

# The Impact of Activating Electronic Platforms by The National Centre for Crisis Management During the Corona Pandemic (Covid-19) on the Users' Satisfaction – 2020

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This research aimed to investigate the impact of activating electronic platforms by The National Centre For Crisis Management during the Corona pandemic (Covid-19) on the users' satisfaction with the provided services. To achieve the objectives of the research, the researcher used the quantitative research method because of its relevance to conduct social and behavioural research. The study population consisted of all platforms users from different sectors. While the study sample individuals were randomly selected, their number was 180 because of the huge numbers of users. 150 questionnaires were found to be usable to perform the statistical processes, 83.3% which is a good percentage. Secondary data was collected from the previous related studies to crisis management, while the primary data was collected through the use of the Arabic version of the questionnaire after confirming its validity and reliability. SPSS,27 software was used to calculate means, standard deviations, and frequencies, and ANOVA analysis, simple regression and multiple regression were used to find the correlation between the variables. Based on the analysis, a number of suggestions and recommendations were presented to the National Centre for Crisis management.

**Keywords:** *National Centre for Crisis Management, Covid-19, Pandemic, Activated Electronic Platforms, Jordan*

## **1. Introduction:**

The sudden emergence of the Covid-19 pandemic and its wide and rapid spreading in all countries worldwide including Jordan has created serious problems for the government in dealing with this unexpected enemy which cannot be seen and tracked.

The pandemic has affected all sectors in the country, especially in an attempt to limit its spread among the population, imposing additional burdens on the citizens and on the government regarding the economic, health, education, transport, tourism & travel, social security and unemployment issues.

The Jordanian government was forced to enforce the state of emergency law and curfew limiting people's movement, reaching to their work, in practicing their daily activities, the closure of schools & universities, and all productive facilities in the country in an attempt to constrain the spread of the pandemic.

The National Centre for Crisis Management took the responsibility of facilitating and managing all aspects of the citizens' life and worked through the establishment of different activated electronic platforms. Each platform is specialised in and concerned with delivering information and possible services to the concerned sectors and individuals during the defence orders, state of emergency, and curfew.

Since such activated electronic platforms are the first to be used by the National Centre for Crisis Management, this research aims to investigate impact of activating electronic platforms on users' satisfaction with the provided services to the citizens and the residents in the Hashemite Kingdom of Jordan.

### **1-2 Statement of The Problem:**

Statement of the problem stems from the need to find out the impact of the activated electronic platforms by National Centre for Crisis Management during the Covid-19 pandemic.

From this statement, emerge the following questions:

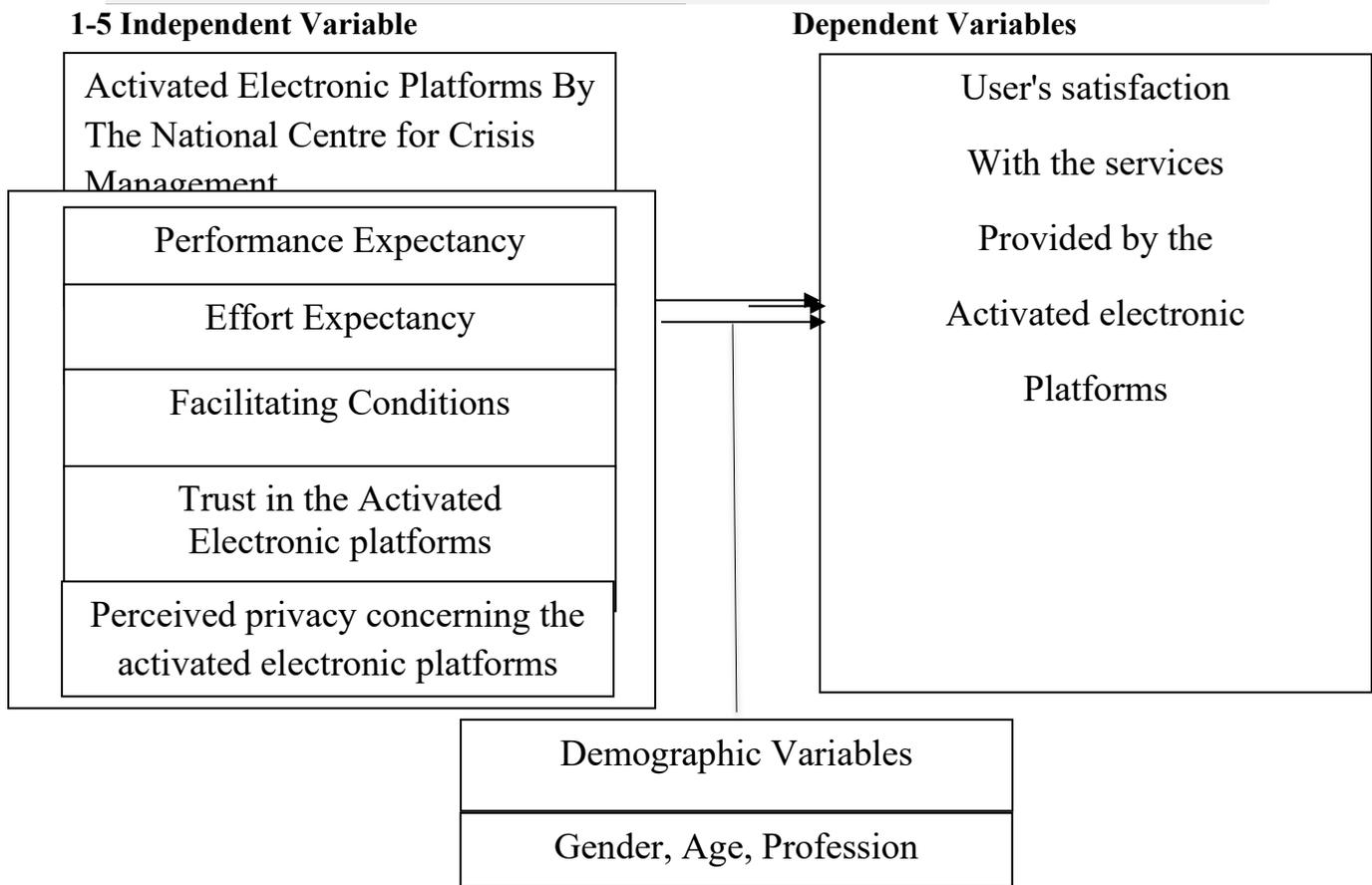
1. What is the impact of activating the electronic platforms with its dimensions (performance expectancy, effort expectancy facilitating conditions, trust in the electronic platform, perceived privacy) by the National Centre for Crisis Management during the Corona pandemic (Covid-19) on the users' satisfaction in the year 2020?

2. Are there differences with statistical significance at a significance level ( $\alpha \leq 0.05$ ) in the impact of activating the electronic platforms with its dimensions during the Corona pandemic (Covid-19) on the users' satisfaction in the year 2020 attributed to the demographic variables?

### **1-3 Objectives of the Research:**

This research aims to achieve the following objectives:

1. To find out the impact of performance expectancy of the activated electronic platforms on the users' satisfaction.
2. To find out the impact of effort expectancy from the activated electronic platforms on the users' satisfaction.
3. To find out the impact of the facilitating conditions from the activated electronic platforms on the users' satisfaction.
4. To find out the impact of trust in the activated electronic platforms on the users' satisfaction.
5. To find out the impact of the perceived privacy from the activated electronic platforms on the users' satisfaction.



Model of the Research

#### 1-4 Significance of the Research:

The significance of the research is in making it a nuclear for future research in dealing with other crisis using different variables.

Researchers can benefit from the results of this research in conducting more research about the benefits of using the electronic platforms in dealing with other forms of crisis.

Suggestions and recommendations are likely to be useful for the National Centre for Crisis Management to improve and up-date the performance in providing the citizens with the required services and information to raise trust of the citizens in the activated electronic platforms.

#### 1-5 Hypothesis of the Research:

The present research employs the following hypotheses:

1. There is no impact with statistical significance at a significance level ( $\alpha \leq 0.05$ ) of activating the electronic platforms with their dimensions (performance expectancy, effort expectancy, facilitating conditions, trust in the electronic platforms, and the perceived privacy) by the National Centre for Crisis Management during the Corona pandemic (Covid-19) on the users' satisfaction.
2. There are no differences with statistical significance at a significance level ( $\alpha \leq 0.05$ ) of activating the electronic platforms by the National Centre for Crisis Management during the Corona pandemic (Covid-19) attributed to the users demographic variables.
3. There is no impact with statistical significance at a significance level ( $\alpha \leq 0.05$ ) of the perceived privacy from using the electronic platforms on the users' satisfaction with the services.

### **1-6 Procedural Definitions:**

**1-6-1 Effort Expectancy:** The ease of use of the technologies with minimum effort.

**1-6-2 Performance Expectancy:** The degree of individual beliefs about the help provided by applying the technology in satisfying his needs.

**1-6-3 Facilitating Conditions:** The degree to which an individual believes that technology infrastructure exists to support the system usage.

**1-6-4 Trust in Electronic Platforms:** The users' beliefs that a specific service can be regarded as secure from any threat or intrusion.

**1-6-5 Perceived Privacy:** The perceived complete confidentiality with the technology.

### **1-7 Limitation of the Research:**

The research is limited to its topic "The impact of activating electronic platforms by National Centre for Crisis Management during the (Covid-19) pandemic on the users' satisfaction with the services.

It is limited to users of electronic platforms from few sectors because of their huge numbers. Another limitation is the small sample size relative to the study population because of time, effort and financial expenditures considerations.

## **2. Literature Review:**

In a study conducted by Reviews (2016), a disaster can include any hazardous event emerging from actual environmental conditions events such as earthquakes, floods, fires or explosions. It is a phenomenon than can results in damage to life, property, and destroy the economy, cultural and social life of people.



According to Brikman (2007), disaster is described as a result of the combination of: exposure to hazard, the conditions of vulnerability, and lack of capacity or measures to mitigate or cope with the possible negative consequences. Disasters effects may include death, injury, disease, and other negative consequences on human physical and social well-being, loss of services, social and economic destruction.

Sena & Michel (2006) have divided disasters into two forms consisting of natural and man-made disasters.

Natural disasters can be categorised into climate logical and biological, such as viral disease and bacteria disease.

Disaster risk management is defined by ISDR, (2009) as “the process of utilizing administrative guidelines, organizations and operational skills and capabilities to execute strategies, policies and enhancing coping strategies to reduce the harmful impacts of hazards and the possibility of disaster”.

Moore et al., 2015 state that disaster response management can be divided into three phases: pre-disaster phase, disaster phase, and post disaster phase.

Conventionally, disaster response management can be presented in: four phase stages: (i) mitigation/ prevention, (ii) preparedness at the pre-disaster stage, (iii) response at the emergency stage, and (iv) recovery at the post-disaster stage. Each phase state has its specific requirements and requires unique controls, strategies and resources to face multiple different challenges.

Mitigation stage includes actions to reduce or eliminate risk to people from disasters and their effects.

Sena & Michael (2006) define disaster preparedness as a stage of preparedness to react to a disaster. It requires leadership, technical and financial assistance to supports citizens, communities & local governments professionals as they prepare for disaster, to minimize the impacts of disaster, responding to community needs during the disaster, and launching recovery initiatives.

Response phase is the immediate reaction to disaster; it includes activities and efforts, to deal with immediate threats from the disaster and satisfying humanitarian needs (Sena & Michael, 2006).



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Cardona (2004) states that hazard and vulnerability are interrelated with each other.

(Phaiju et al, 2010) state that risk knowledge constitutes the foundation for understanding the hazard and the priorities at a given level; it requires the collection and analysis of data, considering the turbulent nature of the hazard.

Risk assessments contribute to better understanding the situation, encouraging people and setting the important needs and response measures.

According to Tubtiang (2005), information and communication technology is a key element in communicating and disseminating data organisation responsible for creating towards the hazard.

### **3- Methodology of the Research:**

This research used the quantitative research method because of its relevance to conduct social and humanitarian research.

#### **3-1 Procedure and Instruments for Data Collection:**

##### **3-1-1 Secondary Data:**

Secondary data was gathered from the previous literature, research and articles that have addressed the present topic.

##### **3-1-2 Primary Data:**

Primary data was obtained from the questionnaire prepared by the researcher after confirming its validity and reliability before distributing it to the research's individual sample.

#### **3-2 Population and Sample:**

##### **3-2-1 Population:**

The research population consists of all citizens and residents in the Hashemite Kingdom of Jordan using the electronic platforms to receive the required services.

##### **3-2-2 Research Sample Individuals:**

Because of the huge numbers of users of the electronic platform, the researcher has tended to select a random sample of users of the electronic platform to represent users from few sectors, it



is believed that a sample of 180 respondents will be sufficiently representative for the purposes of this research.

### **3-3 Data Analysis:**

For the purpose analysing the responses to the questionnaire's items, SPSS,27 software was used, a statistical package for social sciences, to calculate means, standard deviations, frequencies, simple regression, and ANOVA analysis.

**Validity:** is the degree to which measures and research findings present accurate representation of the things they are supposed to describe (Esterby- Smith et al, 2012, P. 347).

Reliability is concerned with the question whether the research findings accurately reflect the investigated phenomenon (Robson, 2011, P. 77),.

**Reliability:** Reliability refers to if data collection techniques and analytical procedures will yield produce consistent findings if they were repeated in another occasion or if they were used by different researcher (Saunders et al, 2012).

### **Results of data analysis:**

Analysis the questionnaire clauses

Independent variable: Activating the electronic platform

#### **1. Performance expectance**

Means and standard deviations of activating the electronic platform according to performance expectance.

**Table 1**  
**Means and standard deviations of activating the electronic platforms according to performance expectancy dimension**

No.	The clause	Mean	Standard deviation	The level
1.	Citizens believe that activating the electronic platforms produces many benefits leading to the user satisfaction with the provided services	3.21	0.76	Medium
2.	Activated electronic platforms helped the citizens in performance of many transactions	3.17	0.72	Medium
3.	Using the activated electronic platforms has contributed to receiving the required services	3.25	0.66	Medium
4.	Activating the electronic platforms resulted in satisfactory expectations about the provided services	3.66	0.77	Medium
5.	Citizens expectations are increasing as a result of the development in the electronic platforms	3.55	0.75	Medium
6.	The citizens are able to receive the services from the electronic platforms at any time and place	3.01	0.46	Medium
Total mean		3.31	0.69	Medium

Table 1 shows that clause 4 which states "**activating the electronic platforms resulted in satisfactory expectations about the provided services**" with a mean of 3.66 and standard deviation 0.77 came at the first rank. At the last rank came clause 6 which states "the citizens are able to receive the services from the electronic platforms at any time and place" with a mean of 3.01 and standard deviation of 0.46 at medium level. It is possible to explain this result through the users of the electronic platforms being satisfied with the level of the provided services because of reduced time, effort and cost for the users, and every citizen knows that he can receive these services at any time and place.

### **Effort Expectances**

Means and standard deviations of activating the electronic platforms according to effort expectation.

**Table 2**  
**Means and standard deviations of activating the electronic platforms according to effort expectation**

No.	The clause	Mean	Standard deviation	The level
7.	The Corona pandemic (Covid-19) has led the citizens to resort to the electronic platforms to receive the required services with minimum effort	3.44	0.66	Medium
8.	Electronic platforms provide the citizens with the guide to facilitate their search for the required services	3.55	0.61	Medium
9.	Electronic platforms aim at reducing the procedures to receive the service with the least effort as possible	3.21	0.62	Medium
10.	Citizens feel satisfaction with using the electronic platforms because of their many benefits that do not require a lot of effort	3.00	0.44	Medium
11.	Electronic platforms distribute the information about the optimal usage to reduce the citizen's effort	3.65	0.45	Medium
Total mean		3.37	0.56	Medium

Table 2 shows that clause 1 which states "Electronic platforms distribute the information about the optimal usage to reduce the citizen's effort" came at the first rank with a mean of 3.56 and standard

deviation which states "citizens feel satisfaction with using the electronic platforms because of their many benefits that do not require a lot of efforts" came with a mean of 3.00 and standard deviation of 0.44 at medium level.

This can be explained through having sufficient knowledge about the information when using the electronic platforms facilitates the citizen reach to the service of specific time and place, also there are many benefits provided by these platforms making the users satisfied with the services.

### **Facilitating Conditions**

Means and standard deviations of activating the electronic platforms according to the facilitating conditions.

**Table 3**  
**Means and standard deviations of activating the electronic platforms according to the facilitating conditions**

No.	The clause	Mean	Standard deviation	The level
12.	There are always available operators who run the electronic platforms to answer the users' questions	3.77	0.56	High
13.	It is easy to link with the electronic platforms in order to receive the required services	3.78	0.71	High
14.	The electronic platform have the advanced infrastructure to activate their usage by the citizens	3.44	0.66	Medium
15.	Electronic government has worked to up-date the used systems to be applied on the smart phones and on other applications	3.66	0.41	Medium
16.	Speed reach to the services timely encourages the citizen to use the electronic platforms	3.65	0.42	Medium
Total mean		3.66	0.55	Medium

Table 3 shows that clause 13 which states "**The electronic platforms have the infrastructure to activate their usage by the citizens to receive the service**" and the information came at the first rank, with a mean of 3.78 and standard deviation of 0.71. At the last rank came clause 14 which states "It is possible to link with the electronic platforms easily in order to reach the services" with a mean of 3.44 and standard deviation of 0.66 at a medium level.

It is possible to explain that the electronic platforms provide all of the requirements to the citizens to receive the distinguished electronic services at the specific time.

### **Trust in the activated electronic platforms**

Means and standard deviations of activated electronic platforms according to trust dimension.

**Table 4**  
**Means and standard deviations of activating the electronic platforms according to trust dimension**

No.	The clause	Mean	Standard deviation	The level
17.	Some citizens see that using the activated electronic platforms violates their privacy	3.40	0.76	Medium
18.	Citizens see that technology development is the motive to increase trust in the activated electronic platforms	3.24	0.52	Medium
19.	Inability of some citizens to deal with the electronic platforms has led to mistrust in them	3.66	0.77	Medium
20.	Citizens do not believe in the electronic government ability to develop the electronic platforms leading to mistrust in the platforms	3.25	0.82	Medium
Total mean		3.39	0.72	Medium

Table 4 shows that clause 19 which states "**Inability of some citizens to deal with the electronic platforms has led to mistrust in them**" came at the first rank with a mean of 3.66 and standard deviation of 0.77. At the last rank came clause 18 which states "citizens see that the technology development is the motive to increase trust in the electronic platforms" with a mean of 3.24 and standard deviation of 0.52 at a medium level. This can be explained by that the study sample individuals because of their inability to use the electronic platforms has led to mistrust in the activated electronic platforms.

### Perceived Privacy

Means and standard deviations of activated electronic platforms according to the perceived privacy.

**Table 5**  
**Means and standard deviations of activated electronic platforms according to the perceived privacy**

No.	The clause	Mean	Standard deviation	The level
21.	Electronic platforms services are characterised by protecting the users' privacy	3.60	0.62	Medium
22.	Electronic platforms provide the specialised bodies to monitor the users' privacy in reaching the services	3.71	0.71	High
23.	Electronic platforms keep the records in special places to protect the user's information	3.15	0.44	Medium
24.	Communication between users of the electronic platforms and the electronic government services is through protected channels to preserve privacy	3.44	0.55	Medium
25.	Electronic platforms guarantee the users complete privacy	3.26	0.56	Medium
Total mean		3.43	0.57	Medium

Table 5 shows that clause 22 which states "Electronic platforms provide the specialized bodies to monitor the users' privacy in reaching the services" came at the first rank with a mean of 3.71 and standard deviation of 0.71. At the last rank came clause 23 which states "Electronic platforms keep the records in special places to protect the user's information "with a mean of 3.15 and standard deviation of 0.44. It is possible to explain that privacy in an important issue in the electronic platforms.

**Dependent variable: User's satisfaction**

Means and standard deviations according to user's satisfaction.

**Table 6**  
**Means and standard deviations according to the user's satisfaction variable**

No.	The clause	Mean	Standard deviation	The level
1.	Many of the society's segments find that the electronic platforms became the accepted alternative in the technology era	3.44	0.62	Medium
2.	Citizens believe that the presence of the activated electronic platforms satisfy their needs to receive their required services	3.21	0.71	Medium
3.	The government usages the citizens to use the activated electronic platforms to reduce risks of the Corona pandemic (Covid-19)	3.66	0.72	Medium
4.	Many citizens use the electronic platforms because they save time and cost of transportation	3.75	0.73	High
5.	The citizens see that receiving the services through the activated electronic platforms satisfies their private needs	3.47	0.72	Medium
6.	Difficulty in transportation to reach the public departments motivates the use of the activated electronic platforms	3.41	0.41	Medium
7.	Citizens encourage each other to use the activated electronic platforms to reduce the tensions in receiving the services in a satisfied manner	3.76	0.42	High
8.	Some of the citizens experience mistrust in the introduced services from the activated electronic platforms	3.11	0.70	Medium
9.	Difficulty in using the activated electronic platforms has led to dissatisfaction with the performance of these platforms	3.80	0.82	High
10	Some of the citizens see that all the public services should turn to the activated electronic platforms because of satisfaction with these platforms	3.31	0.73	Medium
Total mean		3.49	0.64	medium



The table shows that clause 9 which states "difficulty in using the activated electronic platforms has led to dissatisfaction with performance of these platforms" came at the first rank, with a mean of 3.80 and standard deviation of 0.82. At the last rank came clause 8 which states "some of the citizens experience mistrust in the services provided by the activated electronic platforms" with a mean of 3.11 and standard deviation of 0.70 at a medium level.

It is possible to explain that through the study sample individuals find the difficulties they are facing when using the activated electronic platforms have led to frustration and mistrust in the provided services.

From the above analysis, it became clear that impact of activating the electronic platforms with their dimensions by the National Center for Crisis Management during the Corona pandemic (Covid-19) on the users' satisfaction in the year 2020, was at a medium level

### **Testing the Research Hypothesis:**

Analysing results of the first hypothesis which states "There is no impact with statistical significance at a significance level ( $\alpha \leq 0.05$ ) of activating the electronic platforms with their dimensions" performance expectance, effort expectance, facilitating conditions, trust in the platforms and the perceived privacy by the National Center for Crisis Management during Corona pandemic (Covid-19) in the year 2020 on the users satisfaction.

To test this hypothesis, the multiple regression analysis was conducted as seen in table 7.

**Table 7**

**Results of multiple regression analysis of the impact of activating the electronic platforms with their dimensions "performance expectation, effort expectation, facilitating conditions, trust in the platforms, and the perceived privacy" by the National Centre for Crisis Management during the Corona pandemic (Covid-19) on the users' satisfaction for the year 2020**

Correlation	Determination coefficient	(F) value	Significance
0.596	0.356	85.803	0.000

Table 7 shows that the correlation coefficient reached 0.596, and the statistical value of (F) reached 75.80 at significance level 0.000. The determination coefficient reached 0.356, which indicates at the presence of impact with statistical significance at significance level ( $\alpha \leq 0.05$ ) for activating electronic platforms with their dimensions by the National Centre for Crisis Management during the Corona pandemic (Covid-19) on the users' satisfaction.

It is possible to explain that through the presence of electronic services on the activated electronic platforms lead to increase the users' satisfaction with the services because they save time and effort, and enables them to accomplish the services with less effort.

Results of analysing the second hypothesis which states: There is no impact with statistical significance at significance level ( $\alpha \leq 0.05$ ) of the activated electronic platforms with their dimensions on the users' satisfaction attributed to the demographic variables.

**Gender:**

**Table 8**

**Results of (T) test for two independent variables for the difference in the answers means of the study sample individuals about impact of activating the electronic platforms on the users' satisfaction in the year 2020 attributed to gender**

Gender	Number	Mean	Standard deviation	(t)	Significance
Males	100	3.97	0.62	-1.63	0.11
Females	50	4.11	0.61		

Table 8 shows that the t statistic value reached -1.63 which is insignificant at a significance level, so there are no differences with statistical significance of impact of activating the electronic

platforms with their dimensions by the National Centre for Crisis Management during the Corona pandemic (Covid-19) on the users satisfaction attributed to gender.

This can be explained through that the study sample individuals do not differ about the importance of activating the electronic platforms on achieving their satisfaction because of their many benefits.

### Scientific Qualification:

**Table 9**

**Results of the uni-variance analysis in mean of the stud sample individuals answer about impact of activating the electronic platforms with their dimensions by the National Centre for Crisis Management during the Corona pandemic (Covid-19) on the users satisfaction attribute to scientific qualification**

Source of the variance	Sum of the squares	Freedom degrees	Mean of the squares	(F) value	Sig.
Between the groups	1.18	3	0.40	1.29	0.28
Inside the groups	105.99	146	0.32		
Total	106.15	149			

Table 9 shows that the F statistical value reached 1.29 which is insignificant at significance level ( $\alpha \leq 0.05$ ). There are no differences with statistical significance at a significance level ( $\alpha \leq 0.05$ ) in the impact of activating the electronic platforms with their dimensions by the National Centre for Crisis Management during the Corona pandemic (Covid-19) on the users satisfaction attributed to scientific qualification.

It is possible to explain that through the sample individuals, regardless of their scientific qualification, there is no difference on the importance of using the activated electronic platforms in achieving high level of the provided services which reduce time, effort and cost.



## **Recommendations:**

Based on the study results, the researcher recommends the follow:

1. Necessity for providing the employees with continued training courses and more training on the electronic platforms to be able to facilitate the procedures for the provided services to the users.
2. Necessity for increasing the user's awareness about the importance of the activated electronic platforms to enable them to receive high quality services, while at the same time saving time, effort and costs.
3. The need for benefit from the experiences and experiments of the other countries in the field of activating the electronic platforms leading to an improved level of the introduced services.
4. The need for conducting more studies that link the study's variables with other variables.



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