# Electronic Rumors of the Corona 19 Pandemic and its Impact on Psychological Reassurance in a Sample of the Society of Prince Sattam Bin Abdulaziz University

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#### **ABSTRACT**

The study aimed to answer the main question: What is the impact of electronic rumors about Covid-19 pandemic on the psychological reassurance of the public of Prince Sattam Bin Abdul-Aziz University in Al-Kharj? It used the descriptive method, and the electronic survey was the tool applied to sample (236).

The results of the study showed that there was no correlation at (0.05) between the effect of rumors about Corona and the psychological reassurance of the individual. In addition, the existence of an inverse link at (0.05) between the influences of rumors about Corona and the social relations between individuals. The existence of an inverse link at (0,01) between psychological rumors as a lethal psychological weapon in times of crisis and psychological reassurance ,also found that there is an inverse relationship at (0.05) between the impact of electronic rumors about the Corona pandemic and the psychological reassurance To find out the impact of electronic rumor about the Corona pandemic in the public of Prince Sattam Bin Abdul-Aziz University was used a simple linear decline , the study concluded with a number of recommendations to reduce the negative effects of electronic rumors.

**Keywords:** Electronic rumors, Corona 19 pandemic, psychological reassurance.

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#### **INTRODUCTION**

In March 2020, the World Health Organization (WHO) announced that a dangerous virus has begun to spread in China called the new Virus Corona and it threatens the whole world, especially as the number of deaths resulting from it is high, in addition to the number of people infected with the virus, whose causes and source are still unknown, and the virus remained a concern at the scientific and health level fearing its spread more in the light of public life, movement, and community contact.

social media provided a lot of positive roles as health institutions employed them as a strategy to implement health awareness and educational programs about the Corona pandemic19 and to rely on it and trust it for its emotional, behavioral and cognitive impact in the general public, and to take it as a source of health information and help in making specific decisions. In the case of health and increase awareness of the dimensions of the danger of the pandemic by alleviating fear and anxiety, at the same time it is a conveyor and promoter of rumors where it was employed to spread malicious lies about the pandemic due to the ease and speed of spread and the huge number of users and the absence of laws And rules governing control and dissemination, in addition to the possibility of believing them from the majority because of their ignorance of the facts, and thus exploited in psychological and moral wars. Electronic rumors become more active in times of crisis and disaster, where it is considered fertile ground to raise the level of psychological stress and anxiety, and prevalence fear and terror among individuals and communities, and multiply the negative effects on mental health and feeling of psychological insecurity and thus weaken their health immunity. A study at the King Abdullah Centre for National Dialogue confirmed that more than 82% of the

respondents in the survey (2014) on the reality of rumors in Saudi society that public opinion is influenced by rumors, and there are 11% of the participants transmit the rumor without verifying it, there are also 26.2% who trade unreliable information, and 50% consider that the rumors change their view on any topic or issue. The importance of this study of electronic rumors comes from the importance of studying electronic rumors and their significant impact on mental and community health, which leads to the loss of morale of individuals and communities. It came to find out the impact of the electronic rumors in the Corona pandemic on the psychological reassurance of the community of Prince Sattam Bin Abdul-Aziz University in Al-Kharj.

#### The study problem:

The problem of the current study is determined by the answer to the following main question (what the impact of the electronic rumors about the Corona pandemic on the psychological reassurance of the public of Prince Sattam Bin Abdul-Aziz University in Al-Kharj is) and the following questions are derived from it:

- 1- Which application are the most publishers in rumors.
- 2- What is the effect of electronic rumors on psychological reassurance in the sample of the study?
- 3. What are the ways to reduce the impact of electronic rumors on psychological reassurance?
- 4- Are there statistically significant differences in the effect of electronic rumors on psychological reassurance attributable (sex, age, educational level, social status)?

#### Study purposes: -

- 1- Get to know the most social media in spreading rumors.
- 2- Identify the effect of electronic rumors on the psychological reassurance of the sample of the study.

- 3- Identify ways to reduce the impact of electronic rumors on psychological reassurance.
- 4- Identify the differences of statistical significance in the effect of electronic rumors on psychological reassurance, which is attributable (for sex, age, educational level, social status).

# The importance of study: -

- 1- The importance of the topic as a vital topic that affects the mental health of individuals and their psychological well-being.
- 2- The spread of electronic rumors in times of crisis in all societies.
- 3- Many members of the community rely on social media to obtain information and news about the Corona pandemic, publish it without verifying its authenticity, and negatively affect their psychological well-being.
- 4- There is not enough oversight to hold accountable anyone who spreads electronic rumors.
- 5- The results of this study will be important in reducing the impact of electronic rumors on mental health.
- 6- This study will enrich the Arab Library with information about the negative impact of electronic rumors and the future of community mental health.

#### Study limits: -

**Human frontiers**: society of Prince Sattam Bin Abdul-Aziz University in Al-Kharj (Al-Kharj-Al-Dalm) and the sample consisted of (students- faculty members, administrators)

Temporal limits: April 2020.

# Study terms:

1- Electronic rumors:

A- rumor: convention is a news or an incorrect newsgroup that spreads in the community quickly, often exciting and lacks a reliable source that indicates its validity, with the aim of affecting the psychological aspect. It is known as news that people communicate without verifying their authenticity, where the source of the rumor builds, forms and disseminates it to the recipient who has a desire to know (Dayana, R, And Others, 2016, 422). Electronic rumors are known to be widespread on social media sites in general (WhatsApp, Twitter, Facebook, etc.) known as "information or misinformation that can be spread over networks has a shocking effect (Rudat, A, 2015, 2).

Electronic rumors: Rumors that are circulated through social media in a written, voice and video with the exchange of opinions, ideas and information, in addition to the possibility of forming groups and friendships that share common interests (Suleiman:2017).

Procedural definition: It means electronic rumors that spread in this period on the social media sites, which are inferred by the degree to which they obtain from the application of the study standard.

Corona pandemic19 (Covid19):

Known in English as Middle East Respiratory Syndrome, it is known as Corona Middle East, and has been named after several names and recently agreed to be called the new coronavirus.

Psychological reassurance: It is stated in al-Tabari that the origin of (reassurance): reassurance, and reassurance is moderation and stillness, and reassurance is the silence of the soul from fear.

Ahmadi (2014) is a term that ensures the satisfaction of the psychological needs of the individual. Al-Mahdi defined it as the reassuring soul around which she gathered as much as she could from the circles of goodness, and picked out the mixture of good human beings, including them (Mahdi:2008,1). Paterji definition: psychological reassurance in the sense of internal peace. as a state of fundamental balance of positive thinking and based on ideas and opinions that lead to psychological pressures to bear the difficulties and exemption from the effort to win and change for the better (Paterii:2008, p.1-3). The researchers define it (it is an internal feeling based on the basics of faith, peace of mind, happiness, safety, conviction and contentment, with the expectation of the best of calm, comfort, flexibility, safety and emotional stability, away from anxiety and threat, with the ability to solve problems with self-confidence, away from mental disorders, with self-acceptance and living in that guarantees special way psychosocial compatibility).

Procedurally: Is the degree, which the tester is prescribed in the scale applied in this study

# **Theoretical Framework**

#### **Electronic rumors:**

Anonymous news and information, of interest to the recipient, and spread easily and very quickly by a number of means (Mustafa, 2007).

Suleiman (2017) defined it as undocumented and anonymous statements and actions, revolving around an important topic called ambiguity and has traditional and modern means of scenting it among the public.

Hijab (2007) defined it as a planned behavior by a person or entity to disseminate inaccurate information that inspires truth and relates to current circumstances and public interest in them through possible means to achieve their goals. It is a common phenomenon of the old media to the known human, where it was a means of spreading the news and fueling sedition in wars and has passed through many stages and developed and diversified according to modern technological developments and became a means of psychological warfare with technical development day by day. Rumors enter in all aspects of life of politics, economy, and security globally and locally, especially as they spread rapidly, especially in times of crisis, where they play a big role in the lives of individuals and guide public opinion. Our Islamic religion was concerned with the issue of common and Hammed (2007) pointed out that believing it to the recipients of the rumor to avoid feeling remorse. Psychological motives play a prominent role in the spread of rumors and because of the psychological nature and its tendencies to believe rumors even if it realizes that part of it is not true, if it is his emotions that control their belief and on the other hand it is difficult for him to prove their lies in addition to the love of reconnaissance in humans in general.

Darwish (2017) explained that the rumors according to their functions are considered planned and orchestrated behavior by the main beneficiary of their promotion by providing two basic characteristics, namely importance and ambiguity (the law of rumor). The rumor starts from its first source and is circulated through the spoken word or chat through electronic means such as the Internet and mobile phones in a different way to reality with a complete absence of certain standards of honesty. Electronic rumors are characterized by rapid spread, especially in the multiplicity of social media platforms and the shadow of smartphones, where the number of recipients is growing at the touch of a button for social media groups and who play the same role (copy, paste, redirect )the combination of interaction of image, sound and movement makes it an attractive material quick to

influence and low cost increases its transmission inside and outside national borders, and even at the world level and continents by exceeding the limits of control and entering homes without the permission of their owners.

#### Coronavirus:

It is a family of coronary viruses that belong to known viral families that infect humans and animal and appears in common influenza to the most severe such as respiratory syndrome (Khalil:2013).

Corona pandemic19: An infectious disease caused by the recently discovered coronavirus in the Chinese city of Johan in December 2019.

At the scientific level, the biggest concern remains about this virus and the fear of its spread more in the light of public life, movement, movement and community contact. Health institutions have used social networks as a strategy to implement awareness and educational health programs on the dangerous Corona virus19, relying on them and trusting them for their emotional, psychological, behavioral and cognitive impact to the general public, the study (Hook:2014) emphasizes the role of the big media in obtaining health information and increasing community awareness. She also noted (hook, 2013) the role of social media in public awareness because of the ease and speed of its spread and the low cost and reliability of it in the elimination of the health illiteracy of the largest number of users.

The individual grows in the custody of his family from

#### Psychological reassurance: -

birth to the adulthood where he grows mentally, emotionally and physically. The term emotional reassurance is synonymous with the concept of psychological security, where studies and psychological research have been interested in using the two terms to be very similar (Dulaim: 2004, 1). Emotional reassurance is one of the concepts of positive mental health and its basis, Laws, traditions and customs prohibit the violation of human security and anything that threatens its psychological and physical stability in order to achieve secure communication between people (Hadi: 2004, 1). The Holy Quran explained with its verses the effects on the achievement of psychological security, tranquility and the peace of the soul, where is mentioned the need for security in about (113) place between security, fear, and tranquility (Rahu: 1994, 7-8). Abraham Maslow (Maslow 1970) is a pioneer in his theory of the pyramidal construction of psychological needs (Al-Taie: 2006, 9). Maslow stressed that the needs are organized in a hierarchy that includes seven levels of physiological needs at the base of the pyramid to self-realization at the top of the pyramid, and that the follow-up to the satisfaction of these needs achieves the full development

(Chati, Quraish: 2006, 11-13). Freud (Sigmund Freud:1923), From (From:1951), Piagi (Byaget:1955) and Erik Son:1985 agreed with Maslow in all matters of psychological security and stressed that The need for him is important for the individual since the beginning of his life and the satisfaction of the signs of mental health and that the sense of psychological reassurance is the basis of compatibility at different stages of life, especially in the current era, where the patterns of social life and its prevailing systems play a prominent role in the feeling of anxiety and the multiplication of the feeling of psychological stability (Al Obaidi:2007, 2). Exposure to psychological pressures

of the individual and that the lack of them loses the

psychological balance and leads to distress and tension

affects the human being with stress and anxiety, especially at the time of severe crises, and what happens to individuals reflects on societies and leads to various psychological problems and their beginning leads to the loss of psychological reassurance and followed by psychological and behavioral diseases on the whole society (Abu Al-Azzam:2008, 1-3). The happiness of the individual can only be achieved by feeling psychological reassurance and satisfaction in family, social, economic and recreational life (Rahel:2008,15).

#### Previous Study: -

#### The study of Harasha (2020):

The goal was to identify the level of spread of false rumors in the society, the level of sense of community security, and to know the nature of the relationship between them from the point of view of the students of Prince Sattam Bin Abdul Aziz University, the sample consisted of (379) students, applied the level of prevalence of false rumors and the measure of the security of society from the number of researchers. The results found that the prevalence of false rumors is moderate in accordance with the order of dimensions (social, academic, economic, political, religious) and the high level of security of society in order (political, psychological, intellectual, economic). The study of Al-Saaida (2019): which aimed to identify rumors in social media and its effects on social security from the point of view of students of Princess Rahma University College. There are statistically significant differences in the political influences of rumors in favor of females.

# Study of Daak (2018):

Entitled Electronic Rumors and Their Impact on Public Opinion, A Study on A Sample in Gazan Region, aimed at identifying the impact of electronic rumors on public opinion by identifying the role of social networking sites in spreading rumors, and what are the most frequently contributing sites to spreading rumors, using the social survey method by applying the study tool to a sample (400) individuals in the Gazan region. The study found that the networking sites address rumors in a big way affects public opinion, and WhatsApp is the most widespread, and that social rumors are the most types, and concluded the study by recommending the censorship of social media to fight rumors.

# Salman Study (2017):

Entitled Social Networks and Their Role in Spreading Rumors from the Point of View of Faculty Members at Diyala University. The study aimed to identify the role of social networks in spreading rumors through the degree of spread of rumors in social networking sites, applied the study resolution to (352) research, the study found that the Facebook network won the first place to spread rumors, and political rumors most notably, and recommended the study attention to the organization of the use of social media and its control in spreading rumors.

#### Bai (Bai, 2012)

Study entitled Exploring the movement of rumors in social media in China, the study aimed to identify the impact of rumors via social media on citizens in China, by analyzing rumors in the most used sites in China, and the study found to increase the impact of electronic rumors on Chinese society.

# The study of Benjamin and others (2012)

entitled the impact of social media on the spread of rumors such as Face Book, Twitter, the experimental method was used to achieve the objectives of the study by publishing a rumor and tracking it mathematically Logarithmic and the form of preferential Attachment Group's sports, which was designed by both Parisi and Albert and the study found that some sites are the most common

## The Study of Domenzohher (2006):

Entitled Psychology Common, which aimed to monitor rumors in politics with the introduction of models of rumors spread in times of war and monitored the rumor by circumventing the minds of society and affected public opinion, and the study showed that the effect of rumors increases the more studied and carefully formulated.

**Study methodology:** descriptive approach to suit the study's objectives and questions.

**Study community:** Prince Sattam Bin Abdul-Aziz University al-Kharj during the period of study in the semester, April 2020.

**Study sample:** The study sample consisted of (236) individuals during the study period for the academic year 1441H

Study tool and construction procedures: -

1- An electronic reconnaissance tool to identify the opinion of the sample of the study and the extent of the impact of electronic rumors and consisted of (13) questions covered the objectives of the study.

2- researchers relied on the scale (badri, itching: 2009) for psychological reassurance, which is characterized by the characteristics of Seiko metric high—reliability and validity, and consists of (50) paragraphs, divided into five alternatives to answer on each paragraph included from (5, 4, 3, 2, 1) and was presented to a number of arbitrators specialized in Reba and psychology to verify the suitability of the study environment.

Procedures for applying the study tool:

The sincerity of internal consistency:

After ascertaining the apparent reliability of the study tool and the internal reliability of the survey sample, the researchers again applied it to the study sample data as a whole, where the coefficient of correlation between the degree of each phrase was calculated to the total degree of the scale to which the phrase belongs as illustrated by the following tables:

Table 1. Pearson Link Transactions for PsI

Phrase No	Link	Phrase	Link coefficient
	coefficient	No.	
1	0.315**	26	0.403**
2	0.464**	27	0.677**
3	0.260**	28	0.598**
4	0.489**	29	0.604**
5	0.608**	30	0.638**
6	0.385**	31	0.696**
7	0.270**	32	0.474**
8	0.444**	33	0.483**
9	0.335**	34	0.484**
10	0.540**	35	0.587**
11	0.581**	36	0.469**
12	0.456**	37	0.616**
13	0.542**	38	0.725**
14	0.634**	39	0.618**
15	0.651**	40	0.760**
16	0.559**	41	0.591**
17	0.579**	42	0.638**
18	0.585**	43	0.712**
19	0.665**	44	0.562**
20	0.496**	45	0.642**
21	0.283**	46	0.713**
22	0.706**	47	0.427**
23	0.543**	48	0.663**
24	0.542**	49	0.518**
25	0.542**	50	0.263*

<sup>\*\*</sup> D at 0.01 and below

It is clear from table 1 that the values of the coefficient of correlation of each statement with the dimension to which it belongs or the scale to which it belongs are positive and statistically functioning at the indicative level (0.01) are lower than indicative of the sincerity of their consistency and suitability for field application.

# The stability of the study tool:

To measure the stability of the study tool (measure of psychological reassurance), the researchers used

Cronbach's Alpha ( $\alpha$ ) to confirm the stability of the study tool, and the overall stability factor of the scale was found to be high at (0.949) and this indicates that it has a high degree of reliability in the field application of the study.

# Analysis, discussion and interpretation of the results of the study

**First**: Results related to the description of the characteristics of the study sample:

Table 2. Distribution of study sample members according to type variable:

Gender	Iteration	Percentage
Male	56	23.7
Female	180	76.3
Total	236	100%

It is clear from table 2: (180) of the study sample members represent 76.3% of the total study sample members are female and are the majority of the study sample members, while (56) of them represent 23.7% of the total sample members of the study are male.

Table 3. Distribution of study sample members according to the change of scientific qualification:

Age	Iteration	Percentage
Less than 30	87	36.9
From 30to 40	53	22.5
From 40 to less than 50	60	25.4
From 50 and above	36	15.3
Total	236	100%

It is clear from table 3: (87) of the study sample members represent 36.9% of the total study sample members under 30 years of age, while (60) representing 25.4% of the study sample. % of the total sample members of the study are aged 40 to under 50, and (53) of them

represent 22.5% of the total sample members aged 30 to under 40 years, compared to (36) of them representing what 15.3% of the total sample members aged 50 and over.

Table 4. Distribution of study sample members according to the educational level variable:

Educational level	Iteration	Percentage
Below university	17	7.2
University	149	63.1
Above university	70	29.7
Total	236	100%

It is clear from table 4: (149) of the study sample member's represent63.1percentage of the total study sample members with a university level of education, while 70% of the total study sample members represent

their level of education above university, and 17% of the total study sample members represent their level of education below university.

Table 5. Distribution of study sample members according to the social status variable:

Social status	Iteration	Percentage
Married	131	55.5
Widow	8	3.4
Unmarried	87	36.9
Divorced	10	4.2
Total	236	100

It is clear from table 5: (131) of the study sample members represent5.5% of the total sample members married, while (87) represent 36.9% of the total sample members of the study are unmarried, and (10) represent

4.2% of the total sample members are divorced, compared to 8% of whom represent 3.4% of the total sample of the study.

What are the social media that contain the most rumors?

Table 6. Shows the most ways in which rumors reach

	Iteration	Percentage
Social media- internet	228	96.6
Satellite channels - media	8	3.4
Total	236	100%

It is clear from table 6: (228) of the study sample members representing 96.6% of the total sample members of the study consider that the most popular social media is social media sites - the Internet, while (8)

of them represent 3.4% of the total sample members of the study consider that the most common means through which the rumors reach are satellite channels - media.

Table 7. Shows the most social media sites that contribute to spreading rumors:

	Iteration	Percentage
Facebook	56	23.7
WhatsApp	146	61.9
Twitter	34	14.4
Total	236	100

it is clear from table 7: (131) of the sample members of the study represent 55.5% of the total sample of the study consider that WhatsApp is the most popular social media site, while (56) of them represent 23.7% of the total sample members of the study see Facebook second in terms of the social media sites that contribute to the

dissemination of rumors (34) of them representing 14.4% of the respondents. The total sample of the study

sees Twitter as the third in spreading rumors on social media.

Table 8. Shows the type of rumors that are circulating on the social media sites in abundance:

	Iteration	Percentage
Health rumors (epidemics and diseases)	165	69.9
Political rumors (international and political affairs)	47	19.9
Social rumors (high divorces)	20	8.5
Economic Rumors (Investment)	4	1.7
Total	236	100%

It is clear from table 8: (165) of the study sample members represent69.9% of the total sample of the study consider that the type of rumors circulating on the current social media are rumors of health (epidemics and diseases) and they are the category Most of the sample members of the study, while (47) of them represent 19.9% of the total sample of the study, consider that the type of rumors circulating on the current social media are political rumors (international and political

affairs), and (20) of them They represent 8.5% of the total sample of the study who believe that the type of rumors that are circulating on the social media are currently frequently circulated are social rumors (high divorces), compared to (4) of them representing 1.7% of the total sample members of the study consider that the type of rumors circulated on the network sites currently frequently are economic rumors (investment).

Table 9. Shows the most common rumors circulating on social media about Covid19:

	Iteration	Percentage
Yes	173	73.3
Neutral	44	18.6
No	19	8.1
Total	236	100

It is clear from table 9: (173) of the study sample members represent 69.9% of the total sample members of the study believe that the most rumors circulated on social media about Covid 19 are the most group of sample members of the study, while (4) 4) Of them represent 18.6% of the total sample of the study, who are

concerned about rumors circulating on social media about Covid9, compared to (19) of them representing 8.1% of the total sample members of the study do not see the most common rumors circulating. On social media about Covid19

Table 10. Show the reasons of spreading rumors about covid19 pandemic

Percentage	Iteration	Reason
28.8	68	Awareness about the dangerous of the pandemic and
		spreading preventions methods
4.2	10	Just to circulate rumors
11.4	27	Unsettle physiological reassurance between
		individuals
55.5	131	All above are true
100%	326	Total

It is clear from table (10) that: (131) representing 55.5% of the total member's sample of the study see that the reasons of spreading rumors about the covid19 pandemic are all above mentioned true (awareness about the dangerous of the pandemic and spreading preventions methods, just to circulate rumors, unsettle physiological reassurance between individuals). While 68% of them represent 28.8% of the total sample members of the

study, the goal of the many rumors about CORONA19 is to raise awareness of the threat of the epidemic and spread prevention methods, and (27) of them represent 11.4% of the total sample members of the study who consider that the goal of the frequent rumors about CORONA19 is to disturb the psychological security among individuals, compared to (10) of them representing 4.2% of the total sample members of the study.

Table 11. Shows the validity of news and information circulating about Corona 19

Percentage	Iteration	
8.9	21	correct
83.5	197	Fairly correct
7.6	18	Incorrect
100%	236	Total

It is clear from table 11 that: (197) of the study sample members representing 83.5% of the total sample members of the study consider that news and information circulating about Corona 19 is fairly correct and they are the most sample members of the study,

while (21) of them represent 8.9% of the total sample members of the study see news and information circulating about CORONA 19 correct, compared to (18) of them representing 7.6% of the total sample members of the study 19 incorrect.

Table 12. Shows the extent to which all up-to-end information about Corona 19 is certified

Percentage	Iteration	
7.6	18	I believe
79.7	188	I fairly believe
12.7	30	I do not believe at all.
100%	326	Total

It is clear from table 12: (188) of the study sample members represent 79.7% of the total study sample members believe to some extent all the information they receive about Corona 19, the most likely group of study sample members, while (30) Of them represent 12.7% of

the total sample members of the study do not believe at all, All the information they receive about Corona 19, compared to (18) of them representing 7.6% of the total sample members who believe all they receive From information about Corona 19.

Table 13. Shows the extent to which messages are re-sent about Corona19 and have not been confirmed

Percentage	Iteration	
41.5	98	Never
25.4	60	Seldom
24.6	58	Sometimes
6.8	16	Frequently
1.7	4	Invariably
100%	236	Total

It is clear from table 13: (98) of the study sample members represent41.5% of the total sample members of the study never resend the messages they receive about Corona19 even if they are not sure of their authenticity and are the most common sample group of the study sample, while 60 of them represent 25.4% of the total sample members of the study, they resend messages they receive about Corona19, even if they are rarely sure of their authenticity, And (58) of them, representing 24.6% of the total sample of the study, resend messages that they receive about Corona19, even if they are sometimes

unsure of their authenticity, While 16 of them represent 6.8% of the total sample members of the study, they resend messages they receive about Corona19, even if they are often unsure of their authenticity, Compared to 4 of them, they represent 1.7% of the total sample of the study, re-sending messages that they receive about Corona19, even if they are not always sure of their authenticity.

What is the effect of electronic rumors on psychological reassurance in the sample of the study?

Table 14. Shows the impact of rumors about Corona 19 on the psychological reassurance of the individual

Percentage	Iteration	
56.4	133	Agree
31.8	75	Agree to some extent
11.9	28	Disagree
100%	236	Total

It is clear from table 14: (133) of the study sample members represent 56.4% of the total sample members agree that there is an effect of electronic rumors about Corona 19 on the psychological reassurance of the individual and they are the most group of the sample members of the study While 75 of them represent 31.8% of the total sample members of the study, they agree to

some extent that there is an impact of electronic rumors about Corona 19 on the psychological reassurance of the individual, and (28) of them represent 11.9% of The total sample members of the study disagreed that there was an effect of electronic rumors about Corona 19 on the psychological reassurance of the individual.

Table 15. Shows the impact of rumors about Corona 19 on social relations between individuals

Iteration	
95	Agree
108	Agree to some extent
33	Disagree
236	Total
	95 108 33

It is clear from table 15: (108) of the study sample member's represent45.8percentage of the total sample members of the study are somewhat in agreement with the effect of the rumors about Corona 19 on the social relations between individuals, the majority of the sample members. The study, while (95) of them represent 40.3%

of the total sample members agree on the effect of rumors about Corona 19 on social relations between individuals, and (33) of them represent 14.0% of the total sample members the study disagrees with the impact of rumors about Corona 19 on social relations between individuals.

Table 16. Shows whether electronic rumors are a deadly psychological weapon in times of crisis

Percentage	Iteration	
72.5	171	Agree
22.9	54	Agree to some extent
4.7	11	Disagree
100%	236	Total

It is clear from table 16: (171) of the study sample members represent 7.5% of the total sample members agree that electronic rumors are a lethal psychological weapon in times of crisis and are the most class of sample members of the study, while (54) of them represent 22.9% of the total sample members of the study agree to

some extent that electronic psychological rumors are lethal at times of crisis, compared to (11) of which 4.7% represent a total sample of the study. We agree that electronic rumors are a deadly psychological weapon in times of crisis.

Table 17. Explains the reasons for the spread of rumors on social media platforms

Percentage	Iteration	
5.9	14	Financial profit
15.3	36	Lack of censorship
19.1	45	Desire to recycle rumors aimlessly
59.7	141	All that's said is true
100%	236	Total

It is clear from table 17, that: (141) of the study sample members represent 41.5% of the total sample of the study consider that the reasons for the spread of rumors on the networking sites are (material gain, lack of control, desire to recycle rumors without target) and (45) of them represent 19.1% of the total sample of the study And (36) of them represent 15.3% of the total sample of the study consider that the reasons for the spread of rumors on the

networking sites are the lack of censorship, compared to (14) of them representing 5.9% of the total sample members of the study consider that the reasons for the spread of rumors on the networking sites are material gain.

How to reduce the impact of electronic rumors on psychological reassurance?

Table 18. Shows ways to fight rumors

	Tubi	e 10. bilows ways to light runners
Percentage	Iteration	
13.1	31	Don't deliberate unreliable news
6.8	16	Spreading awareness about the psychological damage of
		rumors
11.9	28	Severe and official penalties for promoters
10.6	25	Activating media censorship
57.6	136	All that is mentioned.
100%	236	Total

It is clear from table 18: (136) of the study sample members representing 57.6% of the total sample members of the study, considering that (non-circulation of unreliable news, raising awareness about the psychological damage of rumors, severe and official punishment of promoters, and activating control of communication sought) are one of the most important ways to reduce the impact of electronic rumors on psychological reassurance and are the most likely group of the sample members of the study, while (31) of them represent 13.1% of the total sample of the study. Unreliable news of ways to reduce the impact of electronic rumors on psychological reassurance, while (28) of them represent 11.9% of the total sample of the study consider that one way to reduce the impact of electronic rumors on psychological reassurance is to put a severe and official penalty for promoters, and (25) of

them represent 10.6% of the total sample members of the study consider that it is way to reduce the impact of electronic rumors on psychological reassurance, as opposed to (16) 6.8% of the total sample study respondents believe that ways to reduce the impact of electronic rumors on psychological reassurance spread awareness about the psychological damage of the rumors.

Are there statistically significant differences in the impact of electronic rumors on psychological reassurance attributable (sex, age, educational level, social status)?

# First: Differences by gender variable:

To find out if there were statistically significant differences in the averages of the respondents to the study sample according to the different gender variable, used the "Independent Sample T-test", and the results were as indicated in the following table:

e una emera penarej fer premetere, una (20) er			mere as marcated in the fone mily table.			
The impact of electronic	Sex	Number	arithmetic average	Standard deviation	T value	Indication
rumors on psychological reassurance	Male	56	3.62	0.381	3.207	**0.002

				-
fomalo	150	2 20	0.491	
lemale	130	3.39	0.401	

<sup>\*\*</sup> Statistical indication at 0.01 or lower

It is clear from table 19: there are statistically significant differences at the level of statistical significance (0.01) and less in the respondents of the study sample on (the effect of electronic rumors on psychological reassurance) of different sex variables, i.e., they are more affected by electronic rumors than female psychological reassurance.

# Second: differences depending on age variable

To find out if there were statistically significant differences in the respondents' responses to the study sample according to the age variable difference, the researcher used the researcher "One Way ANOVA" to illustrate the differences in the responses of the study sample members according to the difference of age variable, and the results were as illustrated by the following table:

Table 20. Results "One Way ANOVA" for differences in the respondents' responses according to age differences

The impact of electronic	Source of variance	Total squares	Freedom degrees	Squares average	P value	Statistical indication
rumors on psychological reassurance	Between groups	4.507	3	1.502	7.402	**0.000
	Within	47.093	232	0.203		
Total		51.600	235	-		

<sup>\*\*</sup> Statistical indication at 0.01 and below

Table 20 shows that there are statistically significant differences at the level of statistical indication (0.01) and lower in the respondents of the study sample on (the effect of electronic rumors on psychological reassurance) depending on the age variable.

To determine the benefit of the differences between each age group towards the trend around the psychological reassurance scale, the researcher used the "scheffe" test, and the following table illustrates these results:

Table 21. Test results "scheffe" for differences between age groups

	Age	N	Average	Less than 30 years old	30 to under 40 years	40 to under 50	50 years and above
The impact of electronic rumors on	Less than 30 years old	87	3.27	-			
psychological reassurance	31 to less than 40 years	53	3.53	*	-		
	41 to under 50	60	3.56	**		-	
	51 years and older	36	3.57	**			-

<sup>\*\*</sup> Differences at the statistical indication level (0.01) and lower

Table (21) shows: Statistically significant differences at the level of statistical significance (0.05) are lower between the respondents of the study sample members aged 30 to under 40 and the study sample members under 30 years of age (the effect of electronic rumors on psychological reassurance) in favor of study sample members aged 30 to under 40 years.

Statistically significant differences at the level of statistical significance (0.01) are lower between the respondents of the study sample members aged 40 to under 50 and the study sample members under 30 years

of age (the effect of electronic rumors on psychological reassurance) in favor of study sample members aged 40 to under 50 years.

Statistically significant differences at the level of statistical significance (0.01) are lower between the respondents of the study sample members aged 50 years and over and the study sample members under 30 years of age (the effect of electronic rumors on psychological reassurance) in favor of study sample members aged 50 years and older.

Third: Differences depending on the variable level of education

<sup>\*</sup> Differences at the statistical indication level (0.05) and lower

To find out if there were statistically significant differences in the respondents' responses to the study sample according to the different educational level variable, the researcher used the researcher "One Way

ANOVA" to illustrate the differences in the responses of the study sample members according to the different educational level variable, and the results were as illustrated by the following table:

Table 22 Results "One Way ANOVA" for differences in the responses of study sample members according to the different educational level

pivots	Source of variance	Total squares	Freedom degrees	Squares average	P value	Statistical indication
The impact of electronic rumors on	Between groups	2.191	2	1.095	5.166	**0.006
psychological reassurance	Within groups	49.409	233	0.212		
	Total	51.600	235	-		

<sup>\*</sup> Statistical indication at 0.01 below

It is clear from table 22: there are statistically significant differences at the level of statistical indication (0.01) and less in the respondents of the study sample on (the effect of electronic rumors on psychological reassurance) depending on the variable of the educational level.

To determine the benefit of the differences between each of the educational level categories towards the trend around the psychological reassurance scale, the researcher used the "scheffe" test, and the following table illustrates these results:

Table 23. Test results "scheffe" for differences between educational level categories

The impact of electronic rumors on	Educational level	N	Average	less than university level	Undergraduate	Postgraduate
psychological	less than	17	3.43	-		
reassurance	university level					
	Undergraduate	149	3.38		•	
	Postgraduate	70	3.59		**	-

<sup>\*\*</sup> Differences at the statistical indication level (0.01) and lower

It is clear from table 23 that there are statistically significant differences at the level of statistical significance (0.01) and lower between the respondents of the study sample who have a pre-university level of education and the study sample members who have a university level of education about (the effect of electronic rumors on psychological reassurance) in favor of the study sample members with a pre-university level of education.

# Fourth: Differences depending on the variable of the social situation:

To find out if there were statistically significant differences in the respondents' responses to the study sample according to the difference in the variable of the social situation, the researcher used the researcher "One Way ANOVA" to illustrate the differences in the responses of the study sample members according to the difference sought by the variable of the social situation, and the results were as illustrated by the following table:

Table 24. Results "One Way ANOVA" for differences in the responses of study sample members according to the different social status

pivots	Source of	Total	Freedom	Squares	P value	Statistical
	variance	squares	degrees	average		indication
The impact of	Between	3.894	3	1.298		
electronic rumors	groups				6.313	**0.000
on psychological	Within	47.706	232	0.206		
reassurance	groups					
	Total	51.600	235	-		

<sup>\*\*</sup> Statistical indication at 0.01 below

Table 24 shows that there are statistically significant differences at the level of statistical indication (0.01) and lower in the respondents of the study sample on (the effect of electronic rumors on psychological reassurance) depending on the variable of the social situation.

To determine the benefit of the differences between each of the social status categories towards the trend around the scale of psychological reassurance, the researcher used the "scheffe" test, and the following table illustrates these results:

Table 25. Test results "scheffe" for differences between social status categories

The impact of electronic	Social	N	Average	Married	Widow	Single	Divorced
rumors on psychological	status						
reassurance	Married	131	3.54	-		**	
	Widow	8	3.35		-		
	Single	87	3.29			-	
	Divorced	10	3.70				-

<sup>\*\*</sup> Differences at the statistical indication level (0.01) and lower

Table 25 shows that there are statistically significant differences at the level of statistical significance (0.01) and lower between the responses of the sample members of the study married and the single study sample members on (the effect of electronic rumors on psychological reassurance) in favor of the married study sample members.

**Results related to the main question:** "What is the impact of the electronic rumors about the Corona

pandemic on the psychological reassurance of the audience of Prince Sattam Bin Abdul-Aziz University in Al-Kharj?"

To answer this question, the nature of the relationship between the impact of electronic rumors about the Corona pandemic and the psychological reassurance of the audience of Prince Sattam Bin Abdul-Aziz University in Al-Kharj was measured by the use of the Pearson Correlation Coefficient:

Table 26. Pearson Link Transactions to illustrate the relationship of the impact of electronic rumors about the Corona pandemic to the psychological reassurance

The impact of electronic rumors		Psychological reassurance
Rumors about Corona 19 affect the psychological well-being of the individual	Correlation Coefficient	0.018
	Statistical indication	0.784
Rumors about Corona 19 affect social relations between individuals	Correlation Coefficient	-0.132
	Statistical indication	*0.043
Electronic rumors are a lethal psychological weapon in times of crisis.	Correlation Coefficient	-0.206
	Statistical indication	**0.001
The impact of electronic rumors	Correlation Coefficient	-0.135
	Statistical indication	*0.038

(\*\*) existence of an indication at (0.01)

The results shown in Table 26 indicate:

The lack of a function correlation at the level (0.05) between the effect of rumors about Corona 19 and the psychological reassurance of the individual.

The existence of a counterproductive (negative) correlation function at the level (0.05) between the effect of rumors about Corona 19 and social relationships between individuals. The existence of a counterproductive (negative) correlation is a function at the level (0.01) between electronic rumors as a deadly

psychological weapon in times of crisis and psychological reassurance. The existence of a counterproductive (negative) correlation is indicated at the level of (0.05) between the impact of electronic rumors about the Corona pandemic and the psychological reassurance.

To find out the impact of the electronic rumors about the Corona pandemic on the psychological reassurance, the simple and multiple linear regression was used, and the following tables illustrate this.

Simple regression

Table 27. Results of the Variation analysis of simple regression (Analysis of variance) to determine the impact of electronic rumors about the Corona pandemic on psychological reassurance

ramors about the corona panaenne on psychological reassurance								
Source	Value of 2R	Total	Freedom	Squares	Calculated	(P) level of		
	Selection	squares	degrees	average	(P) value	indication		
	Coefficient							
regression		0.947	1	0.947				
Error	0.018	50.653	234	0.216	4.374	*0.038		
Total		51.600	235	-				

<sup>\*</sup> Statistically significant level  $(0.05 \ge \alpha)$ 

It is clear from table 27 that the R square or selection coefficient is equal to (0.018) for the independent variable: (electronic rumors about the Corona pandemic),

which means that this variable explains (1.8%) of ironing variation in psychological reassurance.

The table also demonstrates the model's validity to determine the impact of electronic rumors about the Corona pandemic on psychological reassurance, given the

value of the (P) value at a low uncertainty level of 0.038 for the independent variable on the dependent variable.

Table 28. Results of the Analysis of Simple Regression to See the Impact of Electronic Rumors about the Corona Pandemic on Psychological Reassurance

ſ	Independent variables	В	Normative	Beta	T value	Statistical
	•		error			indication
ĺ	Constant	3.652	0.103	-	35.608	**0.000
ĺ	Online rumors about the	-0.133	0.064	-	-2.092	*0.038
	Corona pandemic			0.135		

<sup>\*\*</sup> Statistically significant at the level of indication  $(0.01 \ge \alpha)$  \* Statistically significant at the level of indication  $(0.05 \ge \alpha)$ 

The statistical results in Table 28, beta follow-up and test (T) show that the constant d is statistically, and that the effect (electronic rumors about the Corona pandemic) is statistically d effect, and from the previous table we conclude that there is a negative effect of electronic rumors about the Corona pandemic on the psychological

reassurance. In other words, the more rumors about the Corona pandemic, the less psychological reassurance the audience of Prince Sattam Bin Abdul-Aziz University in Al-Khari.

**Multiple regression** 

Table Number (29) Variables in the model

Variables in the model	Order of variables in the model
Electronic rumors are a lethal psychological	1
weapon in times of crisis.	

The previous table shows the steps of multi-regression analysis and independent variables that have been included in the multi-regression equation ranked according to their importance and the strength of their impact on the dependent variable, and it is clear from this

table that a variable (electronic rumors is a lethal psychological weapon in times of crisis) is the only independent variable that has been listed as the most powerful variable affecting the dependent variable (psychological reassurance).

Table 30. Results of multi-regression variance to see the impact of electronic rumors about the Corona pandemic on psychological reassurance

F-7 0						
Source	Value of 2	Total	Freedom	Squares	Calculated	(P) level of
	Selection	squares	degrees	average	(P) value	indication
	Coefficient					
regression		2.181	1	2.181		
Error	0.042	0.211	234	0.211	10.328	**0.001
Total		-	235	-		

<sup>\*\*</sup> Statistically significant level  $(0.01 \ge \alpha)$ 

It is clear from table 30 that the R square or selection coefficient is equal to (0.042) for the independent variable: (electronic rumors are a lethal psychological weapon in times of crisis) and this variable explains (4.2%) of ironing variation in psychological reassurance.

The table also demonstrates the model's validity to determine the impact of electronic rumors about the Corona pandemic on psychological reassurance, given the value of the P at a low uncertainty level of 0.001 for independent variables on the dependent variable.

Table 31. Results of Multiple Regression Analysis to See the Impact of Electronic Rumors about corona pandemic on Psychological Reassurance

Independent variables	В	Normative	Beta	T value	Statistical
		error			indication
Constant	3.675	0.077	-	47.786	**0.000
Online rumors about the Corona	-0.172	0.054	-0.206	-3.214	**0.001
pandemic					

<sup>\*\*</sup> Statistically significant at the level of indication  $(0.01 \ge \alpha)$ 

It is clear from the statistical results contained in Table 31 and from the follow-up of beta and test (T) that the constant d statistically, and that the effect (electronic rumors are a deadly psychological weapon in times of

crisis) the effect of d statistically, and from the previous table we conclude that electronic rumors are a deadly psychological weapon in times of crisis on the psychological reassurance.

Table 32. Shows variables that are not included in the model

Variables that are not included in the model	T value	Statistical indication
Rumors about Corona 19 affect the psychological well-	1.278	0.203
being of the individual		
Rumors about Corona 19 affect social relations between	-1.129	0.260
individuals		

The previous table shows variables that are not included in the regression equation, and the effect of the rumors about Corona 19 on the psychological reassurance of the individual, the effect of rumors about Corona 19 on the social relationships between individuals) is included in the equation of multiple regression as its effect on psychological reassurance is weak, and it explains only a very small amount of variation in the degrees of the dependent variable.

#### **CONCLUSION**

With the increasing spread of the global pandemic of the new Coronavirus (Covid-19), people have become confused about them, and anxiety, panic and fear spread among many of them, especially children and the elderly. This is due to the spread of many frightening and misleading rumors that have contributed to broadcast by the various media and social media, in addition to conflicting news about access to a vaccine or a viable drug by the efforts of scientists and researchers, and the results of continuous scientific research in the countries of the developed world, which started from the first moment of the outbreak Corona. Despite all the necessary precautions, which have been taken to besiege and eliminate that danger, the psychological state and the disturbances that befall us as a result of our experience of this crisis, and what we hear and see throughout our day, remain a matter of concern to health professionals in general, and mental health professionals in particular.

Panic and fear are one of the most psychological reactions to disasters and epidemics, including "Covid-19", because of dealing with the unknown, and with the spread of the epidemic and panic on a large scale, the weight of collective fear intensifies, which increases the confusion and doubts of many people about the validity of what they receive. Fear increases with the spread of misinformation, wrong analyzes, disturbing rumors, and conspiracy theories, as a result of the openness of the world through modern media and social communication without censorship, in addition to the "phobia" of germs and infection.

The two researchers advise to deal with the crisis in a correct, balanced and objective manner, not to be blindly drawn into rumors, and not to spread them through social media.

In addition to not exaggerating or over-dealing with health to prevent any psychological stress that leads directly to you because you are the human immune system, calm and emotional stability are the effective way to control psychological stress that directly affects public health.

The researchers add to individuals who previously suffer from mental illnesses, so we advise them to review mental health professionals, and to take their treatments regularly, with the necessity to distance as much as possible the areas of psychological stress and obsession behind following the news, and there is absolutely no need for fear and anxiety, as global statistics confirm the

weakness of this virus, and that the cure rate is close to 85 percent.

The researchers advise families to pay attention to vulnerable groups such as children and the elderly (for those over the age of eighty), and to be careful, especially when a sudden change in the behavior and behavior of our children occurs, such as the emergence of sudden aggression, with social isolation, and a fluctuation in mood and risk, adding a change in the pattern and timing of sleep, which are psychological symptoms that indicate that children are fearful and panicked due to rumors and fake news Corona, especially intimidation of the danger of death, or the loss of a dear and dear family, as the child may imagine or firmly believe that one of his parents, especially the mother, Then father, he may die of corona. The two researchers also conclude to be calm, give more support and family warmth, while passing health information in a calm manner, away from intimidation or exaggeration and not help in spreading electronic rumors, and spreading positive feelings that ensure a sense of security and reassurance.

## RECOMMENDATIONS AND PROPOSAL

- Activating the control of the means of communication from the competent authorities and adopting deterrent provisions to reduce the spread of electronic rumors
- 2. Using electronic media and media to spread psychological reassurance and spread optimism in times of crisis.
- **3.** Promoting positive spirit and spreading awareness of the non-recycling of rumors among members of society in times of crisis.
- **4.** Conducting studies on the impact of electronic rumors on the mental health of members of the community with variables.

# **ACKNOWLEDGEMENT**

This research publication was supported by the Deanship of Scientific Research at Prince Sattan bin Abdulaziz University, Alkharj, Saudi Arabia.

# REFERENCES

- 1. Holy Qur'an
- 2. Al-Tabari, Mohammed bin Jarir bin Yazid bin Kabir bin Ghaleb. (224-310) the interpretation of the verses of tranquility of the Qur'an.
- 3. Ibn Manzoor (1997). A house confiscated.
- Al-Taie, Iman Muhammad. (2006). A sense of security and its role in sustainable development. Center for Educational and Psychological Research.p. 1 20
- 5. Mahdi Mohamed the reassuring soul among the circles of Good Saudi Arabia, a psychiatrist.
- Paterje, Rotol. (2008). Peace Grant Calcutta, Broq, Article 11.p.1-3.
- 7. Argyle, Michael. (2008). Psychology of Happiness: Translation: Dr. Faisal Abdulqadir Younis, Kuwait. The World of Knowledge series.

- Abu Al-Azzam, Mahmoud Jamal Madi. Prayer and mental health. Prayer and prayer as therapeutic tools.
- King Abdul-Aziz Center for National Dialogue. (2014). Saudi society affection by rumors, a report posted on the Internet.
- Suleiman, Ahmed. (2017). Social networks and their role in spreading rumors from the point of view of faculty members at Diyala University, Master's Thesis, Middle East University, Amman, Jordan.
- 11. Hijab, Mohamed Mounir (2007). Rumors and ways to confront them.
- 12. Darwish, Ibrahim Abdullah (2017). Rumors and entertainment via electronic media and trading controls, Field Marshal Center for Educational and Educational Consultancy, Saudi Arabia.
- 13. Rahu, Janan Saeed Ahmed. (1994). Psychological security for adolescents and their relationship to parental treatment. Faculty of Education, Ibn Rushd.
- 14. Hadi, Azhar. Psychological security and its relationship to psychological alienation among university students.
- Al-Badri, Samir Musa, and Al-Hakak, wajdan Jaafar (2009): Building a measure of psychological reassurance for students at Baghdad University, Journal of Educational and Psychological Research, Issue 29.
- 16. The false rumors and their relationship to the security of society from the point of view of the students of Prince Sattam Bin Abdul-Aziz University in Al-Kharj Ahmed, The Nile Valley Journal for Human, Social and Educational Studies and Research, Cairo University, Khartoum Branch, 25(3)33-68
- Al-Sarhan, Atallah bin Fahda (2013) methods of spreading rumors and confronting them in the media, training programs department, Faculty of Education, Riyadh, Saudi Arabia.
- 18. Al-Khalidi, Ahmed. (2012) Concern for the future and its relationship to the level of ambition and psychological security of a group of high school students in Kuwait. Journal of the Faculty of Education, University of Tanta, 24 (45)77-106.
- 19. Al-Hams, Abdel Fattah Abdel Ghani and Shaldan, Fayez Kamal. (2010). Psychological and social dimensions in promoting rumors through the media and ways to treat them from an Islamic perspective. Journal of the Islamic University (Series of Humanities Studies) 18 (c9) 145-174.
- 20. Al-Sa'aida, Jihad Ali (2019): Rumors on social media and their effects on community security from the point of view of students of Princess Rahma University College.
- 21. Al-Dulaim, Fahad bin Abdullah Ali (2004).

  Psychological reassurance and its relationship to the psychological unit of a sample of students from the University, Saudi Arabia, Riyadh, King Saud University. Faculty of Education.
- Al-Khatf, Iman (2013). Saudi women in the eastern region rely on new media for obtaining the right information (Master's thesis), King Saud University, Riyadh.
- 23. Al-Gharm, Khalid bin Faisal (2016): Using social media in health awareness of Corona disease: an applied study on medical cities and government hospitals in Riyadh, Saudi Arabia, The Arab Journal

- of Media and Communication Research, Al-Ahram University of Canada.
- 24. Cell, Read bin Ahmed Saleh. (2017): Rumors on social media and its relationship to the intellectual security of university students.
- 25. He called you, a victory. (2018). Electronic rumors and their impact on public opinion: a study on a sample of Saudis in Jazan region, Faculty of Arts and Humanities, Jazan University.
- 26. Al-Nashiri, Talal, Al-Sayes, Amal. (2013). Rumors and their impact on Saudi society, Social Science magazine, Saudi Arabia, 25-103.
- 27. Bai, m, (2012). Exploring Dynamic of Romans on social Media in the China context. UN publish maters, s thesis, Uppsala University Sweden.
- Benjamin doer, Mahmoud Focus, Tobias Fredric, experimental Analysis of Algorithms, 2012, PP159-173.
- Hong chin, Yang K. Lu, wing Suen, The Power of Whispers: theory of Rumor, communication and Revolution, international Economic Review, Volume 57 Issue1, 2012, PP 89-116.