THE ROLE OF SOCIAL NETWORKS IN PROMOTING POSITIVE BEHAVIOUR DURING COVID-19 CRISIS AMONGST A SAMPLE OF USERS IN SAUDI SOCIETY: TWITTER AS A MODEL

[a]ABDULLAH AHMED ALGARNI

Ministry of Education, Jeddah Educational Zone,
P.O.Box108630, Jeddah 21351,Kingdom of Saudi Arabia
email: [a]abdullah62@gmail.com

Abstract: This study seeks analysing Twitter social network role in promoting positive behaviour during COVID-19 crisis and exploring the relationship between them. It targets identifying Twitter positive behaviour level differences through variables of gender, age, marital status, residence status, administrative region, and Twitter using size. An online questionnaire was used on a validity-and-stability verified sample of (586) individual Twitter users in the Kingdom of Saudi Arabia. Sample members approved Twitter users' positive behaviour during COVID-19 crisis. They agreed that the positive behaviour level was medium with a Twitter effect of (19.4%). There were both a positive, medium-strong correlation between Twitter daily use and a statistically significant correlation between one - session Twitter using and positive behaviour promotion. However, there were statistically significant differences in positive behaviour promotion when using Twitter between social status favouring singles, residence status favouring residents, age favouring those under 21, administrative region favouring the southern region, usage period favouring network daily and two days - users, and browsing time favouring much Twitter users .The study recommends conducting studies on positive social behaviour and its dimensions to broadly generalise results. Studies on the Internet of behaviour and artificial intelligence are needed to analyse the positive behaviour expected by social networks users to enhance opportunities. It also stressed children and adolescents' digital social education to prepare community members for effective online participation, the activation of public and private services-providing agencies Twitter accounts, interacting positively with users' questions and responses, and substituting fixed stereotypes by interesting interactive patterns.

Keywords: social networks -twitter - positive behaviour - crisis - covid-19.

1 Introduction

The contemporary world is witnessing a set of rapid changes communication and information technology, which made the world a global village in which information is transmitted in fractions of a second. Undoubtedly, these changes have a direct impact on individuals and institutions that consist societies, which prompted these societies both to accept these changes and innovations and to adapt to them to benefit from the advantages they offer in all fields. On top of these innovations are social networks, and because the boundaries of geography no longer play a prominent role in social networks, one can find someone to communicate with anywhere at any time. Besides, it is not based on compulsion or obligation. Rather, it is entirely based on choice. No one is compelled to accept the friendship of another, nor to respond to an e-mail, comment on a speech, a blog, or a post.

Social networks have emerged popularly in the modern era. They are characterised by features of communication that are rarely paralleled elsewhere, which made them attract a large part of the attention of all various divisions of society members. They are using social networks increasingly even to the extent of relying upon them in their daily lives in a remarkably accelerating manner.

Twitter is one of the most prominent globally- used social networks. "Twitter ranked fifth globally in terms of the number of users or the annual increase in its users, with an average usage time of two hours and thirty minutes per day. As for the Kingdom of Saudi Arabia, it ranked third, outside the United States of America, and fourth globally, reaching 14.35 million active accounts (We Are Social, 2021)

The rapid emergence of COVID-19 virus and the seriousness of its effects and repercussions leading to the cessation of a huge amount of human life activities affected the individuals' social behaviour. Societies as well as individuals differed in interacting with the process of social change accompanying this epidemiological crisis. "The danger that the environment is exposed to has the same characteristics as the war destructive force. Also, it is a democratic danger that affects the rich and the poor in all fields. It is no longer an individual country concern and no country is able to control it alone" (Beck, 2009, p.30).

Moreover, this epidemic causes individual and social anxiety, which necessitates putting in place preventive controls that would dispel societal anxiety, and reassure the souls for the general safety of society based on unfamiliar daily life methods, and particularly in social behaviour such as physical distancing, staying at home, and full adherence to strict health behavioral preventive procedures and requirements.

The positive behaviour appears in dealing with this pandemic with positive preventive measures and in adapting to their requirements positively in behaviour at individual and social levels. In addition to the need to overcome societal tendency over individualism, where the fate of the individual is existentially linked to the fate of society. Herein, the feeling of solidarity is the basis of society coalescence. Therefore, positive social behaviour and adapting to preventive measures is one of the methods of expressing true positivity and good citizenship.

This social behaviour emerges through what the individual offers, poses, or interacts with through these social networks, which in total constitutes a social behaviour characterised by straightness and distinguished by positivity, even if it takes a new pattern or a different form in comparison to what the individual is accustomed to. This keeps pace with the global transformation towards technology and its entry into the various joints of life. Perhaps the world today is described as "a world surrounded by dangers due to scientific and technical progress, which has an adverse effect because of human intervention in the environment. Science and technology are amongst the most important reasons, and hope is placed on them for solutions." (Giddens, 2003, p.19).

Accordingly, there is an urgent need to study this social behaviour, especially through social networks, and the extent to which it appears, and whether individuals reinforce it between each other.

2 Literary reviews and related studies

Researchers' opinions from several fields differed concerning the crisis concept. Oxford Dictionary defines it as "a transitional circumstance characterised by imbalance and representing a turning point in the life of the individual, group and society and often results in significant change" (Oxford Dictionary, 2002, p.194).

It is "a state of tension and a turning point that requires a decision resulting in new negative or positive situations that affect the various relevant entities." (Shaalan, 2012, p.23). In the social patrimony, it was defined as "the situation of irregular and unexpected events and the disruption of traditions and custom, which requires rapid change to restore balance and to form new habits" (Badawi,1982, p.82).

It is distinguished by several characteristics, namely "surprise, shock, lack of information and inaccuracy, the events increase, intertwining, acceleration, a state of panic, loss of control, psychological, social, financial or human losses, and the absence of a quick radical solution" (Steve, 1997,p.3-4). The making and formation of these features and characteristics undergo three stages. The first is the impact, as the lack of information, experiences and habits in dealing with the new crisis do not help organisations, groups or individuals in facing the crisis, since it is a new situation that they have not been previously exposed to. The second is backing down and regression. Organisations, groups or individuals suffer from the lack of organisation in their response to difficult situations and the psychological state of fatigue, excitement and anxiety. The third stage is disintegration and compatibility, through the discovery of new resources that help in facing the crisis or by developing new definitions and a new view of the crisis that helps inventing new unfamiliar solutions or adapting to current situations to face the crisis and seek to solve it. (Francis, T., 1994, p.28-29).

However, the crisis has two contradictory successive positions that are risks and opportunities. Its formation through an intertwined group of derivations of the main problem makes the individual lost in dealing with it choosing between two ways. The first is attention to risks leading to despair, pessimism and frustration, which makes him find himself obliged to find a new way to deal with it and here new opportunities appear for the solution, and hope and optimism comes back instead of despair as a second path. The individual is keen to make effective decisions by acquiring a high degree of vigilance and caution that enables him to access information carefully without bias to reach the most appropriate alternative amongst the available options.

Hence, James suggested “not using formally defined approaches to taking decisions in times of crises, but rather relying on informality, non-pre-determination, and self-situational initiatives as an approach to decision-making in crises.” (Al-Faisal, 2006, p.21).

Examination and understanding of sudden and unexpected situations that have severe pressures help guide individuals to how to deal with this crisis and its manifestations in difficult, narrow or severe times. Here, emerges the disparity and variation in the behaviour of individuals according to the social role theory of the individual in dealing with the crisis.

The role theory sees that “the individual’s behaviour and his social relations depend on the social role or roles that he occupies in society. In addition, the individual’s social status and position depend on his social roles. The social role involves social duties and rights. The duties of the individual are determined by the role he occupies. His rights are determined by the duties and tasks that he performs in society, knowing that the individual does not occupy a single social role, but rather occupies several roles located in different institutions. These roles vary, as there are leading, mediating and basic roles. The role is the structural unit of the institution and the institution is the constructional unit of the social structure. Thus, the role is the link between the individual and society. (Al-Hassan, 2015, p.159).

Accordingly, the social role is what the individual does in his large community or in the group to which he belongs, and the individual usually plays a number of roles. This is because the human being is linked to several social forms with a special role for each form. A person is linked, for example, to a country, to a family, and so on. Besides, since the individual often wants more material or moral benefit, he is not convinced to perform his authorised role, but rather does more than his duty, and therefore the individual had a role authorised to him, and a role that he acquired himself.

However, despite defining the meaning, importance and nature of the role in the study and analysis of the social structure, this concept is one of the most ambiguous concepts in the social sciences, due to its overlap with other concepts. As a result, the role is interpreted as “the total sum of cultural patterns associated with a particular position. It is the dynamic aspect of the position, which the individual is obligated to perform so that his work is sound in his position.” (Al-Hassan, 2015, p.167).

There are several determinants of individual behaviour, the most important of which are the common awareness of the position occupied by the individual in the social structure, the expectations that group members hold regarding the behaviour of people who occupy certain positions in the social system, and the social standards and values, which are common expectations shared by society members in the same social system. The process of acquiring social roles is a matter of cognitive and emotional engagement.

The individual's social roles are acquired by empathizing with the important individuals and those around him. It means the ability to perceive the feelings of a person in a particular situation leading to the appropriate behaviour to the social situation. Indeed, the individual's understanding of this role, specifically in times of crisis, is what pushes, motivates, and makes him strive for his behaviour to be always positive.

However, those who are interested in the concept of positive behaviour notes the difference of views on its concept by many researchers and interested people in this field because “the studies of positive social behaviour are still in the cradling stage. One of the reasons for the differences about this definition is the controversy surrounding the essence and nature of positive social behaviours.” (Al-Quraishi, 2012).

Others, however, refer this controversy to the fact "that sociologists focused their efforts on anti-social behaviour, or negative social behaviour and not the positive social behaviour, so deviant behaviour and criminal behaviour received attention, while positive social behaviour remained without any attention." (Dreeb, 2013).

Positive social behaviour refers to “voluntary or optional actions, aiming at benefiting or helping a person, or a group of people, meaning that what distinguishes positive social behaviour is that its actions are voluntary and not coercive. Some other positive behaviours may occur for several reasons such as motivating an individual to help another for personal reasons including obtaining a reward, approval from others, or actually caring for others. Voluntary actions stem from within the individual from an internal motive or internal values and a sense of self-satisfaction, rather than personal gains. The internal motivation here is to love others. It includes belief in the importance of respect, self-esteem, and self-satisfaction, and in return, the individual can punish himself with regret or a sense of inferiority if he does not perform positive behaviour.

For these reasons, some refer the motives of positive social behaviour to selfish values over altruistic ones. Whereas, they believe that each individual acts with his own internal motives, and for his own reasons with a sense of self-enhancement or suitability (Barakat, 2018, p.138). The purest form of prosocial behaviour is “altruism-driven, unselfish interest in helping one person to another and the conditions most likely to elicit altruism are compassion for the individual in need” (Santrock, 2007, p.491).

The positive behaviour of the individual depends on his analysis of the situation according to the bystander intervention decision model, where the individual will consider whether the situation requires his help or not, and whether assistance is the responsibility of the individual, and how to help. This model, describes five things that must happen until the person intervenes, which are that “the individual observes the situation, interprets it as an emergency, develops feelings of responsibility, believes that he has skills to succeed, comes to a conscious decision to help” (Darley, & Latane, 1970, p. 96).

Accordingly, positive behaviour can be described as disciplined, acceptable and normal behaviour that conforms to the customs and traditions of the society in which he lives, and his integration into it through the social and psychological aspect. Positivity is a dynamic integrated set of flexible, free and responsible behaviours based on awareness and insight aiming at bringing about change for the better. Hence, we realise the importance of positive behaviour. A person can decide his behaviour. If he is advised to behave in a positive manner, he can remove many undesirable feelings and things that may hinder the achievement of what is best for the individual, and positive behaviour is closely related to success in all life areas.

Today, the number of the infected and deaths of the COVID-19 pandemic is constantly increasing daily. According to the Saudi Ministry of Health report "the infected reached (482003), including (463004) cases of recovery and (7760) deaths, May God have mercy on them all" (Saudi Ministry of Health., 2021).

These increasing numbers of the infected constitute a real crisis for society, institutions and individuals. Everyone sought to cooperate in solving it. Therefore, security measures were taken including curfews, reducing human gatherings, transforming

distance education and many professional activities as well. Health institutions took preventive and precautionary measures apart from providing infection-preventing vaccines. Moreover, they sought to broadcast the correct ways to deal with this crisis by individuals, and here the role of the individual appears in paying attention to these procedures, which requires him to be a good citizen by supporting them and urging others to strictly follow them.

Herein, appears the positive behaviour of the individual towards his community. Besides, based on the increase in their use, social networks, the first of which is Twitter, have become an integral part of the internet users. In fact, %41 of the total population of Saudi Arabia use Twitter, which is the highest percentage of total users in the world." Individuals sought to carry out and reinforce their positive behaviour through that social network.

Numerous studies have examined the social and cultural effects of social networking in multiple ways. (Tucker.2011) found that with the advancement of technology, the ways in which public health officials communicate with the public have also evolved. Twitter, Facebook, and smartphone apps have become the latest tools in public health and disaster preparedness, because they allow officials to reach quickly a large number of people with important information and it is the most successful means by which public health officials communicate with the community.

The study of (Procon.org .2020) examined the extent of the use of social networks. It found that about seven out of ten Americans (72%) use social networks, showing an increase of (26%) compared to the year 2008. Thus, communities through social networks, have a decisive role in promoting increased interaction with friends and family; it also contributed to the spread of useful information quickly. It enabled the quick and easy diffusion of public health and safety information from reliable sources as it was used by health-related sectors.

The study of (Hassounah. et al. 2020) shed light on how the Kingdom of Saudi Arabia uses digital technology during the COVID-19 pandemic in the areas of public health, health care services, education, communications, commerce, risk communication, and the use of social networks, websites and SMS as best practice guidelines. It concluded that the framework of Saudi Arabia's Vision 2030 paved the way for digital transformation. The pandemic made it possible to promote, test and prove this transmission. It recommended that reducing the number of mobile applications and integrating their functions could increase and facilitate their use.

The study of (Heena & Hunny.2020) presented a review of the positive and negative impact of social networks during the pandemic on health care professionals and the public. It showed that health care providers are actively fighting simultaneously on two fronts: The virus, and the misinformation associated with it and correcting misconceptions by health care professionals. It has proven the effectiveness of providing and conveying honest facts by health experts. It suggested various ways to correct misconceptions about health using social networks, which include timely expert advice, regular public health education, with periodic communication with the public via social networks. As well, evidence must also be presented and displayed to the public through all these ways. The intellectual and emotional dimensions of the audience must always be addressed during this stage of fear and anxiety.

The study of (González & Tortolero .2020) examined the role of social networks in rapid communication with taking into account its many advantages and disadvantages. The study highlighted that the worst aspect of social networks is the possibility of spreading false, frightening and exaggerated information. This can cause fear, stress, depression and anxiety for people whether they suffer from underlying mental illness or they do not. Responsible use of social networks during a pandemic can help quickly disseminate important new information, share prevention, diagnosis, treatment, and follow-up protocols, and compare different approaches from other parts of the world to adapt it to the local environment.

The study of (Alnasser et al. 2020) evaluated the use of social networks as a source of awareness of COVID-19 virus in Saudi Arabia. An online survey was conducted with the participation of (3204) people. Snowball sampling techniques were used through a structured online questionnaire. The results showed that (75.4%) of the participants had a high level of awareness of the pandemic. All participants from all regions of Saudi Arabia showed a high level of awareness except for those from the northern region. The most common source of information was official government social networks, and (44%) respondents reported using Twitter regularly. The results showed that social networks have a positive impact on the transmission of information about the pandemic in Saudi Arabia.

The study of (Siddiquia. et al. 2020) examined the existence of knowledge amongst Saudi and non-Saudi population about COVID-19 and its impact on their behaviour to practice infection prevention protocols. It examined how the population in Saudi Arabia interacts with the government methods and protection measures within its efforts to monitor and eliminate the infection spread. The survey methodology was used and data was collected from Saudi citizens as well as expatriates living and working in five different regions of Saudi Arabia. Non-probability snowball sampling was used. It found that (356) out of (443) respondents (84%) knew and implemented the preventive protocols. The results showed that there is a significant relationship between knowledge and practice, but the correlation strength is weak. Knowledge and practices related to the pandemic were followed differently in the five regions of Saudi Arabia, and the level of education of the respondents influenced their choice of practice to protect themselves from infection.

The study of (Al-Shugair.2020) defined the concept of healthy environmental security, introduced COVID-19 pandemic, and tried to link public health represented in health practices in daily life with the issue of environmental security. As well, it identified the level of health environmental awareness in the practices of members of Saudi society to deal with the pandemic. The study sample included (786) citizens aged 18 years and over, according to seven independent variables (region of residence, age, work, educational level, marital status, number of residents with the respondents and monthly income). The study followed the social survey method, using the quota sample method and an online questionnaire. The results of the study showed that (37.7%) of the total participants daily follow updates on the new COVID-19 virus. The Saudi Ministry of Health came in first place as a source of guidance for respondents. The levels of awareness of the study community's practice in Saudi Arabia of health environmental security measures appropriate to the emerging COVID-19 virus were high. The study confirmed that females are more committed than males to the practices of healthy environmental security measures to prevent and limit the virus spread.

The study of (WHO.2021) which was achieved in collaboration between the World Health Organisation, Wunderman Thompson, the University of Melbourne and Pollfish, sought to better understand how young people could engage with technology during the crisis. It included (23,500) respondents, aged between 18 nd 40 years, in (24) countries across five continents. The findings provided key insights into where millennials seek information about COVID-19, whom they trust as reliable sources, their awareness and actions about fake news, and what their concerns are. The revealed key ideas were that content is seen as shareable, awareness of fake news is high as well as apathy, and millennials have multiple concerns that go beyond getting sick. The idea that young people are "too comfortable" and do not care about the crisis is not reflected in the data, as more than (90%) of the respondents were very concerned or concerned to some extent about the risk of infection. It recommended paying attention to ensuring that

policies and recommendations related to youth should be in an atmosphere free of misinformation, scepticism and fear.

The study of (Taso. et al. 2021) examined peer-reviewed applied studies of COVID-19 and social networks during the first outbreak (November 2019 to November 2020). (81) Studies were analysed. Five cross-cutting public health themes were identified on the role of online social networks and COVID-19 focusing on public attitude investigation, identification of information, mental health assessment, case detection or prediction, analysis of government responses to the pandemic, and assessment of the quality of health information in educational videos. The study concluded on the paucity of studies on applying machine learning to data from social networks associated with COVID-19, and the paucity of studies documenting real-time monitoring developed using data from social networks about COVID-19. Social networks can play a critical role in spreading health information and tackling incorrect and misleading information.

Overall, we find that most of the previous studies dealt only with certain angles of dealing with COVID-19 crisis and did not deal with it in an integrative manner. This study, however, tries to be more comprehensive as it addresses it through positive social behaviour during COVID-19 crisis through Twitter in Saudi society. In conclusion, previous studies have been utilised in formulating the study's questions, defining its objectives, and selecting its appropriate statistical methods in addition to the information and theoretical concepts that these studies comprise.

3 The study problem

Through the COVID-19 virus crisis and the high preventive measures that accompanied it, and based on the massive use of social networks, it is imperative for each user to adopt positive social behaviour such as sympathy, sharing and cooperation in order to overcome this crisis. In addition, the individual should highly prove being a valid citizen by carrying out the duties of citizenship through this social network. The study identified its problem as studying the role of social networks and Twitter in particular in promoting positive behaviour to deal with the COVID-19 pandemic as a crisis experienced by all members of society and its institutions amongst a sample of users in Saudi Arabia, users of Twitter as a model.

The importance of this study stems from the importance of the topics it deals with, both the positive behaviour and the COVID-19 pandemic crisis and their related variables. In fact, they got great interest and care by specialists, especially with the unbridled growth of social networks use, focusing on this global pandemic of COVID-19 virus, which has affected profoundly all economic and social joints of life. The importance of the study is also determined from an applied point of view in transforming its results to a set of recommendations. These conclusions may contribute to enlightening those interested in this crisis, from various social, health and media institutions, to the reality of positive behaviour through social networks to enhance its role in a better way through programmes designed to face this crisis.

Accordingly, this study set its objectives as follows:

- Disclosure of the role of social networks (Twitter) in promoting positive behaviour amidst the COVID-19 crisis.
- Identifying the relationship of using social networks (Twitter) to promoting positive behaviour during the COVID-19 crisis.
- Interpreting the differences in the level of positive behaviour through Twitter during the COVID-19 crisis according to the variables of gender, age, social status, residence status, administrative region and the usage frequency.

Then, the study raised the following questions:

1. What is the level of positive behaviour amongst a sample of Twitter users in dealing with the COVID-19 crisis in the Kingdom?
2. Is there a statistically significant relationship between the use of Twitter and the promotion of positive behaviour in dealing with the COVID-19 crisis?
3. Are there statistically significant differences in the use of Twitter and the promotion of positive behaviour that are attributed to the variables of gender, age, social status, residence status, administrative region, and frequency of use during the COVID-19 pandemic in the Kingdom?

4 The study Methodology

Based on the nature of the study, the goals it seeks, and the questions it asked, the descriptive analytical approach was adopted. This approach depends on the study of the targeted phenomenon and the analysis of its data, and the statement of the relationship between its components and the opinions that are raised about it, the processes it contains and the effects it causes. This is one of the forms of the organised scientific analysis and description of a specific phenomenon or problem in reality, describing it accurately and expressing it by classifying and organising information, seeking to understand the relationships of this phenomenon or problem with other phenomena or problems, and reaching conclusions that contribute to the development of the studied reality. This study was conducted during the months of June and July of the year 2021 AD. The study community represents all Twitter users residing in Saudi Arabia. The research sample was taken using the purposive sampling method and it consisted of (586) individuals. After that, the study tool was designed, which is the online questionnaire via the Google Forms application.

To verify the psychometric conditions of the tool, the apparent honesty of the tool was ascertained by presenting it to a group of arbitrators with science, experience and knowledge in the fields of scientific research and sociology for evaluation. Amendments, deletions and additions were made according to the majority of the arbitrators' opinions. The internal consistency was checked by calculating correlation coefficients between the grade of each phrase and the total score of the questionnaire. It was found that the correlation coefficients of each of the scale phrases and the total score of the scale were all statistically significant at the level of significance (0.01), which indicates the availability of a high degree of internal consistency of the scale. To verify the stability of the search tool, the researchers used the Cronbach Alpha standard and the total reliability coefficient of the questionnaire was (0.922). These high values of the reliability coefficient indicate the validity of the tool for application and the reliability and validity of its results. To achieve the objectives of the research and analyse the collected data, (One-Sample T Test), (Independent Samples T Test), (One - Way ANOVA) and (Levene's Test) were used to test the homogeneity of variance, and (Partial Eta Squared) to determine the size of the sample effect, and (Scheffe) as one of the post- tests when there is homogeneity in the variance.

5 The study results and discussion

In light of reviewing previous studies and based on the study importance, topic, the context in which it is applied, and to achieve the desired goals and the questions it seeks to answer, and after verifying that the study tool fulfills all the psychometric conditions of honesty and stability, the tool was applied to the study sample, The results of the study showed the following:

The first question: What is the level of positive behaviour amongst a sample of Twitter users in dealing with COVID-19 crisis in the Kingdom?

To answer this question, the statistical method represented by the arithmetic average and the One-Sample T Test was used at the level of significance ($\alpha = 0.05$), and the effect size was

calculated using Partial Eta Squared according to the following table:

Tab. 1: Approval Limits

Approval degree	Arithmetic Average Range	Level degree
Strongly disagree	1.00 – 1.80	Very low
Disagree	1.81 – 2.60	Low
Neutral	2.61 – 3.40	Average
Agree	3.41 – 4.20	High
Strongly agree	4.21 – 5.00	Very high

Tab. 2: One-Sample T Test

Axis	Arithmetic Average	Freedom degrees	T value	(sig) P.value
The positive behaviour of Twitter users in dealing with the COVID-19 crisis in the Kingdom	3.40	585	11.838	0.000

From the above results, it is clear that there is a consensus and a high approval of the study sample (68%) on the positive behaviour of Twitter users in dealing with the COVID-19 crisis in the Kingdom. The effect size was (0.50), which means that it is medium. That is, Twitter has a medium effect on promoting the positive behaviour of individuals in dealing with the COVID-19 crisis in the Kingdom. This leads us to assert that (19.4 %) of the positive effects that occur in the behaviour of individuals in behaving positively during the COVID-19 crisis in the Kingdom are attributed to the use of Twitter. The previous table showed that the items of the axis were in descending order based on the opinions average of the study sample, with comparison of the results with the table of the limits of the degree of approval. In general, it was found that the total average of the opinions of the sample members about the positive behaviour of Twitter users in dealing with the COVID-19 crisis was (3.40). That is, there is a consensus and approval of (68.00 %) on the positive behaviour of Twitter users in dealing with the COVID-19 crisis. The level of positive behaviour of Twitter users is average in dealing with the COVID-19 crisis. We find that the standard deviation was (0.823) and its value is small, and this indicates that there is no discrepancy in the opinions of the study sample towards the level of positive behaviour of Twitter users in dealing with the COVID-19 crisis.

The results of this question are in many ways consistent with the findings of previous studies that the use of social networks has an active role in positive social behaviour during the COVID-19 crisis, even if it disagrees with it that Twitter is the main tool used to promote this behaviour. This result may be attributed to the nature of the pandemic crisis and the extent of its impact on the lives of society members. Added to that, the nature of their interaction with it, in terms of the passed period that was characterised by staying at home due to quarantine, reducing outdoor hours, working remotely, which provided a tremendous opportunity for users to highlight their positive behaviour reaching the percentage of consensus and high approval. Thus, they achieved their quest for a sense of community, breaking the feeling of loneliness and social isolation, satisfying psychological needs and bonding with members of the group. It may also be attributed to the extent of the expansion of reliance on social networks and the large number of Twitter users in the Kingdom. As for the approval of (19.4%) of user s, this may be attributed to the multiplicity and diversity of social networks and the multiplicity of individuals' use of these networks, even though Twitter is characterised by "reliability and high rates compared to the rest of the social networks" (Algarni, 2019, p .56).

The second question: Is there a statistically significant relationship between the use of Twitter and the promotion of positive behaviour in dealing with COVID-19 crisis?

To answer this question, the Pearson correlation coefficient statistical method of testing was used at the level of significance ($\alpha = 0.05$). The results are shown in the following table:

Tab. 3: Results of Pearson Correlation Test

Axis	Pearson correlation coefficient(R)	Impact size	(sig) P.value
The relationship between Twitter daily use and the promotion of positive behaviour in dealing with COVID-19 crisis	0.393	0.154	0.000
The relationship between Twitter use in one session and the promotion of positive behaviour in dealing with COVID-19 crisis	0.247	0.061	0.000

From the above results, it is clear that there is a positive, medium-strength, correlation between Twitter daily use and the promotion of positive behaviour in dealing with COVID-19 crisis. This means that the greater the daily use of Twitter is, the greater the strengthening of positive behaviour in dealing with the COVID-19 crisis to a moderate degree is, and vice versa. The effect size was (0.154), which means that Twitter daily use affects (15.4 %) on promoting positive behaviour in dealing with COVID-19 crisis. Accordingly, (15.4) of the changes and positive effects that occur in the behaviour of individuals in dealing with COVID-19 crisis are attributed to Twitter daily use. As for the relationship between the use of Twitter in one session and the promotion of positive behaviour in dealing with COVID-19 crisis, there is a correlation with positive statistical significance of low strength. That is, the more Twitter is used in one session, the more positive behaviour is enhanced in dealing with COVID-19 crisis to a low degree, and vice versa. The effect size was (0.061), which means that the use of Twitter in one session affects (6.1%) on promoting positive behaviour in dealing with COVID-19 crisis. Accordingly, (6.1) of the changes and positive effects that occur in the behaviour of individuals in dealing with COVID-19 crisis are attributed to the use of Twitter in one session.

The results of this question agree in several ways with the findings of (Procon.org 2020), (Hassounah. et al. 2020), (Heena & Hunny. 2020), (González & Tortolero 2020) and (Alnasser et al. 2020) that there is a positive correlation between the use of social networks and dealing with COVID-19 crisis. However, they disagree with it in that Twitter is the main tool used to reinforce this behaviour and the extent of the strength of this relationship to a moderate degree, as previous studies did not measure in depth the strength of that correlation. As for the use of Twitter in one session, the percentage was (6.1) of the changes and positive effects that occur in the behaviour of individuals in dealing with COVID-19 crisis. This is due to the frequency of these sessions, the extent of the diversity of the individual's knowledge sources, and the diversity and multiplicity of social networks, which sheds part of its light on the effect of Twitter on the positive behaviour. As well, it may also be attributed to the individual's feelings of new environmental conditions that provided him with a completely different system and thought, so he tries to deal with them with patience, perseverance, and integration, and their quest to stay away from social networks or COVID-19 crisis.

It may also be attributed to dealing with the crisis, which began to reach its third stage. The latter is characterised by compatibility. Therefore, individuals employed Twitter as a new

resource that helps them face the crisis, deal with it, and adapt to it to reach the maximum extent of the solution or contribution from them towards their society as a social role for them in their society. The individuals' awareness of this role, specifically during the times of COVID-19 crisis, is what pushes, motivates, and makes them strive to always have a positive behaviour.

The third question: Are there statistically significant differences in the use of Twitter and the promotion of positive behaviour that are attributed to the variables of gender, age, social status, residence status, the administrative region and the frequency of use during COVID-19 pandemic in the Kingdom?

To answer this question, the following statistical methods were used: Independent Samples T Test at the level of significance (a = 0.05), the test of analysis of variance (One - Way ANOVA) at the level of significance (a = 0.05), and the effect size was calculated using (Partial Eta Squared), which led to the following results:

First: the gender variable:

The results of the Independent Samples T Test for the gender variable showed the following:

Tab. 4: Independent Samples T Test for Gender Variable

Axis	Gender	Readings Total	Degrees Average	Standard Deviation	T Value	(sig) P.value	Significance
Using Twitter network to promote positive behaviour	Male	256	3.39	0.848	0.252	0.800	Not significant
	Female	330	3.41	0.804			

According Independent Samples T Test for Gender Variable, it is clear that there are no statistically significant differences in the opinions average of the sample members about the use of Twitter in promoting positive behaviour due to the gender variable (male, female), and the impact size was (0.000). Therefore, it can be assumed that the use of Twitter in promoting positive behaviour does not differ according to gender.

Second: the marital status variable:

The results of Independent Samples T Test for the marital status variable showed the following:

Tab. 5: Independent Samples T Test for Marital Status Variable

Axis	Social Status	Readings Total	Degrees Average	Standard Deviation	T Value	(sig) P.value	Eta Squared	Significance
Using Twitter network to promote positive behaviour	Married	354	3.32	0.831	3.082	0.002	0.016	significant
	Single	232	3.53	0.794				

According Independent Samples T Test for Marital Status Variable, it is clear that there are statistically significant differences in the opinions average of the sample members about the use of Twitter in promoting positive behaviour according to the marital status variable. We find that single members of the sample believe that the use of Twitter promotes positive behaviour higher than what married people think. That is, the use of Twitter promotes the positive behaviour of singles over married couples in dealing with COVID-19 crisis. The impact size was (0.016), which is a weak impact. Accordingly, (16%) of the changes in the level of positive behaviour using Twitter in dealing

with COVID-19 crisis in the Kingdom is attributed to the difference in the social status.

Third: the residence status variable:

The results of the Independent Samples T Test for the residence status variable showed the following:

Tab. 6: Independent Samples T Test for Residence Status Variable

Axis	Residence Status	Readings Total	Degrees Average	Standard Deviation	T Value	(sig) P.value	Eta Squared	Significance
Using Twitter network to promote positive behaviour	Citizen	538	3.38	0.819	2.301	0.022	0.010	Significant
	Resident	48	3.66	0.835				

From the above Independent Samples T Test for Residence Status Variable results, it is clear that there are statistically significant differences in the opinions average of the sample members about the use of Twitter in promoting positive behaviour due to the variable of residence status. We find that the residents' rate who believe that the use of Twitter promotes positive behaviour is higher than what the citizens think. That is, the use of Twitter promotes the positive behaviour of residents above citizens in dealing with COVID-19 crisis in the Kingdom. The impact size was (0.010), which is a weak impact. Accordingly, (1%) of the changes in the level of positive behaviour using Twitter in dealing with COVID-19 crisis is attributed to the variable of residence status.

Fourth: the age variable:

The results showed the significance of the differences between the opinions of the study sample about the use of Twitter to promote positive behaviour and the age variable as follows:

Tab. 7: One-Way ANOVA analysis for the age variable

Axis	Age	Readings Total	Degrees Average	Standard Deviation	F Value	(sig) P.value	Eta Squared	Significance
Using Twitter network to promote positive behaviour	Under 21 years old	74	3.62	0.728	5.046	0.007	0.017	Significant
	21-40 years old	286	3.44	0.861				
	More than 41 years	226	3.29	0.788				

From the above One-Way ANOVA analysis for the age variable, there are statistically significant differences in the opinions average of the sample members about the use of Twitter in promoting positive behaviour due to the age variable. The impact size is (0.017), which is a weak impact. (1.7%) of the changes in the level of positive behaviour using Twitter in dealing with COVID-19 crisis in the Kingdom is attributed to the age variable. In order to determine the age groups that led to the different level of positive behaviour using Twitter in dealing with COVID-19 crisis, the Scheffe test was used.

Tab. 8: Scheffe test for the age variable

Axis	Age Category A	Age Category B	Average differences (A) – (B)	Standard Error	(sig) P. value
Using Twitter network to promote positive behaviour	Under 21 years old	More than 41 years	0.33 *	0.109	0.011

* Statistically significant at the level of significance (0.05)

By conducting Scheffe test for the age variable, there is a significant difference between the sample members of the age category (less than 21 years) and the age category of (more than 41 years) in relation to the use of Twitter in promoting positive behaviour. We find that the mean differences are positive, and this means that the use of Twitter promotes the positive behaviour of individuals with an age group (less than 21 years old) is higher than individuals (over 41 years old) in dealing with COVID-19 crisis.

Fifth: the educational level variable:

The results showed the significance of the differences between the opinions of the sample members about the use of Twitter in promoting positive behaviour and the educational level variable as follows:

Tab. 9: One-Way ANOVA analysis for the educational level variable

Axis	Educational Level	Readings Total	Average	Standard Deviation	F Value	(sig) P.value	Significance
Using Twitter network to promote positive behaviour	Secondary level or Less	86	3.42	0.692	0.296	0.743	Not Significant
	University Level	330	3.38	0.874			
	Post graduate Level	170	3.44	0.783			

From the previous One-Way ANOVA analysis for the educational level variable, there are no statistically significant differences in the opinions average of the sample members about the use of Twitter in promoting positive behaviour due to the educational level variable. The impact size was (0.001). Therefore, it can be asserted that the educational level does not affect (because its value is very small) the level of positive behaviour using Twitter in dealing with COVID-19 crisis in the Kingdom.

Sixth: the administrative region variable:

The results showed the significance of the differences between the opinions of the study sample about the use of Twitter in promoting positive behaviour and the variable of the administrative region:

Tab. 10: One-Way ANOVA analysis of the administrative region variable

Axis	Administrative Region	Readings Total	Average	Standard Deviation	F Value	(sig) P.value	Eta Squared	Significance
Using Twitter network to promote positive behaviour	Central Region	176	3.38	0.740	3.177	0.013	0.021	Significant
	Eastern Province	44	3.61	0.894				
	Western Region	346	3.36	0.851				
	Southern area	14	4.04	0.662				
	Northern area	6	3.32	0.586				

From the previous One-Way ANOVA analysis of the administrative region variable, it is clear that there are statistically significant differences in the opinions average of the sample members about the use of Twitter in promoting positive behaviour due to the variable of the administrative region. The impact size is (0.021), which is a weak impact. (2.1%) of the changes in the level of positive behaviour using Twitter in dealing with COVID-19 crisis in the Kingdom are attributed to the variable of the administrative region. In order to determine the administrative regions that led to the difference in the level of positive behaviour using Twitter in dealing with COVID-19 pandemic, the Scheffe test was used to indicate the differences in the level of positive behaviour using Twitter, which is due to the different administrative regions:

Tab. 11: Scheffe Test results for the administrative region variable

Axis	Administrative Regions A	Administrative Regions B	Average differences (A) – (B)	Standard Error	(sig) P.value
Using Twitter network to promote positive behaviour	The Southern Region	The Central region	0.66 *	0.227	0.004
		The Western Region	0.68 *	0.223	0.002
		The Northern Region	0.72 *	0.399	0.001

** Statistically significant at the level of significance (0.05)*

By conducting Scheffe for the administrative region variable, there is a significant difference between the study sample in the (southern) administrative region and between individuals in the central, western, and northern administrative regions in relation to the use of Twitter in promoting positive behaviour. The average differences are positive (0.66, 0.68, 0.72) respectively, which means that the use of Twitter to promote the positive behaviour of individuals in the (southern) administrative region is higher than individuals in the central, western, and northern administrative regions.

Seventh: the duration of Twitter use variable:

The results of the analysis of the differences between the opinions of the study sample about the use of Twitter in promoting positive behaviour and the variable of the duration of Twitter use were as follows:

Tab. 12: One-Way ANOVA analysis of Twitter usage duration variable

Axis	Usage Duration	Readings Total	Average	Standard Deviation	F Value	(sig) P.value	Eta Squared	Significance
Using Twitter network to promote positive behaviour	Daily	358	3.62	0.727	28.47	0.000	0.164	Significant
	Every 2 days	60	3.55	0.793				
	Every 3 days	38	2.98	0.699				
	Every week	10	3.22	0.743				
	From time to time	120	2.83	0.832				

From the previous one-way ANOVA analysis of Twitter usage duration variable results, there are statistically significant differences in the opinions average of the sample members about the use of Twitter in promoting positive behaviour due to the duration of use variable. The impact size was (0.164), which is a large impact. (16.4 %) of the changes in the level of positive behaviour using Twitter in dealing with COVID-19 crisis in the Kingdom are due to the duration of use variable.

In order to determine the duration of use of Twitter, which led to a difference in the level of positive behaviour using Twitter in dealing with COVID-19 crisis, the Scheffe test was used to indicate the differences in the level of positive behaviour using Twitter, which is due to the difference in Twitter use duration.

Tab. 13: Scheffe Test of Twitter Usage Duration Variable

Axis	Twitter usage duration A	Twitter usage duration B	Average differences (A) – (B)	Standard Error	(sig) P.value
Using Twitter network to promote positive behaviour	Daily	Every 3 days	0.64 *	0.129	0.000
		From time to time	0.79 *	0.080	0.000
	Every 2 days	Every 3 days	0.57 *	0.157	0.010
		From time to time	0.72 *	0.119	0.000

By conducting Scheffe Test of Twitter Usage Duration Variable, there is a significant difference between the sample members who use Twitter (daily & every two days) and individuals who use Twitter (every 3 days & occasionally) in relation to the use of Twitter in promoting positive behaviour. We find that the average differences are positive (0.64, 0.79) & (0.57, 0.72), respectively, which means that the use of Twitter enhances the positive behaviour of individuals who use Twitter (daily & every two days) on a higher degree than individuals who use Twitter (every 3 days & from time to time) in dealing with COVID-19 pandemic in the Kingdom.

Eighth: The Twitter browsing time variable:

The analysis indicated the differences between the opinions of the study sample about the use of Twitter in promoting positive behaviour and the variable of Twitter browsing time, as following:

Tab. 14: One-Way ANOVA analysis of Twitter duration usage variable

Axis	Browsing Time	Readings Total	Average	Standard Deviation	F Value	(sig) P.value	Eta Squared	Significance
Using Twitter network to promote positive behaviour	Less than half an hour	282	3.17	0.814	15.09	0.000	0.094	Significant
	From half an hour to less than 1 hour	144	3.50	0.765				
	From 1 hour to less than 1 hour and a half	94	3.81	0.758				
	From 1 hour and a half to less than 2 hours	26	3.31	0.638				
	More than 2 hours	40	3.78	0.807				

From the above One-Way ANOVA analysis of Twitter duration usage variable results, there are statistically significant differences in the opinions average of the sample members about the use of Twitter in promoting positive behaviour due to the variable of Twitter browsing time. The impact size was (0.094), which is a medium impact. Then, (9.4%) of the changes in the level of positive behaviour using Twitter in dealing with COVID-19 crisis in the Kingdom is due to the Twitter browsing time variable.

In order to determine the time of use of Twitter, which led to a difference in the level of positive behaviour using Twitter in dealing with COVID-19 crisis, the Scheffe test was used to indicate the differences in the level of positive behaviour using Twitter, which are due to the difference in Twitter browsing time.

Tab. 15: Scheffe test for Twitter browsing time variable

Axis	Twitter Browsing Time A	Twitter Browsing Time B	Average differences (A) – (B)	Standard Error	(sig) P.value
Using Twitter network to promote positive behaviour	Less than half an hour	From 1/2 hour to less than 1 hour	- 0.32 *	0.080	0.003
		From 1 hour to less than 1 hour and a half	- 0.63 *	0.094	0.000
		More than 2 hours	- 0.60 *	0.133	0.000

** Statistically significant at the level of significance (0.05)*

By conducting the Scheffe test for Twitter browsing time variable, there is a significant difference between the sample members who browse Twitter for (less than half an hour) and those who browse Twitter (from half an hour to less than an hour, from an hour to less than an hour and a half, more than two hours) in relation to using Twitter in promoting positive behaviour. The average differences are negative (-0.32, -0.63, -0.60), respectively, which means that the use of Twitter enhances the positive behaviour of individuals who browse Twitter for (less than half an hour) less than those who browse Twitter (from half an hour to less than an hour, and from an hour to less than an hour and a half, more than two hours) in dealing with COVID-19 pandemic in the Kingdom.

The results of this question agreed in several ways with the findings of previous studies that there are differences in the positive role of Twitter in COVID-19 crisis, and that it is in great agreement with the (WHO.2021) study in the age variable per category and with the study of (Al-Shukair.2020) which concluded that there are no differences between genders, as the current study highlighted the absence of those differences. It differed with the studies of (Alnasser et al. 2020) and (Siddiquia. et al.2020) for the region variable, where the current study showed differences favouring the southern region more than the rest of the Kingdom's regions. The results of the study highlighted the role of Twitter browsing time and duration of use, as the more an individual is exposed to using Twitter, the greater his role in promoting positive behaviour is.

This result may be attributed to the nature of interaction in social networks through its ability to provide individuals with a sense of the presence of the other with their real social presence despite their lack of physical presence, their achievement of self-confidence and initiative in giving support, assistance and cooperation, views and opinions towards the crisis. The individual became able to positively communicate with his community through this social network. His pursuit of positive behaviour through this network may also be attributed to the nature of the crisis in terms of being a surprise, and the accompanying lack of information about the pandemic and its inaccuracy, the acceleration of events, the emergence of a state of insecurity, loss of life as well as psychological and financial losses, and the absence of a quick radical solution. All this led to relying on informality and self-initiatives of individuals to deal with this crisis. Examination and understanding of sudden and unexpected situations that have severe pressures help guide individuals on how to deal with this crisis and its derivations in difficult, narrow or severe times. Here, there is a disparity and contrast in the behaviour of individuals according to the theory of the individual's social role dealing with such a crisis.

6 Conclusion, recommendations and future work

The study found that Twitter has an impact of (19.4 %) in promoting the positive behaviour of individuals, and that (15.4 %) of the changes and positive effects that occur in the behaviour of individuals in dealing with COVID-19 crisis are attributed to the daily use of Twitter. It also found that the use of Twitter in one session affects by (6.1%) on promoting positive behaviour in dealing with COVID-19 crisis. It also found a positive, medium-strong correlation between daily use of Twitter and the promotion of positive behaviour in dealing with COVID-19 crisis. As well as the absence of differences between gender, educational level, and the promotion of positive behaviour using Twitter. However, it showed differences favouring singles in the variable of social status, favouring residents in the residence status, favouring the category of those under (21 years) for the variable of age, favouring the southern region for the variable of the administrative region, favouring users of the network daily and every two days for the variable of use duration, favouring those who use Twitter more for the variable of browsing time.

The study recommends conducting more studies on positive social behaviour and its various dimensions so that the results can be generalised more broadly, as the results of this study remain limited within its specific objectives and questions. Moreover, there is a need to work on studies concerned with the Internet of behaviour and artificial intelligence to analyse the positive behaviour expected by individuals through various social networks, which creates wide enhancing opportunities. It also recommends contributing to paying more attention to the digital socialisation of children and adolescents, which contributes to preparing community members for active and positive participation in networked communities, and that government and private agencies which provide services to citizens and residents activate their Twitter accounts and have a positive interaction with users' questions and responses to get out of stereotypes in their accounts by creating more interesting interactive patterns to followers.

Acknowledgements

The researcher expresses his great thanks to the Chair of Sheikh Abdul-Aziz bin Saleh Al-Sa'wi for Positivity Development at Qassim University, College of Education, for his financial support for this research under No. (S 0037) during the academic year 1442 AH / 2021 AD.

Literature:

1. We Are Social.(2021).Digital in 2021. Digital 2021 - We Are Social.
2. Beck, B., (2009). The Global Risk Community: In Search of Lost Safety (George Kathora and Elham Shaarani, translator). Eastern Library. (Original work published in 1989), 30.
3. Giddens, A., (2003). Untamed world how globalization is reshaping our lives? (Abbas Kazem and Hassan Kazem, translators).Arab Cultural center.(Original work published in1999), 19.
4. Oxford Dictionary. (2002). CRISS. *Oxford University Press,*194.
5. Shaalan, F., (2012). Crisis management foundations, stages and mechanisms. *Jarir Bookstore,* 24.
6. Badawi, A. Z., (1982). Dictionary of Social Sciences. *Library of Lebanon,* 82.
7. Steve, A., (1997). Crisis management for corporate self-defence. *New York Amac,* 3-4
8. Francis, T., (1994). Social work treatment : interlocking theoretical approaches. *New York free press,* 28-29.
9. Al-Faisal, K. B. A., (2006). Making decisions in times of crisis. *Jarir Library*. 21.
10. Al-Hassan, E (2015). Advanced social theories. *Dar Wael for printing, publishing and distribution,* 159.
11. Al-Hassan, E., (2015). Advanced social theories. *Dar Wael for printing, publishing and distribution,* 167.
12 .Al-Quraishi, A., (2012). Positive thinking and its relationship to some variables among university students, *Al-Qadisiyah Journal for Human Sciences,* 15 (2) , 249- 292. https://qu.edu.iq.
13. Dreeb, M. G., (2013). The role of curricula in developing positive thinking and recall skills for female students of the College of Education for Girls in the light of some variables, *Journal of the College of Education for Girls for Human*

Sciences, 1 (12) 99-124. .Iraqi Academic Scientific Journals – IASJ.
14. Barakat, Z., (2018). Positive and negative thinking between theory and practice. *Dar Al-Shorouk for Publishing and Distribution*, 138.
15.Santrock, J. W., (2007). A Topical Approach to Life-Span Development. *McGraw-Hill*, 491.
16.Darley, M. & Latane, B. (1970). The unresponsive bystander: why doesn't he help? New York, Appleton-Century Crofts.
17. Saudi Ministry of Health. (2021). Health announces the registration of (1301) cases of COVID-19 infection. https://www.moh.gov.sa/Ministry/Mediacentre/Pages/default.aspx.
18. We Are Social.(2021).Digital in 2021. Digital 2021 - We Are Social
19. Tucker, C., (2011). Social media, Texting Play New Role in Response to Disasters: Preparedness, Communication Targeted. *The Nation's Health*, 41 (4), 1-18. https://The Nation's Health(thenationshealth.org)
20.ProCon.Org.(2021). Are Social Networking Sites Good for Our Society? https:// Social Networking - Pros & Cons - ProCon.org.
21.Hassounah, M., Raheel, H., & Alhefzi, M. (2020). Digital Response During the COVID-19 Pandemic in Saudi Arabia. *Journal of medical Internet research*, 22(9), e19338. https://doi.org/10.2196/19338
22.Heena S., & Hunny S., (2020). Role of social media during the COVID-19 pandemic: Beneficial, destructive, or reconstructive? *International Journal of Academic*, 6(2), 70-75. https://doi.org/10.4103/IJAM.IJAM_50_20
23 . González, P., & Tortolero, B., (2020). Social media influence in the COVID-19 Pandemic. *INT BRAZ J UROL*, 46 (1), 120-124. https://orcid.org/0000-0002-5853-8845
24. Alnasser A., Al-Tawfiq J., Al Kalif M., Alobaysi A., Al Mubarak M., Alturki H., Alharbi A., Albahrani R., Alatef S., & AlHamad A. (2020).The positive impact of social media on the level of COVID-19 awareness in Saudi Arabia: a web-based cross-sectional survey. *Infez Med*, 28(4),545-550. PMID: 33257629.
25. Siddiquia,A., Alshammarya, F., Junaid A., Rathorec,H., Ibne Hassand, Muhammad Ilyasd,M., & KhursheedAlame,M.(2020). Knowledge and practice regarding prevention of COVID-19 among the Saudi Arabian population. *Work*, 66(4),767-775. https://doi.org/10.3390/medsci9010011
26. Al-Shugair, A. R., (2020). Environmental health security in light of the spread of the emerging COVID-19 virus: an analytical descriptive study of some health practices in the Kingdom of Saudi Arabia. *The Arab Journal for Security Studies*, 36(20), 144-157. https://doi.org/10.26735/PCBC1154
27. World Health Organization .(2021).social media & COVID-19: A Global Study of Digital Crisis Interaction among Gen Z and Millennials. Social media & COVID-19: A global study of digital crisis interaction among Gen Z and Millennials (who.int).
28. T sao S., Chen H., Tisseverasinghe T., Yang Y., Li L., & Butt Z.A.(2021).What social media told us in the time of COVID-19: a scoping review. *The Lancet Digital Health*, 3 (3), 175-194. https://doi.org/10.1016/s2589-7500(20)30315-0
29. Algarni, A., (2019). Screen life: Sociological Insights. *Masterpieces of Culture, Arts and Publishing*, 56.

Primary Paper Section: A

Secondary Paper Section: AO, BC