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Pandemic Communication and Media Dependency

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Abstract

The COVID-19 experience is considered a fertile ground for lessons learned regarding media use, communication strategies, and consumption of media content during pandemics. This study seeks to learn from such experience in Egypt and investigates the role the media played in affecting the behavior of the Public in Egypt towards the COVID-19 pandemic, from their own perspective. The study seeks to explore the level of dependence of the Public on the different media of communication and how they made decisions regarding their behavior to mitigate the pandemic in response to these media messages.

Through focus group discussions (FGDs) with communities in Cairo, this research gained insight into the role the media played in providing information during the crisis situation, and how the media helped frame perceptions of COVID-19. While identifying the main means of communication they used to get information, FGD participants discussed which ones were most effective in terms of convincing them of a certain perception of the pandemic and the vaccine, as well as influencing their behavior including their adoption of, and adherence to protective measures, as well as their acceptance of the vaccine. The research is guided by the media system dependency (MSD) theory (Ball-Rokeach & DeFleur, 1976) and its updated perspective on technologically mediated means of communication.

Keywords: Pandemic Communication, Media Dependency, Crisis Communication, Infodemics.

Introduction:

The global outbreak of COVID-19 prompted governments, health providers, NGOs and the private sector to utilize communication strategies to ensure that the Public is informed and protected. People, cross the globe, sought information through local media as well as global media to grasp the depth and breadth of the situation. Different communication approaches and messages were used to satisfy and fulfill the Public's need to be informed, updated and connected. The COVID-19 experience is considered a fertile ground for lessons learned regarding media use, communication strategies, and consumption of media content during pandemics. This study seeks to learn from this experience in Egypt.

This study focuses on the role the media played in affecting the behavior of the Public in Egypt towards the COVID-19 pandemic, from their own perspective. It seeks to explore the level of dependence of the Public on the different media of communication and how they made decisions regarding their behavior to mitigate the pandemic in response to these media messages.

Through focus group discussions (FGDs) with communities in Cairo, this research gained insight into the role the media played in providing information during the crisis situation, and how the media helped frame perceptions of COVID-19. While identifying the main means of communication they used to get information, FGD participants discussed which ones were most effective in terms of convincing them of a certain perception of the pandemic and the vaccine, as well as influencing their behavior including their adoption of, and adherence to protective measures, as well as their acceptance of the vaccine.

The study is guided by the media system dependency (MSD) theory (Ball-Rokeach & DeFleur, 1976) and its updated perspective on technologically mediated means of communication.

Importance of the Study:

The crisis communication literature is rich with important studies that focus on the organizational point of view, analyzing crisis communication strategies of institutions, governments, and organizations involved in the crisis situation. This study adopts an audience-centric approach and delves deeper into the details of the communication processes that govern the crisis situation from the Public's perspective. The importance of this study stems from contributing to filling a gap in the crisis communication literature by focusing and contributing to the individual and social perspective, rather than an organizational perspective, hence the use of the term pandemic communication.

Therefore, this study contributes to the body of knowledge related to pandemic communication, with application to the recent COVID-19 situation, from an audience-centric perspective. It focuses on understanding, from the perspective of members of the Public, their dependence on the media to make sense of the COVID-19 situation, and whether their behavior was affected by media messages. The study also seeks to understand whether and how the members of the Public felt that they were able to engage in communication processes to further their understanding, clarify confusions, or express a differing point of view through the media they used. The study, therefore, seeks to enrich our understanding of the different levels of communicative actions of the Public experiencing the crisis.

Problem Statement:

Crisis communication usually reflects a sender-centric, top-down and one way communication. While this kind of instructional communication is necessary during a crisis situation, it does not allow for gauging the multiple

levels of communication that evolve among the Public that receives this information. Moreover, it does not provide the space for differing or opposing viewpoints of the Public to emerge. Crisis communication focuses on what can be described as the formal voice of either the organization, institution and / or government involved in the crisis situation, with minimal attention to the informal voices of the Public.

Moreover, while information is necessary for the Public to address and mitigate the crisis situation, receiving information does not automatically result in influencing the Public into the right behavior or action (Aldoory, 2020) since individual members of the Public vary in their convictions, acceptance of the media messages, and their reaction to it. Hence, excessive information, even if accurate, may overwhelm the Public rather than drive them to action. Conflicting or confusing information would also have adverse effects on the Public, which will be discussed in this paper.

Meanwhile, messages used by the media to educate the Public in times of a crisis are mostly designed to elevate the Public's level of concern to trigger action relevant to the desired behavior. This may cause fear, trigger questions, or heighten anxieties of the Public. Therefore, it is quite important that the Public find ways to relieve their concerns, pose their questions and get their answers through trusted and reliable sources. What are these sources and how do members of the Public decide to conform to the messages of a certain medium more than another is an important question to be answered.

Objectives of the Study:

The goal of this paper is to explore how a group of people in Cairo navigated their information seeking behavior and decisions related to Covid-19 pandemic. The objectives are:

- Determine the perception of the Public of the role of the media in information dissemination and sense making during the Covid-19 pandemic.
- Understand the Public's perception of COVID-19 as framed by the media.
- Identify the most preferred medium / media for information during the Covid-19 pandemic, from the Public's perspective.
- Identify the most effective communication channels from the Public's perspective.
- To gain insights into how the media affected the Public's attitudes, beliefs, and potential motivators to adopt protective measures and getting the COVID-19 vaccine.

Research Questions:

This research is guided by the research question: How did community members in Cairo depend on the media to mitigate and deal with COVID-19 pandemic?

The research question is broken down into the following sub-research questions:

- How did community members perceive the crisis situation as framed by media?
- Which medium / media were most sought and followed by community members?
- Which media are more effective from the community members' perspective?
- Which messages were viewed as most effective in instilling the needed behaviors, like precautionary measures and vaccine uptake from the perspective of the community members?

Research Methodology and Design:

A qualitative research design was employed in this study, where six focus group discussions (FGDs) were conducted in Cairo including 8 to 12 participants each. Three FGDs comprised male participants and three comprised female participants of the equivalent age groups.

Research Design:

This primary research study seeks to explore the notion of media dependency among lay people who represent the regular members of the audience in Cairo. The main premise of the study is to understand the Public's perspective of their own consumption and conviction of mass media content pertaining to COVID-19 pandemic, mainly during the early phase of the pandemic and the vaccine uptake phase. To reach this goal, a sampling strategy that suits this purpose is employed.

Sampling Strategy:

A purposive random sampling strategy is employed in this study. Purposive random sampling is designed to augment the comprehension of the experience of the groups selected for the study, by selecting groups that provide the greatest insight into the research question (Devers & Frankel, 2000), as well as identifying and expanding the range of variation and differences among groups studied (Palinkas, Horwitz, Green, Wisdom, Duan, & Hoagwood, 2015). Purposive sampling is best suited for the study of typical cases, those who are normal, or average of the population being studied (Devers & Frankel, 2000; Ragin, 1999).

Sample Selection Criteria:

In this study, the participants selected to participate in the FGDs were typical members of the Public, who represent the average and regular member

of the audience of mass media and social media in Cairo. Therefore, normalcy is considered one of the main criteria for selection in the sample, coupled with gender and age. The age factor is an essential criterion for selection, since the social media is mostly used by younger age groups, the inclusion of three different age groups is ensured.

Sample Characteristics:

A purposive random sample is selected to conduct 3 FGDs with females and 3 FGDs with males, divided by age groups. The sample comprised the three age groups: 20 to 29, 30 to 39, and 40 to 49 years old of female and male participants each. FGDs are categorized by gender, as it is usually expected that FGDs are more effective and successful when participants are of the same gender. Participants in each focus group ranged from 9 to 12. The total number of participants reached 32 female participants and 30 male participants, totaling 62 participants in all 6 FGDs. Although an equal number of males and females were sought to be included in the study, 2 male participants did not show up for the FGD.

The education level of the sample is not among the selection criteria of the purposively selected sample, except that being literate was a mandatory inclusionary criterion. Since the study aims to capture the whole range of media available to the Public, including those that require literacy like social media, banners, posters, etc., participants in the study should be literate. The participants' education level ranged from bachelor's degrees to Vocational degrees.

Research Instruments & Data Collection:

Focus Group Discussion guides were prepared for the purpose of the study. FGDs lasted from 45 to 90 minutes each. Data was transcribed during and after the FGDs and data analysis was done manually.

Theoretical Framework:

The study used the Media Systems Dependency theory (MSD) (Ball-Rokeach & DeFleur, 1976) and its updated version, the Social Network System (SNS) dependency theory that are utilized to guide the study and the analysis of data. Given the audience centric focus of this study, this theoretical framework seemed to be best suited for the purpose of the study, as they are fit to delve into the communication process from the perspective of members of the audience.

Media System Dependency Theory (MSD):

Media System Dependency Theory, (Ball-Rokeach & DeFleur, 1976) seeks to explain the increasing level of people's dependence on mass media for obtaining information and knowledge in modern societies. According to the (MSD) theory, which is often called media dependency theory (MDT); due to

the increased complexity of modern society, people depend on media to fulfill their need for information and knowledge that they cannot get first hand. Therefore, mass media dependency is developed and is eventually considered an omnipresent need and a required condition necessary for people's survival. To survive, people need to understand the social world they live in, need to act meaningfully and effectively in that world, need to escape from the tensions related to the complex reality of the modern society to the virtual reality presented by media, among many other needs. As societies get more modern and complex, and as the quality of media technology improves, the media would increasingly serve more essential and unique functions for people in society. The deeper the complexity, the greater the need for information by people in society, the more dependent they will be on media to serve the needs. This tripartite relationship between people, media and society represents an essential factor in deciphering the role of media in society, and the ways by which media messages influence the beliefs, feelings and behaviors of people. In MSD, the changes that the media affects to the people of the audience and society, can also result in affecting the media back; this is what is meant by the tripartite relationship (Ball-Rokeach & DeFleur, 1976).

During times of particularly intense uncertainty and ambiguity, MSD postulates that there would be a heightened dependence of people on mass media for information and knowledge in their efforts to make sense of the uncertain situation and the ambiguity surrounding it (Ball-Rokeach & DeFleur, 1976). Since this study delves into the choice of media by people for usage during a pandemic, and the media's influence on their behavior from their perspective, and since the MSD / (MDT) focuses on choice of media during times of ambiguity and uncertainty; it is suitable to use in this study.

Social Network Systems (SNS) Dependency Theory:

Social network system dependency is an extension of the MSD theory, where the process of media dependency that influences people's media connectedness and governs their media exposure is similar between the mass media and SNSs. The outcome, however, is exhibited differently. Individuals who have higher SNS dependencies can act as active storytellers, as they move beyond the inactiveness of mass media audience members (Kim & Jung, 2017). It can be argued, however, that not all SNS dependent audience members engage in actual storytelling or in active communicative action.

Agenda Setting Theory (AST) as a cognitive effect of MSD theory:

The agenda setting theory was developed to refer to the coordination between the topics the media signals out for attention and the topics the audience considers as important topics to follow (McCombs & Shaw, 1972). Research on agenda setting theory revealed that while the mass media places topics as central in the minds and attention of people; they do not tell people

what to think about these central topics. In other words, media do not necessarily change attitudes and behaviors, but they give people a list of topics to think about as important (McCombs, 1978). The agenda, therefore, refers to the relative perceived salience and importance of an issue, rather than its relative approval by the audience (Erbring, Goldenberg & Miller, 1980). In MSD theory, one of the main cognitive effects of dependency is agenda setting (Ball-Rokeach & DeFleur, 1976), which means that media dependency propels the receiver to prioritize the topics to follow on the media according to the significance of these topics by the media.

Review of Literature:

Crisis is defined as “the perception of an unpredictable event that threatens important expectancies of stakeholders and can seriously impact an organization’s performance and generate negative outcomes” (Coombs 2007b: 2–3 as cited in Coombs, 2010). Given the unpredictability, the uncertainty and ambiguity surrounding crises as they occur, therein lies the difficulty and the challenges associated with communicating about it.

Information Seeking and Sense Making:

Crisis situations generate an environment of uncertainty that results in a state of anxiety among people experiencing the crisis situation. This creates a strong need for obtaining information for people to make sense of the ambiguities of the crisis, and catapults them into actively turning to others to communicate and to fill the knowledge gap. This process of assembling pieces of information to create meaning to lessen the uncertainty of a situation was coined as the sense making concept by theorist Karl E. Weick (Weick, 1988, 1993, 1995; Mirbabaie & Marx, 2020). It entails seeking information about a vague situation, while gathering, organizing, and interpreting external signals to overcome a knowledge gap and understand a problem. The sense-making process ultimately results in the translation of the external signals in the surrounding environment in such a way as to gain acceptability of the situation, and to adjust one’s actions in accordance to this interpretation (Weick 1988, 1993, 1995). People pursue the sense making process by connecting with others through various means of online and offline communication (Mirbabaie & Youn, 2018). Therefore, the success of a sense-making process depends on the source’s capabilities in providing useful and worthy information that enables the receiver to overcome a gap of knowledge. If the process of sensemaking fails or collapses, this leads the audience to disorientation, confusion and anxiety, while successful sensemaking restores cognitive order (Mirbabaie & Marx, 2020; Weick, 1993).

Different forms of crisis communication developed in response to this public need of sense making. The basic role of mass and social media in crisis situations is to fill knowledge gaps and sensitize citizens with needed, relevant

and useful information. It was noted, however, that while the media provide information interpreting the crisis, explaining its reach and ways of mitigation; it may be creating confusion, anxiety, and despair in tandem. The information provided by the media may be excessive, contradictory, or outright incorrect causing public avoidance or dismissal of the news or the media in general. This phenomenon was termed an infodemic by the World Health Organization (WHO, 2020b) in the wake of the COVID-19 crisis.

Instructional communication:

From the receiver's perspective, effective communication in crisis situations is that which provides helpful instruction. This kind of effective communication is defined as instructional communication, which provides advice on actions and behaviors that help the receiver understand the situation and make proper decisions about the actions that should be taken to mitigate it. Thus, the perceived value, utility, proper comprehension, and the extent to which the information received propels the receiver into proper action is what really counts from the receiver's point of view, not the sheer amount of information sent by the sender (Sellnow et al, 2015; Sellnow & Sellnow, 2010). Successful instructional communication results in well-formed risk perception by the Public.

The Intertwined Nature of Risk and Crisis Communication:

Crisis and risk communication are two fields that focus on developing the most effective communication strategies to deal with risks and crises. Crisis can be viewed as a risk that has manifested (Heath and O'Hair, 2020), and while risk communication focuses on preventing harm, crisis communication focuses on communication during the crisis (Sellnow, Ulmer, Seeger and Littlefield, 2009). The focus of these fields, however, has been mainly organizational and focus on aspects like the reputational assets of the organization facing the risky or crisis situation, restoration of the organization's reputation and repair of its image (Coombs, 2008; Benoit and Pang, 2008). This mainly explains why the two terms risk and crisis are often used interchangeably, and why their communication strategies often overlap, even though they started as separate fields. This overlap is evident in research and practice, as they evolve in unison.

Risk Communication is a form of top-down communication. It, was initially formulated to provide early information about a potential future harmful situation and the associated dangers so that people may react in a proactive way and mitigate the risk. This top-down approach to informing and raising public awareness was criticized for being too linear, technocratic, and expert-centric to motivate the Public to action (Steelman & McCaffrey, 2013). Risk communication, however, developed over the years to more actively engage the Public in order to achieve maximum effectiveness through inclusion in dialogue

about risk, and through designing culturally sensitive messages. Best practices in risk communication messages include ensuring credibility and honesty, maintaining openness and accessibility, acknowledging diverse levels of risk tolerance, and accounting for inherent risk uncertainty in developing the messages (Sellnow et al, 2009).

Crisis Communication is defined as the collection, processing and dissemination of information needed by stakeholders to address a crisis situation (Coombs, 2010; Coombs and Holladay, 2012). As a field of communication that is rooted in crisis management and Public Relations., it focuses on the crisis situation and on the messages delivered; emphasizing the importance of delivering timely, useful and accurate information during a crisis (Steelman et al, 2013).

Several factors contribute to the effectiveness of crisis communication. Transparency and honesty, as perceived by the Public, are essential. Sources that are perceived as credible, exert the effort to understand public concerns, and includes the Public in the discussions as an equal partner to the organization, can be very effective as well. Information that provides the Public with clear and concrete actions to be taken, and acknowledge uncertainty in transparent messages are also essential for to the credibility and success of crisis communication (Seeger, 2006; Heath et al, 2009).

The ideas related to these two fields are increasingly being adapted to societal and community settings as the need arises. However, crisis communication, in particular, is criticized for being too narrowly focused on organizational crises and the relevant strategies of restoring organizational reputation and image to be of use in pandemics (Rasmussen & Merckelsen, 2014).

Situational Crisis Communication Theory (SCCT):

It is a theory which provides an updated thinking about communication in times of crisis. In times of crisis, the SCCT prioritizes protecting the stakeholders from harm as the main priority, then providing information about the crisis situation is crucial in order to help the Public deal with the uncertain situation. Since crisis are usually enveloped in uncertainty, stress levels of the Public can soar and become unmanageable. Therefore, ensuring safety and providing information can help curb stress levels and normalize the situation to the extent possible (Coombs, 2007; Luran, Kunneman, & Van de Wijngaert, 2020). The advent of the internet and social media represented an interactive and swift communication prospect, which can enhance crisis communication (Atasoy, Turkey and Sengül, 2022).

While social media was not part of the original conceptualization of SCCT, a revision of the theory anticipated that the emergence of social media will boost the effect of SCCT and enhance the speed and the delivery of the messages (Coombs, 2017). The emergence of the internet was regarded as

representing an interactive and swift communication prospect through social media which can enhance crisis communication (Atasoy, Türkay and Sengül, 2022).

Rhetorical Arenas:

The rhetorical arena approach is considered a new perspective that expands the concept of crisis communication. It critiques the determinist focus on the sender in crisis communication and the stagnant status of the field (Frandsen and Johansen, 2010). It acknowledges that crisis communication comprises several senders and several receivers and listeners. As a crisis occurs, a rhetorical space emerges surrounding it and multiple communicators participate and engage in communicative actions, competing for the attention of others (Coombs & Holladay, 2014; Frandsen and Johansen, 2010). The rhetorical arena approach represents a more realistic visualization of the dynamics of crisis communication, where multiple voices can be heard and various communicators engage to offer their perspectives on the crisis.

Pandemic Communication: More than Crisis Communication

The previous review of the different forms of communication during crisis reveals that earlier forms of crisis communication may not be perfectly fitting for use in pandemic communication.

Pandemics like the Bird flu, H1N1 and COVID-19 are crisis situations that represent a significant challenge to media and communication (Kopecka-Piech & Łódzki 2022). Unlike organizational crises that affect an organization and its various stakeholders, pandemics affect large sectors of the population, and sometimes world populations. Pandemics are much larger in scope, reach and effect than organizational crises and are therefore more challenging in terms of communication and management.

The dominance of the organizational perspective in the crisis communication literature is understandable as it has emerged from the organizational and Public Relations disciplines. It has reflected an organizational and corporate centric focus on addressing organizational problems and is limited to corporate apologia and reputation (Rasmussen, & Merksens, 2014; Iannacone, 2021). The relevance of the communication strategies that are typical of this form of crisis communication to health, social or humanitarian crises is minimal, at best. They are, therefore, not equipped to address the multi-layered societal and cultural aspects of pandemics.

As the world increasingly suffers from catastrophic incidents like wars, and unprecedented changes like global warming and climate change, pandemics like H1N1 and COVID 19, and similar incidents that trigger humanitarian crises; it is increasingly realized that crisis communication strategies are not a one size fits all. Such crises challenge orderly categorization (Iannacone, 2021), and cannot be handled with the same strategies and ideas that govern corporate and organizational crises.

Media Dependence during pandemics:

The role the media plays in crisis, disasters, hazardous and risk situations is paramount as it shapes perceptions. The relationship between individuals and media increases during crises and disasters as individuals need information to make decisions and form opinions on the event (Muñiz, 2020). While communication during crisis has been profusely studied, the focus on media dependency, especially during disasters is limited (Hyman, 2021).

Arab countries:

Examining the impact of media dependency on trust in the government of Bahrain in the context of COVID-19, a quantitative study revealed that dependence on news websites positively affected trust in government, while dependence on television and social media negatively affected trust in government, and the results of dependence on newspapers and radio were non-conclusive (Khalifa & Khalifa, 2020).

Focusing on social media dependency, a quantitative study was conducted on Arab audiences in the MENA region (Middle East and North Africa region) to study their reliance on and usage of social media, and the relevant impact during COVID-19. The results of the study showed that the Arab Public increasingly shifted their preference to digital media over traditional and legacy media. This reliance on digital and social media is coupled with limited awareness of its drawbacks, for example circulating fake news and rumors during a troubled time like that of COVID-19 (Kalliny, 2021).

Another study focused on the Arab journalists' dependence on digital media for coverage of COVID-19. The findings of the online survey employed in this study indicated that social media was useful for Arab journalists in terms of collecting news and information during the Covid-19 outbreak, and that journalists heavily depend on online platforms as they proved useful in collecting information and news (Ziani, Elareshi, Habes, Tahat, & Ali, 2021).

Studies in Egypt:

In Egypt, many studies were conducted to investigate different aspects related to COVID 19, and the choice of media by different sectors of the Public. In an effort to assess Egyptian medical students' knowledge, attitudes, and adherence to precautionary actions against COVID-19, an online survey was conducted on a number of medical students, which revealed their satisfactory level of knowledge, attitudes and practices. The main source of information was found to be social media, and one fourth of the medical students in the sample received their information from healthcare staff, who were considered as a source of accurate and reliable information. The study also revealed that many

students also served as providers of information to their families (Salem, M. R., Al Hanafy, Bayad, Abdel-Aziz, Shaheen & Amin, 2021).

Another quantitative study conducted in Egypt focused on the Public's awareness of the spread of COVID-19 pandemic in its early phase. The study results showed that respondents with a higher level of education are more able to obtain information and knowledge about COVID-19 from different sources than people with a lower level of education. It also revealed that most respondents thought that the diffusion of rumors and incorrect information about COVID-19 was quicker than the correct information (Elgendy, El-Gendy, & Abdelrahim, 2020). To assess the effect of social media on Egyptians, a study revealed that spreading panic among adults was one of the effects of social media during the COVID-19 pandemic (Shehata, & Abdeldaim, 2022).

Other studies looked into the psychological factors of the effect of the pandemic. An example is a cross-sectional study that sought to unravel whether COVID-19 caused anxiety and depression among Egyptians (El Desouky, Fagher, El Hawary, & Salem, 2021). Another example is a study that aimed to evaluate the prevalence of depression, anxiety, stress, and inadequate sleeping among the Public in Egypt during the COVID-19 pandemic. This was found to be mainly due to the way the media frame the pandemic and present it through fear messages (Arafa, Mohamed, Saleh, & Senosy, 2021).

Another study analyzed the content of online newspapers in Egypt and Jordan and concludes that newspapers in the two countries focused heavily on the coverage of COVID-19, overlooking other topics of importance. Comparing between coverage during the first and second waves of Covid-19, the study found that coverage during wave two was deeper, stories were longer, and there were efforts to interact with the Public through infusing the content with videos. One of the main recommendations of the study is that the media should avoid the excessive use of a negative tone in order not to cause panic (AlAshry, 2021).

Infodemics:

Situations of uncertainty and ambiguity like the COVID-19 pandemic trigger people's need for information and sense making, which is addressed by the media's dissemination of information and news. This creates the perfect atmosphere for propagation of misinformation and fake news (Lewis, Govender, & Holland, 2021). The excessive amount of information about a problem may inhibit the ability to identify a solution, and creates an atmosphere where misinformation, disinformation and rumors can spread easily. It can hamper an effective public health response and create confusion and distrust among people (WHO, 2020).

In different countries, studies suggested that the media, social media in particular, contributed to creating an infodemic through propagating fake news and misinformation about COVID-19 and created a state of panic among

citizens (Ufuophu-Biri & Bebenimibo, 2021; Brindha, Jayaseelan & Kadeswaran, 2020; Lovari, Ducci, & Righetti, 2021).

Findings:

The findings revealed that the perception of risk was associated with anxiety and fear, in some cases, and with outright dismissal in others. Females of the middle and oldest age groups were the ones who expressed their high anxiety levels due to their worry about their families, not themselves, in most cases. Females from the youngest age group expressed their feelings of anxiety, fear and worry about the effect of the pandemic on the future, the economy, and their families.

The expression of dismissal was mainly from male participants of all age groups. This can be due to their inability to stay home and their commitment to go out and move about to earn money for their families. In fact, a number of male participants criticized the lock down and quarantine approach taken by different countries to mitigate the pandemic, as it drove many of individuals to extreme poverty and domestic violence. Meanwhile, a few of the younger male participants expressed their conviction that the pandemic was a hoax, a serial, or an empty threat that benefits some countries that initiated fake news about the pandemic.

The participants described the media messages about the pandemic as gloomy and pessimistic, which resulted in anxiety, fear and distress. The media mainly reported on infected cases and there was an atmosphere of vagueness, doom and gloom during reporting.

Information Seeking and Sense Making:

Overall, participants across age groups and gender were well informed of the nature of the pandemic, the symptoms of COVID-19, the modes of transmission, the precautionary and preventive measures. This reveals that instructional communication and the dissemination of information from the various media channels they followed were effective as the participants' level of awareness of the crisis situation and its various dimensions was quite elevated.

Media Use:

Study participants reported that they used different means of communication to get information about COVID-19. Most participants expressed the need for sense making by reporting that they sought information in order to understand COVID-19, which meant understanding its nature, symptoms and means of protection. The main sources of information mentioned were: 1) Legacy or traditional media (mainly through news on TV and radio, doctors and physicians who were invited on broadcast TV shows and newspapers); 2) Social networking sites (mainly Facebook and YouTube), and

3) Interpersonal communication (mainly relatives, colleagues, the pharmacists and physicians in the area where they live); 4) Awareness raising meetings held in the non-government organizations (NGOs) in their areas; 5) Medical convoys deployed by the ministry of health; and 6) Posters.

Almost all participants followed local media, not global media. Females and males from the eldest age group mostly used traditional / legacy media, while participants belonging to the middle-aged groups use social media and traditional media. Females and males from the youngest age groups use mostly social media and minimal use of traditional media. Medical convoys and posters were reported to be used by very few participants and mainly males of the oldest age group.

Media Effectiveness:

While study participants did not depend exclusively on one medium, and resorted to using all media, they perceived the different media as having different levels of effectiveness. Effectiveness is defined here as the capacity of the medium to convince the receiver of a certain action or chain of actions. Some of the younger age groups added to the definition of effectiveness the ability to discuss some of their questions and challenges with the media. From their perspective, this is mostly not possible with traditional media, but it can be possible with social media. However, very few participants from the younger age group reported that they engaged in discussions through social media about their worries and anxiety resulting from the pandemic. For the eldest age groups, interpersonal communication is the most effective. Thus, social media and interpersonal communication can be ranked as the most effective means of communication from the perspective of the participants. Most participants reported that they find posters the least effective.

Media Messages:

What type of messages were used by the media to provide community members with information and education about the crisis situation? Most participants reported that the messages were mainly instructional, to inform the audience about the symptoms, the protective and preventive measures. They commented that the messages were very rigid in terms of instructions and did not empathize with the plight of the Public who may not have the financial means to purchase the various means of protection like masks and sanitizers. It was further explained that as far as they know, the media did not discuss the problems faced by the Public like the difficulty of affording to buy masks and sanitizers while being out of work due to the pandemic. Some referred to the way TV announcers would criticize those who use the mask repeatedly, without considering the financial burden that constrained many to buy them.

Most participants of all groups reported that media messages triggered their anxiety and were fear mongering. Some thought that this is understandable

given that the pandemic was seriously dangerous, while others thought that this caused them to avoid the media, or to have bad dreams, or to feel too anxious and distressed. Interestingly, female and male participants in the eldest age groups were not able to recognize the fake news disseminated through the media on their own, and explained that they were able to recognize them through interpersonal communication with relatives or younger members of the family.

Trust and credibility:

One of the interesting findings in this study is that people have many different simultaneous levels of trust in media. It is not a state of trust versus no trust, but there is a state of trust and doubt, simultaneously and there is a different state of confusion and low level of trust.

The highest level of trust was in interpersonal communication across age groups. Interpersonal communication was used to get information, but it was most prominently used to check and verify information received from other media. Most respondents reported that they used interpersonal communication to further understand and operationalize the precautions received from other sources of information more thoroughly and clearly – a finding which reveals that in times of crisis, people resort to people they trust the most. Many male participants from the middle and eldest age groups reported that they were skeptical of the information they received from media until verified at work by their managers, colleagues or by their relatives who are physicians or generally work in the health field. They also reported that the discussions of the precautionary measures that took place in meetings at work were the most effective.

Other respondents specified their trusted sources as relatives who are in the health sector and the medical profession either as physicians, nurses, or pharmacists. This reveals the dynamic of the rhetorical arenas, where many actors engage in communication other than the formally designated source of information. A female participant of the middle age group reported that her sister works in the health field and is therefore the source of information for the whole extended family.

Simultaneous Trust and Doubt:

Many participants noted that they looked out for posters developed by MOH to get correct information and details about the virus, and that they contacted the Ministry's hotline frequently to get COVID related information, which reflects a high level of trust in the information shared by the Ministry. However, the opposite also applied. A surprising finding was that although many respondents considered the ministry a credible source of information, the number of cases reported by the Ministry of Health was not considered accurate

by quite a few participants as it seemed that less cases than reality was actually shared through media in order not to scare the Public.

Lower Levels of Trust:

Females and males from the middle and eldest age groups perceived social media, celebrities, influencers, TV announcers and talk shows on Egyptian TV as the least trusted sources of information. From their perspective, social media promoted rumors and fabricated news and presented conflicting information. Therefore, they may follow it, but not trust it.

Meanwhile, celebrities were viewed as uninformed and unaware, so they were not considered trusted for accurate information. TV announcers and talk shows on Egyptian TV were viewed as communicators of inaccurate information and were cause of confusion and misperception. They were also regarded as more interested and focused on celebrities but not on the regular citizen. One female participant in this age group declared that she did not trust any media as she relied only on information from physicians. She explained that there are too many and too much talk shows on TV and it provided contradictory information, while social media propagated inaccurate information.

Conclusion:

The study revealed how individual members of the Public, in response to excessive and contradictory information, make sense of an ambiguous situation like the COVID -19 pandemic, how they verify information received through media, and whether they feel they can engage in enough communication to satisfy their needs and address their questions.

The findings of the study posit that the ambiguity of the COVID -19 situation especially in its early phase, coupled with the excessive and somewhat conflicting information (the infodemics) generated through mass and social media may have overwhelmed the Public, who had to turn to their most trusted sources to make sense of the complexity of the looming crisis situation. The dynamics of the Public's decision-making process concerning the adoption and adherence to the protective measures, and the vaccine uptake are also affected by messages received from the various sources of information. Hence, media messages affected the perception and the behavior of the Public towards the pandemic to varying degrees.

The findings of this study are consistent with findings of other studies in terms of dependence on interpersonal communication. Interpersonal communication was found in some studies to be the highest priority for people who have a higher perception of threat in crisis situations (Vozab, Mihalec & Uremović, 2023). Higher perception of threat was shown to be more connected to dependency on interpersonal communication than on mass media; which is

understandable, as people in crisis feel safer around trusted others and are drawn to each other to feel safe and secure (Lowery, 2004). Social media as an interactive platform has a real potential to be a trusted and effective source through engagement and interactivity of the Public. However, the current reputation of social media casts doubt that this can ever be the case in the near future.

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