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COVID-19 containment and control: Information source credibility and adoption of prevention strategies among residents in South West Nigeria

ABSTRACT

The outbreak of COVID-19 pandemic has generated unprecedented information on preventive strategies aimed at containment and control of the disease. This study examined the relationship between perceived credibility of information sources and adoption of COVID-19 preventive strategies among residents in South West Nigeria. The study adopted Elaboration Likelihood Model (ELM),

KEYWORDS

COVID-19
coronavirus
information sources
misinformation
prevention strategies
source credibility
South West Nigeria

while online survey and in-depth interview (IDI) were employed as the research designs. Convenience and purposive sampling procedures were used in the selection of 259 respondents and ten participants who were 18 years and above. Data were generated using questionnaire and interview guide. Descriptive statistics, Pearson correlation and multiple bootstrapping comparison test were used to analyse quantitative data, while qualitative data were transcribed and direct quotations that represented the participants' opinions were used for the analysis. Key findings showed that expertise and trustworthiness determined the credibility of information sources while television was perceived as the most credible source of information. A significant relationship exists between perceived credibility of information sources and adoption of preventive measures. These findings highlight the need for preventive strategies to be disseminated through credible information sources.

INTRODUCTION

Communicating credible information during a pandemic period is vital to galvanizing the populace into actions directed at the containment or total eradication of the disease. Communication should be deliberate, since according to Mohamad and Azlan (2020), it is very important to make communication effective in a period of health emergency. Researchers have dissected the various roles played by information sources for users during health crisis. Choi et al. (2017) aver that mainstream media, interpersonal and group communication play significant roles as sources of information on health issues, while Cinelli et al. (2020) contend that the proliferation of social media sites, which have also been taken as information sources, has changed the information-seeking pattern and behaviour among media users.

The mass media, according to Choi et al. (2018) give significant amount of news and information during an outbreak of a disease and are therefore, the primary sources of information that the masses depend on. Furthermore, the authors posited that people rely more on media as sources of related information when set to assess the risk of events and also when trying to construct a perception about an event (Choi et al. 2018). For instance, the media played such role during previous disease emergencies such as Ebola and HIV/AIDS (Odorume 2015) and Middle East respiratory syndrome (MERS) (Choi et al. 2017). In addition, the transformation brought by social media has allowed media users to receive and create health-related contents and also join ongoing health-related conversations on the internet and social media sites (Choi et al. 2017). Chan et al. (2020) believe that social media can be a viable and faster alternative information source. Beyond these sources, non-media or interpersonal information sources have been described as active sources of health-related information. According to Onyechi and Ezeneche (2019), interpersonal sources of health information encompass health care professionals, family and friends, members of a community, etc. In the situation where information is urgently needed for preventive actions, scholars (Redmond et al. 2010; Vraga and Bode 2017) have established that interpersonal sources of information are close and much trusted by individuals because they are flexible and proffer situation-relevant information. In fact, it is found that individuals who get information from these sources are more likely to be health conscious and take positive health-related actions (Dutta-Bergman 2004).

Similarly, Redmond et al. (2010) found that adoption of positive health behaviour is significantly influenced by interpersonal communication with health professionals and family and friends. Although, information from these sources might be mediated due to the current technology, these sources have vital roles to play in the promotion of positive health attitudes (Onyechi and Ezeneche 2019) and especially the adoption of coronavirus disease 2019 (COVID-19) preventive measures.

With COVID-19 pandemic ravaging the entire globe, great emphasis has been placed on communicating correct information on its containment and/or total eradication in the absence of any effective vaccine and treatment regimes. It is, therefore, not surprising that the avalanche of information emanating from various information sources leads to unprecedented volumes of information, which may or may not help people cope with the situation. The availability of multiple information sources (mainstream media, digital media and non-media) has created an information overload on COVID-19 and can lead to overreaction or uncertain risk perception feelings (Huynh 2020). Mohamad and Azlan (2020) opine that with the overload of information, the masses grapple with ascertaining the correctness of information as well as struggle to understand the risk of the disease and the necessary precautions to be taken. This situation is, however, worsened with fake health-related news that spread fast, especially on the social media, which increases the level of people's uncertainty and fear about the disease (Muller cited in Mohamad and Azlan 2020). This may have prompted Cowper (2020) to assert that mitigating COVID-19 pandemic calls for a balanced communication approach that urgently and accurately informs people of what they need to do in order to avert contracting the disease.

In a situation of information overload and availability of multiple information sources, reliability and trust in the information sources help to reduce the risks and spread of diseases (Choi et al. 2018) such as COVID-19. Husnayain et al. (2020) alluded that adequate and proper information from credible sources is necessary because credibility perception of information sources help to prevent infodemics and spread of the disease. According to Kang and Namkung (2018), source credibility relies on how much trust a recipient has in the source from which information comes. In crisis periods, the credibility of information sources depends largely on expertise and trustworthiness of the source (Bibkov and Bibkov 2020), which then affects the attitude of the message recipient. Therefore, the extent to which a source of information is believable is hinged on the expertise and trust reposed in the source, especially when information seekers are uncertain about a phenomenon. In addition, it is stated that sources should be 'responsive, transparent and consistent' in dealing with the public in order to be trusted and seen as credible (WHO 2020: 2).

Although, it is posited that credible sources have been demonstrated to be effective in behavioural change during health-related epidemics (Bibkov and Bibkov 2020), the new information landscape, where both new and mainstream media bequeath information to information seekers, has further challenged the basis of the credibility of information sources based on trustworthiness and expertise. Onyechi and Adeitan (2019) argued that issues bothering on media, source and message credibility continue to dominate discussions by researchers since the introduction of digital media. In other words, the proliferation of information from digital and non-mainstream media sources of information has made the idea of credibility more challenging and fragile,

especially during health-related crisis. This could be the reason Metzger and Flanagin (2013) aver that one critical aspect of abundance of information is the issue of source credibility. Therefore, information seekers are confronted with the task of determining the credibility of the numerous information sources, especially in the COVID-19 period as the adoption of preventive measures is largely needed to avoid contraction and spreading of the virus. Studies have investigated prevalence of low-credibility information on Twitter during the COVID-19 outbreak (Yang et al. 2020), COVID-19 social media infodemic and state-sponsored propaganda (Broniatowski et al. 2020) and prevalence of COVID-19-related misinformation on social media (Cinelli et al., Pulido et al., Laato et al. cited in Broniatowski et al. 2020). However, none of these studies interrogated the variables of interest of this present study, which investigated the correlation between perceived credibility of information sources and the adoption of COVID-19 preventive strategies among residents in Southwest Nigeria. The researchers asked the following questions: What is the exposure pattern to information on COVID-19 preventive strategies among the respondents? What are the sources from which people get information on COVID-19 preventive strategies? What are the dominant criteria used by people for assessing the credibility of sources on COVID-19 preventive strategies? What is the relationship between perceived credibility of information sources and adoption of COVID-19 preventive strategies?

THEORETICAL FRAMEWORK

Elaboration Likelihood Model (ELM) provided the theoretical underpinning for this study. It is a social psychological theory concerned with the understanding of how individuals process persuasive information. The theory states that individuals change their attitude with the assessment and evaluation of persuasive messages via two routes – central and peripheral – based on the individual's motivation and ability (Petty and Cacioppo 1984, 1986). In processing information via the central route (high end), message recipients go through high cognitive activities while on the peripheral route (low end), less cognitive effort is involved in message processing, which involves using heuristic cues to make judgement (Kang and Namkung 2018).

Researches on the role of source factors (e.g. expertise, believability and trustworthiness) in decision-making and judging the credibility of information have been conducted within the frame of the ELM (Braten et al. 2011). In fact, source has been identified as the most frequently used cue in the message elaboration process (Bhattacherjee and Sanford 2006). According to the theory, a credible source has a high tendency of influencing persuasion (Petty and Cacioppo 1984). Thus, when the source of a message is perceived credible, such source is expected to positively influence message recipient.

The theory was adopted to investigate the factors that respondents use to assess the credibility of information sources on COVID-19 preventive strategies. The assumption is that when people perceive information sources as being credible, they are more likely to adopt COVID-19 preventive strategies and vice versa.

LITERATURE REVIEW

During disease-induced public health challenge, people turn to the media and other information sources to gather information on how to avoid contracting the diseases and preventing its spread. Choi et al. (2018) aver that members of

the public with highly rated ability to gather information are largely expected to seek information from media and other sources to confirm or allay their uncertainty about a disease in the time of health-related disease outbreak. According to Berger et al. (2020), honest and transparent communication is crucial in the time of health crisis such as the current COVID-19. Sadly, a finding by Cinelli et al. (2020) found that COVID-19 information from both credible and unreliable sources spread at the same pace and pattern. Consequently, information seekers are confronted with the challenge of determining the information source to believe. Mohamad and Azlan (2020) posit that the increasing amount of misinformation, disinformation and false news circulating in social networks and news media about COVID-19 has resulted in severe health anxiety and panic behaviour. This will undoubtedly make information seekers more sceptical about adopting the recommended preventive strategies from these sources.

Meanwhile, Chan et al. (2020) aver that the success of information dissemination in the time of COVID-19 is hinged on the extant reputation of the information source. Similarly, Huynh (2020) found that the use of credible social media handles has significant impact on the perception of COVID-19 risks among Vietnamese. Choi et al. suggested that government and health-related agencies should constantly use credible media to 'effectively communicate with, and build trust among the public' during the outbreak of diseases to reduce the effect and prevent people from contracting such diseases (2018: 3614).

Although Duan et al. (2020) state that COVID-19 manifests same symptoms with SARS and that the experience with SARS should help reduce the effect of COVID-19, disappointingly, Peeri et al. (2020) posit that COVID-19 spread widely in China and other countries due to poor risk assessment and poor reportage given to the disease in the early stage of its outbreak. It is expected that media outlets and other information sources give adequate and creative attention to the reportage of COVID-19 due to the experience gathered during the outbreak of similar diseases (Peeri et al. 2020) and more importantly, due to the warning issued by the WHO in the early stage of the outbreak that COVID-19 prevention and intervention measures should be clearly made known to members of the public and all necessary sectors (WHO 2020). The poor reportage and risk perception are, however, blamed on the delay in effective decision-making by governments and the unavailability of timely, useful and critical information from government and health officials (Zhang et al. 2020).

Duan et al. (2020) found in their study that government communication is not a determinant factor that influences the adoption of preventive recommended actions against COVID-19; however, Husnayain et al. (2020) found information from government-controlled media to be significant in motivating information seekers. Husnayain et al. (2020) found that COVID-19 information from the Taiwan Network Information Centre (TNIC) greatly influences information-seeking behaviour of Taiwanese. Similarly, Broniatowski et al. (2020) found that recommendation from experts aids the adoption of preventive strategies. Therefore, a controlled media and expertise of the information source could be influential in the adoption of COVID-19 preventive strategies.

METHOD AND MEASURES

Method

We employed a combination of quantitative method, using survey, and qualitative method, using in-depth interview (IDI) as research designs for the study. The study was conducted in South West Nigeria, and focused on adults from the age of 18 years who have access to the internet. The states are: Oyo with a 2020 projected population of 5.5 million, Osun, 3.4 million, Ogun, 3.7 million, Lagos, 9.1 million, Ekiti, 2.3 million and Ondo with 3.4 million (Citypopulation 2020). Online survey was adopted because the study was carried out during nationwide lockdown. In order to avoid physical contact with respondents, we used convenient sampling technique to select contacts in our social media networks. However, in selecting participants who took part in the IDI sessions, purposive sampling technique was employed to avoid selecting those who already took part in the survey. The total study sample size is 269 (259 for survey, ten for IDI). Although we received entries from 315 respondents, 56 were excluded (51 from outside the stipulated six states and five invalid entries). Therefore, 259 copies of the questionnaire were analysed for the study. Quantitative data generated from the survey were analysed using descriptive statistics (expressed in frequency counts and simple percentage), Pearson correlation and multiple bootstrapping comparison tests. Qualitative data generated from the interview were transcribed, and direct quotations that represented participants' opinions were analysed.

Measures

Instruments

Questionnaire and IDI guide were used to collect quantitative and qualitative data respectively. The questionnaire consisted of two parts – A and B. Demographic items were presented in part A, while part B has four sections. Section 1 has two items that focused on exposure pattern to information sources on COVID-19. Section 2 comprised eleven items on source credibility, while Section 3 with eight items examined the criteria used to determine the credibility of sources on COVID-19 information. Finally, Section 4 has six items that focused on adoption of COVID-19 preventive strategies. The interview guide consists of ten questions, which were designed to elicit information on participants' exposure to information sources on COVID-19 criteria for determining the credibility of information sources and the adoption of COVID-19 preventive strategies.

Adoption of preventive strategies

Six measures for COVID-19 preventive strategies as specified by the National Centre for Disease Control, Nigeria (NCDC 2020) and World Health Organization (WHO 2020) were utilized to measure the level of adoption by the respondents. Respondents were asked to rate their level of adoption on the scale of 1–5 (very often–not at all) for each of the strategies. Therefore, for the adoption of strategies, a maximum score of 30 was obtainable. Building on the scale used by Duan et al. (2020), respondents were categorized based on scores obtained: 1–12 (low adopters), 13–24 (moderate adopters) and 25–30 (ardent adopters). To confirm the reliability of the items, a Cronbach's alpha reliability test was conducted. The Cronbach's alpha coefficient result for the six items was 0.746, which suggested a relatively significant internal consistency.

Credibility perception

Ten items were used to measure respondents' perception of credibility of information sources on COVID-19. Respondents were asked to rate the sources on a scale of 1–5 (to a great deal–not at all). A maximum score of 50 was obtainable. Based on the scores obtained, respondents were categorized into three groups: 1–17 (low perception), 18–34 (moderate perception) and 35–50 (high perception). To confirm the reliability of the items, a Cronbach alpha reliability test was also conducted, and the result suggested a relatively high and significant internal consistency at 0.859.

RESULTS

Demographic distribution of respondents

Findings show that majority of the respondents are male (55.6%), between ages 26 and 35 years (50.6%) and Christians (68.0%). Almost half (47.9%) of the respondents reside in Oyo State followed distantly by those who reside in Lagos State (26.3%). The findings are presented in Table 1.

Information sources on COVID-19 preventive strategies

We carried out a multiple frequency analysis to determine the sources from which respondents get information on COVID-19 preventive strategies. The result (see Table 2) reveals that in decreasing order of frequency the respondents get information on COVID-19 preventive strategies from the social media (19.1%), television (14.8%), radio (11.4%) and family and friends (11.0%).

Our finding from the IDI shows that participants get information on COVID-19 preventive strategies from multiple sources. The same number of participants, eight out of the ten, claim to get information from television and social media. Similarly, six out of ten reported getting information from newspapers and radio. Only two said they access information on COVID-19 from family and friends. A striking similarity of this finding with that of the survey is that the least number of people relied on interpersonal source (family and friends) than the mass media (social media, television and radio) for information on COVID-19 preventive strategies.

Frequency of exposure to information on COVID-19 preventive strategies

Finding in Table 3 shows that 88% (representing everyday and 5–6 days per week) of the respondents are frequently exposed to information on COVID-19 preventive strategies, 5.8% (representing 3–4 days per week) are less frequently exposed, while 6.2% (representing 1–2 days per week) are infrequently exposed to information on COVID-19 preventive strategies. These exposure patterns cut across various information sources from which they access such information.

Finding from the IDI corroborates survey result as all the ten interview participants reported getting information on COVID-19 preventive strategies many times in a day. This means that the respondents and participants are regularly exposed to information on COVID-19 preventive strategies. For instance, one of the participants, a 45-year-old female said:

	N	%
Sex		
Male	144	55.6
Female	115	44.4
Total	**259**	**100**
Age		
>25	39	15.1
26–35	131	50.6
36–45	51	19.7
<45	36	13.9
Total	**259**	**100**
State of residence		
Oyo	124	47.9
Lagos	68	26.3
Ogun	17	6.6
Osun	15	5.8
Ondo	19	7.3
Ekiti	16	6.2
Total	**259**	**100**
Religion		
Islam	82	31.7
Christianity	176	68.0
Adherent of the Grail Message	1	0.4
Total	**259**	**100**

Table 1: Demographic variables of the respondents.

> I get information on COVID-19 many times in a day and from different sources. For instance, I hear about it on radio, I read on the Internet and when I sit to watch television, hardly will you not see information about COVID-19 within an hour.

Another participant, a 29-year-old male stated:

> Internet does it for me, however, I get information from friends and family as well, especially my parents and I also hear about it regularly on radio.

Perception of credibility of information sources

Although finding presented earlier (see Table 2) shows that majority of the respondents get information about COVID-19 from social media, finding in Table 4 reveals that 19.0 per cent of the respondents perceived television to be

Sources	Responses	
	N	%
Radio	30	11.6
Television	38	14.7
Newspaper (print)	11	4.2
Newspaper (online)	25	9.7
Social media	49	19.0
Friends and family	28	10.8
Health practitioners	26	10.0
Government agent	20	7.7
Religious leaders	19	7.3
Members of my community	13	5.0
Total	259	100

Table 2: Information sources on COVID-19 preventive strategies.

Per week	Responses	
	N	%
Everyday	217	83.8
5–6 days per week	11	4.2
3–4 days per week	15	5.8
1–2 days per week	16	6.2
Total	259	100.0

Table 3: Frequency of exposure to information on COVID-19 preventive strategies.

the most credible sources of information on COVID-19 preventive strategies. Health practitioners, as source of information, followed with 16.2 per cent.

In the same vein, qualitative data revealed that majority of the participants perceived television to be the most credible source of information on COVID-19 preventive strategies. Eight out of ten participants stated that television is the most credible source of information. A total of six each identified radio and newspaper as the most credible sources of information on COVID-19 preventive strategies. For instance, a 34-year-old-male participant said:

> To me TV is the most credible of the information sources because of its audio-visual feature. I don't only hear about the preventive measures, I am also able to see how to apply those measures.

While two participants stated that they trust and rely on information from the social media, one participant, a 29-year-old male, who is not certain of the source he trusts said, 'trust and credibility depend on the type of information and how it is presented'.

Information sources	Responses	
	N	%
Radio	34	13.1
Television	49	19.0
Newspaper (print)	15	5.7
Newspaper (online)	24	9.3
Social media	37	14.3
Friends and family	14	5.4
Health practitioners	42	16.2
Government agent	23	9.0
Religious leaders	13	5.0
Members of my community	7	2.9
Total	259	100.0

Table 4: Perception of credibility of information source on COVID-19 preventive strategies.

Categorization of respondents based on perception of credibility of information sources

Respondents were categorized based on their perception of credibility of information sources on COVID-19 preventive strategies. The result shows that majority of the respondents have moderate perception (47.5%). Those who have high perception (35.9%) and low perception (16.6%) followed in that order.

Furthermore, respondents were also asked to indicate the criteria they used to determine the credibility of the information sources. A total of 17.5% indicated expertise, 14.1% indicated trustworthiness, while 12.8% and 11.9% used objectivity and visualization, respectively, as criteria used by the respondents to determine the credibility of sources (see Figure 1).

Adoption of COVID-19 preventive strategies

We categorized the respondents based on their responses to adoption of COVID-19 preventive strategies. The result shows that majority of the respondents fall into the moderate adopters (71.8%), while 25.2% represents ardent adopters. Only 2.7% represents low adopters (see Table 6).

Finding from IDI discussions points to the fact that majority of the participants regularly adopt preventive measures in order to avoid contraction of COVID-19. Seven out of ten interviewees claimed that they observe the preventive measures regularly. For instance, a 50-year-old female participant stated:

> I wash my hands at every hour. I use nose mask regularly when I am going out and I do change my clothes before entering my house whenever I come back from a busy place like market.

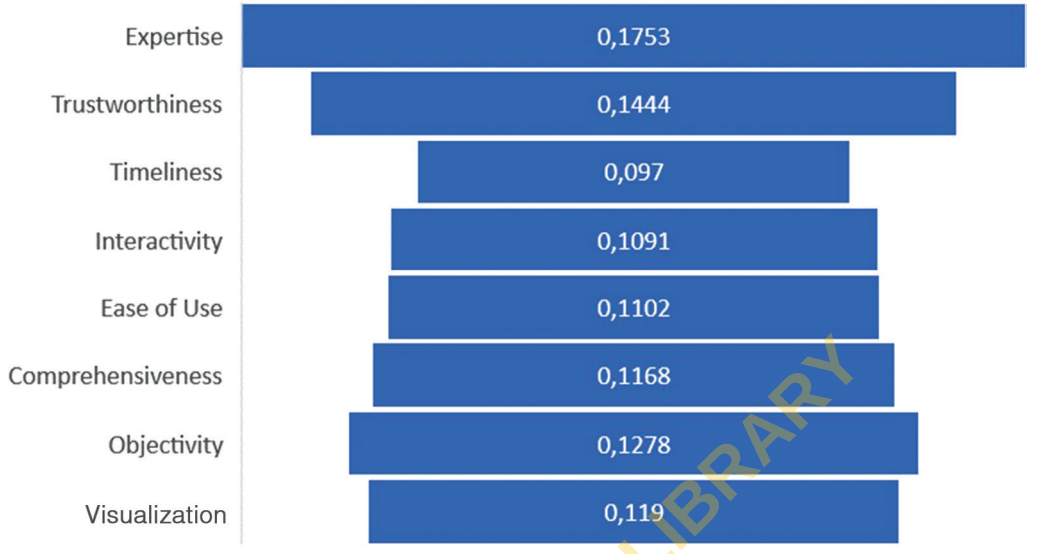

Figure 1: Criteria for determining the credibility of information sources.

Perception levels	No.	%
Low perception	43	16.6
Moderate perception	123	47.5
High perception	93	35.9
Total	259	100

Table 5: Categorization of respondents based on their perception of credibility of information sources.

RELATIONSHIP BETWEEN PERCEPTION OF CREDIBILITY OF INFORMATION SOURCES AND ADOPTION OF COVID-19 PREVENTIVE STRATEGIES

A two-tailed Pearson correlation conducted to ascertain the relationship between respondents' perception of credibility of information sources and adoption of COVID-19 preventive strategies shows a positive coefficient (0.030) at a *p*-value of 0.630. The implication of this finding is that respondents' perception of credibility of the information sources on COVID-19 preventive strategies positively influences their adoption of such strategies. This finding is presented in Table 7.

To further determine the level at which the relationship mostly exists, multiple bootstrapping estimation test was conducted. At 95% confidence interval, the test reveals that at the low level of adoption, there is no significant relationship between perception and adoption of strategies. It shows that perception has no significant influence on the adoption of COVID-19 preventive strategies at 0.00 value (p>0.01). However, at the moderate level,

Adoption categories	No.	%
Low adopters	7	2.7
Moderate adopters	186	71.8
Ardent adopters	66	25.2
Total	259	100

Table 6: Categorization of respondents based on adoption of COVID-19 preventive strategies.

it shows that credibility perception of information sources is significant and has effect on the adoption of COVID-19 preventive strategies at the value of 0.03 (p<0.001, 95% CI: 41.4–55.9). Finally, at the ardent level of adoption, result shows that there is significant relationship between perception and adoption of preventive strategies at the value of 0.05 (p<0.001, 95% CI: 25.8–48.5). Going by the values at which the significant relationships are shown for moderate and ardent adopters, 0.03 and 0.05, respectively, it shows that the more respondents perceived sources of information to be credible, the more they are influenced to adopt COVID-19 preventive strategies.

DISCUSSION OF FINDINGS

Our findings show that majority of the respondents received COVID-19 information from multiple sources and on a daily basis. Zhong et al. (2020) alluded to the findings that because of the serious situation of the epidemic and the overwhelming news reports on this public health emergency, the general population would actively learn about this infectious disease from various channels of information. Furthermore, majority of the respondents in our study also stated that they get information on COVID-19 from the social media. According to Chan et al. (2020), social media are viable and faster information source that have keyed into disseminating COVID-19 information. It is, therefore, not surprising that information-seeking pattern of individuals has been significantly impacted by the use of digital media (Cinelli et al. 2020) and the availability of multiple information sources.

However, the flow of information from multiple sources is noted to create an overwhelming situation of uncertainty and increased fear because fake news, disinformation or misinformation flow along with credible information (Huynh 2020; Broniatowski et al. 2020). In fact, Cinelli et al. (2020) found that information from both credible and non-credible sources flow in the same pattern. Result of this study shows that in the face of COVID-19 information overwhelming situation, respondents are not misled by non-credible sources because there are criteria they use to determine the credibility of information sources. Majority of the respondents use expertise and trustworthiness of the source to determine the credibility of information sources. Our result is consistent with an earlier study finding of Bibkov and Bibkov (2020), which revealed that people use expertise and trustworthiness to determine the credibility of information sources in the time of health-related crisis. In addition, Choi et al. (2018) found that Koreans use trustworthiness to determine the credibility of information sources on MERS. Therefore, the suggestion of WHO that critical information on COVID-19 should consistently come from credible

		Credibility perception	Adoption of strategies
Credibility perception	Pearson correlation	1	0.030
	Sig. (two-tailed)		0 .630
	N	259	259
Adoption of strategies	Pearson correlation	0.030	1
	Sig. (two-tailed)	0.630	
	N	259	259

Table 7: Relationship between perceived credibility of information sources and adoption of preventive strategies by the respondents.

				Bootstrap for per cent[a]			
						95% Confidence interval	
Adopters	**Credibility perception**	**Frequency**	**%**	**Bias**	**Std. error**	**Lower**	**Upper**
Low	Low	3	42.9	0.0	17.8	14.3	71.4
	Moderate	2	28.6	-0.8	17.2	0.0	57.1
	High	2	28.6	0.8	16.6	0.0	57.1
	Total	**7**	**100.0**	**-0.3**	**5.5**	**100.0**	**100.0**
Moderate	Low	29	15.6	-0.1	2.7	10.2	21.0
	Moderate	90	48.4	0.3	3.7	41.4	55.9
	High	67	36.0	-0.3	3.5	29.0	43.0
	Total	**186**	**100.0**	**0.0**	**0.0**	**100.0**	**100.0**
Ardent	Low	11	16.7	0.0	4.5	9.1	25.8
	Moderate	31	47.0	-0.5	6.0	34.8	57.6
	High	24	36.4	0.5	5.8	25.8	48.5
	Total	**66**	**100.0**	**0.0**	**0.0**	**100.0**	**100.0**

a. Results are based on estimation of 1000 bootstrap samples

Table 8: Multiple bootstrapping estimation.

sources should be adhered to in order to improve the adoption of COVID-19 preventive strategies and contain the spread of the virus.

Despite the fact that most respondents claim to receive information about COVID-19 from social media, the result shows that television, health professionals, social media and radio, in that order, are believed to be highly credible sources of information. A plausible explanation for this tendency may be because people who serve as sources of information in mainstream media and hospitals are trained professionals. While mainstream media operate with gatekeeping practices (Metzger and Flanagin 2013), such practices are non-existent in social media spheres. The far-reaching implication according to Mohamad and Azlan (2020) is that in time of emergencies, people have

trust in mainstream media because they believe that social media have higher levels of fake news, misinformation and disinformation.

Our study also shows that majority of the respondents are moderate adopters of preventive measures. Varied levels of adoption of COVID-19 preventive strategies have been reported in previous studies. For instance, Goldberg et al. (2020) found that people adopt the use of face mask following the recommendation from government, whereas majority of the respondents (79.20 per cent) in the study conducted by Duan et al. (2020) are good adopters.

Finally, the results showing that there is significant relationship between perceived credibility of information sources and adoption of COVID-19 preventive strategies augurs well. This is because when an individual trusts a source of information, the knowledge gained from such a source will influence risk perception. Risk perception has been found to influence individual's health behaviour through a cognitive process of evaluating the extent to which they are vulnerable to a particular hazard, and thus influences their health behaviour (Pidgeon 1998). This view resonates with the central processing route of the ELM proposition that a credible source has a high tendency of influencing persuasion (Petty and Cacioppo 1984).

CONCLUSION

This study explored the relationship between perceived credibility of information sources and the adoption of COVID-19 preventive strategies. The results showed that respondents used expertise and trustworthiness to determine the credibility of information sources and perceived television, health practitioners and social media (in that order) to be the most credible source of information on COVID-19. Our findings also showed significant association between perceived credibility of information sources and the adoption of COVID-19 preventive measures. Adoption of preventive strategies augurs well for the containment and possible elimination of COVID-19. It is, therefore, important that information on preventive strategies should be disseminated through information sources that are found to be very credible.

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