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RESEARCH ARTICLE

Does media affect adherence to COVID-19 quarantine protocols?

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The Philippines, which has experienced community quarantine from March 2020 to the present, is one country that has imposed quarantine protocols. Although the Philippine government imposes penalties on those who do not follow the quarantine protocols, the success of quarantine depends on the individual's adherence to quarantine protocols. This study examined if media affected adherence to COVID-19 protocols. 334 residents from lloilo, Philippines were surveyed. Using the Theory of Planned Behavior as a framework, the results showed a positive relationship between (1) attitude and quarantine adherence, (2) controllability and quarantine adherence, and (3) media and quarantine adherence. This implies that a favorable attitude can result to quarantine adherence. Residents who believe that they have the capability to follow quarantine protocols will follow it. Media positively affects quarantine adherence. Further, media mediated the relationships between attitude and quarantine adherence, self-efficacy and quarantine adherence, and controllability and quarantine adherence. As a mediating variable, media can strengthen the quarantine adherence by favorably influencing attitudes, self-efficacy, and controllability. The relationship between subjective norm and quarantine adherence was not significant. This implies that individuals comply with quarantine protocols on their own volition.

Keywords: media; COVID 19; quarantine protocols; Theory of Planned Behavior

JEL Classification: M31

When the World Health Organization declared COVID-19 a pandemic on March 11, 2020, various types of media, such as tv, newspaper, radio, and social media, allowed the public to recognize the seriousness of COVID-19 (Vallejo & Ong, 2020). According to the Philippine Department of Health, COVID-19 had infected 54,771,888 persons worldwide by November 17, 2020 (Department of Health, 2020). The report showed that there were 412,097 COVID-19 cases and 7,957 deaths in the Philippines as of November 17, 2020. Many governments, including the Philippine government, strongly enforced social-distancing, area-wide lockdowns and curfews, and contact-tracing of persons under investigation (Biana & Joaquin, 2020).

According to Biana and Joaquin (2020), various governments also used media in the form of infographics, infomercials, and hashtags to encourage residents to adhere to quarantine protocols. The authors point out the use of fear appeal to encourage quarantine adherence. This also validates the study of Li and Huang (2020) which stated that fear-appeal communication has been used in health information campaigns to encourage individuals to adopt healthy behaviors.

The Enhanced Community Quarantine (ECQ) in the Philippines was announced on March 13, 2020 and was initially limited to the National Capital Region (NCR), but was expanded to nearby provinces, such as Iloilo as more cases of local transmission were recorded (Vallejo & Ong, 2020). Under the ECQ, all modes of travel including land, air, and sea were suspended (Prasetyo et al., 2020). To prevent the spread of COVID-19, the residents, through various forms of media (newspaper, TV, radio, Facebook and Instagram) were instructed to stay at home and go out only to buy essentials (Prasetyo et al., 2020). Other quarantine protocols from the Philippine Department of Health (2020) which were aired on tv, newspaper, radio, and social media included the following: frequent handwashing, social distancing, covering nose and mouth when coughing, not touching eyes, nose, or mouth, staying at home if unwell, seeking medical attention if having a fever, cough and difficult breathing, and observing the curfew (Torneo et al., 2020).

Rationale for Choosing Iloilo Residents as Respondents

The adherence to quarantine protocols of Iloilo residents was lauded in social media. According to Pag-iwayan (2020), Iloilo's best practices included active contact tracing, private donations from wealthy individuals to secure personal protective equipment, testing kits, medical supplies, handwashing areas, dormitories and transportation for medical front-liners, 240 community kitchens with day-care centers, an accredited testing facility that can deliver prompt results, and food assistance to vulnerable workers such as jeepney and pedicab drivers, person with disabilities, and senior citizens. These best practices were listed in the policy briefs for local government units in minimizing the spread of COVID-19 (Torneo et al., 2020).

Although the role of the local government units is crucial to quarantine adherence, there are very few studies on the role of media to encourage quarantine adherence, especially in the Philippines. During a pandemic such as COVID-19, the public depends on the media to make informed decisions, such as following quarantine protocols (Garfin et al., 2020). According to Garfin et al. (2020), traditional media (TV, radio, and newspaper) and new types of media (Apple updates, Twitter, and Instagram) can provide information that can encourage the public to engage in health behaviors to prevent the spread of COVID-19. This study aims to find out if media influenced the adherence of Iloilo residents to quarantine protocols. Most of the actions implemented in Iloilo are included in the policy brief written by De La Salle University researchers on how local government units can effectively respond to COVID-19 (Torneo et al., 2020).

As of 2015, Iloilo had a population of 1,936,423. It is a first-class province with five districts (Department of Tourism, 2016).

Table 1. *Iloilo districts*

First	Second	Third	Fourth	Fifth
Guimbal	Alimodian	Badiangan	Anilao	Ajuy
Igbaras	Leganes	Bingawan	Banate	Balasan
Miag-ao	Leon	Cabatuan	Barotac Nuevo	Batad
Oton	New Lucena	Calinog	Dingle	Barotac Viejo
SanJoaquin	Pavia	Janiauay	Duenas	Carles
Tigbauan	San Miguel	Lambunao	Dumangas	Concepcion
Tubungan	Santa Barbara	Maasin	Passi City	Estancia
	Zarraga	Mina	San Enrique	Lemery
		Pototan		San Dionisio
				San Rafael
				Sara

Quarantine Protocols to Prevent COVID-19

According to the Philippine Department of Health (2020), the suggested quarantine protocols to prevent COVID-19 are as follows:

1. Use soap and water, or an alcohol-based hand rub to clean hands,
2. Maintain physical distancing from anyone who is coughing or sneezing,
3. Don't touch the face particularly the eyes and the mouth,
4. Use face mask and face shield when going out,
5. Stay at home if not feeling well,
6. Inform the local health authorities if not feeling well, and
7. Follow the directive of the local government unit.

Conceptual Framework

Theory of Planned Behavior

The Theory of Planned Behavior (TPB) posits that there are three socio-cognitive variables namely: attitude towards the behavior, subjective norm, and perceived behavioral control which independently affect a person's intention to behave in a specific manner (Azjen, 2020). According to Ajzen (2020), these three variables will affect the intention to perform a specific behavior and intention will affect actual behavior. This study, however, measures actual behavior because residents may not always act on their intentions (Ajzen, 2020). Ajzen (2020) stressed that it is difficult to use intention as a proxy for actual behavior and, thus, the authors surveyed the residents' actual behavior instead of intentions. The TPB has been used to explain the factors that will affect perceived effectiveness of quarantine measures during COVID-19 (Prasetyo et al., 2020).

Attitude towards the Behavior

This is the individual's positive or negative belief about performing a specific behavior. If the individual has a positive attitude towards a behavior, this will lead him to perform the behavior. On the other hand, a negative attitude towards a behavior will lead to non-compliance. Studies have shown that attitude has influenced actual behavior (Prasetyo et al., 2020).

Subjective Norm

Subjective norm is the subjective pressure to perform or not perform abehavior. This is influenced by normative beliefs, which according to Ajzen (2020) is influenced by the approval or disapproval of family, friends, and partners towards performing the behavior, and the motivation of the person to comply with that pressure.

Perceived Behavioral Control

This is the perception of ease or difficulty in performing the specific behavior, which is influenced

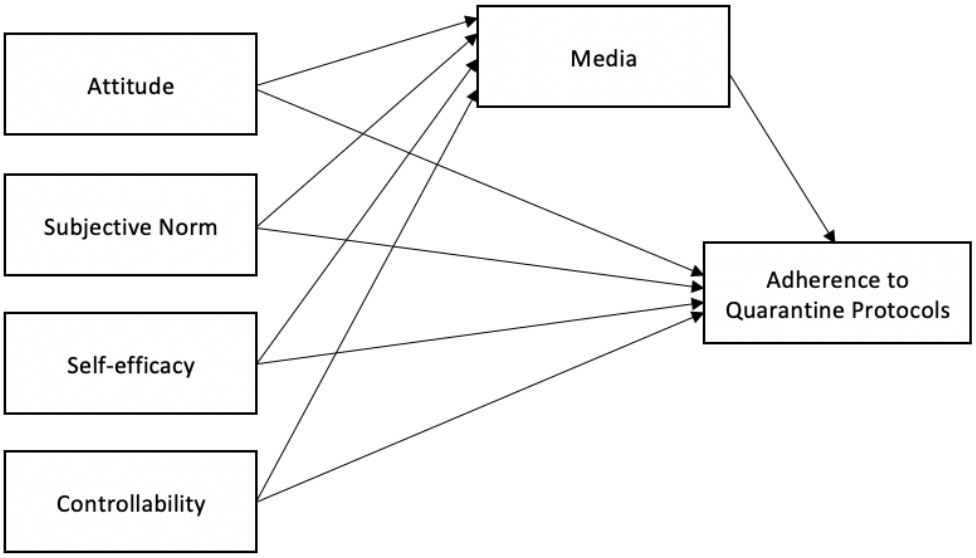

Figure 1. Conceptual Framework (Adapted from Ajzen's Theory of Planned Behavior)

by control beliefs. This includes the concepts of self-efficacy and controllability of performing the specific behavior (Ajzen, 2020). In the TPB, perceived behavioral control and intention, taken together, can predict the performance of the behavior. An increase in perceived behavioral control while keeping the intention level constant will bring about the performance of the specific behavior (Ajzen, 2020).

Figure 1 shows the study's conceptual framework, which retains attitude and subjective norm from the original TPB model and splits perceived behavioral control to its components namely self-efficacy and controllability with media as the mediating variable. As seen in Figure 1, the authors measured actual behavior.

Review of Related Literature

Attitude towards Behavior and Adherence to Quarantine Protocols

Attitude towards quarantine protocols can encourage a person to comply with those protocols. Residents who have a positive attitude towards quarantine protocols will follow them. A study of 649 Filipinos in the National Capital Region showed that a favorable attitude towards quarantine protocols positively affected the intention to follow COVID-19 prevention measures and, consequently, intention predicted actual behavior (Prasetyo et al., 2020).

In another study conducted by Trecene and Abides (2020) on how Twitter users reacted to the pandemic, the authors concluded that those surveyed showed the willingness to follow quarantine protocols to prevent the spread of COVID-19. According to Trecene and Abides (2020), the general sentiments and behavior of Twitter users showed a favorable attitude to adhere to quarantine protocols.

Omodior et al. (2015) conducted a study to determine the intention to engage in personal protective behaviors against tick-borne diseases among visitors in an outdoor recreational center and identified six dependent variables namely

1. Wear long pants, long sleeved-shirts, or light-colored clothing,
2. Tuck shirts into pants and pants into socks,
3. Use tick repellent/insecticide on skin or clothing,
4. Routinely check for ticks on clothes and body,
5. Avoid wooded or grassy areas, and
6. Choose to walk the centre of the trails.

Attitude, which influenced preventive behavior, was found to be a significant predictor for many of the variables above (Omodior et al., 2015).

This leads us to the following hypothesis:

H1. There is a positive relationship between attitude and adherence to quarantine protocols.

Subjective Norm and Adherence to Quarantine Protocols

Subjective norms such as family, friends, and partners can also motivate a resident to comply with health behavior, such as adherence to quarantine protocols. Mo et al. (2019) found that women engaged in compensated dating had a higher intention for future HIV testing when their peers were supportive of the behavior. Ay et al. (2019) showed that the subjective norm of healthcare workers towards hand hygiene was influenced by social cohesiveness and a sense of belongingness with the Intensive Care Unit team. White et al. (2015) found that Australian nurses reported that their colleagues influenced their normative beliefs towards hand hygiene the most. Superiors, patients, and representatives from Infection Control also built their normative beliefs, as well as their own families as they could risk infecting them with poor hand-hygiene practices (White et al., 2015).

A study on Filipinos in NCR showed that when residents were surrounded by people who were following the preventive protocols given by the government such as wearing face masks when going outside of their homes, staying and working from home, using hand sanitizer frequently, and practicing social distancing during the outbreak, they were also likely to follow quarantine protocols (Prasetyo et al., 2020).

This leads to the following hypothesis:

H2. There is a positive relationship between subjective norm and adherence to quarantine protocols.

Perceived Behavioral Control and Adherence to Quarantine Protocols

Self-efficacy and controllability, which are concepts under perceived behavioral control, can influence adherence to quarantine protocols. Self-efficacy refers to a resident's general capability to adhere to quarantine protocols, while controllability refers to the facilitating

conditions such as financial or social conditions that can assist in complying with quarantine protocols (Ajzen, 2020). The study on factors influencing Filipinos to adhere to quarantine protocols to prevent the spread of COVID-19 in the National Capital Region showed that Filipinos with greater self-efficacy and controllability are most likely to stay at home and comply with the lockdown implementation of the country, city, and community (Prasetyo et al., 2020). This validates the findings of Bandura (1977) that the essential predictor of various medical behaviors, including medication constancy, are self-efficacy and controllability.

This leads to the following hypotheses:

H3a**.** There is a positive relationship between self-efficacy and adherence to quarantine protocols.

H3b. There is a positive relationship between controllability and adherence to quarantine protocols.

Media and Adherence to Quarantine Protocols

Ajzen (2020) pointed out that the TPB can also include other constructs aside from attitude, subjective norm, and perceived behavioral control (self-efficacy and controllability). This study extends the framework to include media. Media, in this study, is defined as Television, online newspapers, Facebook and Instagram. Thus, media in this study would refer to both mass media (Television and online newspapers) and social media (Facebook and Instagram).

Mass media such as television, online newspapers, Facebook, and Instagram communicate stories of events, issues, people, politics, disasters, conflicts, and epidemics such as COVID-19 (Gabore, 2020). Various media sources can influence the level of an individual's perception of COVID-19 (Ignacio et al., 2020). Ignacio et al. (2020) stress that media can communicate messages that can affect the management of health risks due to COVID-19.

A local study analyzing panic behavior during the COVID-19 showed that correct information dissemination was needed to prevent panic behavior (Nicomedes et al., 2020). This implies that media has a role to play to prevent panic behavior and, instead, encourage preventive health behaviors, especially during quarantine. According to Garfin et al. (2020), media has a crucial role to play as public health officials, scientists, and journalists need critical information to advise the public on appropriate precautions to minimize the spread of COVID-19. Further, media with appropriate and responsible information can influence the public to engage in appropriate health protective behaviors to minimize the spread of COVID-19 (Garfin et al., 2020).

Garfin et al. (2020) also cautioned that in times of pandemic, the type and amount of media exposure can also lead to stress. According to these authors, responsible media messages that are needed in times of pandemic to promote health behavior should not include sensationalism or disturbing messages (Garfin et al., 2020). To convey credible messages that will encourage residents to comply with quarantine protocols, it is deemed best that the message should be delivered by medical professionals, including psychologists and psychiatrists, and scientists (Bilal et al., 2020; Lep et al., 2020).

In a study of Singaporean scientists as public communicators, the common outreach programs that they handle include public lectures and demonstrations, talks with community groups and policymakers, and granting media interviews (Ho et al., 2020). This suggests that scientists can deliver credible messages to the public that can encourage quarantine adherence may it be through television, Facebook, online newspapers, or Instagram (Bilal et al., 2020; Ho et al., 2020).

Bilal et al. (2020) have stressed that media is the most powerful tool that can disseminate campaigns to provide some relief from panic and boost the morale of the general public during COVID-19. The authors suggested that medical practitioners should have media campaigns to encourage the public to engage in health behaviors. Furthermore, tv shows featuring residents who have recovered from COVID-19 and complimenting medical front-liners for their valiant services should be aired.

This leads to the following hypothesis:

H4. Media can positively influence adherence to quarantine protocols to prevent the spread of COVID-19.

Attitude, Media, and Adherence to Quarantine Protocols

Lovejoy et al. (2015) found that exposure to health media such as television and print is positively related with avoidance of unprotected exposure to the sun, which may lead to the development of skin cancer.

This was consistent with earlier studies which suggest that a positive attitude towards health behaviors can be due to a health media exposure. Additionally, Lovejoy et al. (2015) found that individuals who had higher exposure to and encouraging attitude towards health information across various health media channels avoided unprotected sun exposure. Similarly, Stryker et al. (2008) found that particular to health media use and skin cancer protection behavior, individuals who reported positive attitude to health news in newspapers had more knowledge about skin protection and engagement in health prevention behavior. This implies that media can influence the attitude of Iloilo residents towards quarantine protocol adherence.

The following hypothesis is made:

H5a**.** Media significantly mediates the relationship between attitude and quarantine adherence.

Subjective Norms, Media, and Adherence to Quarantine Protocols

Namkoong et al. (2017) found that an interactive health communication campaign against smoking over social networking sites (SNS) such as Facebook and Twitter increased the use of these channels for the information-seeking behavior of individuals, and consequently changed their attitudes and perceived social norms towards smoking, which ultimately reduced their smoking behavior. The treatment group demonstrated that in relation to the campaign, the use of the internet was not a passive media consumption, but rather deliberate and involved both cognitive elaboration and collective consideration (Namkoong et al., 2017).

Namkoong et al. (2017) suggested that the internet might be a more effective channel for gaining relevant information, and for sharing of ideas and opinions versus traditional modes of mass media like television, print, as well as word of mouth communications. Social media campaigns can be cost-effective according to Duggan et al. (2015) as the number of individuals with SNS accounts is continuously increasing. Moreover, Boyd et al. (2007) found that SNS are already heavily integrated in the lives of young individuals who can be influenced by their peers to engage in healthier behaviors.

Namkoong et al. (2017) suggested that interactive campaigns over SNS can be very useful for a variety of community-related issues such as public health. This can include smoking, nutrition, socio-civic behaviors like donation drives, fundraising, and volunteerism and environmental concerns like recycling. This implies that media such as Facebook and Twitter can strengthen the relationship between subjective norms and adherence to quarantine protocols.

This leads to the following hypothesis:

H5b. Media significantly mediates the relationship between subjective norms and adherence to quarantine protocols.

Perceived Behavioral Control, Media, and Adherence to Quarantine Protocols

Sundstrom et al. (2018) developed 'It's Your Place,' a theory-based multimedia health communication campaign to prevent sexual assault on campus and found that exposure to this had a significant effect on self-efficacy and controllability of bystanders towards behavior to intervene to prevent a sexual assault from happening. After seeing the campaign, participants of the study reported that they had a more positive attitude towards bystander intervention, a greater sense that the important people around them would expect them to intervene, and that they were equipped with more knowledge and skills to prevent a sexual assault occurrence (Sundstrom et al., 2018).

LaBelle et al. (2020) developed 'Rethink,' a health communication campaign to reduce the normalization of prescription stimulant misuse on college campuses for the purpose of performance enhancement during periods of high academic stress. The campaign which made use of traditional media, print, social media such as Facebook, events, and promotional items aimed to inform college students of the health risks and legal consequences of mis-using prescription stimulants like Adderall, Ritalin, and Concerta and to dissuade them from mis-using prescription stimulants (LaBelle et al., 2020). The campaign was successful in changing the attitude towards misusing prescription stimulants to (1) concentrate better while studying, (2) study longer, and (3) concentrate better in class (LaBelle et al., 2020). This implies that the media campaign was successful in encouraging students to have better self-efficacy and controllability on their academic life.

This leads to the following hypotheses:

H5c. Media positively mediates the relationship between self-efficacy and adherence to quarantine protocols.

H5d. Media positively mediates the relationship between controllability and adherence to quarantine protocols.

Methodology

334 Iloilo residents answered the self-administered survey. The self-structured survey questions were developed through a review of the literature. Although 47% of the respondents live in Iloilo City, the remaining 53% were from the 1st, 2nd, 3rd, 4th and 5th districts of Iloilo. 220 respondents were females, while 114 were males. The respondents' marital status showed that 61% were single, while 39% were married.

The survey was administered from March 15 to April 15, 2020, which are the dates when the ECQ was implemented. It had six sections which covered attitude, subjective norm, self-efficacy, controllability, media, and actual behavior. Each section measured the participants' perceptions based on the Likert five-point scale (1 – Strongly disagree, 2 – Disagree, 3 – Neutral, 4- Agree, and 5- Strongly agree). Each section had four questions to measure perceptions for each variable (attitude, subjective norm, self-efficacy, controllability, media, and actual behavior). The survey was pretested and modified to make some of the questions easier to understand.

The participants were also requested to fill up the section on demographic profiles.

SMART/PLS was used to analyze the respondents' data (Ketchen, 2013). Reliability tests were carried out to secure accuracy and consistency.

Results

To test the model of the respondents' adherence to quarantine protocols, path analyses were conducted using SMARTPLS 3.0 (Ringle, Wende & Becker, 2015).

Cronbach's alpha was used to ensure scale reliability and consistency (Cronbach, 1951). According to Peterson (1994), adequate Cronbach's alpha value is at least 0.70, while at least 0.60 is still acceptable in social psychology research (Robinson, Shaver & Wrightsman, 1991). Please refer to Table 2.

As seen in Tables 3 and 4, the direct paths showed that attitude, controllability, and media were significant to quarantine adherence. The results also show that media mediated the relationships between attitude and quarantine adherence, self-efficacy and quarantine adherence, and controllability and quarantine adherence. This implies that H1, H3b, H4, H5a, H5c and H5d were supported. On the other hand, there was no significant relationship between subjective norm and quarantine adherence, and self-efficacy and quarantine adherence. Media did not mediate the relationship between subjective norm and quarantine adherence. This shows that H2, H3a and H5b were not supported.

Table 2. *Reliability and Validity measures*

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Adherence to Quarantine Protocols	0.950	0.951	0.960	0.801
Attitude	0.943	0.950	0.959	0.855
Controllability	0.982	0.982	0.985	0.916
Self- Efficacy	0.948	0.948	0.962	0.865
Subjective Norm	0.966	0.966	0.975	0.906

Table 3. *Summary of hypotheses*

	Hypotheses	Results
1	There is a positive relationship between attitude and adherence to quarantine protocols.	Supported
2	There is a positive relationship between subjective norm and adherence to quarantine protocols.	Not supported
3a	There is a positive relationship between self-efficacy and adherence to quarantine protocols.	Not supported
3b	There is a positive relationship between controllability and adherence to quarantine protocols.	Supported
4	Media can positively influence adherence to quarantine protocols to prevent the spread of COVID 19.	Supported
5a	Media significantly mediates the relationship between attitude and quarantine adherence.	Supported
5b	Media significantly mediates the relationship between subjective norms and adherence to quarantine protocols.	Not supported
5c	Media significantly mediates the relationship between self-efficacy and adherence to quarantine protocols.	Supported
5d	Media significantly mediates the relationship between controllability and adherence to quarantine protocols.	Supported

Table 4. *Direct path coefficients*

Paths	Original Sample	Sample Mean	Standard Deviation	T Statistics	P Values
ATT -> ADHERE	0.239	0.246	0.056	4.247	0.000
CONTR -> ADHERE	0.153	0.150	0.071	2.153	0.031
MEDIA -> ADHERE	0.154	0.151	0.036	4.292	0.000
SE -> ADHERE	0.115	0.118	0.069	1.675	0.094
SN -> ADHERE	0.075	0.078	0.045	1.685	0.092

Table 5. *Indirect path coefficients*

	Original Sample	Sample Mean	Standard Deviation	T Statistics	P Values
ATT.>MEDIA.>ADHERE	-0.180	-0.181	0.061	2.935	0.003
CONT.>MEDIA.>ADHERE	-0.162	-0.145	0.073	2.224	0.026
SE.>MEDIA -> ADHERE	0.158	0.150	0.077	2.066	0.039
SN.>MEDIA -> ADHERE	0.060	0.050	0.053	1.132	0.258

Table 5 shows that media does not mediate the relationship between subjective norm and adherence to quarantine protocol. The result does not support H5b. This is due to the fact that it was the resident (not their family, friends, and community) who was personally able and willing to adhere to quarantine protocols.

Discussion

Attitude was significant to adherence to quarantine protocols based on the study's results. This validates the existing literature that attitude is a predictor of actual behavior (Agarwal, 2014; Mo et al., 2019;

Omodior et al., 2015; Prasetyo et al., 2020; Schmid et al., 2017; Trecene & Abides, 2020; Yang, 2015). This suggests that media can encourage favorable attitudes towards quarantine protocols adherence.

Subjective norm was not significant to quarantine adherence. This implies that it is the resident who is willing to adhere to quarantine protocols. It is because they want to stay alive. This does not support existing literature that shows that subjective norm influenced behavior (Ay et al., 2019; Mo et al., 2019; Prasetyo et al., 2020; White et al., 2015). This suggests that the residents' strong feelings to stay alive came from their own volition, not from external pressures from family, friends, and colleagues.

Self-efficacy was not significant to quarantine adherence. The results support existing studies (Prasetyo et al., 2020) The residents feel that they are not able to stop Corona virus from spreading as characterized by society's feeling of fear (Biana & Joaquin, 2020). This fear-appeal communication has been stressed by Li and Huang (2020) as a tool that can promote healthy behavior such as quarantine adherence. Trecene and Abides (2020) concluded that COVID-19 caused fear and sadness among Twitter users. According to Trecene and Abides (2020), Twitter users feared the rapid spread of the disease and the lack of vaccine. The negative emotions of fear and sadness may have affected the capability to perform the desired behavior.

Controllability was significant to adherence to quarantine protocols. This validates existing studies that show that controllability influenced quarantine adherence (Prasetyo et al., 2020). This implies that conditions were favorable for quarantine compliance.

The results showed that media mediated the relationships between attitude, self-efficacy, and controllability with quarantine adherence. These show the positive influence of media in health behavior compliance, especially during COVID-19. This also suggests that media can be used to influence the relationships between attitude, self-efficacy, and controllability with quarantine adherence. The results support existing studies (Labelle et al., 2020; Lovejoy et al., 2015; Sundstrom et al., 2018).

The results show that subjective norm was not significant to adherence to quarantine protocols. This suggests that residents comply with quarantine protocols not because of external pressures from family, peers, and the community, but rather because of their own intrinsic reason to stay alive. These results do not support the existing literature (Namkoong et al., 2020; Prasetyo et al., 2020).

The mediating effect between controllability and quarantine protocols adherence also suggests that media can create facilitating conditions for the residents to comply with quarantine adherence. Media messages that highlight the benefits of quarantine adherence can prevent the spread of COVID- 19, especially at a time when the vaccine is still not yet available. To attain credibility, the message can be delivered by medical practitioners and scientists (Bilal et al., 2020; Ho et al., 2020; Lep et al., 2020).

Conclusion, Limitations and Areas for Future Research

Media is a powerful tool to encourage health behaviors in times of a pandemic (Bilal et al., 2020; Garfin et al., 2020; Lep, 2020). The positive relationship between media and adherence to quarantine protocols implies the crucial role of media in preventing the spread of COVID-19. Due to the stress that can be caused by the type and exposure to media during this time, it is suggested that responsible media campaigns should use medical practitioners and scientists to guide the public on the benefits of quarantine adherence. Studies show that medical practitioners and scientists are credible influencers to health promotion behaviors (Bilal et al., 2020; Ho et al., 2020; Lep et al., 2020).

Media mediated the relationships between attitude, self-efficacy, and controllability, with adherence to quarantine protocols. This suggests that media campaigns can influence the residents' attitude, ability, and capability to comply with quarantine protocols. The positive relationships between attitude and controllership and adherence to quarantine behavior suggests that the Theory of Planned Behavior can be used to explain pro-social behaviors (Ajzen, 2020). Given the importance of attitude as a predictor of quarantine protocols adherence, media campaigns can be prepared to yield favorable attitudes towards quarantine protocols adherence. Media campaigns can be a facilitating condition to encourage a resident to comply with quarantine protocols that can save not only their life, but even the lives of their family and friends.

The respondents in this study were asked if the information from the following media sources

affected their quarantine behavior: television, online newspaper, Facebook, and Instagram. The definition of media sources is limited to these sources of information. Future studies can explore more media sources. This can be traditional media such as television, newspaper, and radio and new media such as websites, blogs, email, Facebook, and Twitter. The study of Ignacio et al. (2020) on Filipino college students showed that they had trusted information about COVID-19 from traditional media versus new media. A study on traditional versus new media can further validate this finding.

The respondents surveyed in this study are limited to residents of Iloilo, Philippines. Future research that can explain the mediating role of media on health behaviors in other areas aside from Iloilo province can be explored. This can yield interesting insights on how media is perceived in many places.

This study contributes to the few studies on the positive impact of attitude to health behaviors to minimize the spread of COVID-19. Pandey et al. (2020) found differences in the reception of campaign messages owing to how they are framed. Therefore, future research can also test how proximal and distal framing of community benefits in COVID-19 related campaign messages from the Philippine Department of Health (DOH) and other health-governing authorities can impact the reception of these messages and the adherence to quarantine protocols.

Based on Hofstede's cultural dimension, the Philippines is a collective country. A study on how media can influence quarantine adherence in an individualistic country can yield interesting results.

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