



THE EXTENT OF THE INDIVIDUAL RESPONSES ON COVID-19 HEALTH-RELATED MISINFORMATION AND THE VALIDATION ABILITY AMONG SELECTED RESIDENTS IN BRGY. LUCIANO, TRECE MARTIRES CITY, CAVITE

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ABSTRACT

The World Health Organization (WHO) declared last 2020 that along with the COVID-19 outbreak, an “infodemic” that is mostly misinformation regarding COVID-19 is continuously spreading mostly on online platforms. These COVID-19 misinformation are said to have harmful effects on the public (WHO, 2020). Thus, the study was conducted to determine the extent of individual responses on COVID-19 health-related misinformation and on the validation ability. The study utilized descriptive correlational design to describe the relationships of and correlate the research variables which are COVID-19 health-related misinformation, individual responses, and validation ability. Through convenience sampling, 363 respondents—who are in the age bracket of 20-59 years old and have access to the internet—were selected from Brgy. Luciano, Trece Martires City, Cavite. The data was gathered through the distribution of survey questionnaires. Statistical treatments including simple linear regression were performed for data analysis. The study found out that COVID-19 health-related misinformation and individual responses have a direct relationship ($r^2 = 0.160$, P-value < 0.05) and that validation ability and individual responses have an inverse relationship ($r^2 = 0.047$, P-value < 0.05). This concludes that encountering misinformation leads to inadvisable responses and that performing proper validation measures can prevent one from subscribing to misinformation.

KEYWORDS: COVID-19, Misinformation, Validation Ability, Responses, Correlational.

1. INTRODUCTION

The rapid spread of the novel Coronavirus disease (COVID-19) immediately put the world into a state of a pandemic. With the internet being a click away, information about the COVID-19 pandemic and its effects were immediately recognized and published in different online platforms (Ong et. al., 2020).^[1] However, not all information published on the internet is factual. In 2020, the World Health Organization (WHO)^[2] coined the term infodemic to address the surplus of information regarding the COVID19. In addition, the term also encompasses the rapid spread of misinformation as infodemic is defined to be the surplus of correct and incorrect information that can prevent the people from acquiring reliable information and guidance they need. Thus, the infodemic concerns the spreading of COVID-19 misinformation. Misinformation is defined as any false or inaccurate information being spread. Misinformation in any subject can be detrimental, but health-related misinformation can produce worse effects

because it can directly influence how an individual manages his health, especially with the pandemic.

The most common health-related misinformation is about the following: (1) preventive health protocols (2) preventive health measures, (3) COVID-19 vaccine, and (4) treatments for COVID-19. Misinformation concerning the preventive health protocols includes, but is not limited to, the use of face masks and use of antibacterial soaps are enough to prevent the transmission of the virus. Meanwhile, misinformation regarding preventive health measures includes, but is not limited to, drinking alcoholic beverages and using vitamin C as a prevention or cure for the virus. Following this, COVID-19 vaccine misinformation includes, but is not limited to, the use of vaccines prescribed for pneumonia is effective in treating COVID-19 and safety issues due to Dengvaxia controversy. On the other hand, misinformation about treatment for COVID-19 includes, but is not limited to, the use of different antiviral

medications can cure COVID-19 and related misinformation has harmful effects to the people and the community in different aspects such as physical and mental health, and increased stigmatization in the community that can lead to decreased compliance to accurate information—accurate information—which can ultimately cause death.

Health-related misinformation can affect the individual responses of the people. An individual response pertains to the effect on the actions of an individual produced from a certain condition or situation such as misinformation encounter. Thus, health-related misinformation can impose certain effects on the public. Some of the effects of health-related misinformation are (1) decreased compliance to correct health protocols, (2) increased compliance to incorrect practice of preventive health measures, (3) COVID-19 vaccine hesitancy, and (4) drug misuse. These events could lead to medication errors, health risks, and even death. As suggested by the WHO (2020)^[2], the spread of misinformation has further complicated the pandemic.

According to Barua *et al.* (2020)^[3] in their study entitled - Effects of misinformation on COVID-19 individual responses and recommendations for resilience of disastrous consequences of misinformation, the individual responses of the people, in relation to COVID-19, are affected by the information they encounter on various media platforms. In order to prevent this, the WHO (2020)^[2] encourages everyone to verify the information found on the internet and prompts everyone to report misinformation immediately. This effort can help prevent the further spread of misinformation and negate its influence to the individual responses, specifically, the actions of the affected individuals.

Thus, the study aims to determine the relationship between the following: (1) COVID-19 health-related misinformation, (2) individual responses on COVID-19 health-related misinformation, and (3) validation ability related to the information encountered on online platforms. Determining the extent of the individual responses on COVID-19 health-related misinformation and validation ability can help raise awareness on the effects of this misinformation to the health of the community and on how it contributes to the COVID-19 transmission. Recommendations to improve validation and misinformation management are also needed by the community to ensure that the information they will get from the internet is valid. In addition, the data gathered through this study can be presented to concerned organizations to provide insights on how to manage misinformation and the infodemic. Currently, there have been numerous foreign studies about the impact of COVID-19 misinformation on the public. However, there are limited to no local studies about the impact of COVID-19 misinformation on the actions of individuals and their possible correlation. Furthermore, there are also no local studies conducted addressing that the validation

ability of an individual can prevent them from subscribing to misinformation.

2. MATERIALS AND METHODS

2.1. Study Design

The study utilized the descriptive correlational study design which was used to determine the relationship between COVID-19 health-related misinformation and the individual responses of the respondents as well as to determine the relationship between the validation ability of the respondents and their individual responses.

2.2. Questionnaire Development

The survey questionnaire was developed by the researchers based on the published journal articles of Barua *et al.* (2020)^[3] and Islam *et al.* (2020).^[4] The questionnaire consists of: (1) COVID-19 health-related misinformation; (2) individual responses; and (3) validation of information. Modifications were made after it was validated. The instrument was then subjected to a reliability test on thirty respondents using Cronbach's alpha. The results of the reliability test of the 3-part-questionnaire were interpreted as acceptable and good based on George and Mallery (2003).^[5]

2.3. Respondents of the Study

The respondents of the study were selected from the Brgy Luciano, Trece Martires City, Cavite. Residents who were within the age range of 20-59 years old, and with an internet or data access at home were eligible. The study's sample size was determined to be 363. The respondents were then approached conveniently for the data collection.

2.4. Data Collection

The survey questionnaires with attached consent forms were distributed by the barangay health workers of the Brgy. Luciano, Trece Martires City, Cavite to the 363 accessible and convenient residents of the mentioned locality. The answered survey questionnaires and consent forms were collected a day after the distribution. Throughout the procedure, the barangay health workers assured that they have observed the minimum health protocols for COVID-19.

2.5. Statistical Analysis

The simple linear regression was used to present and determine the relationship between COVID-19 health-related misinformation and the individual responses of the respondents as well as the relationship between the validation ability and the individual responses of the respondents. However, since the individual responses provided in the questionnaire included both positive and negative actions, the researchers utilized reverse scoring on the individual responses pertaining to positive actions to correlate the whole of individual responses with the COVID-19 health-related misinformation. The reverse scoring for the positive individual response follows: "1 as strongly agree" through "3 as undecided" to "5 as strongly disagree". In addition, the qualitative data from

the open-ended questions obtained from individual responses, and validation ability were thematically analyzed.

2.6. Ethics Considerations

The rights to confidentiality, anonymity, and self-determination were observed to render the study ethical and to recognize and protect the rights of human subjects. Scientific honesty, aside from expertise and diligence, is also required when researching to ensure the integrity and credibility of the study are not compromised. One of the ethical principles is anonymity wherein it can be used by the respondents since it is their right to hide their true identity if necessary. Anonymity was ensured in this study by not disclosing the name of respondents on the research reports and questionnaire. Moreover, confidentiality can be used by the respondents wherein the information they provided would not be disclosed in a way that identifies them. The said ethical principle was maintained in this study by maintaining confidentiality on the collected data and not revealing the identities of the subjects when publishing or reporting the study. Also, the ethical principle of self-determination was maintained. The subjects were treated as autonomous agents by giving them information about the study and giving them the option to voluntarily participate or not. In the event of further complaints or

questions, information about the researchers was provided. When conducting research, the ethical responsibility regarded as very important is scientific honesty. Data manipulation or retention as well as methods and design manipulation are considered as dishonest conduct. Any form of dishonesty was avoided by the researchers through truthfully recording the subjects' answers, especially those who could not write or read. The survey questionnaires and research protocol was reviewed and approved by the Institutional Ethics Review Committee (IERC) of Centro Escolar University.

3. RESULTS AND DISCUSSION

3.1. Demographic of the Respondents

A total 363 respondents participated in the study, they are mostly in the age bracket of 20-59 years old (124 or 34.16%), the majority are males (226 or 62.26%), most are high school graduates (190 or 52.34%), internet usage among the respondents is almost even—with respondents who often access the internet representing the highest percentage (102 or 28.10%), 123 or 33.88% of the respondents' internet daily utilization is 1-2 hours while the least of the respondents use the internet daily for 3-4 hours (47 or 12.95%). The popular source of COVID-19 health-related information is through Facebook (308 or 84.85%) and the least is Wikipedia (36 or 9.92%).

Table 1: Demographic Profile Distribution of Respondents.

Age		
Age Bracket	Frequency	Percentage (%)
20-29	124	34.16
30-39	99	27.27
40-49	83	22.87
50-59	57	15.70
Total	363	100.00
Gender		
Gender	Frequency	Percentage (%)
Male	226	62.26
Female	137	37.74
Total	363	100
Highest Educational Attainment		
Highest Educational Attainment	Frequency	Percentage (%)
Elementary Graduate	35	9.64
High School Graduate	190	52.34
Vocational Degree	11	3.03
College Undergraduate	27	7.44
College Graduate	99	27.27
Master's Degree	1	0.28
Total	363	100.00
Frequency of Internet Usage		
Frequency of Internet Usage	Frequency	Percentage (%)
Rarely	82	22.59
Sometimes	93	25.62
Often	102	28.10
Always	86	23.69
Total	363	100.00
Duration of Internet Usage		
Duration of Internet Usage Per Day	Frequency	Percentage (%)
Less than 1 hour	57	15.70
1-2 hours	123	33.88
2-3 hours	50	13.77
3-4 hours	47	12.95
More than 4 hours	86	23.69
Total	363	100.00
Online Platforms as Source COVID-19 and Related Information		
Online Platform Used	Frequency	Percentage (%)
Facebook	308	84.85
News Websites (ABS-CBN, GMA, CNN, etc.)	264	72.73
Government Sources	231	63.64
Legitimate Health Websites (WHO, FDA, DoH, etc.)	228	62.81
YouTube	207	57.02
Messaging Apps (Messenger, WhatsApp, Viber, etc.)	183	50.41
Domain names ending in .org, .gov, .int, .edu, .net	108	29.75
Online Forums	100	27.55
Online Blogs	81	22.31
Online Vlogs	60	16.53
Domain names ending in .html, .com	53	14.60
Instagram	47	12.95
TikTok	41	11.29
Twitter	37	10.19
Wikipedia	36	9.92

The distribution of age suggests that the majority from age bracket 20-29 yearsold are less likely to subscribe to all kinds of information found on the internet, which reduces their potential risks of subscribing to misinformation, while the remaining are likely to become victims of misinformation (Scherer & Pennycook, 2020).^[6] As for the gender distribution, According to a study, men are likelier to believe false information, with a 15% probability of believing a given false claim compared to the 12% probability from women (Baum et al., 2020).^[7] With the highest education attainment, it can be deduced that most of them are considered educated and therefore less likely to suffer the risks of misinformation (Roozenbeek et al., 2020).^[8]

Exposure to the internet can increase the chances of encountering misinformation. However, due to the distribution of frequency of internet usage being split almost evenly, this demographic may not produce a significant impact to the findings of the study. With the duration of internet usage, half of the respondents are likely to encounter misinformation. The potential risks are even greater for those who use the internet for at least 4 hours a day—which account for nearly 1/4 of the total

respondents. Oppositely, the other half who uses the internet for 3 hours a day at most is less likely to encounter misinformation (Allen et al., 2020)^[9] Lastly, with Facebook being the most popular source of information, respondents may have encountered misinformation as Facebook is reported to contain fake news on the internet (Guess et al., 2020)^[10] However, results also show that at least 72.73% of the respondents have a source of reliable and truthful information, which they can also use to verify information they encounter on other online platforms such as Facebook.

3.2 COVID-19 Health-Related Misinformation

3.2.1. COVID-19 Preventive Health Protocols Misinformation

Findings show that 69.15% of the respondents thought that antibacterial soap is the only effective soap that can be used for hand washing, while 19.56% of the respondents consider that wearing a face mask properly is enough that social distancing is not needed anymore to prevent COVID-19 and 26.72% of the respondents presumed that wearing a face mask will increase the amount of carbon dioxide that they breathe and will lower their oxygen levels.

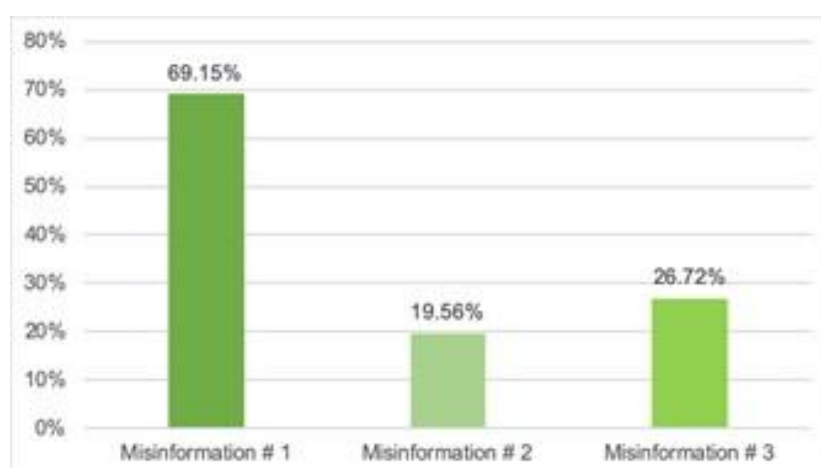


Figure 1: Preventive Health Protocols Misinformation Perceived to Be True by The Respondents.

The study presented the respondents with six statements regarding COVID-19 preventive health protocols where three out of six statements were incorrect or misinformation. As much as most of the respondents perceived that the use of antibacterial soap is a preventive health protocol against COVID-19, however, literature shows that any type of soap can be used for handwashing (Kuzminski, 2017)^[11] Thus, it can be said that the respondents are misinformed on the use of antibacterial soap in handwashing.

3.2.2. COVID-19 Preventive Health Measures Misinformation

The researchers also presented the respondents with six statements regarding COVID-19 preventive health measures where three out of six statements were incorrect or misinformation. Results show that 80.99% of the respondents thought that Vitamin C intake can

prevent or act as a cure for COVID-19. While 34.44% of the respondents consider that high temperatures and humidity prevent the transmission of the virus and 16.53% of the respondents presumed that drinking alcoholic beverages will protect them from acquiring the virus.

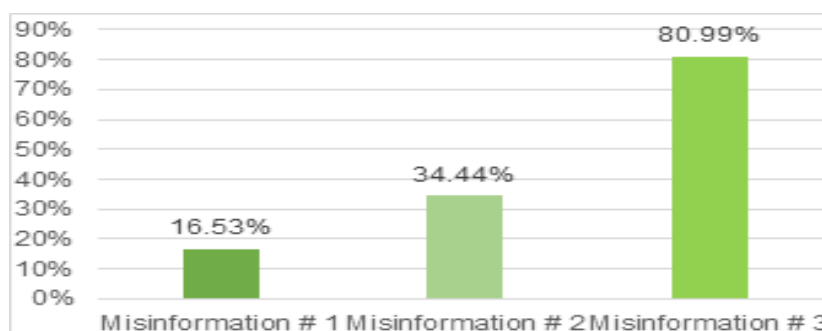


Figure 2: Preventive Health Measures Misinformation Perceived to Be True by The Respondents.

Based on the top result, the respondents perceived that intaking vitamin C can be considered as a preventive health measure to prevent contracting the virus, however, literature states that no supplement such as vitamin C can protect an individual from the virus (Shoemaker, S., 2020)^[12] Thus, it can be said that the respondents are misinformed on the purpose of vitamin C in the body.

3.2.3.COVID-19 Vaccine Misinformation

The study presented the respondents with six statements

regarding COVID-19 vaccine where three out of six statements were incorrect or were misinformation.

Findings show that 46.28% of the respondents thought that vaccines for pneumonia can protect them against COVID-19. While 32.23% of the respondents consider that high temperatures and humidity prevent the transmission of the virus, and 30.58% of the respondents presumed that Fabunan Antiviral Injection (FAI) is an approved vaccine for COVID-19 in the Philippines.

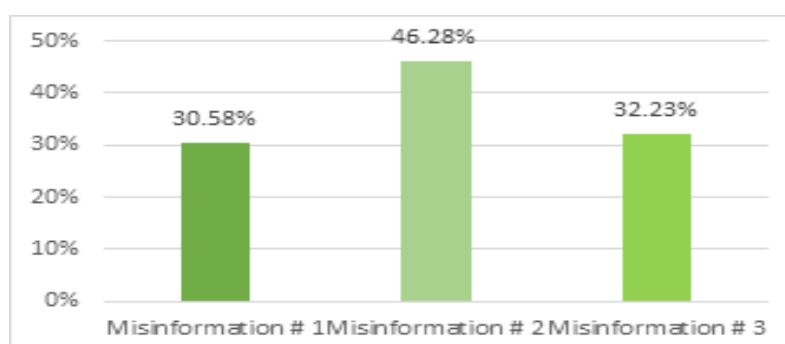


Figure 3: COVID-19 Vaccine Misinformation Perceived to Be True by The Respondents.

As much as most of the respondents perceived that the use of pneumonia vaccines can be considered as a protection against COVID-19, however, the WHO (2020)^[2] stated that these vaccines are not effective against the corona virus since COVID-19 is entirely a different type of disease and it requires a specific vaccine. Thus, it can be assumed that the respondents are misinformed on the use of pneumonia vaccine.

3.2.4. COVID-19 Treatment Misinformation

The study also presented the respondents with six

statements regarding COVID-19 treatment where three out of six statements were incorrect or misinformation. Results show that 53.72% of the respondents thought that “tuob” or steam inhalation can kill the COVID-19 virus. While 21.21% of the respondents consider that Hydroxychloroquine or Chloroquine (a medicine that is effective for lupus and malaria) is a treatment for the virus and 13.50% of the respondents presumed that Dexamethasone (a medicine that is effective for arthritis and shortness of breath) is a cure for the virus.

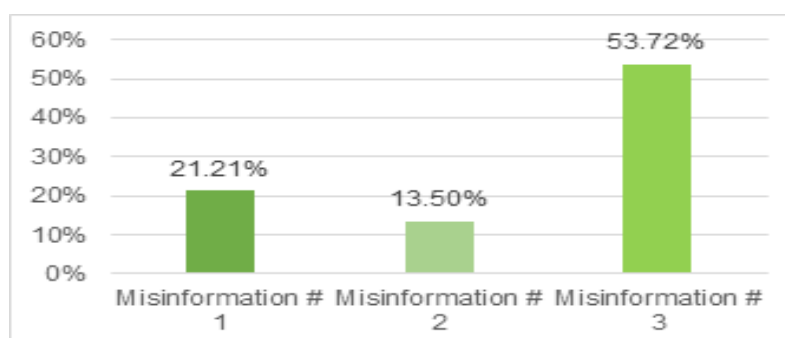


Figure 4: COVID-19 Treatment Misinformation Perceived to Be True by The Respondents.

Based on the results, the respondents perceived that practicing “tuob” or steam inhalation can be considered as COVID-19 treatment, however, literature states that government health organizations such as DOH do not promote the practice for the reason because there is no scientific basis that proves “tuob” is effective for COVID-19 (Hallare, 2020)^[13] Moreover, steam inhalation can be harmful and can cause a risk of burn injury (WHO, 2020)^[12] Thus, it can be said that the respondents are misinformed on the benefits of practicing “tuob” or steam inhalation.

3.3. Individual Responses Upon Encountering COVID-19 Health-Related Misinformation

In this study, an individual response pertains to the effect on the actions of an individual produced from a certain condition or situation such as misinformation encounter.

As such, COVID-19 health related misinformation is considered to be a stimulus that can influence the individual responses of the respondents.

Using a 5-point Likert scale of agreement, the researchers were able to evaluate the positive and negative individual responses of the respondents. The result showed an average mean of 2.39, the respondents were interpreted to disagree with the individual responses on the COVID-19 health-related misinformation. Hence, generally, the respondents are informed on COVID-19 health-related information. This can be supported by the report conducted in the United Kingdom presenting that a well-informed public on the topic of COVID-19 has been found to adhere willingly to the measures set by the government (Nuffield Foundation, 2020).^[14]

Table 2: Distribution of the Respondents’ Positive Individual Responses on Correct COVID-19 Health-Related Information.

Individual Responses	Mean	Interpretation
1. Performs hand washing with any soap and rinse with water for at least 20 seconds	4.66	Strongly Agree
2. Wears face mask and face shield every time I go out in the public	4.67	Strongly Agree
3. Abides and avoid mass gathering	4.04	Agree
4. Avoids close contact with someone showing flu-like symptoms	4.36	Agree
5. Uses alcohol-based sanitizer that contains at least 60% alcohol to minimize contracting the virus	4.04	Agree
6. Practices washing all fresh products by using running water to prevent transmitting SARS-CoV-2	4.55	Strongly Agree
7. Willing to be vaccinated with Pfizer COVID-19 vaccine	3.31	Neutral
8. Waits and follows the guidelines of the Health Government Units or Health Organizations	4.14	Agree
9. Gets vaccinated when the COVID-19 vaccine is available	3.31	Neutral
10. Disregards the said information that there are no treatments available yet for the virus	2.63	Neutral
11. Follows self-isolation and increases oral fluid intake, once I present the symptoms of the virus.	4.36	Agree

Table 3: Distribution of the Respondents' Negative Individual Responses on COVID-19 Health-Related Misinformation.

Individual Responses	Mean	Interpretation
1. Does not practice social distancing after knowing that wearing a mask is enough	1.82	Disagree
2. Wears face mask but leaving the mouth and nose uncovered to help me breathe easier; keeping in under the chin.	1.72	Disagree
3. Drinks alcoholic beverages to be protected against COVID-19	2.30	Disagree
4. Still goes out because the Philippines has high temperature and humidity, thus, it will keep me safe from the virus.	2.21	Disagree
5. Resort to stocking up of vitamin C amidst the COVID-19 surge	4.06	Agree
6. Promotes the use of Fabunan Antiviral Injection	2.93	Neutral
7. Get vaccinated with pneumonia vaccine to be protected against COVID-19	3.21	Neutral
8. Hesitates to be vaccinated with COVID-19 vaccine	3.19	Neutral
9. Resort to stocking up of hydroxychloroquine amidst the COVID-19 surge	2.87	Neutral
10. Still buys treatment for COVID-19 that has encountered on online platforms	2.38	Disagree
11. Resort to stocking up of dexamethasone amidst the COVID-19 surge	2.81	Neutral
12. Practices the "Tuob" or Steam inhalation	3.57	Agree
AVERAGE/ WEIGHTED MEAN	2.39	Disagree

Aside from the numerical data, the researchers were able to sort into themes the qualitative data gathered from the respondents. Four major themes emerged for the individual responses of the respondents after reading the COVID-19 health-related information. Three out of the four major themes lead to a positive response which is like a study saying that dissemination of information, especially the accurate ones, would contribute to the success of managing COVID-19 pandemic (Li et al., 2020)^[15] However, one of the themes that emerged is

self-medication, a negative response. In relation to this, a journal article discussed that self-medication arises due to the spread of COVID-19 information that does not have enough scientific evidence (Hashmi et al., 2020).^[16] Thus, a study explained that the information received by people through different media such as the Internet can greatly influence the individual responses, which might be positive or negative (Barua et al., 2020).^[3]

Table 4: Themes for Other Individual Responses after Reading the COVID-19 Health-Related Information.

Themes	Definition/Description	Exemplar Quote
Lifestyle change	Trying to eat healthier food, exercising, and resting enough.	“... nageehersisyo upang mapanatiling malusog ang katawan.” (R109) “... kumain ng sapat at matulog ng sapat.” (R360) “... pagkain ng masusustansyang pagkain [para] maalagaan ang pangangatawan.” (R149)
Adapting to the new normal	Participants become accustomed to the pandemic situation and complies with the health policies made by the government.	“... tuwing galing sa labas, kami ay naghuhugas ng kamay at nagbibihis, nagaalcohol...” (R52) “Once a month na lang lumabas ng bahay, depende na lang kung importante ang lalakaran.” (R94) “Madalas na pagsagawa ng cough etiquette ...” (R130)
Positive outlook in life	After reading the information, it still brings hope and optimism to some of the participants. Being optimistic about the current situation.	“Maging positibo iwasan mastress dahil mas mabilis tamaan ng sakit ang taong stress...” (R102) “... pananalangin.” (R160)
Self-medication	Use of certain medication to treat self-diagnosed illness or self-recognized symptoms of flu or COVID-19.	“... nagese-self-medicate ako.” (R356) “Pag take ng vitamins para sa pagpapalakas ng immune system.” (R359)

3.4. Validation Ability of The Respondents

Findings show that among the 11 validation ability questionnaire items, “Check the page or information if it is verified by health officials or departments” has the highest mean of 4.18 and is interpreted as “Often”. Meanwhile the item “Based on the number of likes and comments on the posted information” has the lowest mean of 2.86 and is interpreted as “Sometimes”.

Table 5: Distribution of the respondents' validation ability on the information they encounter in online platforms.

Validation Ability	Mean	Interpretation
1. Check the page or information if it is verified by health officials or departments	4.18	Often
2. Check if the source covers the topic thoroughly and comprehensively	4.11	Often
3. Check first the truthfulness and accuracy of the headline used in the posted article	4.15	Often
4. Look for additional information on other platforms/websites to verify the information provided by your source	3.92	Often
5. Check the credibility of the author of the information	4.04	Often
6. Check if the information is influenced by the author's bias	3.88	Often
7. Inspect the date of the posted information	3.94	Often
8. Based it on the number of likes and comments on the posted information	2.86	Sometimes
9. Mind if the information has no reference/s	3.53	Often
10. Mind if the website of the source of information has a lot of ads	3.00	Sometimes
11. Analyze if the information covered states a fact, opinion or propaganda	3.98	Often
AVERAGE/ WEIGHTED MEAN	3.78	Often

In summary, having the average/weighted mean of 3.78, the respondents' validation ability is interpreted as "Often". This indicates that the respondents often validate the information they encounter in online platforms. It can be presumed that the respondents will have no or minimal risk on their health if they would often validate the information as the credibility of online health information sources is considered to play an important role in health decision making (Chen et al, 2020).^[17]

3.5. Relationship Between COVID-19 Health-Related Misinformation and Individual Responses of the Respondents

Data analysis shows that 16% of individual responses are

predicted by COVID-19 health-related misinformation. This means that the COVID-19 health-related misinformation can influence the individual responses of the respondents by 16%.

Table 6: Model Summary between COVID-19 Health-Related Misinformation and Individual Responses

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.400 ^a	0.160	0.157	0.26849

a. Predictors: (Constant), COVID-19 Misinformation

Additionally, the p-value of 0.000 is less than the significance level of 0.05. This means that the researchers rejected the null hypothesis and conclude that COVID-19 health-related misinformation and individual responses have a significant relationship.

As for the coefficient results between COVID-19 health-related misinformation and individual responses,

findings show that for every unit decrease on COVID-19 health-related misinformation, the individual responses significantly decrease by 0.005. Similarly, as COVID-19 health-related misinformation increases, the individual responses also increase. This shows that COVID-19 health-related misinformation and individual responses have a direct relationship.

Table 7: ANOVA Table between COVID-19 Health-Related Misinformation and Individual Responses.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.946	1	4.946	68.603	0.000 ^a
	Residual	26.024	361	0.072		
	Total	30.970	362			

a. Predictors: (Constant), COVID-19 Misinformation

b. Dependent Variable: Individual Response

Table 8: Coefficient Results between COVID-19 Health-Related Misinformation and Individual Responses.

Model		Unstandardized Coefficients		Standardized Coefficients		t	Sig.
		B	Std. Error	Beta			
1	(Constant)	2.196	0.027			80.028	0.000
	COVID-19 Misinformation	0.005	0.001	0.400		8.283	0.000

a. Dependent Variable: Individual Response

To establish the unidirectional characteristic of the study, the researchers employed a reverse scoring on the part of positive individual responses, that is, the responses of the respondents were reversed. Considering that COVID-19 health-related misinformation can influence the individual responses by 16% (0.160) and p-value being less than the significance level of 0.05, it is inferred that COVID-19 health-related misinformation and individual

responses have a significantly direct relationship. Hence, as COVID-19 health-related misinformation increases, individual responses also increase. This is parallel to the study about misinformation on COVID-19 and its effects which concluded that the propagation of misinformation on social media undermines the COVID-19 individual responses (Barua et al., 2020).^[3]

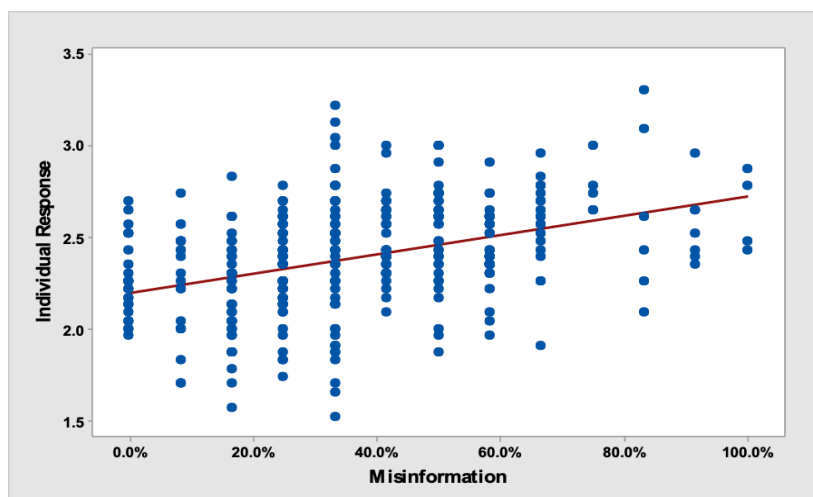


Figure 5: Scatterplot – Misinformation and Individual Responses.

3.6. Relationship Between Validation Ability and Individual Responses of the Respondents

Data analysis shows that 4.7% (0.047) of the individual responses is predicted by validation ability. This means that the validation ability can influence the individual responses of the respondents by 4.7%.

Additionally, data shows that p-value is less than the significance level of 0.05. This means that the researchers rejected the null hypothesis and concluded that validation ability and individual responses have significant relationships.

Table 9: Model Summary between Respondent's Validation Ability and Individual Responses.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.217a	0.047	0.045	0.28589

a. Predictors: (Constant), Validation Ability

Table 10: Anova Table between Table between Respondent's Validation Ability and Individual Responses.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.464	1	1.464	17.915	0.000 ^a
	Residual	29.505	361	.082		
	Total	30.970	362			

a. Predictors: (Constant), Validation Ability

b. Dependent Variable: Individual Response

As for the coefficient results between validation ability and individual responses, findings show that for every one unit increase in validation ability, individual responses significantly decrease by 0.099. Similarly, as

the respondent's validation ability increases, the individual responses decrease. This shows that validation ability and individual responses have an inverse relationship.

Table 11: Coefficient Results between Respondent's Validation Ability and Individual Responses.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.766	.090		30.814	0.000
	Validation Ability	-.099	.023	-.217	-4.233	0.000

a. Dependent Variable: Individual Response

To establish the unidirectional characteristic of the study, the researchers employed a reverse scoring on the part of positive individual responses, that is, the responses of the respondents were reversed. Considering that the validation ability can influence the individual responses of the respondents by 4.7% and p-value is less than the significance level of 0.05, it is inferred that validation ability and individual responses have a significant and

inverse relationship. Hence, when the respondent's validation ability increases, the individual response decreases. In relation to this, Barua et al. (2020)^[3] conducted a study about misinformation on COVID-19 and its effects and concluded that credibility evaluation of misinformation predicts the COVID-19 individual responses with positive influences.

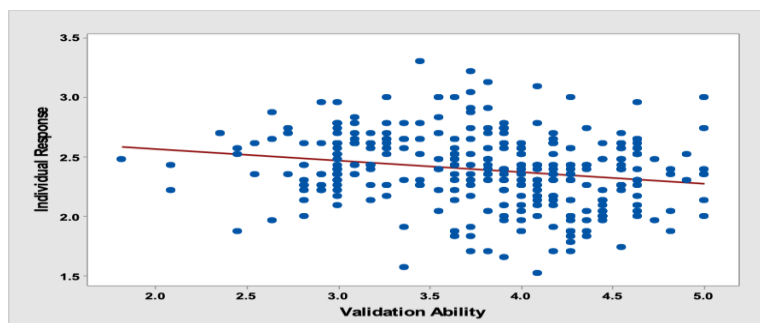


Figure 6: Scatterplot – Validation Ability and Individual Response.

Lastly, the researchers were able to sort into themes the qualitative data gathered from the respondents concerning the effects of validation ability of the respondents to the individual responses. Four major themes emerged for the effects of validation ability of the respondents to the individual responses. Three of the four major themes are similar to a study explaining that having a good credibility evaluation has been considered a resilience strategy of individuals thus, people respond in a more insightful and favorable way towards COVID-

19 (Barua et al., 2020)^[3] On the other hand, one of the themes is about uncertainty, a study reported that uncertainty arises when an individual looks into low-accuracy online resources that results in a negative effect on their decision-making skills (Storino et al., 2016).^[18] Consequently, individuals that involve themselves in evaluating and validating the information found in online platforms, respond more properly to COVID-19 pandemic than those who do not (Barua et al., 2020).^[3]

Table 12: Themes for the Effects of Validation Ability to the Individual Responses.

Themes	Definition/Description	Exemplar Quote
Concern for self, family members, and others	The safety for themselves, family, and others become the concern of the participants after reading the information from the Internet.	"... maaring makasama sa kalusugan ng tao ang maling impormasyon na nakukuha sa internet." (R103)
Awareness	State of being conscious about all the pieces of information circulating in online platforms, about one's well-being and actions.	"... hindi lamang ako ang apektado kundi pati ang mga tao sa aking paligid, isang maling impormasyon ay merong malaking epekto..." (R172) "... magkaroon ng kaalaman paano makakaiwas sa mga sakit at mas maging conscious at maingat sa aking kalusugan..." (R213) "... mas lalo kong napapag-isipan[g] mabuti kung ano ang maaring maging epekto nito sa aking kalusugan kung ito ay aking gagawin." (R302)
Sense of Relief	Feeling at ease knowing that the COVID-19 information has a reliable and scientific evidence that explained it well.	".... magdudulot ito ng kasiguraduhan at kapanatagan ng loob sa gagawing aksyon." (R149) "... mas magiging panatag ang aking kalooban na sumunod sa anumang aksyon kung alam kong may tamang basehan ba ang mga impormasyong iyon." (R188)
Uncertainty	Still doubting all the information posted in online platforms and having a hard time making a decision about health issues.	"... ngayon mahirap magdesisyon dahil wala pa talagang patunay..." (R113) "... karamihan [ng impormasyon] ay parang gawa-gawa lamang at walang katotohanan." (R114)

4. CONCLUSION

The study found out that COVID-19 health-related misinformation and individual responses have a direct significant relationship. This means that encountering misinformation directly affects the individual responses such that being subjected to misinformation influences people to take wrong actions and induces negative responses. Moreover, respondents' validation ability and individual responses have an inverse significant relationship. This means that validating information inversely affects the individual responses such that being able to perform validation on encountered information helps people to respond to the pandemic situation in a more insightful way.

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