Influence of Information and Knowledge towards Attitude in Receiving Vaccines

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Abstract

During the pandemic, there are still anxieties among the public, especially those who have not been vaccinated. This condition urges all components like government, public, and media to agree that the essence of the vaccine is a mechanism to control coronavirus spread. This article discusses the application of Information Integration Theory, consisting of (1) valence, which means purpose, in which the information can be positive since the information supports the existing beliefs; and (2) weight of assessment in which the public evaluate the level of source credibility. On quantitative approach, this research statistically tests various tests on all elements. From the 100 samples taken from followers of @kemenkes_ri, the results demonstrate the positive linkage among The Influence of Information (X1), Knowledge (X2), and Attitude (Y). This shows that uploading information about vaccines is needed to provide certainty for followers about the safety and legitimacy of vaccination.
Keywords: Attitude; Information; Knowledge; Survey; Vaccine

Abstrak

Selama situasi pandemi, masih terdapat kecemasan masyarakat terutama yang belum mendapatkan vaksin. Kondisi ini mendorong seluruh komponen baik dari sisi pemerintah, masyarakat maupun media untuk menyepakati esensi vaksin sebagai alat pengendalian penyebaran virus corona. Artikel ini membahas penerapan Teori Integrasi Informasi yang terdiri atas: (1) valensi yang berarti tujuan: di mana informasi yang diperoleh dapat bersifat positif karena informasi tersebut mendukung keyakinan yang ada; dan (2) bobot penilaian dimana publik menilai tingkat kredibilitas sumber, khususnya di media instagram dan tanpa hoaks. Secara kuantitatif, penelitian ini menguji secara statistik berbagai pengujian semua elemen yang diperlukan. Sehingga dari 100 sampel yang diambil dari pengikut/follower akun @kemenkes_ri, hasilnya menunjukkan bahwasanya adanya keterkaitan positif diantara semua variabel yaitu Terpaan Informasi (X1), Tingkat Pengetahuan (X2) dan Sikap Penerimaan Vaksin (Y). Hal ini menunjukkan bahwa pengunggahan informasi tentang vaksin diperlukan saat ini untuk memberikan kepastian bagi pengikutnya tentang keamanan dan keabsahan vaksinasi.
Kata Kunci: Sikap; Informasi; Pengetahuan; Survei; Vaksin

Introduction

Nowadays, the most deathful disease globally is known as Coronavirus Disease 2019 (COVID-19). This virus attacks the respiratory system, causing acute pneumonia to death. Firstly, it started in Wuhan (China). Since the initial outbreak, the number of cases globally has significantly grown and changes minute to minute. As of April 15, 2020, 1.995.983 cases and 131.037 deaths associated with COVID-19 were reported worldwide (Smith & Branscum, 2021). Then, spread quickly throughout the world, including Indonesia. Since the first case of positive COVID-19 patients in Indonesia was announced on March 2, 2020, by President Joko Widodo, the Indonesian people have experienced the same fear as the whole nation. Various news about COVID-19 has sprung up in conventional media and various online media (Situmeang, 2020).

On March 11, 2020, World Health Organization (WHO, 2020) declared the disease outbreak due to the COVID-19 coronavirus as a global pandemic. The declaration of this status was due to positive cases outside China, which had increased thirteen times in 114 countries, with total deaths reaching 4,291 people. The WHO stated that there has never been a pandemic triggered by a coronavirus which is uncontrollable at the same time. Based on those facts, WHO urges countries to take immediate and aggressive action to prevent and overcome the spread of the COVID-19 virus (WHO, 2020). Thus, every country has tried to find a solution to this dangerous disease, at least to reduce the spread of the COVID-19. Like other countries, the Indonesian government's solution in breaking the chain of virus spread is to use vaccines.

Initially, vaccination was one of the most significant scientific discoveries ever made. Firstly, it can protect many children from sickness and death from terrible diseases and reduce the suffering of many parents. Also, parents need to develop knowledge and perceptions about vaccination because knowledge about vaccines helps develop positive attitudes towards vaccinations and thus their contribution to the vaccination itself (Mugada et al., 2017).

However, the use of vaccines invites agreement and disagreement within society. Conventional media and online media also appear to agree and disagree in conveying information to the public regarding the government's appeal to use vaccines. Various media convey information so that people are not afraid to use vaccines because they are safe and lawful. MUI (*Majelis Ulama Indonesia*), as the highest council for the Indonesian Muslim organizations, has issued a *fatwa* (decision) regarding the lawful status of the COVID-19 vaccine made by Sinovac. This *fatwa* was issued after obtaining legality from the Emergency Use Authorization (EUA) by the Food and Drug Supervisory Agency (*Badan Pengawas Obat dan Makanan/*BPOM). Inside MUI *Fatwa* Number: 02 of 2021 about COVID-19 Vaccine Products from Sinovac Life Science Co. LTD China and PT Bio Farma (Persero), it is stated that the vaccine was lawful. According to a credible and competent expert, the vaccine can also be used for Muslims as long as it is safe is guaranteed. MUI uses several bases to determine the Sinovac vaccine's lawfulness (Dzulfaroh, 2021).

Specifically, through the Ministry of Health, the government provides information to the public through various posts on the Ministry of Health's Instagram. Numerous posts are provided to the public so that they are not afraid to receive vaccines and understand the use of vaccines. The posts are expected to share education without raising doubts among the public. So far, regarding vaccination, the government is optimizing the potential vaccination program given the national budget constraints (Vo,

Tran, & Vo, 2018). Knowledge, attitudes, and practices towards immunization, in general, have a significant impact. Several studies on immunization status conducted in various countries have revealed that increasing public knowledge about vaccination will improve immunization status and affect the success of the immunization program (Sunny, Ramesh, & Shankar, 2018).

Unfortunately, empirical evidence suggests that the integration of vaccination into prevention strategies may face several barriers related to knowledge, attitudes, practices, and willingness to pay (WTP) for these vaccines due to high costs, lack of knowledge about vaccines, negative attitudes to vaccines, and fear of side effects (Tran et al., 2018). Thus hopefully, people who become followers of the @kemenkes_ri account will learn from every information post submitted regarding the COVID-19 vaccine. If the community is not ready to receive the vaccines, it will have a more prolonged impact on this problem. During the year COVID-19 has attacked Indonesia, various problems have arisen within the community. That is why this believable vaccination will slowly reduce the community's problems.

Like a pandemic, the COVID-19 has tested the resilience of both humans and countries in overcoming crises. Not only are threats to health issues to be the main focus, but also social and economic situations are seriously affected. Scientists in various countries continue to compete, exhausting their energy and thoughts to find a vaccine as soon as possible to cure this disease. Before, no one knew when the vaccine would be invented and could be used massively. Mainly, the optimist estimates it takes at least one year as the fastest time (Deutsch, 2020). Therefore, in 2021, all countries began to vaccinate gradually and widely to their people, including Indonesia. Of course, Indonesian people are expected to be ready to receive vaccines. The government is continuously making efforts to convey information about the safety of vaccines for the Indonesian people.

Through the Ministry of Health, the government has determined COVID-19 Vaccines used in Indonesia as stated in the Decree of the Minister of Health Number HK.01.07/Menkes/9860/2020 on the Types of Vaccines for the Implementation of the Coronavirus Disease Vaccine. The vaccines are those produced by PT Bio Farma (Persero), AstraZeneca, China National Pharmaceutical Group Corporation (Sinopharm), Moderna, PFizer Inc and BioNTech, and Sinovac Biotech Ltd (Kencana, 2020).

Until now, the government has carried various information uploads about the COVID-19 vaccine through the @kemenkes_ri account. Undoubtedly, it can increase public knowledge about vaccines' content, benefits, and uses, especially during this pandemic. If the public has sufficient knowledge of this vaccine, surely there will be no more doubts in the community and the attitude in refusing vaccines. The government is working to disseminate vaccines so that all people will receive them well. It should be understood that the government has a legal obligation to protect its citizens in various aspects of life. This includes aspects of public health and the right to social security and human rights to have transparent information.

Regarding this issue, similar research has been done. In the beginning, to develop this research, some literature studies were conducted. One of them had been shown by Situmeang, focusing on the credibility and the attitude change variables on Instagram (in Rachmad 2020). Also, previous research explained the searching for keywords on the internet regarding the COVID-19 through google application, resulting in the increasing trend of searching for information fit to the statements from the government

(Limilia & Pratamawaty, 2020). Then other research focused on the subject/actors of media users, especially students. Research findings indicated that students were digital natives using social media to find information about COVID-19. Students were given digital literacy in using social media regarding finding information about COVID-19 by verifying information before disseminating information on their social media accounts (Junaedi & Sukmono, 2020). Finally, a research (Savitri & Irwansyah, 2021) has successfully found patterns and forms of uploading COVID-19 news on Instagram stories and became a relevant reference for this research. From those explanations, this research is expected to complement previous research that focuses on media users, especially Instagram, and examine the public's attitudes as vaccine recipients.

Hence, using a variety of variables proves that there is a linkage among these variables: knowledge, attitude, and information exposure. From this article, the researchers conduct research related to the account @kemenkes_ri, taking different samples from before. From the background described, the researchers formulate problems and aim to seek for:

1. The influence of information exposure about vaccines on @kemenkes_ri account towards the attitude in receiving vaccines among followers.
2. The level of knowledge towards the attitude in receiving the vaccine among followers.
3. The influence of information exposure about vaccines on @kemenkes_ri account and the level of knowledge towards the attitude in receiving vaccines among followers.

As scientific research, the researchers apply Information Integration Theory, an approach for communication actors focusing on accumulating and organizing information about all people, objects, situations, and ideas that form attitudes or tendencies to act positively or negatively towards several objects. This approach is one of the most popular models that offer explaining information formation and attitude change. This model begins with the concept of cognition which is described as the strength of the interaction system. Information is one of these strengths and has the potential to influence a belief system or individual attitudes. An attitude is considered an accumulation of information about an object, person, situation, or experience (Littlejohn & Foss, 2011).

Furthermore, information has the potential power to influence people to have certain attitudes (Littlejohn & Foss, 2011). The magnitude of this influence depends on these points: valence and weight of the assessment:

1. Valence or purpose: describes the extent to which information supports what someone already believes. Information can be positive if the information obtained supports the individual's beliefs.
2. Weight of assessment: relates to the level of credibility of the information. If an individual sees this information as the truth, the person will highly assess the information.

Meanwhile, according to Widyatama in Rizki & Pangestuti (2017), the information exposure provided in a medium could be able to do these (1) to encourage symbolic awareness, then to generate symbolic awareness; (2) consumptive awareness, in which consumptive awareness leads consumers; (3) actual awareness (behavior). In short, the knowledge has six levels, as shown below:

Table 1. Level of Knowledge (Notoatmodjo, 2012)

1	Knowing	Remembering a material that has been previously studied, included in this level of knowledge is to recall something specifically from the whole material studied or stimuli that have been received. Therefore, knowing is the lowest level of knowledge. Here are verbs to measure that people know what they are learning, include: mentioning, describing, defining and so on
2	Understanding	Ability to correctly explain a known object and interpret the material correctly. People who have understood the material must be able to explain, mention, conclude and predict examples of the object being studied
3	Application	Ability to use the material that has been studied to a real situation or condition. Applications here can be interpreted as applications or users of laws, formulas, methods, principles in other contexts or situations
4	Analysis	The ability to describe material or an object into components is still within an organizational structure and is still related to one another. This analytical ability can be from the use of verbs, such as being able to describe, differentiate, separate, classify and so on
5	Synthesis	Ability to put or connect parts in a new whole form, for example, composing new formulations from existing formulations.
6	Evaluation	Ability to justify or evaluate the material or object. The assessments are based on existing criteria.

Also, Notoatmodjo (2012) points out the factors that influence knowledge, which can be seen in the following table.

Table 2. Factors Influencing Knowledge (Notoatmodjo, 2012)

1	Education	Affects the learning process: the higher a person's education, the easier it is for someone to receive information. Increased knowledge is not only absolutely obtained in formal education, but also can be obtained in non-formal education. A person's knowledge of an object contains two aspects, namely positive aspects and negative aspects. These two aspects determine a person's attitude towards certain objects. The more positive aspects of a known object will foster a positive attitude towards that object. In higher education, information is obtained both from other people and the mass media. The more information that comes in, the more knowledge will be gained about health
2	Mass media/information sources	Information obtained from both formal and non-formal education can provide immediate effect, resulting in changes and increased knowledge. Advances in technology provide a variety of mass media that can influence people's knowledge of new information. Communication tools such as television, radio, newspapers, magazines, counseling, and others have major influence on the formation of people's opinions and beliefs
3	Socio-culture and Economy	One's habits and traditions are done without reasoning whether it is good or not. A person's economic status will also determine the availability of facilities needed for certain activities, so that socio-economic status will affect one's knowledge

4	Environment	Everything surrounding an individual whether it is physical, biological, or social environment. The environment affects the process of entering knowledge into individuals inside the environment. This happens because of the reciprocal interaction that will be responded to as knowledge.
5	Experience	Knowledge can be obtained from personal experience or the experience of others. This experience is a way to obtain the truth of a knowledge
6	Age	Affects a person's perceptive power and mindset. Increasing age will develop a person's mindset and grasping power so that the knowledge gained will be better

Next, there are some definitions of attitude. Attitude can be described as a reaction or response of someone who is still close to a stimulus. Attitude tends to act from an individual in a closed response to certain stimuli or objects. So, attitude is a reaction or response that is still closed from someone to a stimulus or object. Attitude is not yet an action or activity, but it is a predisposition to a behavior. Attitude is the readiness to react to objects in a certain environment to appreciate the object. In terms of attitude, it can be divided into various levels below (Soekidjo, 2010):

a. Receiving means that the person (subject) wants and pays attention to the stimulus given (object)
b. Responding, which can be in the form of giving answers when asked, doing and completing the assigned task
c. Appreciating (valuating), which can be in the form of inviting other people to work on or discuss a problem
d. Responsible for everything that has been chosen

Moreover, Alport explained the three main components of attitude (in Notoatmodjo, (2012): (1) Beliefs, ideas, and concepts on an object; (2) Emotional life or emotional evaluation of an object, and (3) Tendency to act, in which those components form a complete attitude.

Meanwhile, the attitude was also associated with education, which means the individual's attitude towards the material given. The factors that influence the formation of a person's attitude consist of Baliwati (2004):

a. Personal experience. When a sufficient number of different experiences are available, people usually have familiar experiences and like. This is caused by (i) the amount of information a person has and (ii) one's ability to apply knowledge in which personal experience is that what we are experiencing will help shape and influence someone.
b. The influence of others to be an important consideration
c. Among the people who are usually considered important by individuals are parents, people of higher social status, peers, close friends, teachers. In general, a person's tendency to have an attitude in line with someone's attitude that is considered to be important
d. Cultural influences. People's culture has an influential power in choosing something. Socio-cultural aspects in a society that develops in accordance with environmental conditions, religion, customs, habits, and education of the community.

Method

This research applied a quantitative approach. A quantitative approach aimed to seek truth in an objective, empirical, systematic, and organized manner. Researchers such as Christian (2017; 2019) also measured the public's exposure to information or public attitudes using a quantitative approach. Because this quantitative research was concrete and can be quantified in numbers, this research is objective. The results can be generalized to the population and interpreted by everyone. Explaining a problem whose result can be generalized, thus, quantitative research did not need to emphasize data depth since the research results were considered to represent the entire population. Based on a positivist paradigm, this research was an explanation and used a survey as a method. A survey was known by using questionnaires as an instrument for data collection. It obtained information about several respondents who represented a specific population (Kriyantono, 2014).

In this quantitative research, the population was taken from the instragram *followers* of @*kemenkes-ri* on February 4, 2021, of as many as 1,9 million followers. (*https://www.instagram.com/kemenkes_ri/?hl=en*). Meanwhile, the sample was selected by applying the purposive sampling technique. Furthermore, selecting a group of subjects in purposive sampling was based on certain characteristics closely related to previously known population characteristics. The criteria were (1) being followers of @kemenkes_ri account, (2) giving 'likes' to @kemenkes_ri account; and (3) giving comments on @kemenkes_ri account. Furthermore, the researchers made the operationalization of the variables Widyatama in Rizki & Pangestuti (2017) as follow:

Table 3. Operationalization of Variables

Uploading information **(Var. X1)**	1.	Encourage symbolic awareness
	2.	Consumptive awareness
	3.	Actual awareness behavior
Followers' knowledge level **(Var. X2)**	4.	Education. Education affects the learning process. The higher a person's education, the easier it is for someone to receive information
	5.	Mass media/information sources. Information obtained from both formal and non-formal education can provide immediate impact knowledge, resulting in changes and increased knowledge
	6.	Socio-culture and economy. One's habits and traditions are applied without reasoning whether it is good or not
	7.	The environment is everything around an individual, whether physical, biological, or social. The environment affects the process of entering knowledge into the individuals who are in that environment
	8.	Experience. Knowledge can be obtained from personal experience or the experience of others
	9.	Age affects a person's perceptive power and mindset.
Attitudes to receive vaccines **(Var. Y)**	1.	Receiving, means that the person (subject) wants and pays attention to the stimulus given (object)
	2.	Responding, which can be in the form of giving answers when asked, doing and completing the assigned task
	3.	Appreciating (valuating), which can be in the form of inviting other people to work on or discuss a problem
	4.	Responsible for everything that has been chosen.

For sample, this research used Slovin's formula as follow:

$$n = \frac{N}{N\,d^2 + 1}$$

n =   the amount of sample
N =   the total of population
d =   level of significance (0,05 or 0,01)

$$n = \frac{1.900.000}{1.900.000\,(0.10)^2 + 1}$$

$$n = \frac{1.900.000}{1.900.000\,(0.01) + 1}$$

= 99,99

The result was 99,99 rounded to 100 samples. For the whole process, the researchers need to reach out to respondents by giving direct messages. After being responded to, the number of those respondents was categorized as a sample according to the specific criteria.

In data analysis, the researchers arranged and ran several tests, namely: validity test, reliability test, normality test, correlation test, regression test, and hypothesis test. The details were described as follow:

1. Research Trials: conducting a validity test used to measure whether a questionnaire was valid or not. A questionnaire was said to be valid if the statement on the questionnaire was able to reveal something that the questionnaire will measure. Thus, it showed whether the instrument could measure the object being measured (Ghozali, 2013). The reliability test indicated the level of reliability or confidence in a measurement result. A measurement was called reliable or had reliability if it consistently gave the same answer (Morissan, Wardhani, & Hamid, 2012).

2. Normality test aimed to determine whether the sample data came from a normal distribution or not. The distribution of the sample means will approach the normal number the larger the sample size. This test used a normal p-p plot of regression standardized residual graphs. Normality was detected by looking at the distribution of data on the diagonal axis and following the direction of the diagonal line, so it is stated that the regression model fulfilled the normality assumption (Ghozali, 2013).

3. Correlation test can be defined as the relationship or closeness between two or more variables, where the other variables were considered as controls or controllers. Correlation values range from -1 to +1. Values close to -1 or +1 indicated that the relationship was getting stronger, while values closer to number 0 were said to have a weak relationship. A positive value indicated that the direction of the relationship was unidirectional (if X increased, then Y increased). Conversely, if the resulting value was negative, it indicated the direction of the relationship was inverse (if X increases, then Y falls). In addition, multiple correlation analysis was to determine the degree or strength between the relationship of three or more variables, as well as to know the contribution made simultaneously by variables X1 and X2 to the value of variable Y and the partial contribution given by variables X1 to Y and X2 to Y (Siregar, 2015).

4. A regression test was performed if the correlation between the two variables had a causal (cause-effect) or functional relationship. According to Mustikoweni in Kriyantono (2014), regression was shown to look for a relationship between two or more variables in the form of a function or equation, while correlation analysis aimed to find the degree of closeness of the relationship between two or more variables.

5. Hypothesis test: basically, the statistical T-test showed how far the influence of one explanatory or independent variable individually in explaining the variation of the dependent variable. One way to perform the T-test was to critically compare the T-statistic value according to the table (Ghozali, 2013). In addition, the F-test was used to determine whether simultaneously or together the coefficient of the independent variable had a real influence or not on the dependent variable. To test whether each independent variable had a significant effect on the dependent variable together with $\alpha = 0.05$.

Overall, all hypotheses tested can be seen below:

Ha1: There was an influence of Information Exposure towards the Attitude in Receiving Vaccine

Ho1: There is no influence of Information Exposure towards the Attitude in Receiving Vaccine

Ha2: There was an influence of Level of Knowledge towards the Attitude in Receiving Vaccine

Ho2: There is no influence of Level of Knowledge towards the Attitude in Receiving Vaccine

Ha3: There was an influence of Information Exposure and Level of Knowledge towards the Attitude in Receiving Vaccine

Ho3: There was no influence of Information Exposure and Level of Knowledge towards the Attitude in Receiving Vaccine

Results and Discussion

In this part, all data have been analyzed statistically, by firstly, using a correlation test. The result is shown below.

Table 4. Simple Correlation Test

SIMPLE CORRELATION TEST
Correlations

		Information Exposure	Level of Knowledge	Attitude in Receiving Vaccine
Information Exposure	Pearson Correlation	1	,294**	,688**
	Sig. (2-tailed)		,004	,000
	N	100	100	100
Level of Knowledge	Pearson Correlation	,294**	1	,701**
	Sig. (2-tailed)	,004		,000
	N	100	100	100
Attitude in Receiving Vaccine	Pearson Correlation	,688**	,701**	1
	Sig. (2-tailed)	,000	,000	
	N	100	100	100

**. *Correlation is significant* at the 0.01 level (2-tailed)

From the table above, the results of the correlation test between variable X1 (Information Exposure) and variable Y (Attitude in Receiving Vaccines) are as follow:

1. There is a relationship between X1 and Y. This can be seen from the significant value. The table shows the value of 0.000, which is less than 0.05
2. The relationship between the two variables was a positive relationship, which means that if there were an increase on the Information Exposure variable, the Attitude in Receiving Vaccine variable would increase
3. The value of Pearson's correlation coefficient was 0.688. The level of the relationship between the two variables was categorized as a strong correlation, as it is in the interval of 0.600 to 0.799.

Then, the results of the correlation test between variable X2 (Level of Knowledge) and variable Y (Attitude in Receiving Vaccines) can be concluded by the following three points:

1. There was a relationship between variable X2 and variable Y. This could be seen from the significance value, which shows 0.000, and is less than 0.05
2. The relationship between the two variables is a positive relationship, which means that if there is an increase in the Level of Knowledge variable, the Attitude in Receiving Vaccine would also increase
3. Pearson's correlation coefficient value was 0.701. The level of the relationship between the two variables included a strong correlation because it was in the interval from 0.600 to 0.799.

Further, the researchers put data into various tests, starting from multiple correlation tests below.

Table 5. Multiple Correlation Test

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	,694^a	,481	,491	2,917	,501	48,787	2	97	,000

a. Predictors: (Constant), TOTAL X2, TOTAL X1

b. Dependent Variable: TOTAL Y

Based on the table, the coefficient (R) value was 0.694, whereas R^2 was $0,694^2$ (becoming 0,481). It means that the magnitude of the influence between the variables of Information Exposure and the Level of Knowledge towards The Attitude in Receiving Vaccine was 0,481 or 48,1%. The correlation coefficient had a positive relationship and strong correlation because it is in the interval from 0.600 to 0.799. This means there is a strong positive relationship between the Information Exposure variable and Level of Knowledge variable on the Attitude in Receiving Vaccines variable. Next, the data obtained were tested and explained below.

Table 6. Regression Test

MULTIPLE REGRESSION TEST
Coefficients

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	9,269	1,845		5,125	,000
	TOTALX 1	,295	,042	,579	7,033	,000
2	(Constant)	2,599	1,963		1,278	,187
	TOTALX 1	,354	,043	,457	5,993	,000
	TOTALX 2	,327	,051	,425	5,684	,000

a. Dependent Variable: TOTALY

$Y = a + b_1X_1 + b_2X_2$

$Y = 2{,}599 + 0{,}354X_1 + 0{,}327X_2$

The results revealed that the Information Exposure variable on the @kemenkes_ri account was considered constant, and the Attitude in Receiving Vaccines variable value was 2.599 units. If the value of the Level of Knowledge increased by one unit and the value of Information Exposure was constant, then the value of the Attitude in Receiving Vaccines increased by 0.327 units. As the next step, t-test analysis is taken, and the result is presented below.

Table 7. T-Test Results

T TEST
Coefficients[a]

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	2,599	1,963		1,278	,172
	TOTAL X1	,354	,043	,457	5.993	,000
	TOTAL X2	,327	,051	,425	5,872	,000

a. Dependent Variable: TOTAL_Y

T tabel : $(\alpha/2 ; df) = (0{,}1/2 ; 97) = (0{,}05 ; 97) = 1{,}664$

The table above shows that t-value of the variable X1 (Information Exposure) had a value of 5.993 and a significant value of 0.000. The value obtained from the SPSS data processing test results shows that the t-count was greater than the t-table, which was 1.664 (5.993> 1.664). Also, the significant value was less than 0.05, which meant that Variable X1: Information Exposure affected Variable Y: Attitude in Receiving Vaccines.

From the results obtained above, the researchers conclude that in variable X1: Information Exposure to variable Y: Attitude in Receiving Vaccines, the results obtained were Ho rejected and Ha accepted. Based on the results of the SPSS test, there was an influence between Information Exposure on @kemenkes_ri account toward Attitude in Receiving Vaccines.

For the t-test on variable X2 (Level of Knowledge), the value was 5.872, and the significant value was 0,000. These results show that the t-count was more significant than the t-table, which was 1.664 (5.872> 1.664), and the significant value was less than 0.05. This means that the variable X2: Public Knowledge Level affects variable Y: Attitude in Receiving Vaccines.

Then for variable X2: Level of Knowledge on variable Y: Attitude in Receiving Vaccines, the result was that Ho was rejected and Ha was accepted. Based on the results of the SPSS test that had been carried out and explained, there was an influence between the Level of Knowledge variable toward the Attitude in Receiving Vaccines variable. As a final, F-test resulted as shown below.

Table 8. F-Test

F-test ANOVA [a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	830,293	2	415,147	49,342	,000[b]
	Residual	825,417	97	8,509		
	Total	1655,710	99			

a. Dependent Variable: TOTAL Y
b. Predictors: (Constant), TOTAL X2, TOTAL X1
F tabel : (k ; n-k) = (2 ; 100-2) = (2 ; 98) = 3,09

The F-test showed a value of f count 49,342 and the sig value of 0,000. The calculated f-value was greater than the f-table (3.09), and the sig value was less than 0.05. It can be said that the variable X1 (Information Exposure) and variable X2 (the Level of community Knowledge) simultaneously affect variable Y (Attitude in Receiving Vaccines). Ho was rejected, and Ha accepted. Thus, the researchers conclude there was an influence between information exposure and the level of Knowledge on Attitude in Receiving Vaccines.

As mentioned before, this research adopted Information Integration Theory as an information integration approach for communication actors centered on accumulating and organizing information about all people, objects, situations, and ideas that shape attitudes or tendencies to act differently: positive or negative. This was one of the most popular models explaining information formation and attitude change. It started with cognition as a concept as a core of an interaction system. Information was one of that power and had the power to influence either a belief system or an individual's attitude. In this research, the information was spread out through Instagram posts several times a day, along with photos, videos, and Instagram stories about vaccines. This information can be from ingredients contained in vaccines, benefits, objectives, side effects, and lawfulness status. These were done so that the followers could get accurate information about vaccines. Included, the results of laboratory tests on vaccines were available to make the followers feel safe while getting the information. In short, the purposes were to convey information and also increase the followers' knowledge to receive vaccines.

Gradually, it is hoped that a change in attitude will be analyzed from this research. Referring to the main components of attitude, of course, the respondents have beliefs/ideas about vaccinations. Besides that, emotional life/evaluation of this vaccination has led them to tend to act. The impact of @kemenkes_ri account could hopefully increase the follower's knowledge and influence the followers: refusing becomes taking the vaccinations.

Through the posts, the @kemenkes_ri account provides information to followers about the importance of the COVID-19 vaccines. The posts add insight and knowledge regarding the use of vaccines, generally and specifically, regarding the COVID-19 vaccines, including the stages of making vaccines, vaccines, and their distribution. This is done by the Ministry of Health to answer many issues that affected information about the COVID-19 vaccines such as vaccine safety factor, lawfulness factor and many others. The government continues to strive to reduce negative issues about the COVID-19 vaccines by continuing to intensify campaigns, socializing the benefits of vaccines, and continuing to remind the public to be disciplined in implementing "3M" concept (*menggunakan masker*, *mencuci tangan*, *menjauhi kerumunan*/wearing masks, washing hands with soap and maintaining distance), posted by @kemenkes_ri account.

Not only did the government carry out various campaigns and outreach directly or use media about COVID-19, but also various parties such as students, community, and public were involved. From the results, the researchers conducted counseling with posters through instagram and the Whats application group. Counseling about the dangers and prevention of the coronavirus aimed to increase public awareness and understanding of the importance of COVID-19 knowledge, especially in terms of the danger, transmission and prevention of the virus (Purwanto et al., 2021).

In addition to information, the Ministry of Health convened a slogan as a form of a campaign: "Not Knowing, So Not Immune". The motto has a message that in the midst of an effort to prepare a safe vaccine, the public must continually be educated to know and find out information about the benefits of the COVID-19 vaccine so that they are willing to have the vaccine in time. Education was carried out in various ways, like displaying photo posters, displaying videos, and even photo instances, posters, and videos. These were done so that followers were attracted to see every post to increase knowledge about vaccines.

However, it can be ascertained that @kemenkes_ri account was a post that motivated followers to have vaccines. From the research's result, it is strongly encouraged that positive posts can positively motivate readers to positively impact or positively affect behavior change in society. Positive posts will positively impact, while negative posts will influence negatively (Situmeang, 2020).

Various facts about the COVID-19 vaccines must be actively conveyed to the public to know for sure about the vaccine, starting from how it worked, content, recommendations for administration, and potential side effects. Currently, public knowledge about the COVID-19 vaccine also varies, including safety assurance, effectiveness, and requirements to receive vaccines. It is believed that the post from the Ministry of Health's account can help the public get information and increase knowledge to influence the attitude of followers.

By Information Exposure variable on @kemenkes_ri account and also the followers' Level of Knowledge variable that was formed will affect people's attitudes, the information presented through @kemenkes_ri account was positive and motivated exposure that finally formed positive knowledge to influence followers to do the vaccine. Positive information will create a change in the attitude of being interested in having vaccines. The results obtained in the field show a strong relationship between the posting of information by the Ministry of Health's account with the followers' attitude towards vaccines. This was because the posts and Instagram stories carried out by @kemenkes_ri account can influence the attitude of followers.

In addition, the formation of followers' knowledge provided a strong relationship with followers' attitudes to vaccination. In contrast, the Information exposure and the follower's Level of Knowledge variables provided a strong relationship with the attitude of followers towards vaccination. This shows that information about vaccines was needed to provide certainty for the followers about the safety and lawfulness of vaccination.

Thus, based on the theory used, the elements of Information Integration have been fulfilled. They are:

1. Valence or purpose: The information gained can be positive since the information supports the beliefs existing
2. Weight of assessment: The public evaluated the level of source credibility through Instagram and without hoaxes.

Conclusion

Based on the hypotheses tested, Variable X1 (Information Exposure) and Variable X2 (Level of Knowledge) simultaneously affect the Variable Y (Attitude in Receiving Vaccine). Ho is rejected, and Ha is accepted. Thus, the researchers conclude that there is an influence between Information Exposure and the Level of Knowledge toward receiving vaccines.

However, this research still had a weakness, limited to the three variables tested only. As an interesting finding, the researchers found that Instagram—as an information platform—is more effective at reaching people. Since due to the current pandemic situation, people need to easily find lots of information regarding vaccinations. Using this social media to get accurate information without hoaxes is helpful.

Based on the research results, the researchers provided suggestions: this research could be useful for further research on similar themes in which collecting input for Instagram providers in sharing useful information to the public to fulfill their need for health information.

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