

The Comprehension of COVID-19 Mitigation in the Nonformal Education

Safuri Musa ^{1,*} , Yusuf Muhyiddin ² , Siswanto ³ , and Sri Nurhayati ⁴ 

¹ Department of Community Education, Faculty of Teacher Training and Education, Universitas Singaperbangsa Karawang, 41361, Karawang, West Java Province, Indonesia

² Department of Agribusiness, Faculty of Agriculture, Universitas Singaperbangsa Karawang, 41361, Karawang, West Java Province, Indonesia

³ Department of Physical Education, Health, and Recreation, Faculty of Teacher Training and Education, Universitas Singaperbangsa Karawang, 41361, Karawang, West Java Province, Indonesia

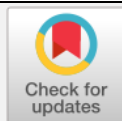
⁴ Department of Community Education, Faculty of Teacher Training and Education, IKIP Siliwangi, 40521, Cimahi, West Java Province, Indonesia

* Corresponding Author: safuri@unsika.ac.id

ARTICLE INFO

Publication Info:

Research Article



How to cite:

Musa, S., Muhyiddin, Y., Siswanto, S., & Nurhayati, S. (2022). The Comprehension of COVID-19 Mitigation in the Nonformal Education. *Society*, 10(1), 141-156.

DOI: [10.33019/society.v10i1.404](https://doi.org/10.33019/society.v10i1.404)

Copyright © 2022. Owned by Author(s), published by Society

OPEN  ACCESS



This is an open-access article.

License: Attribution-NonCommercial-ShareAlike (CC BY-NC-SA)

Received: February 2, 2022;

Accepted: March 14, 2022;

Published: June 30, 2022;

ABSTRACT

The world condition is currently being affected by the COVID-19 pandemic, including the behavior of human life and the teaching and learning process. Educators and educational personnel are overwhelmed in learning activities by changing appropriate learning strategies. Thus, it is necessary to understand COVID-19 mitigation literacy. This study aims to analyze the correlation between the COVID-19 mitigation literacy comprehension on educators and educational personnel's life behavior. Also, to examine the learning strategies used during the pandemic in nonformal education units in West Java. The IBM SPSS Statistics 24.0 program analyzed this correlation study descriptively and inferentially. The results showed a high correlation between the understanding of COVID-19 pandemic mitigation literacy and the life behavior of educators and educators at nonformal education units in West Java Province. They used a blended learning strategy, with WhatsApp as the dominant application. The obstacles in implementing the learning strategy were poor connections in some areas and the lack of operational costs in purchasing internet quota packages.

Keywords: COVID-19 Mitigation Literacy; Life Behavior; Nonformal Education

1. Introduction

Education is the main thing to develop a country, producing a quality society. Education has a central role in human resource preparation to work in society, especially for those with competencies under the workforce guidelines in industry 4.0 (Soenarto et al., 2020). According to (Haerullah & Elihami, 2020), education can be divided into three categories, that is formal (school), nonformal (community/outside of the school), and informal (family) education. Ki Hadjar Dewantara called these three pathways as three education centers because these three contribute greatly to the human development process to achieve perfection in various dimensions.

Nonformal education is an important part to improves the quality of public education. Based on the Law of the Republic of Indonesia Number 20 of 2003 concerning the National Education System, Nonformal education is an education system based on outside formal education that can be implemented in a structured and tiered manner. Nonformal education has educational objectives determined by the form of formal education according to its type. Wahyudin (2007) adds that nonformal education can function as a substitute, complement, addition, and developer of formal and informal education. Nonformal education also has educators and teaching staff for the learning process in nonformal schools. The learning process in nonformal education includes games, simulations, and concrete social realities related to where the child lives and the culture in a certain location (Bianco, 2006). Munawwir & Nur Hanip (2021) explained that nonformal education that adheres to integrated thematic learning has a learning model related to everyday life, such as simulation, social teaching, and role-playing.

Educators and educational personnel have serious tasks with various obstacles they may face. The duty of educators is more pronounced due to the lack of facilities (Daniel, 2020). It triggered the enthusiasm to improve educational institutions, starting from the awareness to improve their quality and teaching in preparation and implementation. Educators and educational personnel play a strategic role in creating the nation's character by developing the desired personality and values. Professional educators have the main task of educating, teaching, guiding, directing, training, assessing, and evaluating students from early childhood to higher education. Educators must present a conducive learning atmosphere as an integral part of the education system in schools. Thus, students can develop their potential in facing the demands of industrial 4.0 (Soenarto et al., 2020).

Educators also shape students' resilience, which is the ability to adapt and remain firm in difficult situations. Resilience includes: creating good relationships with peers; developing problem-solving skills; designing a realistic future; having a positive and effective attitude in performing tasks; experiencing success in various areas of life; communicating effectively; having strong attachments to older people, and being responsible for themselves and others (Shiwaku et al., 2016). Thus, educators and personnel in the educational process play a strategic role, especially in shaping the nation's character through developing the desired personality and values.

Based on the dimensions of learning, educators' role in Indonesian society remains dominant even though the technology that can be used in the learning process is developed very quickly. It is because there are dimensions of the educational process that technology cannot replace. Their function as educators will not be eliminated. The same goes for the educational staff who carry out administration, management, development, supervision, and technical services to support the educational process in educational units.

The COVID-19 pandemic affects almost all aspects of life, especially education ([Azzi-Huck & Shmis, 2020](#); [DHEC, 2020](#)). In carrying out their work, educators and educational personnel are supervised by their surroundings related to the words and behaviors they show in every situation and condition. The appeared behavior is due to various factors, including anxiety or self-regulation. [Notoatmodjo \(2010\)](#) stated that behavior is a response to stimuli (external stimuli). Thus, the current pandemic conditions can trigger the behavior of educators and educational personnel.

Educators are professional who has to plan and carry out the teaching process, asses the teaching process, supervise and train students, and do some research and community dedication, especially for college-level educators ([Republik Indonesia, 2003](#)). In addition, educational personnel is also referred to as a teacher, lecturer, counselor, tutor, widyaiswara (teacher, and a functional position given to civil servants with the task of fully educating, teaching, and/or training in the education and training units of government agencies), instructor, facilitator, and other related names who must carry the education itself ([Republik Indonesia, 2003](#)).

Today's condition of education is being hit and influenced by the COVID-19 virus outbreak, caused by a new type of coronavirus (novel coronavirus). According to the World Health Organization (WHO), pneumonia cluster cases with unclear etiology in Wuhan City have become a worldwide health problem. This pandemic continues to grow to all corners of the world. WHO has stated COVID-19 as a Public Health Emergency of International Concern (PHEIC). On February 12, 2020, WHO officially designated the novel coronavirus disease in humans as Coronavirus Disease (COVID-19). COVID-19 is caused by Severe Acute Respiratory Syndrome-Coronavirus 2 or SARS-CoV-2, which was first reported in Wuhan City, Hubei Province, China ([Shereen et al., 2020](#)). COVID-19 is caused by SARS-CoV-2, which belongs to the same family of coronaviruses that caused SARS in 2003, only with a different type of virus. The symptoms are similar to SARS, but the SARS death rate is higher (9.6%) than COVID-19 (currently less than 5%), even though the number of COVID-19 cases is far more than SARS. COVID-19 has a broader and faster spread to several countries than SARS ([Zhu & Liu, 2020](#); [Singh et al., 2020](#)).

From February 29, 2020, to May 29, 2020, Indonesia declared an emergency for the coronavirus pandemic, which continues to this day. The government has taken various measures to prevent the spread of the virus, such as social distancing that changed to physical distancing. Social distancing is staying at home and away from the crowd. Meanwhile, physical distancing is maintaining physical distance from other people to ensure the COVID-19 virus does not spread ([Putra et al., 2021](#)).

The emergence of COVID-19 alarms all humans to be equipped with knowledge related to the outbreak. All parties must realize that COVID-19 is not the first virus or pandemic to threaten or affect human activities and may not be the last ([Cluver et al., 2020](#)). In the twentieth century, the world has experienced several new diseases and even pandemic-level diseases ([Contreras, 2020](#)). Therefore, this nation needs to learn from the conditions that have occurred and learn from history to take effective strategies to strengthen all sectors of life, and especially the education sector, in responding to future pandemics (as the saying goes, providing an umbrella before it rains) ([Wahyono et al., 2020](#)).

The COVID-19 pandemic indicates that all humans must be equipped with knowledge regarding the outbreak, including the literacy movement. Literacy is the ability to use knowledge, identify questions, and draw conclusions based on existing evidence, to understand and make decisions. The Directorate General of Primary and Secondary Education explains that

literacy is more than just reading and writing but includes thinking skills using sources of knowledge in print, visual, digital, and auditory forms (Direktorat Jenderal Pendidikan Dasar dan Menengah, 2016). In the current pandemic condition, literacy is very much needed in determining the direction of attitudes, actions, words, and strategies. Therefore, the appropriate literacy movement is COVID-19 mitigation so that people can behave and survive. The COVID-19 mitigation literacy movement refers to the use of knowledge, which is actualized through behavior, in this case, the comprehension of educators in nonformal education units in West Java.

Referring to the main problem explained, a special study related to understanding COVID-19 Mitigation Literacy on the Life Behavior of Educators and Educational Personnel in the West Java Province Nonformal Education Unit is needed. Therefore, this study aimed to examine the learning strategies used by educators and educational personnel in nonformal education units in West Java during the COVID-19 pandemic to gain clear data about the effective learning strategies used by the educational personnel in nonformal education units in West Java during the pandemic.

2. Research Methodology

This study is a correlation study to find the relationship between the COVID-19 mitigation literacy comprehension on the life behavior of educators and educational personnel in nonformal education units in West Java Province. Correlational research studies the relationship between variables or several variables with other variables (Winarni, 2011). Meanwhile, Sugiyono (2014) explained that the correlation study is a linking method that seeks to connect one element with other elements.

The data sources of this research are educators and educational personnel in nonformal education units in West Java. Data collection was done by questionnaires (life behavior questionnaires), interviews, and documentation studies. The data were analyzed with descriptive and inferential analysis using the IBM SPSS Statistics 24.0 program. Next, the data was simplified into a form that was easier to read and interpret.

3. Results and Discussion

3.1. Results

The respondents used in this study were 252 nonformal educators in West Java Province. The demographic of respondents for this present study is explained as follows.

Respondents' demographic based on their sex were 52 men and 200 women. Therefore, women respondents have a higher number in this study (Figure 1).

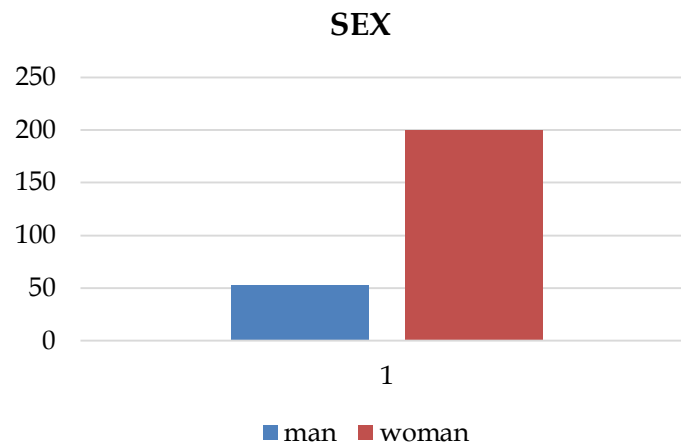


Figure 1. Respondent demographic based on sex

Based on their age, the respondents of this present study were categorized as seen in **Figure 2**. There are 42 respondents aged 20-30 years old. Seventy-one respondents aged 31-40 years old. Seventy-five respondents aged 41-50 years old. Fifty-two respondents were 51-60 years old, and 12 were more than 60. Therefore, the highest number of respondents were aged 41-50 years old.

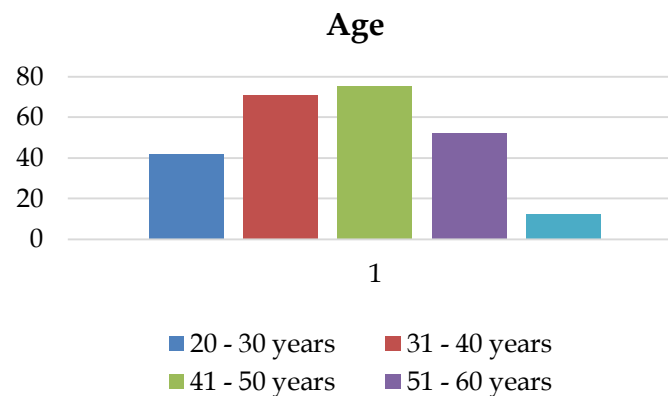


Figure 2. Respondent's demographic based on their age

Based on their role status, this study's respondents include 136 educators and 116 educational personnel (**Figure 3**).

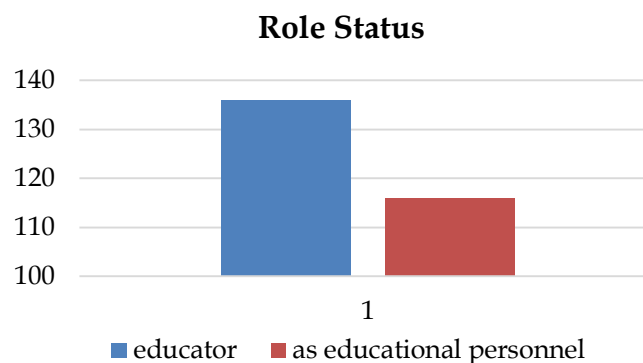


Figure 3. Respondent's demographic based on their role status

3.1.1. COVID-19 Mitigation Literacy Comprehension

Data analysis showed that the understanding of COVID-19 mitigation literacy is in the high category. More details can be seen in [Table 1](#) and [Table 2](#).

Table 1. Distribution of COVID-19 mitigation literacy categorization

No	Score	Frequency	%	Category
1.	$X > 21$	187	74	High
2.	$14 < X \leq 21$	65	26	Moderate
3.	$X < 14$	0	0	Low
	Total	252	100	

Source: Research Analysis (2020)

Table 2. Descriptive statistics of COVID-19 mitigation literacy comprehension variable

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
COVID-19 Mitigation Literacy	252	17	28	23,08	2,508
Valid N (listwise)	252				

Source: Research Analysis (2020)

Based on [Table 1](#) and [Table 2](#), the minimum and maximum values on the COVID-19 mitigation literacy variable were 17 and 28, respectively, with an average value of 23.08 and a standard deviation of 2.508. There were 187 respondents with a value of more than 21, with a distribution of 74% in the high category and 26% in the medium category. Thus, it was concluded that the COVID-19 mitigation literacy comprehension was in the high category.

3.1.2. Life Behavior

Data analysis showed that the life behavior of Educators and Educational Personnel in the Nonformal Education Unit in West Java Province was in the high category ([Table 3](#) and [Table 4](#)).

Table 3. Distribution of life behavior categorization

No	Score	Frequency	%	Category
1.	$X > 21$	142	56	High
2.	$14 < X \leq 21$	110	44	Moderate
3.	$X < 14$	0	0	Low
	Total	252	100	

Source: Research Analysis (2020)

Table 4. Descriptive statistics of life behavior variables

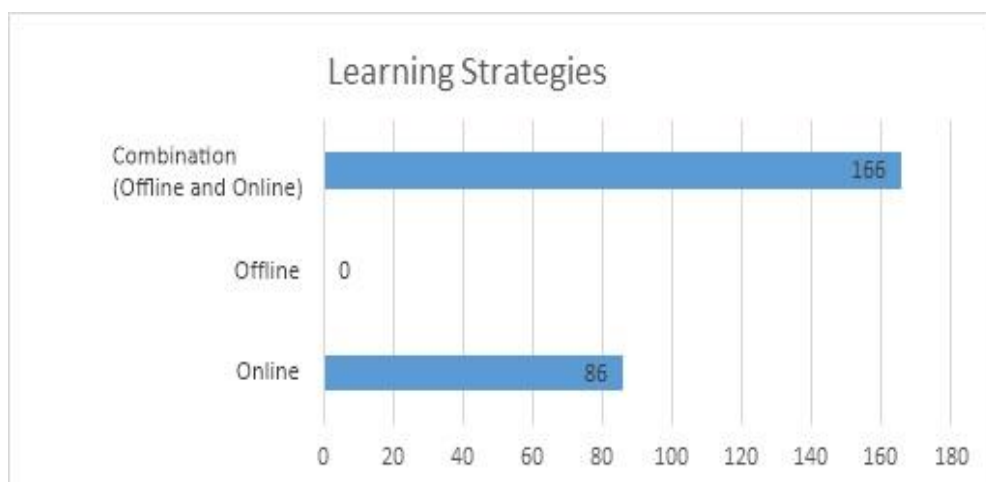
Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Life Behavior	252	16	28	22,40	2,370
Valid N (listwise)	252				

Source: Research Analysis (2020)

Based on **Table 3** and **Table 4**, the minimum and maximum values on the life behavior variable were 16 and 28, respectively, with an average value of 22.40 and a standard deviation of 2.37. There were 142 respondents with more than 21, with 56% in the high category and 26% in the medium category. Thus, Educators' and Educational Personnel's life behavior in Nonformal Education Units were in the high category.

3.1.3. Learning Strategies

Educators and educational personnel used several learning strategies during the COVID-19 pandemic (**Figure 4**), such as online (86 people), offline (0 people), and a combination of offline and online learning (166 people).

**Figure 4. Learning strategies during the COVID-19 pandemic**

During the COVID-19 pandemic, there were many ways used by educators and educational personnel to support the learning process to keep it going as it should. The results of the questionnaire showed that each respondent used various applications that can facilitate the learning process.

The WhatsApp application occupies the highest position, with 252 of 228 respondents using the application. It was followed by self-made learning video users (101 respondents), Zoom (87 respondents), Google Classroom (52 respondents), and other applications (**Figure 5**).

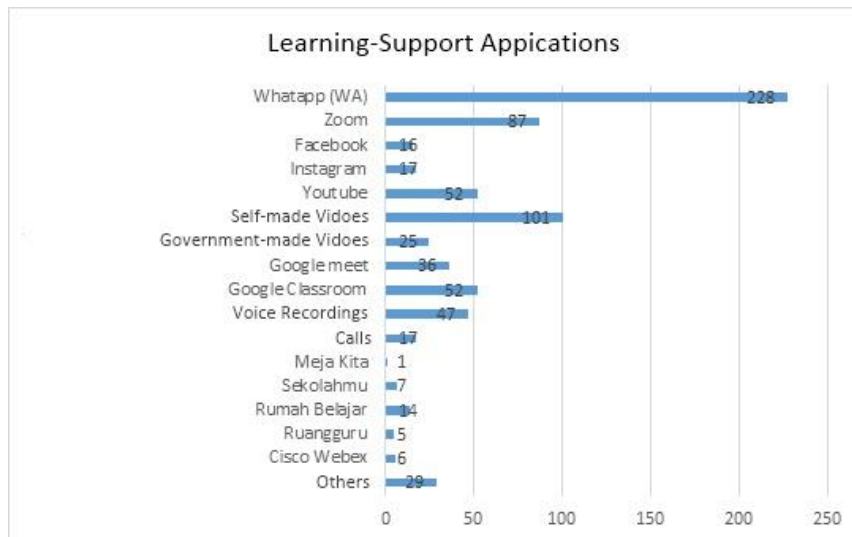


Figure 5. Learning-support applications during the COVID-19 pandemic

3.1.4. Learning Process Obstacles

The learning strategy during the COVID-19 pandemic must be planned and modified appropriately to support the learning process to achieve its goals. However, many obstacles were encountered by all parties in the implementation process.

The most obstacles found were poor internet connection (193 respondents), no cost to buy internet quota (119 respondents), no adequate computer or mobile phone facilities (113 respondents), and other obstacles, which can be seen in Figure 6.

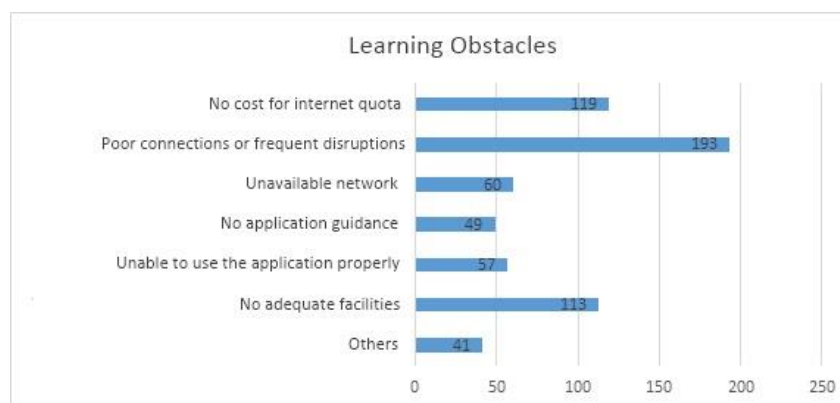


Figure 6. Learning obstacles during the COVID-19 pandemic

3.1.5. Hypothesis Testing

The stages of testing the hypothesis followed the steps as follows:

1) Simple linear regression test

This study used a simple linear regression test to examine the relationship between the independent and dependent variables. The test results showed that understanding COVID-19 mitigation literacy obtained the A value (constant) of 9.364 while the beta (B/regression coefficient) was 0.565. Thus, the equation could be written as follows:

$$\hat{Y} = 9.364 + 0.565 X \quad (1)$$

These results indicate that the consistent value of life behavior if there is no treatment from the COVID-19 mitigation literacy variable, is 9.364. Also, every time one treatment or value is added to the COVID-19 mitigation literacy comprehension variable, the life behavior variable will increase by 0.565. Then, the direction of the relationship between COVID-19 mitigation literacy and life behavior is positive.

2) Correlation Coefficient Test

The result of the correlation coefficient test showed a value of 0.597. Next, this value was interpreted into the R-values table, which showed a moderate level of relationship. So, it can be concluded that the COVID-19 mitigation literacy comprehension has a moderate relationship with the life behavior of Educators and Educational Personnel at the Nonformal Education Unit of West Java Province.

3) Determination Coefficient Test

The results showed that the value of the determination coefficient on the R-square was 0.357, meaning that the COVID-19 mitigation literacy comprehension influences life behavior for educators and educational personnel in the Nonformal Education environment by 35.7%. Thus, it can be concluded that "there was a relationship (moderate category) between the COVID-19 mitigation literacy comprehension on the life behavior of Educators and Educational Personnel in the Nonformal Education Unit of West Java Province of 35.7%, while the other 64,3% was an influence given by other factors not examined in this study."

3.2. Discussion

Before mitigation is carried out as an initial stage in disaster management, it must have information literacy. Information literacy is principal as it can reduce disaster risk by appropriately handling, right on target, and can be carried out optimally. Information literacy is finding, collecting, evaluating, and then using that information for a specific purpose. Information literacy ability is an urgent matter, considering today is an era of information abundance (Pamungkas & Wahyudi, 2020). Information literacy is finding, collecting, evaluating, and using information for a specific purpose. Marlyono & Pasya (2016) state that information literacy is finding, evaluating, and using the information needed effectively.

The Directorate General of Primary and Secondary Education develops information literacy based on Clay and Ferguson's opinions, including early, basic, library, media, technology, and visual. (1) Early literacy is the ability to listen, understand spoken language, and communicate through pictures and speech shaped by the experience of interacting with the social environment at home. Students' experience communicating in their mother tongue becomes the foundation for developing basic literacy. (2) Basic literacy is the ability to listen, speak, read, write, and count, related to the analytical ability to calculate, perceive, communicate, and draw information based on personal understanding and conclusions. (3) Library literacy provides an understanding of how to distinguish fiction and non-fiction reading, utilizes reference and periodical collections, understands the Dewey Decimal Classification (DDC) as a classification of knowledge that makes it easier to use libraries, understands catalog use and indexing, and has knowledge in understanding information while completing a paper, research, work, or solving a problem. (4) Media literacy is the ability to identify different forms of media, such as print, electronic (radio and television), and digital (internet), and understand their intended use. (5) Technology literacy is the ability to understand the tech equipment utilizing technology, such as hardware, software, and etiquette. Next, the ability to understand technology to print,

present, and access the internet. In practice, there is also an understanding of using computers (computer literacy), including turning computers on and off, storing and managing data, and operating software programs. In line with the current technological developments, it is necessary to have a good understanding of managing the information needed by society. (6) Visual literacy is an advanced understanding of media and technological literacy, which develops learning abilities and needs by critically and with dignity utilizing visual and audiovisual materials. Unstoppable interpretation of visual material, whether in print, auditory or digital form (a combination of these three is called multimodal text), must be managed properly. However, much manipulation and entertainment must be filtered based on ethics and propriety (Direktorat Jenderal Pendidikan Dasar dan Menengah, 2016).

Afriani & Islami (2019) emphasize that information literacy can increase disaster mitigation capabilities by up to 56%, meaning that good disaster literacy skills may advance the ability to prevent the spread of disasters. In line with the Dunning-Kruger effect theory, people with sufficient knowledge and literature references can comply with and implement government recommendations properly and optimally (Buana, 2017).

Based on the information literacy indicators by Elmborg (2012), during the outbreak of COVID-19, each family member must first consider determining the extent of information needed. Second, information needs that have been determined previously must be accessed effectively and efficiently. Third, the information that has been accessed must be evaluated critically. Fourth, the selected information should then be socialized with other family members. Fifth, the information is used effectively to educate oneself and those around them, for example, by sharing reviews and testimonies of recovered patients as motivation and early prevention measures (Sampurno et al., 2020). Sixth, understanding the economic, legal, and social issues surrounding the use of information, from accessing and using information ethically and legally. These indicators are expected to be a reference in mitigating COVID-19. The results showed that if COVID-19 mitigation can be studied and mastered precisely, it can influence the lifestyle by adjusting to new living arrangements during the COVID-19 pandemic. If the public understands, acts, and implements the spread prevention of COVID-19, they can familiarize themselves with the new habits (new normal) the government applies while waiting for scientists to find the vaccine.

Disaster prevention literacy is personal knowledge, attitude, and skills toward disaster prevention. According to Sung-Chin Chung and Cherng-Jyh Yen, as cited in Prihantini et al. (2020), the conceptual framework and dimensions of disaster prevention literacy consist of: (a) dimensions of scaling-down knowledge, including disaster knowledge, preparedness knowledge, and response knowledge; (b) dimensions of disaster scaling-down attitudes, including the sensitivity of disaster prevention, values related to disaster prevention, sense of responsibility for disaster prevention; and (c) disaster prevention skills, including preparedness action and behavioral response.

After understanding the mitigation, the formation of a mitigation strategy can be compiled by considering the surrounding factors based on the situation and circumstances. COVID-19 mitigation literacy can be done by (a) understanding COVID-19 and its dangers; and (b) preventing the spread of COVID-19 by understanding the importance of washing hands with soap, using masks, maintaining social distancing, and maintaining the immune system to protect from the disease.

In general, the COVID-19 pandemic has had an impact on changing the life behavior of the community. Various policy options are being pursued so that the pandemic will end as soon as possible. The Indonesian government has implemented a new normal policy as a realistic

response to the existence of COVID-19, which will affect all aspects of life. Buana (2017) emphasizes that the Indonesian community that ignores the appeal has a cognitive bias. They think they know or understand better the conditions of this pandemic when it is a mistake. For example, they think they can take good care of themselves, even outside the house or in a crowd, so they feel smart based on their perceptions. This phenomenon can occur due to low literacy skills, and many still do not access information media. Thus, they have minimal knowledge of the COVID-19 outbreak.

The new normal was designed by adopting new habits to inhibit the spread of the COVID-19 virus in society. As happened to the Bali provincial government, people are asked to have a healthy lifestyle by applying health protocols which include: (a) always wearing a mask when traveling outside; (b) understanding the cough ethics; (c) not going out without urgent interests; (d) diligently washing hands with clean running water and soap or using a hand sanitizer with a 60% alcohol; (e) no goods exchange with other people at the workplace; (f) keep your distance and avoid crowds.

The new normal policy affects the world of education, especially the learning strategy. The learning strategies during the COVID-19 pandemic were dominated by online and offline classes, meaning that learning was still carried out face-to-face (offline) but also combined with learning at home (online). This combination is known as blended learning. Graham (2005) states that blended learning combines online learning with face-to-face learning, improving outcomes. Blended learning has three main components, namely: (a) online learning; (b) face-to-face learning; (c) self-study. By implementing blended learning, the diversity of learning resources can be obtained, allowing interaction between fellow students and students with educators without being limited by space and time to create a positive learning environment.

Basalamah (2020) confirms that the effectiveness of the blended learning method has a positive and significant impact on lecturer productivity during the COVID-19 pandemic. It shows that the blended learning method is considered effective for lecturers and students in transferring knowledge, information, and understanding of course material. The WhatsApp (WA) application is the most widely used and in-demand alternative for its easy use and interesting features. Putra et al. (2021) stated the dominant (>10%) media or applications used in online learning, sequentially Google Meet (22.47%), Google Classroom (17.95%), Whatsapp (15.56%), and Schoology (11.70%). These results confirm that WhatsApp (WA) is still used in online-based learning. Wahyono et al. (2020) explain that teachers and students are increasingly familiar with the technology used for online learning. The applications used are WhatsApp Group, Zoom Cloud Meeting, Google Classroom, Google Form, and email. Teachers and students use these platforms according to their respective conditions and abilities. Schools use technological developments to get around unexpected situations that affect teaching and learning activities, including the COVID-19 pandemic.

The results showed that WhatsApp (WA) was the most widely used and popular alternative application due to its easiness and availability of interesting features. Brata (2010) mentioned that WhatsApp features its users can use that are: (1) successfully send, received, and read messages marks; (2) send photos, videos, audio, locations, and contacts; (3) view contact, users can see whether other users have a WhatsApp account by the contact information in their smartphone; (4) avatar, the profile picture of WhatsApp users; (5) add conversation shortcuts, some chats can be added as shortcuts to the home screen; (6) email conversation, send all chats by email (7) forward, a feature to forward or re-send messages that have been received; (8) smile icon, a large selection of emoticons such as expressions, buildings, weather, animals, musical instruments, cars, and others; (9) voice and video call, to make voice or video calls with

other users; (10) block, to block contacts; (11) status, to inform other contacts that the user is willing or unwilling to chat.

Miller (2020) provides six suggestions for online learning teachers, with two main objectives: maintaining as much continuity of teaching as possible and completing the semester. (1) Start by studying assignments for the next few weeks. Can the material be accessed online so students can find the instructions and materials they need? Is it clear how students will change their work? Had the deadlines been changed, are all of those deadlines posted? (2) How will the teacher provide feedback on students' progress? Consider how students practice key skills and goals - things they usually do in class. How will the teacher provide students with opportunities for practice and feedback for small and high-risk assignments? Those opportunities will undoubtedly differ from before the teacher moved to online classes. Make sure that it is very clear how students can access these opportunities. And if teachers do not spend much time in class to train students and get feedback, now is a good chance to improve this aspect of learning - considering teachers won't be presenting content directly. (3) switch to online classroom experiences. Try to determine what teachers do in class at a higher level, more goal-oriented (e.g., content presentation, checking knowledge, collaborative project work - instead of just "lectures," "quizzes," "discussion"). If teachers keep these goals in mind, they will better understand how to achieve them online and what aspects of the classroom experience to focus on simulating. (4) Decide what to do about high-risk assessments, especially exams. It is best not to have questions with easy answers, especially if the teacher plans to have marks depending on programmed tests. Also, use several types of projects and various online activity data processors. (5) Consider the material to be provided. Chances are, the literature and other material are in digital form, and the teacher may have posted them. However, teachers should double-check that readings, videos, problem sets, quizzes, and other materials are accessible, along with key documents such as the syllabus and timetable. (6) After checking these things, ensure everything is well communicated. Teachers need to explain in detail what can be expected from students about online learning in the next few weeks. Be sure to discuss what students are responsible for, how they can find the things they need, and what they should do first. Also, ensure a two-way line of communication, offering more ways to communicate with the teacher (e.g., WhatsApp, email, video call).

Apart from the easy-to-use application, several obstacles were still found, such as (a) having no sufficient costs to purchase internet quota, (b) weak internet connections or frequent interruptions, (c) no internet connection available, (d) no application guidance, so it is difficult to use, (e) cannot use online learning applications, and (f) do not have adequate computer or mobile phone facilities. Rigianti (2020) also showed that teachers' obstacles during online learning are the learning applications, internet networks and devices, learning management, assessment, and supervision.

Putra et al. (2021) confirm that the implementation of online learning will not be effective when it is not supported by several things, namely: (1) Change in mindset and motivation of executors (lecturers and students). Implementation of online learning cannot run optimally if there is no change or awareness in thinking, behavior, and paradigm from both lecturers and students. The estuary of this change is creativity and innovation, which are expected to become a habit; (2) Infrastructure facilities: networks, tools (compatible laptop/device), and institutional technology readiness (platform and LMS). In reality, the readiness of the infrastructure is yet to be optimal. Many students still have difficulty getting a network because of the location in various regions. Besides, laptops/gadgets for students and lecturers are incompatible, so they are often constrained during learning, such as errors or slow processes. The readiness of

institutional platforms and LMS also affects the implementation of online learning; (3) systematic and comprehensive learning planning. Yustika et al. (2020) explained that in designing online classes, educators need to understand how students deal with online classroom situations. Therefore, learning scenarios, worksheets, and assessments need to be prepared before learning; (4) Effective and efficient implementation (easy to access and learn); (5) Learning culture, e-learning pedagogy, and academic atmosphere are parts that must be focused on during the implementation process. Thus, using worksheets that raise productive, imaginative, open-ended questions and analyzes can create a learning culture and academic atmosphere; (6) Technical training and user familiarity level. There needs to be training or a willingness from users to master various online learning applications. Mastery of various applications can make the processes fun and not tedious. For instance, the learning process combined with online games or questions that challenge students to work virtually; and (7) Time management. The assignment given by the lecturer can be completed maximally when the time given is sufficient—lack of time due to almost all subjects assigning tasks in each meeting. In general, the assignment only answers questions, which does not stimulate students to think at high levels and even makes students bored.

Wahyono et al. (2020) also explain that implementing online learning has human resources and infrastructure obstacles. The main challenges faced were network limitations, lack of training, awareness, and interest. The obligation to learn online is a serious problem, especially for students from low-economic circles. Online learning in some regions of Indonesia is not running optimally, especially in remote areas with limited internet technology and networks. The readiness of school infrastructure, the ability of teachers to teach, and the availability of smartphone facilities are other problems in online learning in Indonesia. Students also perceive that the school does not have a good program for the home learning system. Schools and teachers only give assignments in a row according to the lesson plan and subject matter in non-pandemic or normal conditions.

4. Conclusion

The COVID-19 pandemic mitigation literacy comprehension and educators' life behavior in the nonformal education units of West Java Province were in the high category. There was a relationship between the COVID-19 mitigation literacy comprehension variable on educators' life behavior and educational personnel in nonformal education units in West Java Province, with a moderate level category.

The learning strategy used by educators and educational personnel was a combination of online and offline learning with the assistance of WhatsApp, zoom, Facebook, Instagram, YouTube, self-made learning videos, Google Meet, Google Classroom, recordings, telephones, Meja Kita, Sekolahmu, Rumah Belajar, Ruang Guru, Cisco Webex, and more. The blended learning was still not optimal due to several obstacles, such as weak internet connections in several regions and a lack of operational costs in purchasing internet quota packages.

5. Acknowledgment

The authors thanked Universitas Singaperbangsa Karawang, Indonesia and Institut Keguruan dan Ilmu Pendidikan Siliwangi, Indonesia, for supporting this research.

6. Declaration of Conflicting Interests

The authors have declared no potential conflicts of interest concerning this article's research, authorship, and/or publication.

References

- Afrian, R., & Islami, Z. R. (2019). Peningkatan potensi mitigasi bencana dengan penguatan kemampuan literasi kebencanaan pada masyarakat Kota Langsa. *Jurnal Pendidikan Geografi*, 24(2), 132–144. <https://doi.org/10.17977/um017v24i22019p132>
- Azzi-Huck, K., & Shmis. T. (2020). *Managing the impact of COVID-19 on education systems around the world: How countries are preparing, coping, and planning for recovery*. World Bank Blogs.
- Basalamah, I. (2020). Implementasi Blended Learning di masa pandemi COVID-19 pada STIE Wira Bhakti Makassar [Implementation of Blended Learning during the COVID-19 pandemic at STIE Wira Bhakti Makassar]. *AkMen. J. Ilm.*, 17(4), 529–538. <https://doi.org/10.37476/akmen.v17i4.1164>.
- Bianco, J. (2006). *Educating for citizenship in a global community: World kids, world citizens and global education*. In Jack, C., Baikloff, N & Power, C. (Ed.), *Towards a global community: Educating for tomorrow's world global strategic directions for the Asia-Pacific Regi*. Springer Netherlands.
- Brata, V. B. T. (2010). *Tip membuat handphone pintar menjadi lebih pintar [Tips to make smart phones smarter]*. Media Kita.
- Buana, R. D. (2017). Analisis Perilaku Masyarakat Indonesia dalam Menghadapi Pandemi COVID-19 dan Kiat Menjaga Kesejahteraan Jiwa. *Sosial Dan Budaya, Fakultas Syariah Dan Hukum Universitas Islam Negeri (UIN) Syarif Hidayatullah Jakarta*, 53(9), 1689–1699. <file:///C:/Users/User/Downloads/fvm939e.pdf>
- Cluver, L., Lachman, J. M., Sherr, L., Wessels, I., Krug, E., Rakotomalala, S., Blight, S., Hillis, S., Bachman, G., Green, O., Butchart, A., Tomlinson, M., Ward, C. L., Doubt, J., & McDonald, K. (2020). Parenting in a time of COVID-19. *The Lancet*, 395(10231), e64. [https://doi.org/10.1016/S0140-6736\(20\)30736-4](https://doi.org/10.1016/S0140-6736(20)30736-4)
- Contreras, G. W. (2020). Getting ready for the next pandemic COVID-19: Why we need to be more prepared and less scared. *Journal of Emergency Management*, 18(2), 87–89. <https://doi.org/10.5055/jem.2020.0461>
- Daniel, S. J. (2020). Education and the COVID-19 pandemic. *Prospects*, 49(1–2), 91–96. <https://doi.org/10.1007/s11125-020-09464-3>
- DHEC. (2020). *Higher education guidance on novel coronavirus or COVID-19*. [https://scdhec.gov/sites/default/files/media/document/Higher Education Guidance on Novel Coronavirus or COVID-19.pdf](https://scdhec.gov/sites/default/files/media/document/Higher%20Education%20Guidance%20on%20Novel%20Coronavirus%20or%20COVID-19.pdf).
- Direktorat Jenderal Pendidikan Dasar dan Menengah. (2016). *Desain induk gerakan literasi sekolah [School literacy movement master design]*. Direktorat Jenderal Pendidikan Dasar dan Menengah, Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia. <https://repository.kemdikbud.go.id/39/1/Desain-Induk-Gerakan-Literasi-Sekolah.pdf>
- Elmborg, J. (2012). *Critical information literacy: Definitions and challenges*, in Wetzel, C. and Bruch, C. (Ed.), *Transforming information literacy programs*. Librarianship, No. 64. ACRL.
- Graham, C. R. (2005). *Blended Learning System. Definisi, Current, and Future Directions*. The Hand Book of Blended Learning.
- Haerullah, H., & Elihami, E. (2020). Dimensi Perkembangan Pendidikan Formal Dan Non Formal. *Dimensi Perkembangan Pendidikan Formal Dan Non Formal*, 1(1), 190–207.

- Marlyono, S. G., & Pasya, G. K. (2016). Peranan Literasi Informasi Bencana Terhadap. *Gea. Jurnal Pendidikan Geografi*, 16, 116–123.
- Miller, M. D. (2020). Going online in a hurry: What to do and where to start. *The Chronicle of Higher Education*, 8–10.
- Munawwir, A., & Hanip, S. P. N. (2021). Sekolah Pesisir Juang: Pendidikan Non-Formal Anak Pesisir. *Jurnal Pendidikan Nonformal*, 16(1), 1–11. <https://doi.org/10.17977/um041v16i1p1-11>
- Notoatmodjo, S. (2010). *Prinsip-prinsip dasar ilmu kesehatan masyarakat [The basic principles of public health science]*. Rineka Cipta.
- Pamungkas, A. H., & Wahyudi, W. A. (2020). COVID-19, Family, and Information Literacy. *KOLOKIU Jurnal Pendidikan Luar Sekolah*, 8(1), 83–91. <https://doi.org/10.24036/kolokium-pls.v8i1.395>
- Prihantini, A., Rahmayanti, H., & Samadi, S. (2020). Literasi mitigasi bencana [Disaster mitigation literacy], in Proc. *Seminar Nasional Pascasarjana Universitas Negeri Jakarta*, 283–288. <http://journal.unj.ac.id/unj/index.php/semnas-ps/article/view/16895>
- Putra, R. A., Nurdiansyah, N., Futra, D., & Primahardani, I. (2021). Analisis Pembelajaran Jarak Jauh (online) Mahasiswa Calon Guru IPA di Kota Pekanbaru pada Masa Pandemi COVID-19. *Journal of Natural Science and Integration*, 4(1), 94. <https://doi.org/10.24014/jnsi.v4i1.12744>
- Republik Indonesia. (2003). Undang-Undang Republik Indonesia Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional. Lembaran Negara Republik Indonesia Nomor 4301.
- Rigianti, H. A. (2020). Kendala pembelajaran daring guru Sekolah Dasar di Kabupaten Banjarnegara [Barriers to online learning for elementary school teachers in Banjarnegara Regency Kabupaten]. *Elem. Sch. J*, 7(2), 297–302.
- Sampurno, M. B. T., Kusumandyoko, T. C., & Islam, M. A. (2020). Budaya Media Sosial, Edukasi Masyarakat, dan Pandemi COVID-19. *SALAM: Jurnal Sosial Dan Budaya Syar-I*, 7(5). <https://doi.org/10.15408/sjsbs.v7i5.15210>
- Shereen, M. A., Khan, S., Kazmi, A., Bashir, N., & Siddique, R. (2020). COVID-19 infection: Origin, transmission, and characteristics of human coronaviruses. *Journal of Advanced Research*, 24(March), 91–98. <https://doi.org/10.1016/j.jare.2020.03.005>
- Shiwaku, K., Sakurai, A., & Shaw, R. (2016). *Disaster resilience of education systems: Experiences from Japan*. Springer.
- Singh, D. R., Sunuwar, D. R., Karki, K., Ghimire, S., & Shrestha, N. (2020). Knowledge and Perception Towards Universal Safety Precautions During Early Phase of the COVID-19 Outbreak in Nepal. *Journal of Community Health*, 45(6), 1116–1122. <https://doi.org/10.1007/s10900-020-00839-3>
- Soenarto, S., Sugito, S., Suyanta, S., Siswantoyo, S., & Marwanti, M. (2020). Vocational and senior high school professional teachers in industry 4.0. *Cakrawala Pendidikan*, 39(3), 655–665. <https://doi.org/10.21831/cp.v39i3.32926>
- Sugiyono. (2014). *Metode penelitian pendidikan pendekatan kuantitatif, kualitatif, dan R&D [Educational research methods quantitative, qualitative, and R&D approaches]*. Alfabeta.
- Wahyono, P., Husamah, H., & Budi, A. S. (2020). Guru profesional di masa pandemi COVID-19: Review implementasi, tantangan, dan solusi pembelajaran daring. *Jurnal Pendidikan Profesi Guru*, 1(1), 51–65. <http://ejournal.umm.ac.id/index.php/jppg/article/view/12462>
- Wahyudin, D. (2007). *Pengantar pendidikan [Introduction to education]*. Universitas Terbuka.
- Winarni, E. W. (2011). *Penelitian pendidikan [Educational Research]*. Bengkulu: Putri Media.

- Yustika, G. P., Subagyo, A., & Iswati, S. (2020). Masalah yang dihadapi dunia pendidikan dengan tutorial online: sebuah short review [Problems facing education with online tutorials: a short review]. *TADBIR: Jurnal Studi Manajemen Pendidikan*, 3(2), 187–198.
- Zhu, X., & Liu, J. (2020). Education in and After COVID-19: Immediate Responses and Long-Term Visions. *Postdigital Science and Education*, 2(3), 695–699.
<https://doi.org/10.1007/s42438-020-00126-3>

About the Authors

1. **Safuri Musa** obtained his Doctoral degree from Universitas Pendidikan Indonesia in 2003. The author is an Assistant Professor at the Department of Community Education, Faculty of Teacher Training and Education, Universitas Singaperbangsa Karawang, Indonesia. His research interests focus on adult learning (andragogy), literacy, and community development.
Email: safuri@unsika.ac.id
2. **Yusuf Muhyiddin** obtained his Doctoral degree from IPB University, Indonesia, in 2013. The author is an Assistant Professor at the Department of Agribusiness, Faculty of Agriculture, Universitas Singaperbangsa Karawang, Indonesia. His research interests focus on social engagement.
Email: yusufmuhyiddin@gmail.com
3. **Siswanto** obtained his Master's degree from Universitas Galuh, Indonesia, in 2013. The author is an Assistant Professor at the Department of Physical Education, Health, and Recreation, Faculty of Teacher Training and Education, Universitas Singaperbangsa Karawang, Indonesia. His research interests focus on teaching and learning.
Email: siswanto.media@fkip.unsika.ac.id
4. **Sri Nurhayati** obtained her Doctoral degree from Universitas Pendidikan Indonesia in 2018. The author is an Assistant Professor at the Department of Community Education, Faculty of Teacher Training and Education, IKIP Siliwangi, Indonesia. Her research interests focus on parenting, early childhood education, and lifelong learning.
Email: srinurhayati@ikipsiliwangi.ac.id