

Sanitation and Hygiene Implementation Training to Minimize The Spread of Covid 19 in Family and Consumer Science Students

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Abstract. During the COVID-19 pandemic, activities to maintain personal hygiene, and environmental hygiene, including hand washing, reduce cross-contamination but are challenging to measure. Using the principles of self-awareness theory, we developed and tested a new instrument that produces a quantitative measure of personal hygiene. This study aims to determine the public's understanding of hygiene and sanitation. The training was given using online media with 119 participants. The results showed that the instrument was 95% valid. The level of practicality in understanding the content of the material reaches the level of 87%. Meanwhile, an average score of 83.95 was obtained for evaluating learning outcomes following training, indicating increased participants' knowledge of hygiene and sanitation attitudes. Participants' responses to the training activities were considered positive and positively impacted their psychology. Suggestions for follow-up from these findings is the need for training and socialization of clean and healthy living behavior in rural areas to improve the quality of public health in their environment, the majority of whom still lack knowledge of clean-living behavior.

Keywords: Covid-19, training, sanitation, hygiene, family and consumer science.

1 Introduction

Covid-19 can spread by hands, surfaces of items, failing to observe the coughing and sneezing protocol, and failing to keep a distance [1]. [2] reported that the transmission of covid-19 is through droplets, and close contact such as kissing hands, shaking hands, hugging and touching contaminated surfaces [3]. Some of these things are crucial to avoid the transmission of covid-19 [4]. The attitudes and behaviors people choose can affect their hygiene behavior, in addition to cultural, societal, and family conventions, their level of education, their socioeconomic situation, and other factors[5]

Personal hygiene issues will impact a person's health. [6]. Lack of personal hygiene is one of the causes of illness [7]. This problem should be a concern that needs to be solved [8]. Maintaining one's health status requires maintaining cleanliness. Society must know that numerous medical and psychological issues might result from skin changes [9]. Self-concept

changes might result from physical problems. In addition, psychological illnesses may develop due to these conditions since they may lessen the appeal of physical beauty and emotional responses. [10].

Recently, the government and various parties have monitored hygiene and sanitation behavior using media [11]. However, research by [12] shows that one of the socialization tools, the New Normal, has not been able to have a significant impact. Meanwhile, according to the [13] socialization materials, the contents are pretty complete, from the definition of covid, its symptoms, and various prevention efforts, to communication channels. This statement is supported by [14], stating that the material includes hygiene, sanitation, and environmental health. The obstacle faced by previous research is the extensive process that has not been maximized [15]. So the current research focuses on valid and reliable instruments that are carried out online. Thus, socialization will better achieve the target, and its achievement will be more measurable.

This study provides community training in sanitation and hygiene. The information covered in the materials addresses behavioral, COVID-19, and individual health issues that must be considered when producing and handling food. People have the propensity to employ food delivery services to fulfill their needs, which can lead to cross-contamination, which is also training material [16]. This research is essential to prevent and maintain clean living behavior in the community. The training instrument is presented to make it easier for the public to understand the material's content. This instrument is implemented through available applications such as zoom and google meet. To provide broader knowledge and reach a wider community with samples from various circles.

2 Method

This quantitative descriptive study aims to use internet media to disseminate hygiene and sanitation training materials. This approach is pertinent because the instrument created is used to gather systematically, measure, classify, compute, describe, synthesize, analyze, and interpret quantitative data [17]. The training participants' knowledge and responses are the measured indicators. Figure 1 shows the research process. The training uses internet tools like Zoom and Google Meet, allowing the research subjects to be seen by a wider audience [18]. As many as 119 students from the Universitas Negeri Surabaya's Department of Family and Consumer Science served as trained participants and research subjects in this study.

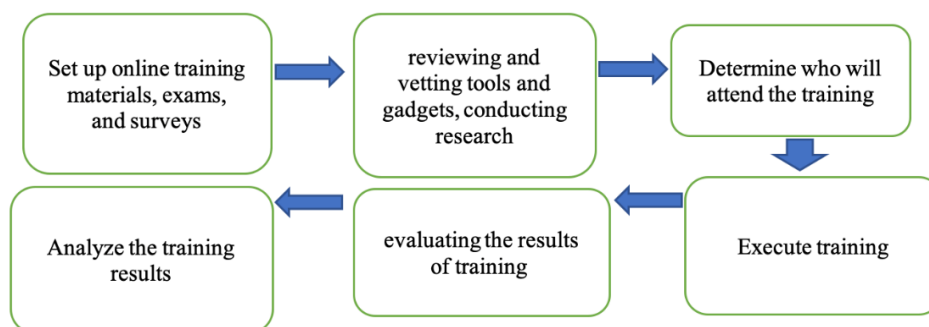


Fig. 1. Study illustrates the steps.

Knowledge exams and response surveys were utilized as collection tools. 20. The knowledge test gauges how well the training attendees comprehended the course information. One goal of the response questionnaire is to ascertain how the training's participants responded to its execution. The information was analyzed using percentages and nonparametric statistics [19].

3 Result and Discussion

3.1 Learning tools developed

The course content is specific to the training goals, which include educating the public on the causes, symptoms, transmission, prevention, preparation, and purchase of food following accepted health standards. This instrument was developed based on the input and advice of sanitation and hygiene experts. This instrument was designed to cover the shortcomings of previous research. So that with the suitability of the instrument and information needs, students' knowledge of hygiene and sanitation can be improved.

3.2 Device validation results

Validating the training device material is carried out in detail and thoroughly. This process involves two validators with the competence and expertise in sanitation and personal hygiene for food handlers. The results of validation by sanitation and hygiene experts show that the instruments made are relevant and measurable. The instrument is feasible to be used as a good and valid information-gathering tool [20].

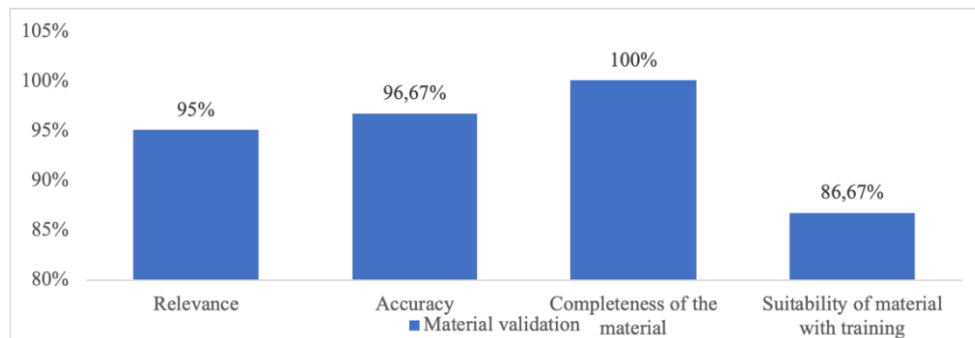


Fig. 2. Material validation.

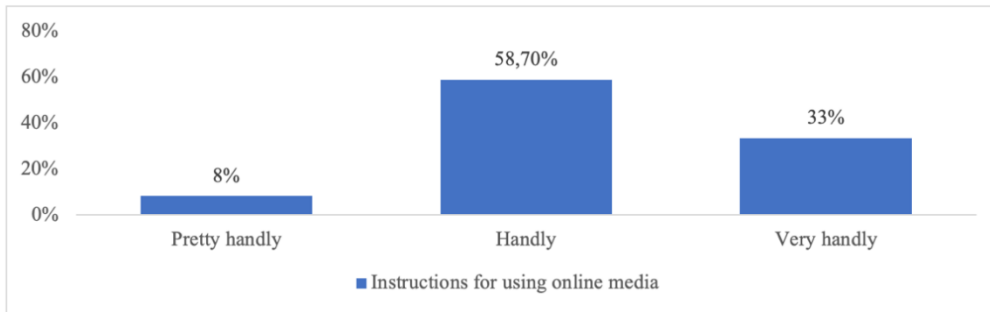


Fig. 3. Practical internet media guidelines.

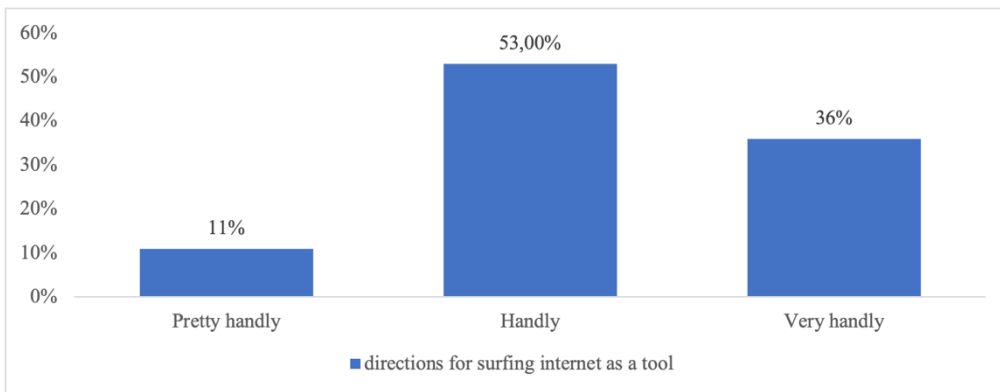


Fig. 4. Guidelines for navigating the internet.

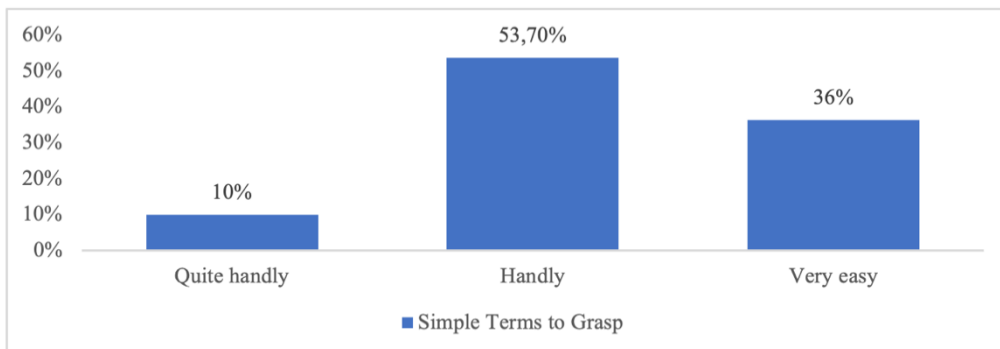


Fig. 5. Simple terms to grasp.

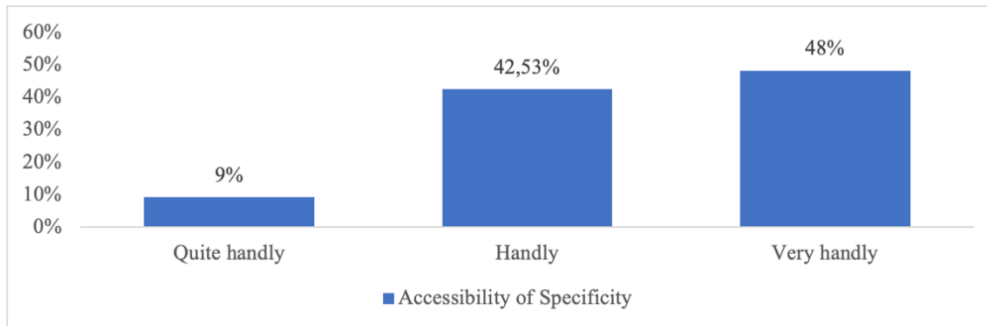


Fig. 6. Accessibility of specificity.

Figure 2 shows the outcomes of the material validation, which included the relevance of attaining 95% results, the accuracy of 96.67%, completeness of 100%, and suitability of presentation with 86.67% training requirements. The material is deemed very legitimate because the total average of the material validation results is 94.59%. The answer results for the practicality of the media use instructions are as follows, as shown in Figure 3 for the online media zoom cloud meeting: 7.97% practical enough, 58.70% practical, and 33.33% efficient, respectively.

Regarding accessibility, Figure 4's answer findings for media zoom cloud meetings may be as follows: rather practical 11%, practical 53%, and very practical 36% in that order. Figure 5 for a media zoom cloud meeting illustrates response findings that can be seen in terms of words' simplicity as follows: 30% straightforward, 53.70% easy, and 10% easy enough, correspondingly. Regarding the accessibility of supporting features, Figure 6 for the media zoom cloud meeting displays the response findings: relatively simple 9.21%, easy 42.53%, and very easy 48.26%.

According to the supporting characteristics of the media's practicality, which include practical usage instructions, practical navigational aids, easily understandable words, and ease of access, 11% of respondents provided helpful replies. In contrast, some others were practical and extremely practical. The online media-based tools utilized, according to the respondents, were helpful.

3.3 Knowledge of the training participants

The pretest, administered before individuals engage in online training activities, and the posttest, administered following participation in training activities, both measure the learning outcomes of the training participants. The outcomes are displayed in Figure 7.

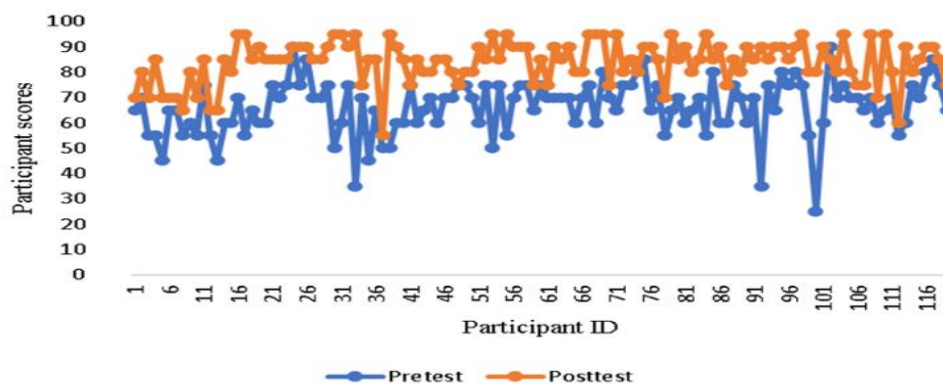


Fig. 7. Pretest and posttest scores results.

The learning outcomes of the 119 participants in the activity are shown in Figure 7 between the pretest and posttest. Pretest scores on average were 66.30, and posttest scores on average were 83.95. This result indicates that the training materials have been well-understood by the participants. The normalcy test is initially performed to determine whether there are appreciable variations in learning outcomes between the pretest and posttest.

If the significance value (p) for the normality data test is more than 0.05 ($\text{sig.} > 0.05$), the data is considered to be regularly distributed. While the results of the Shapiro-Wilk and Kolmogorov-Smirnov normality tests indicate that: 1) the significance value (p) in the Shapiro-Wilk test is 0.000 ($p < 0.05$), so based on the Shapiro-Wilk normality test, the data is not normally distributed, and 2) the significance value (p) in the Kolmogorov-Smirnov test is 0.000 ($p < 0.05$), the data is not commonly dispersed.

The Wilcoxon signed ranks test was utilized in the data analysis because the data were not normally distributed. The results of the data analysis show that there is a difference between the mean learning outcomes for the pretest and posttest. The sig (2-tailed) value is 0.0000.05, which means that H_0 is rejected and H_1 is accepted.

Personal hygiene knowledge is crucial because it can improve one's health [21]. Personal hygiene usage is influenced by knowledge of its significance and its benefits for health. Cultural and individual beliefs influence the ability to personal hygiene behavior. Varied cultural origins have different standards for personal cleanliness [22]. Culturally based attitudes frequently define health and self-care. Habits will influence a person's daily actions [23].

Similarly, suppose sanitary and hygienic conduct is consistently practiced. In that case, it will become habitual among food handlers who do not practice personal hygiene in food processing, which will negatively impact their health and the caliber of the food grown [24]. Individual behavior is considered within the framework of an organization and its leadership, along with recent research on food safety culture and a study of successful food hygiene training methods and strategies [25].

Body image, social behaviors, socioeconomic level, knowledge, culture, and habits are just a few of the variables that impact how someone behaves when practicing personal hygiene [26]. The effects of pre- and post-training support provided to food handlers on their attitude and behavior to implement safe food handling procedures at work are also being investigated [27].

A person's subjective perception of physical appearance is related to body image. The improvement of body image will be affected by good personal cleanliness [28]. Social gatherings are also where people can connect and impact how others practice personal hygiene. The ability of the family to offer the facilities and essentials required to maintain family life and nourishment will depend on the family's ability to do so. The nature and extent of personal hygiene practices vary depending on a person's financial resources [29]. Interactive media and practical exercises are the training course activities most well-liked by the participants. These exercises stimulate employee attitude and behavior changes while also advancing their knowledge and abilities. [30]. For instance, enhancing moms' education while considering current viewpoints might result in favorable modifications [31].

Food contamination can occur through inadequate cooking utensils or utensils. The CDC discovered that contaminated equipment was the source of 10% of foodborne infections [32]. An essential step in removing dirt and food scraps and keeping the number of bacteria at a safe level is washing equipment and sterilizing food utensils. Relevantly, it is crucial to instill healthy lifestyle practices, especially in students who are the younger generation and need to be more knowledgeable about food safety and health. In addition, [33] describes the various ways food can become contaminated. From the receipt of raw materials until the final consumption of food by consumers, various steps are applied to food. To ensure the safety of the food served, all food service personnel must receive effective and ongoing training in food safety and cleanliness [34].

3.4 Response from a training participant

Sequentially shown in Figures 8, 9, and 10, the sequence shows the consistent reactions of participants to the training activities, including the relevance of the material for participants and the ease of understanding the material. Figure 8 displays the findings of the participants' responses about the material's value for them, with the results being moderately crucial (4.26%), crucial enough (56.74%), and highly crucial (39%), respectively. Figure 9 displays the participants' responses, indicating how easy it was to understand the material. The results are as follows: rather handy 7.97%, handy 58.70%, and very handy 33.33%, respectively.

Following are the findings from participant responses to the question of whether the content obtained could be applied, as shown in Figure 10: perhaps 3.36% and the "yes" responses are 96.64%. Considering the number of individuals who gave the "maybe" response, it is evident that the participants confronted obstacles.

According to the participants' responses about the material's significance, clarity, and likelihood of application, which indicate a positive response rate of more than 80%, it can be concluded that the participants' attitudes toward this exercise were favorable. According to early research [35], there is a significant spatiotemporal relationship between information flow and new instances of COVID-19. Discussions regarding myths and connections to inaccurate information are present, although they are not as prevalent as other crisis-specific themes. Online media has grown significantly in popularity and usage since the covid-19 epidemic in various contexts. Government and private organizations, the corporate world/industry, and instructors who employ work-from-home (WFH) use various online media to ensure that learning and work activities continue as intended [36]. Notably, more remarkable cognitive progress was linked to participant-determined attendance. Additionally, there was a minimum level of treatment intensity below which there was no impact [37]. Many employees are

undetected shedders, interact with sick family members, handle raw animal products, or perform poor hygiene [38].

Streaming media can be used for learning, including coaching, quite well. Many meetings, both professional and casual, employ this media as well. This material is widely used for recitation groups, family gatherings, reunions, and other activities [39].

4 Conclusion

This result is predicated on the findings of the study and subsequent discussion. It has been determined that: (1) the information provided is accurate; (2) the online tools used in the zoom cloud meeting are helpful; (3) the assessment of learning outcomes, which yielded a mean score of 83.95 after mentoring; and (4) the respondents' reply to the training programs were rated as good. The online instruction on using sanitation and hygiene to reduce the spread of Covid-19 was successful. Crucially, to enhance the standard of healthcare students, it is recommended that training and socialization of healthy and clean living behaviors be done consistently.

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