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Offline Shopping Behavior during the COVID-19 Pandemic

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ABSTRACT

During the COVID-19 pandemic, by maintaining health protocols, young people and community members continue to shop to meet daily needs, especially food needs, both online and offline shopping. This study aims to explain the effect of wearing masks, maintaining distance and washing hands-on offline shopping behaviour. The population of this study was young people in Indonesia. There were 155 respondents from various regions. The sampling technique used is a random sampling area. The sample is based on regionality by not comparing the proportionality of the site. The results showed that using masks had a significant positive effect on offline shopping behaviour. Social distance has a significant negative impact on offline shopping behaviour. Handwashing does not affect offline shopping behaviour.

Introduction

No matter the firm ban on leaving the house during the COVID-19 pandemic, people are still trying to do shopping to meet their daily needs, primarily online and offline. The policy of stopping the spread of COVID-19 with restrictions on leaving home has changed the offline learning system to online learning [1]; entrepreneurs protect their businesses [2], and

shopping consumers must learn with new habits [3], which pushes from offline shopping to online shopping. To stop the spread of COVID-19, feared by all citizens, encourages everyone they leave the house to carry out health protocols, namely wearing masks, maintaining distance, and washing hands [4].

COVID-19, which affects society, has spread to various aspects of life, including the business and economic fields [5]. COVID-19 affects global mental health, impacting psychological, stress, anxiety and depression communities, including health professionals. Social isolation as an effort to stop the spread of COVID-19 causes anxiety and economic stability is significantly disrupted [6]. As a result of COVID-19, Bangladesh is vulnerable to financial, operational, infrastructure, and demand and supply factors. [7], customers only have the option to purchase essential products on an e-commerce basis. The Ministry of Consumer Affairs instructs all e-commerce businesses to take appropriate precautions and hygiene throughout their supply chain processes [8]. There is a significant favourable influence of e-product, e-price, and e-promotion on consumer decisions through e-trust [9].

Efforts to prevent the transmission of COVID-19, according to [10], public trust in doctors is very high, and general satisfaction with health information is very positive, so he suggested that the government should focus on adequately socializing COVID-19 knowledge. [11] strengthened, covid volunteers have sufficient knowledge about efforts to prevent the transmission of COVID-19, and there is a relationship between knowledge of prevention efforts and compliance in the prevention.

Young people like to be adventurous and happy to leave the house. Many activities outside the home are vulnerable to health, so they need to be maintained to prevent the transmission of COVID-19 [12]. For them, prevention is carried out by being disciplined in implementing health protocols and the community to increase self-immunity by exercising, getting enough rest, and maintaining food and supplementary drinks—the community to prioritize healthy eating habits to reduce long-term susceptibility to COVID-19 [5].

Literature Review and Hypotheses Development

A. Shopping behaviour

Shopping for groceries is a critical activity to meet the needs of human life [13]. Food needs must be met daily, and foodstuffs have low durability, so the needs to shop for food or foodstuffs tend to be daily. Meeting food needs still requires communication contact between sellers and buyers, even indirectly. For consumers, online shopping can be used to meet consumption needs (physical). During the COVID-19 period, online food shopping significantly increased [14]. To order goods to send money can make transactions online, but the delivery and receipt of goods by consumers is undoubtedly in the form of goods. Physical contact can occur through merchandise or the operator of the sender of the goods.

Consumer spending on groceries during the COVID-19 pandemic increased [13], and they kept concerns about the unavailability of stocks and fears of infection from grocery store owners. Compared to before, people have reduced the frequency of grocery shopping and tried to shop quickly and efficiently [15]. Shopping consumers must acquire value for purchased goods depending on the cost-benefit check, status symbols, and value they attach to money [16]. Hedonistic motivation becomes a predictor of purchase intentions rather than utilitarian motives to realize social status, and women show a higher level of hedonistic motivation [17].

During the COVID-19 pandemic, sales increased by 5.7%, and the number of customers increased by 4.9%. Online food shopping showed a significant increase [14]. Purchasing e-commerce formats further satisfy consumer needs and reduces the perception of panic buying in extreme times [18]. The COVID-19 pandemic has impacted changing consumer behavioClick or tap here to enter text.ur [19]. Customers are not free to get the necessities of life. Consumers must help stop the spread of COVID-19 because it is at high risk for health diseases [20]. Consumers must implement health protocols when leaving the house to reduce the global health crisis that threatens the health and public safety [21]. The efforts of the government of the Republic of Indonesia to stop the spread of COVID-19, following in the footsteps of WHO, are requiring people to carry out health protocols by wearing masks, keeping their distance and washing hands.

B. Wearing a mask

One of the government's policies [12] to stop the spread of COVID-19 by requiring all people to wear masks is to cover the nose and mouth to the chin if they have to leave the house or interact with other people with health status is unknown. When using a cloth mask, use a 3-layer cloth mask. The use of masks can reduce the number of infected saliva emissions and respiratory droplets from individuals [22]. This policy is in line with WHO's advice that to stop the spread of COVID-19, the general public should wear masks, maintain a minimum distance of 1 meter from other communities [4], the use of masks can reduce the number of infected saliva emissions and respiratory droplets from individuals with subclinical or mild COVID-19 [22].

To reduce the spread of COVID-19, Ref. [23] recommends to wash hands frequently with or without different antiseptics, to wear masks with filtration equipment, and to isolate. To prevent the spread of COVID-19, [24] suggested that community residents wear masks, while Ref. [25] advocated avoiding infection and transmission of COVID-19 so that they wash their hands frequently. Research of Ref. [26] shows differences in the number of microorganisms on the hands before and after washing hands with soap or hand sanitiser. These two ingredients contain ingredients that can reduce the number of harmful bacteria on the hands.

To stop the spread of COVID-19, WHO recommends that people wear non-medical masks indoors or outdoors by maintaining a minimum distance of 1 meter. The wearing of a mask must cover the mouth and nose. Adjust it to minimize the gap between the face and the mask [4]. There is no splash of water from the mouth and nose from and to other parties. The use of masks contributes to the control of COVID-19 by reducing the amount of infected saliva emissions and respiratory droplets from individuals with subclinical or mild [22].

Hypothesis 1: wearing a mask affects offline shopping behaviour to meet the daily needs of Indonesian youth during the COVID-19 pandemic.

C. Keep distance

Social distancing is an act of limiting the space between someone and others. There will be no physical allusions, and can be the farthest from splashing one's saliva and respiratory fluids in others to control the possibility of spreading the virus to other parties. Social distancing is necessary as an additional protective measure against wearing masks [27]. Close contact with high-risk interaction services, such as work partners in the office, friends of school students and merchants with buyers, always occurs in communication contact. Extreme efforts during the precarious conditions of the spread of COVID-19, some rulers imposed lockdowns, prohibitions on leaving the house and maintaining a minimum distance of one meter from others to avoid being exposed to droplets from interlocutors, coughing or sneezing, as well as avoiding crowds. If it is not possible to keep distance, various other administrative and technical engineerings can be carried out. Ref. [12] recommends that you can keep your distance. WHO also requires social distancing to stop the spread of COVID-19 [4].

Any virus, including COVID-19, becomes easy to attack a person when a weak physical condition does not have the power to fight the attacking virus. However, when a person's physical condition is strong, the physical has a repulsive power and can be aware of the virus attack. The self-immune program strengthens the body's resistance by exercising, getting enough rest, and maintaining food and available drink supplements, including Vitamin C. Ref. [5] suggests broader access to food and attention to healthy eating habits to reduce susceptibility and long-term complications.

Ref. [11] stated that most covid volunteers have sufficient knowledge about COVID-19 transmission prevention efforts, and there is a relationship between knowledge of prevention efforts and compliance in COVID-19 prevention in volunteers. So there is a need for education, rules and the provision of personal protective equipment for covid volunteers to prevent the transmission of COVID-19. One of the efforts to stop the spread of COVID-19, the government recommends maintaining a minimum distance of one meter from other people to avoid being exposed to droplets from people who talk, cough, or sneeze, as well as avoid [12]

Hypothesis 2: Social distancing influences the offline shopping behaviour of Indonesian youth's daily needs during the COVID-19 pandemic.

D. Hand washing

Hand washing is cleaning both hands using water or other [25]. Hand washing, done using soap and hand sanitiser, aims to kill germs on the hands. Hand washing is one of the preventive measures to avoid various diseases that can be transmitted through the hands. Washing hands using soap and water and hand sanitisers are considered more effective for eliminating microorganisms on the hands [26]. Most countries announced preparedness plans to deal with COVID-19 with self-isolation measures, social distancing, hand washing and wearing face masks [28].

Most of a person's activities are carried out by hand. If the hands are not clean, then the hands and fingers become a source of the spread of infection. Infections that occur are widely transmitted through the hands [25]. Children play with various kinds of objects and then often put their dirty fingers in their mouths. Adults do many activities with their hands, hold a lot of office equipment, and must wash their hands properly before eating. Bank employees count customers' money, which was previously held in turn for exchanging goods. The merchants in their market process merchandise that many candidates have been waiting for the user. All those who do not wash their hands are susceptible to infection [25].

During the pandemic, many spread COVID-19 through hands, hands holding objects, and left behind viruses and objects held by other parties, so the virus is easy to spread to the second, third and subsequent holders. So by washing hands at all times, the existing virus will die and dissolve; clean hand conditions do not make the virus spread. Research of Ref. [26] shows that hand washing using soap and hand sanitisers can effectively eliminate microorganisms on the hands.

Hypothesis 3: handwashing influences offline shopping behaviour to meet daily needs.

Methods

The research applies the quantitative research paradigm, which is a way of thinking based on general theories to be tested or applied to life in society. The population of this study is the younger generation of Indonesia, with a research sample of 155 respondents from various regions, representing their respective regions, Java Island, Sumatra Island, Kalimantan Island, Papua Island, Sulawesi Island and Nusatenggara Island. The sampling technique is carried out by random sampling area, which is sampling from various regions. Each area is represented even though the amount does not have to be proportional. Data collected primary data and data collection techniques with questionnaires. The distribution of questionnaires is carried out using google forms so that the distribution of questionnaires can spread thoroughly

in various regions in Indonesia. The collected data were analyzed using multiple linear regression. The model of the relationship between variables in this study is as follows:

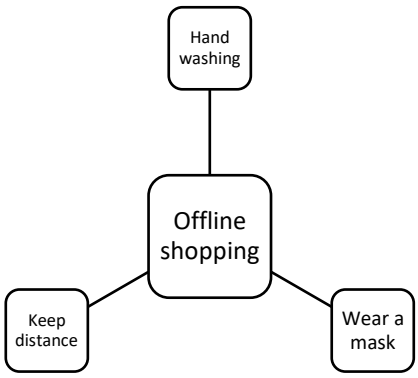

Fig. 1. The relationship between variables

The relationship between the variables in this study is: that handwashing affects offline shopping behaviour, social distancing affects offline shopping behaviour, and wearing masks affects offline shopping behaviour. In order to obtain data to prove the influence between variables, research instruments were developed by departing from each variable. Table 1 shows the definition of each variable and the indicators.

Table 1. Definition and dimensions of variables

Variable	Operational definition	Dimensions/indicators
Wear a mask	It covers the nose, mouth to chin with a cloth. It is tied to the back of the head or up to the ears.	Out of the house (office, college, the market, the store, the mall, another travelling)
Keep distance	Self-determination to avoid crowds and physical contact between each other to avoid splashing breathing fluids or talking from other parties.	Avoid physical contact with friends, and avoid crowds in offices, schools, markets, shops, malls, and restaurants.
Hand washing	Clean hands with soapy water or other drugs so that hands remain clean from infections and dirt.	Wash hands, enter the store, enter the office, enter the market and go home; wash hands,
Offline shopping	The activity of buying goods to meet the needs of daily life directly.	To the market, to the mall, to the restaurant, shopping for household appliances, the needs groceries, toiletries, or others.

Based on the indicators of each research variable developed into question items on the questionnaire, the finished questionnaire was tested on 30 respondents to find the instrument's validity with Spearman correlation and test reliability with Crombach Alpha. The instrument test is to get the validity or accuracy of the questions on what will be asked and get the reliability or constancy of the instrument to get reliable data. The test of this instrument was imposed on 30 respondents to obtain the instrument's validity and reliability. The results are as Table 2.

Table 2. Validity and Reliability

No.	Variable	R-Calculated	R-Table	Crombach Alpha
1	Wearing Masks (WM)	0.719, 0.739, 0.777, 0.865	0.349 (5%)	0.749
2	Washing Hands (WH)	0.893, 0.916, 0. 855	0.456 (1%)	0.860
3	Offline Shopping (OS)	0.882, 0.857, 0.685		0.738
4	Social Distancing (SD)	0.673, 0.821, 0.697		0.681

The calculated R-value of all question items on each instrument variable is above the R table value (0.349) for 5% and (0.296) for 1%. The test analysis of this instrument shows that the validity test results of all question items for each R variable are calculated above the R table value, and then all question items are valid. Furthermore, the instrument was analyzed for reliability. The reliability results of each instrument variable showed the Crombach Alpha value: wearing a mask (0.749), hand washing (0.860), and offline shopping behaviour (0.738). The Crombach Alpha value kept a distance of 0.681. If all Cronbach alpha values are above 0.60, then all are reliable.

Results and Discussion

The respondents of this research are representatives of young people aged between 15 and 25 years. They are always kept from their cell phones at all times and are more familiar with communicating with internet media. They come from various regions in Indonesia. The profiles of the respondents in this study can be reported as follows:

Table 3. Respondent Profiles

Indicators	Frequency	%
Age		
• 15 -20	67	43.23
• 21-25	88	56.77
Gender		
• Man	52	33,55
• Woman	103	66,45
Regional origin		
• DIY	23	14.84
• Central Java	34	21.94
• West Java	22	14.19
• East Java	8	5.16
• Sumatra	32	20.65
• NTB/Sulawesi	24	15.48
• Kalimantan	10	6.45
• Papua	2	1.29
Area of residence		
• Agriculture	82	52.90
• Trade	50	32.26
• Industry	23	14.84
Total	155	100%

The condition of all respondents is young, 67 respondents (43.23%) are between 15-20 years old, and 88 respondents (56.77%) are between 21-25 years old. The gender of respondents was 52 men (33.55%) and 103 women (66.45%). In terms of regional origin, most of the respondents were from Java 87 respondents (56.13%), Sulawesi 24 respondents (15.48%), Sumatra 32 respondents (20.64%), Kalimantan 10 respondents (6.45%) Papua 2 respondents (1.3%). Then the condition of the respondent's residence area is mainly in the agricultural area (52.90%), the trading area (32.26%), and a small part is in the industrial area (14.84%).

Respondent's activities carried out daily activities, especially activities to fulfil daily needs, and prevented the spread of COVID-19. Offline shopping was classified as moderate, while activities to prevent the spread of COVID-19 were classified as high. The size of the scale with a 5-level scale, namely: 1-0.8 (very low), 1.9-2.6 (low), 2.7-3.4 (moderate), 3.5-4.2 (high) and 4.3-5.0 (very high). The results of the analysis of the average scale of respondents' activities in terminating the spread of COVID-19 and offline shopping activities are as Table 4.

Table 4. Activities to prevent the spread of COVID-19

Activities and stopping the spread of COVID-19	Average	Information
Wash hands		
Wash hands when entering a store, a mall or another institution	4.361	Very High
Wash hands when returning home from travelling far away	4.162	Tall
Wash hands as well as Bathe from travelling	2.578	Low
Keep distance		
Keep distance when going to the store	3.916	Tall
Keep distance when to the market	3.767	Tall
Keep distance when gathering with friends	3.774	Tall
Wearing a mask		
When travelling to a mall or an authorized office	4.683	Very High
Going to a place of worship	4.129	Tall
Shop for citizenship to the market	4.542	Very High
Katika meets neighbours, friends and colleagues	4.490	Very High
Offline shopping		
Offline shopping at restaurants	3.114	Keep
Offline shopping at the mall	2.751	Keep
Offline shopping in markets and stores	3.097	Keep

The primary data on offline shopping behaviour, along with data on wearing masks, washing hands, and data on keeping at a distance when leaving the house during the COVID-19 pandemic that has been collected is analyzed with multiple regression, and the results of the analysis can be seen in the following Table 5.

Based on the analysis results, social distancing (SD) negatively and significantly impacts offline shopping behaviour. The higher the social distancing, the less frequent offline shopping will meet daily life's needs. It is very reasonable. The prohibition of crowds and the

recommendation to work from home, school at home, worship at home, restrictions on shops, and open markets make consumers limit shopping time.

Table 5. Coefficients of regression analysis

	Unstandardized Coefficients		Standardized Coefficients		
Type	B	Std. Error	Beta	T	Sig.
(Constant)	3.739	.454		8.240	.000
SD	-.723	.248	-.583	-2.916	.004
WH	-.207	.120	-.183	-1.718	.088
WM	.813	.252	.616	3.230	.002

a. Dependent Variable: OS

The impact of spending restrictions policies, the primary concern of consumers in India is the fear of unavailability of food stocks and the fear of infection from shop owners. Customers affect traditional and related online shopping. Consumers with higher education tend to make food purchases online, feel that shopping for food online is more accessible, and feel happy shopping for food online.

Washing hands (WH) has no effect on offline shopping behaviour, with a significance value of 0.088, and a beta value of -1.718, meaning that it is not significant for 5%. The results of this analysis were close to significant negative for 5% and negative for 10%. The state of handwashing interrupts time and adds energy related to consumer shopping activities, and in traditional markets, not all traders provide handwashing facilities. Large shops and kiosks generally provide handwashing facilities, but small kiosks, especially in the traditional market arena in stalls, provide few handwashing facilities. Many consumers themselves need to bring hand sanitizer. Studies conducted in India show that shopping people need to be safe from healthy groceries in stores to ensure cleanliness to reduce the risk of infection in consumers, so handwashing for consumers and shopkeepers is essential.

Wearing a mask (WM) has a positive and significant effect on offline shopping behaviour, meaning that the higher the level of using masks, the more comfortable they are in doing offline shopping for the necessities of daily life. During the COVID-19 pandemic, consumers were used to wearing masks. It had become an automatic daily behaviour, so shopping at the market and going to offline stores was more comfortable wearing masks, and there was no worry about being affected by the spread of the COVID-19 virus.

The spread of water splashes from the mouth and breathing through the nose and mouth can be inhibited by using masks in an orderly manner. WHO recommends that the general public wear masks and maintain a minimum distance of one meter from other communities. Using masks can reduce saliva emissions from infected and respiratory droplets from individuals. The COVID-19 outbreak has caused changes in the way businesses and consumers behave. COVID-19 pandemic has disrupted business schools worldwide, primarily

through the shift to distance teaching as an effort to avoid physical contact and stop the spread of COVID-19. Physical distancing affects consumers shopping during pandemic. To avoid the risk of spreading it, people have reduced the frequency of grocery shopping and are trying to shop quickly and efficiently. People buy more packaged foods and also make purchases from brands that are new to them.

The mandate of lockdown and social distancing and the impact of COVID-19 has disrupted consumer habits in shopping. In line with the impact on the economy. COVID-19 outbreak's impact on online education, so he suggested that an online teaching strategy be prepared online delivery of instructional materials, adequate support provided for online teaching, and contingency plans to deal with unexpected online education platform incidents. Online technology is a special channel for the impact of the COVID-19 pandemic. Various activities can be found solutions. From online shopping and telework to distance learning It has been felt globally and has influenced consumer attitudes towards online shopping, while convenience is a negative factor influencing online shopping attitudes. For health comfort, it is necessary to arrange a store that is guaranteed safety in the post-pandemic era.

The community is worried about the spread of residents exposed to COVID-19. Many medical personnel were exposed and even died. The adequacy of mental hospital medical staff knowledge about COVID-19 during the pandemic is critical. Therefore, an increased understanding of the risks and strategies for preventing it is needed for clinical staff in order to treat patients and protect themselves. Sehgal's research in India shows that convenience affects consumer shopping practices during pandemic.

The Minister of Health of the Republic of Indonesia prepares Guidelines for the Prevention and Control of COVID-19. The concrete directions include: carrying out surveillance, early detection, contact tracing, and health quarantine; implementing clinical management; implementing infection prevention and control; carrying out specimen management and laboratory confirmation; and implementing risk communication and community empowerment. Examples of policies for reducing crowds are reducing physical contact with the impact of working from home, school from home, shops opening, limited business places, entertainment venues not fully open, and people having free celebrations. The policy impacts many who died as victims of COVID-19. People are afraid and traumatized. The trauma of the general public was significantly higher than that of front-line nurses. Therefore, increased attention should be paid to the psychological problems of medical personnel and the general public in control situations.

Conclusion

Shopping for daily necessities is a consumer need that cannot be abandoned. Preventing COVID-19 through social distancing, washing hands, and wearing masks clashes

with consumer offline shopping activities to meet their needs. Keeping distance harms offline shopping activities, hand washing also harms offline shopping activities, and wearing masks positively affects offline shopping. As an effort for consumers to shop to meet their daily needs and at the same time prevent the spread of COVID-19, it is recommended all citizens change their shopping patterns from offline shopping to online shopping. People who are forced to shop offline to maintain strict health protocols by maintaining distance, washing hands, and wearing masks when leaving the house. People who shop offline and leave the house while relieving fatigue, strict supervision is needed from family, community, and government so as not to be complacent, which harms their future.

Conflict of Interest

The authors should declare that there is no conflict of interest.

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