

Understanding Offline Shopping Intentions During Pandemic

Application of the Theory of Planned Behavior

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ABSTRACT

The transmission of the coronavirus disease 2019 in Indonesia has forced the government to impose a large-scale social restriction. This restriction has lowered the chances of contact with the virus and at the same time encouraged people to shop online for their necessities. However, despite the high risk of being contaminated by the virus, a large crowd of people was seen in offline stores in many cities to have their last-minute shopping days before Eid. The purpose of this research is to investigate the factors that motivate people to shop offline during a pandemic. The influence of cognitive social characteristics such as attitudes, subjective norms, and perceived behavioral control on shopping intentions were investigated using the Theory of Planned Behaviour. Data from 300 respondents were collected in the period of social restrictions, two weeks prior to the Eid celebration 2020, and analyzed using PLS-SEM. The findings show that perceived behavioral control, attitude, and subjective norms all have positive effects on offline shopping intentions. The findings of this study further emphasize the importance of subjective norms in influencing attitudes about offline shopping during a pandemic. This study significantly improves our knowledge about consumer purchasing behavior during pandemics.

Keywords: Theory of Planned Behaviour, Offline shopping, Shopping intentions, Pandemic.

1. INTRODUCTION

Eid al-Fitr is an event to strengthen brotherly relations between Muslims [1]. It is at the end of Ramadan, the Islamic holy month of fasting. Muslims celebrate this blessing day by asking parents and relatives for forgiveness, paying a visit to relatives and friends, and hosting guests by entertaining them with food and drink. In order to look best on annual family photos and on meeting the extended families and friends, Muslims in Indonesia have several traditions in welcoming Eid, one of them is wearing new clothes [2]. It has become a long tradition and has existed since 1596, following the Prophet Mohammed who also wore new clothes for Eid [2].

Retailers in Indonesia look forward to Ramadan since the sales can be double or eventriple compared to the other months. However, the tradition of celebrating Eid in 2020 was different from the previous years due to the spread of coronavirus disease which hit Indonesia in March 2020 [3]. To decrease the dispersion of the virus, the

Indonesian government imposed a “large-scale social restriction” step for some regions that experienced a significant increase in Covid-19 cases [4]. This restriction included closing down non-essential services such as malls, dine-ins, and theatres; restricting religious, sport, and social gatherings; and limiting people's movements. The government's step has surely changed the way people shopped for their Eid necessities. Most people shifted their shopping activities to online shopping [5]. However, not all of them were happy with this new method. A large crowd of people was seen in offline stores in many cities in order to have their last-minute shopping days before Eid, ignoring government orders and risking themselves of getting contact with the virus [6].

Previous studies find that religion and tradition are the major factors that shape the consumption behavior of individuals [7, 8]. Studies on religion-motivated behavioral intentions [9, 10] reveal that the social cognitive factors including one's attitudes, beliefs, subjective norms are the determinants of the intentions

toward purchasing religious-related products. The Theory of Planned Behaviour (TPB) established by Ajzen is one of the most widely used models to examine the influence of social cognitive elements on consumption behavior [11]. The intention to engage in a certain behavior, according to TPB, is the best predictor of actual behavior. Subjective norms, attitudes, and perceived behavioral control then influence intention. This research, therefore, uses the TPB model to examine the social cognitive aspects that influence people's intention to shop offline for Eid necessities during a pandemic. Considering that the act of shopping offline amidst the pandemic is hazardous, conducting this research to better understand consumer buying behavior during this kind of situation is deemed to be important.

2. LITERATURE REVIEW

2.1. The Theory of Planned Behaviour

TPB is the result of the development of the Theory of Reasoned Action (TRA) [11]. It was based on the idea that a person's behavior is the product of his intention to do a certain behavior, as well as his ability to make conscious decisions to engage in that particular behavior. This theory added one more aspect to the TRA, namely perceived behavior control. According to the TPB model, three elements directly influence intention to engage in certain behaviors; attitude (do I want to do it?), subjective norms (do others want me to do it?), and perceived behavioral control (do I have the resources to do it?) [12]. The ability of this TPB model to predict behavioral intentions has been validated in various research areas such as the intention to buy halal food [10], intention to visit green hotel [13], entrepreneurial intention [14], intention to visit destination [15], and intention to conduct pro-environmental behavior [16]. To the author's knowledge, there has never been a published study that used TPB as an attempt to identify offline purchase intentions for Eid essentials during a pandemic. As a result, this study is the first to look into the characteristics that encourage consumers to engage in this behavior.

Attitude refers to the degree to which a person perceives a certain behavior as positive or negative. When he has a favorable attitude towards the behavior, the prospect of him engaging in the behavior increases [17]. Research using TPB has shown that attitudes affect behavioral intention. For example, [18] examine and find that attitude positively influences the intention to purchase green products. Another study shows attitudes as a determinant of intention to buy halal food [19]. Moreover, [20] discover a link between attitude and the intention to engage in unsafe behavior. Therefore, the proposed hypothesis is:

H1: Attitude has a significant and positive effect on offline shopping intention during a pandemic.

Subjective norms refer to societal pressure or influence to act or not act in a certain way [11]. Subjective norms are one's beliefs about how their reference group will perceive them if they engage in a particular behavior. Previous studies have recognized that attitudes have a positive relationship with subjective norms. [21], [22], and [23] have found in their studies that attitudes and subjective norms are significantly related. Therefore, to examine this relationship further in the context of offline shopping intention during a pandemic, it is hypothesized:

H2: Subjective norms have a significant and positive effect on attitude toward offline shopping during a pandemic.

Also, earlier research has found that subjective norms have a favorable effect on behavior intention [17, 18, 23]. Using data from 300 respondents, [18] discover that subjective norms have a significant impact on the intention to purchase green products. Similarly, [17] discovers that subjective norms have a strong direct effect on blood donation intention. As a result, the hypotheses below are postulated:

H3: Subjective norms have a significant and positive effect on offline shopping intention during a pandemic.

H4: Attitude significantly mediates the relationship between subjective norms and offline shopping intention during a pandemic.

Perceived behavioral control refers to the perception of individuals about their capability to carry out the behavior of interest [11]. People are expected to perform a particular behavior if they perceive that they have enough resources to carry it out. The significant relationship between perceived behavioral control and behavior intentions has been demonstrated by several studies [17, 18, 24]. In the case of offline shopping during a pandemic, people who think that they have more funds and perceive more control have a higher intention to perform the behavior. Therefore, this hypothesis is advanced:

H5: Perceived behavioral control has a significant and positive effect on offline shopping intention during a pandemic.

3. RESEARCH METHODS

3.1. Data Collection Process

Data for this research were collected from 14 to 24 May 2020 amidst the large-scale social restriction imposed by the Indonesian government. The target population was Indonesian age 18 and above who have engaged in offline shopping preparing to celebrate the 2020 Eid holy day. The data were gathered using an online survey. An invitation message was sent via social media channels requesting the eligible audience to fill the self-

administered online questionnaire. The questionnaire was separated into two portions. The questions in the first section were used to collect demographic data. The second section contained indicators that use a five-point Likert scale to measure the four variables involved, ranging from 1 (strongly disagree) to 5 (strongly agree). All of the items used to quantify the constructs were derived from previous studies that validated the instruments. The instruments were, then, modified to fit the context of offline shopping during a pandemic. The construct of attitude was measured by scales from [25]. Additionally, perceived behavioral control, subjective norms, and purchase intention variables were measured by scales reported by [26]. Data from 300 valid and complete questionnaires were successfully collected. The sampled respondents were dominated by females (82%), married (55%), and come from the 21-30 years old range (51.3 %). In terms of their highest educational level, the majority graduated from high school (65.7%) and possessed low-level income (48%).

3.2. Data Analysis Procedure

This study employed the partial least squares structural equation modeling (PLS-SEM) analysis (using SmartPLS 3 software) to assess the measurement and structural model as suggested by [26]. Two reasons to select PLS are first, it is best suited for the exploratory nature of this study [27], and second, PLS has been through various refinement in terms of model prediction notably for the use in the field of consumer behavior research [28].

4. RESULTS

4.1. Measurement Model Assessment

Prior to evaluating the structural model, the reliability and the validity of the measurement model need to be achieved. The assessment of the measurement model involved composite reliability, convergent validity, and discriminant validity. Table 1 reveals that all constructs in the model surpass the cut-off value of 0.7 for composite reliability. Convergent validity is established as all the outer loading values are greater than 0.6 [29]. The discriminant validity was evaluated using the HTMT criterion. To establish the discriminant validity, the HTMT ratio for the two constructs must be less than 0.90 [30]. Table 2 indicates that discriminant validity is met.

4.2. Structural Model Assessment

Table 1. Item loadings, α , CR and AVE

| Construct / Items | Loading ** | α | CR | AVE |
|------------------------------|------------|----------|-------|-------|
| Attitude | | 0.910 | 0.933 | 0.740 |
| Att1 | 0.924 | | | |
| Att2 | 0.820 | | | |
| Att3 | 0.936 | | | |
| Att4 | 0.686 | | | |
| Att5 | 0.909 | | | |
| Perceived Behavioral Control | | 0.836 | 0.903 | 0.757 |
| PBC1 | 0.916 | | | |
| PBC2 | 0.916 | | | |
| PBC3 | 0.769 | | | |
| Purchase Intention | | 0.944 | 0.960 | 0.857 |
| PI1 | 0.926 | | | |
| PI2 | 0.935 | | | |
| PI3 | 0.931 | | | |
| PI4 | 0.910 | | | |
| Subjective Norms | | 0.704 | 0.832 | 0.625 |
| SN1 | 0.816 | | | |
| SN3 | 0.681 | | | |
| SN4 | 0.863 | | | |

Note: **All significant at $p < 0.01$

Table 2. Heterotrait-Monotrait Ratio (HTMT)

| | Attitude | Perceived Behavioural Control | Purchase Intentions |
|-------------------------------|----------|-------------------------------|---------------------|
| Attitude | | | |
| Perceived Behavioural Control | 0.669 | | |
| Purchase Intentions | 0.768 | 0.707 | |
| Subjective Norms | 0.773 | 0.676 | 0.672 |

The structural model assessment was performed to determine the model's predictive power and to investigate

the hypothesized associations amongst the variables proposed. The bootstrapping procedure was conducted for the assessment of the structural model. This research employed a 5000 repetition procedure as suggested by Hair et al [27]. The predictive power of the model was determined by utilizing the R² and Stone-Geisser's Q² values [31]. R² is classified as weak (0.19), moderate (0.33), and substantial (0.67) [31]. Based on this classification, the R² of attitude (0.405) and purchase intention (0.603) are between moderate and substantial. These results advise that the model, which includes independent variables of subjective norms, attitude, and perceived behavioral control, has a higher than moderate predictive value for purchase intention. The Q² criterion states that when the value is higher than 0, the model has predictive power, while when it is less than 0, the model has no predictive power. The results of Q² analysis are 0.297 for attitude and 0.509 for purchase intention, indicating the predictive relevance of the model.

The results of the structural model assessment indicating the coefficients and the t-values for each construct are presented in Table 3 and visualized in Figure 1. Table 3 shows that all the hypothesized relationships (H1, H2, H3, H4, and H5) are significant, thus all hypotheses are supported. The Sobel test was used to assess the role of attitude as a mediator (H4). The Sobel test result is 6.135, which is statistically significant at p<0.01. This finding, together with the significance of H1 and H2, signifies the mediation role of the relationship between attitude on subjective norms and purchase intention.

Table 3. Path Coefficient

| Path | β | t-values |
|--|---------|----------|
| Attitude -> Purchase Intentions | 0.507 | 9.118* |
| Subjective Norms -> Attitude | 0.637 | 17.553* |
| Subjective Norms -> Purchase Intentions | 0.099 | 2.170** |
| Perceived Behavioural Control -> Purchase Intentions | 0.278 | 5.096* |
| Subjective Norms -> Attitude -> Purchase Intentions | 0.323 | 8.500* |

Note: *p < 0.01 ; **p < 0.05

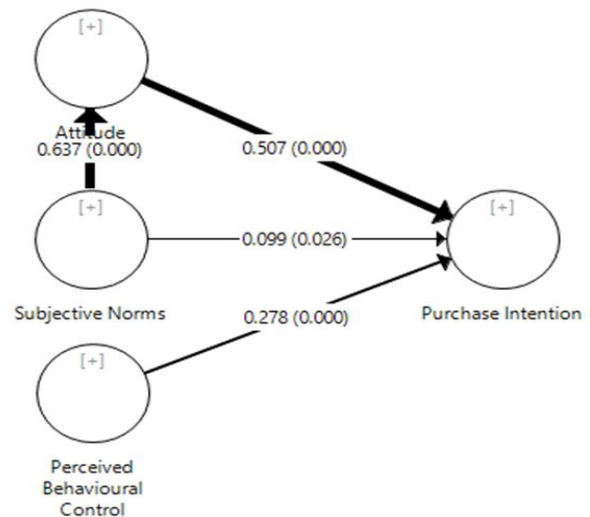


Figure 1 Research Model

5. DISCUSSION AND CONCLUSION

The TPB model has been widely used in a variety of situations [10, 13, 15, 16]. However, based on the author's understanding, there have been no studies using this theory to investigate offline shopping behavior during a pandemic. This study successfully confirms the effect of attitude, subjective norms, and perceived behavioral control on offline shopping intentions during a pandemic. The eminent feature of this study is a connecting line linking subjective norms to attitudes. The results show that subjective norms and attitudes are not independent of each other as suggested by the original TPB model. The addition of the connecting line from subjective norms to attitudes has resulted in a highly significant beta path coefficient. These findings corroborate those of [21] and [23] who discover that attitude influences the relationship between subjective norms and behavioral intentions. Furthermore, the findings of this study reveal that subjective norms have a stronger indirect (than direct) effect on behavior intention. This demonstrates that subjective norms have a strong influence on the formation of attitudes. In other words, the attitude of Indonesian consumers, who belong to a collectivist society [32], towards shopping offline during a pandemic is strongly influenced by their significant others. Although they are aware of the risk of getting contact with the Covid 19 virus in crowds, they do not choose any deviant act that may contradict their reference group. They choose to remain compliant in order to prevent the risk pertaining to the particular behavior.

Additionally, this phenomenon can be described by the social identity theory. According to the social identity theory, people develop part of their identity from the group to which they belong [33]. Emotions and behavior are affected by social identity. Putting it to this study's results, it is clear that those who are eager to shop to

commemorate the Eid holy day in Indonesia are Muslims. It is important for them to celebrate the blessing day by following the tradition of buying new clothes and other Eid necessities regardless of the risk of the coronavirus. The influence of social pressure or the fear of being different from the rest of the group may also influence this phenomenon. This research also supports the effect of perceived behavioral control on behavioral intentions. It indicates that the more people believe that they have resources to shop for their Eid necessities, the more likely they engage in offline shopping despite the risk of being contacted with the coronavirus.

5.1. Theoretical Implication

This study makes a significant contribution to the TPB literature. In addition to the three variables in the original TPB model that are significantly related to offline shopping intentions during a pandemic, subjective norms are also found to have a strong positive link with attitudes. In other words, contrary to the original TPB paradigm, subjective norms and attitudes are not mutually exclusive.

6. RECOMMENDATION

This study was based only on Muslim respondents in the Bandung area. Therefore, it may not reflect the Muslim population of Indonesia. Future research needs to investigate further the link between subjective norms and attitudes in the TPB model in other contexts and countries to validate the finding of this study.

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