

# **Analysis of Factors that Affecting Impulsive Buying Behavior on Online Snack Products**

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## **Abstract**

The existence of Covid-19 in Indonesia has led to an increase in daily snack consumption using digital technology in aspects of life. The number of online snack purchases has increased during the pandemic. The increase in online snack purchases is an example of people making impulse purchases. The situation is the basis of a study to examine the factors that cause people's impulse buying. The present study analyzes the factors influencing impulse buying of online snack products. The measured dimensions are consumer mood, store visual design, store service, store promotion, and gender. The research result can be used to improve how a manufacturer markets snack products online by referring to factors that have been revealed in research. The research was conducted using quantitative methods with an explanatory approach. The study population was also taken from the active account followers of the XYZ brand, where the research distributes questionnaires by using the purposive sampling technique. The regression analysis showed that mood, service, and promotion showed a significant value of  $p < 0.05$ . These results indicate that impulse buying behavior depends on the mood. The store's visual design does not significantly impact consumers' impulse buying. The insight indicates that although the store's visual design is so neat and attractive, it does not influence consumers to impulse purchases. Likewise, the gender effect is not significantly different in impulse buying behavior.

## **Keywords**

Impulse Buying, Pandemic Covid, Online Shopping, Snacks

## **1. Introduction**

Snacks are foods that are considered to relieve a person's hunger temporarily. Snacks can provide energy to the body and something that is eaten to enjoy the taste. Snacking or eating snacks is one of the habits that many people cannot abandon on the sidelines of their daily activities. The eating habits also increase when the Covid-19 pandemic urges people to maximize the use of digital technology in all aspects of life (Galali 2021). The massive use of social media also supports the increase in snack transactions to market products to consumers, and consumers feel safe and comfortable when making online snack transactions. The high level of snack consumption for Indonesians and global is linked to impulsive buying behavior. Due to its competitiveness in the online offering, many providers are struggling to compete with each other. Thus, further analysis is essential to understand what factors influence impulse buying online. The benefit of the present analysis will help the online snack providers prepare their strategies for adjusting the behavior of consumers during the Covid-19 pandemic.

### **1.1 Objectives**

The current study evaluates the factors affecting online impulse purchases using social media and e-commerce. The factors that want to be proven are the influence of mood, store visual design, store staff service, store promotion, and gender. Not only to prove the factors mentioned above but also to find out the description of the various factors, the

simultaneous influence between the factors of impulse buying, and differences in impulsive buying behavior in terms of gender.

## **2. Literature Review**

Impulse buying is a purchase made without prior planning and an urgent desire to buy a specific product (Dawson and Kim 2009; Kacen and Lee 2002). Impulse buying occurs when the prospective customer is already in the store and when exposed to external stimuli (in the form of a product people see). An urgent desire arises in people to immediately buy the product, so impulsive buyers do not need to find more information about alternative products and evaluate alternative products they already know. In other words, this purchase occurs impulsively or spontaneously, not planned. Looking at the 'contagious' nature of impulse buying (Beatty and Ferrell 1998), it is unsurprising that more and more marketers focus on this purchase. Impulsive buying behavior is mainly affected by the internal state of prospective consumers and external factors of the consumer.

Two factors that can affect consumer impulse buying are internal and external. Internal factors are dimensions within a person that encourage potential consumers to make impulse purchases. Internal variables include the consumer's personality (the consumer's perceived mood) and the demographic condition of the consumer. The positive emotions felt by someone will encourage the desire to have a product immediately and suddenly without any prior planning. Negative emotions can encourage consumers not to make impulse purchases. Consumer demographic factors are grouped according to gender, age, socioeconomic class, marital status, occupation, and education. In this case, consumer characteristics are internal factors that encourage potential consumers to make impulse purchases (Miranda 2016). External factors encourage prospective consumers to engage in impulsive buying because there are exciting things consumers see from product marketing or product attributes. Product characteristics influencing impulse buying are affordable prices, little need for these products, small and light sizes, and ease to store. In marketing characteristics, things that affect impulse buying are the installation of large-scale advertisements and promotional materials in the form of product discounts, the position of the goods displayed (display), and prominent store locations (Miranda 2016). However, online shopping cannot always encourage someone to make an impulse purchase because, in online shopping, buyers cannot see and touch the goods directly to assess their quality.

## **3. Methods**

In testing the validity of the questionnaire, the validity measurement is analyzed by correlating the factor score with the total score with a significance level of 0.5. An item is considered valid if it correlates significantly with the total score. The testing technique used to test the validity is the bivariate Pearson correlation. The data processing technique uses computational calculations of a computer program that can process statistical data accurately and quickly into various outputs that will be analyzed. The analytical method used in this research is multiple linear regression analysis. This regression analysis aims to understand the relationship between the independent and dependent variables comprehensively. The operational definition of each variable is explained as follows:

1. Mood  
Positive emotions are feelings of pleasure, joy, liking, loving, enjoying, feeling satisfied, and alertness when making decisions by consumers (Utami 2010).
2. Store Visual Design  
Visual design elements are techniques for presenting merchandise attractive to potential consumers (Jain et al. 2012).
3. Service  
Service is any action or activity that can be offered by one party to another, which is essentially intangible and does not result in any ownership (Kotler and Armstrong 2008).
4. Promotion  
Promotion is an activity carried out to communicate a product to the public so that the product can be sold in the market (Kotler and Armstrong 2008).
5. Impulsive Buying  
Impulse buying is an act carried out without having a problem in the form of intention or intention to buy, which is formed before entering the store (Yahmini 2019).

#### 4. Data Collection

This study used quantitative research methods, and the forms of the data are primary and secondary. Researchers distributed the questionnaires to young adult respondents, homemakers, and career workers to determine respondents' perceptions of impulse buying behavior on online snack products. Questionnaires must be tested first to find out the valid and reliable questionnaires. The purposive sampling technique is part of the non-probability sampling method, which is a sample selection method based on the criteria set by the researcher. The study was conducted to measure the influence of mood, store visual design, service, promotion, and gender on the impulsive buying behavior of online snack consumers. Research respondents are active followers of the XYZ snack brand. The number of respondents used in the study was 74 people. The purposive sampling technique determined respondents. The sample was taken from 91 active Instagram followers of the snack business with the XYZ brand, which is the population in this study. Research data collection was carried out with a distribution made using a Likert scale of 1 to 5.

The number of male respondents who contributed to this study was 31 people or 42%, while the number of female respondents was 43 or 58%. Based on this number, it can be concluded that female respondents who dominate the study are female. Questionnaires were distributed to respondents with various occupational backgrounds. As many as 36 people or 47% of the respondents are students, while 30 people or 41% of respondents work as employees. Respondents who work as entrepreneurs are five people or 8%, and those with other jobs consist of 3 people or 4%. These results indicate that students dominate the research respondents. That is why the age group that dominates this study is 20 – 40 years old, which is 50% of the entire respondents, followed by the age group of <20 years old, which consists of 36%, and last is >30 years old with 14% of the respondents.

#### 5. Results and Discussion

The validity test technique used is Pearson product-moment correlation. The result shows that the calculated R-value obtained from all items is higher than the r table. Therefore, it can be concluded that the questionnaire items used have passed the validity test and are considered suitable for use in research. The reliability test is used to determine the consistency of research measuring instruments, and the result can be seen from Cronbach's alpha coefficient. The regression equation is formulated as follows:

Table 1. Variable Reliability Test Result

| No | Variable           | Cronbach's Alpha |
|----|--------------------|------------------|
| 1  | Mood (X1)          | 0.724            |
| 2  | Store Visual (X2)  | 0.808            |
| 3  | Service (X3)       | 0.689            |
| 4  | Promotion (X4)     | 0.735            |
| 5  | Impulse Buying (Y) | 0.817            |

Table 1 shows that each variable's Cronbach's Alpha values are higher than 0.6. These results indicate that the questionnaire used in the current study is reliable

$$Y = 0,085 + 0,337 X_1 + 0,044 X_2 + 0,204 X_3 + 0,532 X_4 + 0,836 X_5 + e$$

It can be concluded several things as follows:

- The constant value of 0.085 indicates the value of the Impulsive Purchase variable (Y) without being influenced by the independent variables.
- The regression coefficient ( $\beta_1$ ) score is 0.337, which showed the effect of the Mood variable (X1), meaning that the higher a person's mood, the higher the impulsive buying behavior.
- The regression coefficient ( $\beta_2$ ) score is 0.044. The result showed the effect of the Store Visual Design variable (X2), meaning that the more attractive the store's visual design, the higher the level of impulsive buying behavior.
- The regression coefficient ( $\beta_3$ ) score is 0.204. The value showed the effect of the service variable (X3), meaning that the better the service provided to customers, the higher the impulsive buying behavior.
- The regression coefficient ( $\beta_4$ ) score is 0.532. The number showed the effect of the Promotion variable (X4), meaning that the better the promotion, the higher the impulsive buying behavior.

- The regression coefficient ( $\beta_5$ ) score is 0.836, which showed the effect of the variable Gender (X5), meaning that one's impulse buying behavior is also closely related to gender.

Based on the test results in Table 2, the significance value of the X1 variable is 0.007, X2 is 0.581, X3 is 0.046, X4 is 0.000, and X5 is 0.000. The significance value obtained from the variables X1, X3, and X4 is  $<0.05$ . Thus, mood, service, and promotion significantly affect impulsive buying behavior. Lastly, the significance value of variables X1 and X5  $> 0.05$  means that the store's visual design variables and gender significantly affect impulsive buying behavior.

Table 2. T-Test Results

| Model |                     | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|-------|---------------------|-----------------------------|------------|---------------------------|-------|------|
|       |                     | B                           | Std. Error | Beta                      |       |      |
| 1     | (Constant)          | .085                        | 2.221      |                           | .038  | .970 |
|       | Mood                | .337                        | .121       | .276                      | 2.791 | .007 |
|       | Store Visual Design | .044                        | .079       | .035                      | .555  | .581 |
|       | Service             | .204                        | .100       | .206                      | 2.030 | .046 |
|       | Promotion           | .532                        | .116       | .461                      | 4.589 | .000 |
|       | Gender              | .836                        | .567       | .092                      | 1.474 | .145 |

- a. Dependent Variable: Impulsive Buying

Referring to Table 3, the significant value obtained is 0.000 or  $<0.05$ . These results conclude that the variables of mood, store visual design, service, promotion, and gender simultaneously have a significant effect on impulsive buying behavior.

Table 3. F Test Results

| Model |            | Sum of Squares | Df | Mean Square | F      | Sig.              |
|-------|------------|----------------|----|-------------|--------|-------------------|
| 1     | Regression | 1104.556       | 5  | 220.911     | 39.748 | .000 <sup>b</sup> |
|       | Residual   | 377.930        | 68 | 5.558       |        |                   |
|       | Total      | 1482.486       | 73 |             |        |                   |

- a. Dependent Variable: Impulse Buying  
 b. Predictors: (Constant), Gender, Service, Store Visual Design, Mood, Promotion

The coefficient of determination test shown in Table 4 showed that the Adjusted R Square score is 0.726. This value means that the variables of mood, store visual design, service, promotion, and gender simultaneously affect the impulsive buying behavior variable by 72.6%. At the same time, the other 27.4% is affected by other variables that are not in the model.

Table 4. Results of the Coefficient of Determination

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1     | .863 <sup>a</sup> | .745     | .726              | 2.35750                    |

- a. Predictors: (Constant), Gender, Service, Store Visual Design, Mood, Promotion

Table 5. Differential Test Statistics

|                  | Gender | N  | Mean    | Std. Deviation | Std. Error Mean |
|------------------|--------|----|---------|----------------|-----------------|
| Impulsive Buying | Male   | 31 | 18.9355 | 5.08551        | .91338          |
|                  | Female | 43 | 19.8837 | 4.05445        | .61830          |

The test results in Table 5 above show that the average value of impulse buying for male respondents is 18.935, with a standard deviation of 5.085. Meanwhile, female respondents had an average value of impulse buying of 19.883 and a standard deviation of 4.054. The average value of impulse buying based on gender showed that female respondents tend to have higher impulse buying behavior than male respondents. However, it is also known that the significant value of the test results is 0.375. This value is undoubtedly greater than 0.05. Thus, the result showed that male and female respondents' differences in impulsive buying behavior are insignificant.

Multiple regression testing aims to measure how much influence mood (X1), store visual design (X2), service (X3), promotion (X4), and gender (X5) on impulsive buying behavior in online snack products. Referring to the results of multiple linear regression analysis between the X variables and the Y variable, the regression equation is arranged as follows: The regression coefficient value on mood (X1) is 0.337, store visual design (X2) is 0.044, store service (X3) is 0.204, store promotions (X4) is 0.532, gender (X5) is 0.836, with a constant value of 0.085 on the impulsive buying variable (Y). Based on the positive constant value, almost all variables influence impulsive buying behavior on online snack products. The most influential variable is the highest value, namely gender, store promotion, store service, consumer mood, and store visual design.

The determination coefficient test is carried out to assess the ability of the model in order to explain how much influence X variables have simultaneously (simultaneously) affecting the dependent variable, which can be indicated by the adjusted R – Squared value. The results show that the adjusted R – Squared value is 0.726. The determination coefficient score is in the range of zero to one. A value can be said to be good if it is above 0.5. A value of 0.726 shows that the variables studied strongly correlate with the impulsive buying behavior of online snack products. These variables include mood, store visual design, service, promotion, and gender, which simultaneously affect impulse buying by 72.6%, while the other 27.4% is affected by other variables that are not in the model.

Different tests were conducted to compare male and female respondents' perceptions of impulsive buying behavior. The different test in this study was carried out using the Independent T-test. It is known that male respondents' average value of impulse buying is 18.935, with a standard deviation of 5.085. Meanwhile, female respondents had an average value of impulse buying of 19.883 with a standard deviation of 4.054. The average value of buying by gender showed that female respondents tend to have higher impulse buying behavior than male respondents. The results are then strengthened by a different test, which is known to have a significant value of 0.375. This value is undoubtedly higher than the probability of 0.05. Thus, there is no significant difference in impulsive buying behavior between male respondents and female respondents. In other words, the differences shown are not significant.

## **6. Conclusion**

The current study is generally conducted to determine the factors that can affect the impulsive buying behavior of online snack products. The results of the tests and discussions are described as follows

1. The mood is positive feeling consumers feel when shopping for snacks online, including emotional, interest, and loyalty. Store visual design is a display visible to consumers, including product display & layout, attractive images with color combinations, and lighting. Promotion is one of the activities to reach consumers through engaging advertising content. Store service is an activity carried out by companies to serve consumers by showing a sense of care for consumers, product guarantees, product responsibility, and a positive response to consumers. Impulsive behavior is someone's action of shopping without any prior planning. What influences this action are positive emotions, the presence of urges, looking at stores, and the availability of time and money to shop.
2. There is a significant influence between positive emotions (mood) on the behavior of impulsive buying of online snacks. The better a person's mood, the higher the potential for impulsive buying behavior.
3. There is no significant effect between the store's visual design on the impulsive buying behavior of online snack products. The store's visual design attractiveness is not the main factor influencing impulse buying behavior.
4. Service has a significant effect on impulsive buying behavior of online snack products. Good service causes the level of customer impulse buying to increase.
5. There is a significant influence between promotions on impulsive buying behavior of online snack products. The broad reach of the promotion increases the potential for a customer's impulsive buying behavior.

6. There is a gender effect on impulse buying behavior in online snack products. Female respondents tend to have higher impulse buying behavior than male respondents.
7. There is a significant simultaneous effect of consumer mood, store visual design, service, promotion, and gender on impulse buying behavior.
8. There is no significant difference between impulsive buying behavior in women and men.

The conclusion from the problem formulation determined can be used as an insight for online shop owners to maximize the factors that make consumers desire to shop. Factors that business actors can maximize include building a positive atmosphere and feeling towards consumers, maximizing service to consumers, and providing attractive promotions to consumers who are in online stores. For the future research, it can be maximized by online business actors by involving creativity so that their online store looks attractive, and other researchers in the future can also perfect this research.

## References

- Beatty, S. E. and Ferrell, M. E., Impulse buying: Modeling its precursors, *Journal of Retailing*, vol. 74, no. 2, pp. 169–191, 1998.
- Dawson, S. and Kim, M., External and internal trigger cues of impulse buying online, *Direct Marketing: An International Journal*, 2009.
- Galali, Y., The impact of COVID-19 confinement on the eating habits and lifestyle changes: A cross sectional study, *Food Science & Nutrition*, vol. 9, no. 4, pp. 2105–2113, 2021.
- Jain, V., Sharma, A. and Narwal, P., Impact of visual merchandising on consumer behavior towards women's apparel, *International Journal of Research in Management*, vol. 5, no. 2, pp. 106–117, 2012.
- Kacen, J. J. and Lee, J. A., The influence of culture on consumer impulsive buying behavior, *Journal of Consumer Psychology*, vol. 12, no. 2, pp. 163–176, 2002.
- Kotler, P. and Armstrong, G., *Prinsip-prinsip pemasaran*. Edisi, 2008.
- Miranda, Y. C., Kajian Terhadap Faktor Yang Mempengaruhi Impulse Buying Dalam Online Shopping, *Competence: Journal of Management Studies*, vol. 10, no. 1, 2016.
- Utami, C. W., Manajemen Ritel (edisi 2), *Jakarta: Salemba Empat*, 2010.
- Yahmini, E., Kecenderungan Impulse Buying Pada Mahasiswa Ditinjau Dari Latar Belakang Keluarga, *EXERO: Journal of Research in Business and Economics*, vol. 2, no. 1, pp. 41–56, 2019.

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