

# The Role of Hedonic Motivation and FOMO on the Impulsivity of e-Commerce Users during COVID-19 Pandemics in Indonesia

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## Abstract

This study aims to identify if extraversion traits moderate consumers' impulse buying behavior and identify other determinants that can trigger consumers' impulse buying behavior on e-commerce platforms during the COVID-19 pandemic. Using a convenience sampling method, people domiciled in Jakarta, Bogor, Depok, Tangerang, Bekasi (Jabodetabek) and Surabaya were selected as samples. Out of 265 questionnaires distributed, 206 completed questionnaires can be analyzed. The Partial Least Squares Structural Equation Modeling (PLS-SEM) analytical approach is used to evaluate hypotheses. This study's result revealed how customers' impulsive buying behavior is significantly affected by hedonic motivation and fear of missing out (FOMO) on e-commerce platforms during the COVID-19 pandemic. Meanwhile, during the pandemic, impulsive buying behavior was not affected by sales promotions, and extraversion characteristics could not mitigate the link between those variables and impulse buying behavior.

## Keywords

Hedonic motivation, Fear of missing out (FOMO), Sales promotion, Extraversion trait, Impulse buying behavior

## 1. Introduction

Coronavirus disease (COVID-19), which occurs since the beginning of 2020, is a current global crisis impacting more than 200 countries in the world where it is determined to be an infectious disease, and as a result, it caused an outbreak (Ahmad et al., 2020). Considering the high risk of being infected by this virus, many countries are implementing lockdowns and self-quarantine to restrict social life and reduce social interaction (Chou et al., 2020). In Indonesia, the government implemented a policy called the large-scale social restrictions, which is strictly implemented in most populated provinces such as Jakarta, West Java, Banten, and East Java to prevent the virus from spreading (Suraya et al., 2020). As a result, many people are turning to online shopping in fulfilling their consumption needs and wants. Indonesian e-commerce users are increasing since e-commerce provides various product options and no physical interaction (SIRCLO, 2020). Moreover, e-commerce has characteristics where it empowers consumers to control their behavior and social media users state that e-commerce also influence their shopping processes and inspire their online purchases which could lead them to have online impulsive behavior (Aragoncillo and Orus, 2017). This makes online channels, including e-commerce, influence people to behave impulsively (Gupta, 2011).

Correspondingly, one factor that leads people to behave impulsively is hedonic motivation (Wahab et al., 2018; Tambuwun, 2016; Tirtayasa et al., 2020; Sahetapy, Kurnia and Anne, 2020; Sangaji, 2020). Consumers with hedonic motivation do not consider the use or the result after purchasing a product they wanted, as hedonic motivation is based on consumers' multisensory, fantasy, and emotions for the products, and it could trigger the consumers to make a purchase and satisfy their emotional needs (Solomon, 2017). People in Indonesia who are forced to follow the government regulation during this pandemic which is the social restrictions, are threatened by the fact that they could not shop directly to the store. Especially people with hedonic motivation where they found joy, happiness, and stress-

relief when they shop, will look through e-commerce and might purchase products to satisfy their desire while following the social restriction regulation.

Besides the hedonic motivation, fear of missing out (FOMO) is another factor that could stimulate consumers' impulsivity behavior (Çelik et al., 2019). Consumers with fear of missing out tend to stay up to date, and they did not want to miss a trend or activities where they could purchase products impulsively just to stay on track with the current trend (Good and Hyman, 2020). FOMO could trigger people to stay connected with others, leading to problematic social networking use, especially during self-isolation. People in Indonesia tend to be addicted to social networks because of fear of missing out, especially during pandemics where people could not socialize directly with others. People will be more active on social networking sites and e-commerce to keep themselves updated about news and current trends. When people use e-commerce, it could lead them to have impulsive behavior and purchase something on e-commerce.

In addition, sales promotions offered by e-commerce, such as discounts, free samples, etc. could also influence consumers to have impulsive buying behavior (Mayasari, 2019; Ismail and Siddiqui, 2019; Fitri, 2018; Kumar and Kaur, 2018; Liyanage and Wijesundara, 2020). According to Genchev and Todorova (2017), sales promotion could retain and captivate consumers because it could benefit them. During the pandemic, many companies in Indonesia offered discounts and other attractive incentives for consumers to have a win-win solution where the consumers will get a special offer, and the company could balance out their sales turnover that declined after the pandemic started (Tarigan et al., 2020).

In addition, people with extraversion traits as one of the personal traits most likely will feel tedious since they could not do their daily habits and activities as they used to, and for that reason, they mostly use social media and e-commerce to entertain themselves during the pandemic. Furthermore, this type of consumer also has a high fear of missing out since they are always updated about social life (Tresnawati, 2016). Moreover, Husnain et al. (2016) mentioned that consumers with extrovert characteristics could be influenced easily by several marketing strategies such as promotions and have a high level of curiosity (Hartung and Renner, 2011). For these reasons, e-commerce managers need to understand consumers' hedonic motivation and their tendency to fear missing out (FOMO) influence their impulse buying behavior and offer more sales promotion to trigger consumers to behave impulsively.

To give consumers the best experience while shopping on e-commerce and stimulate their impulse buying behavior, e-commerce managers need to understand how hedonic motivation, shopping promotions, and fear of missing out (FOMO) tendency can stimulate their consumers to become impulsive. The fact that along with the hedonic motivation, fear of missing out, and sales promotion are effective since it could stimulate consumers to buy the product with a special offer (Lehman and Winner, 2006; Walsh, 2000). Despite several studies have found that hedonic drive, fear of missing out, and sales have a beneficial impact on customers' spontaneous purchasing behavior (Tirtayasa et al., 2020; Wahab et al., 2018; Sahetapy et al., 2020; Gultekin and Ozer, 2012; Çelik et al., 2019; Fitri, 2018; and Putri, 2020; Mayasari, 2019; Ismail and Siddiqui, 2019; Kumar and Kaur, 2018), studies that analyzed these factors during the crisis still inadequate. Consumers' behavior such as impulsivity using e-commerce during a crisis may differ from a non-crisis or daily basis since consumers are doing self-isolation and restricted from the outside world. That being the case, it is needed to research e-commerce during this crisis, especially in Indonesia.

Additionally, studies that analyzed extraversion trait as moderating variable is still insufficient. Extraversion represents sociability and impulsivity (Revelle, 1997); it is important to see whether it strengthens the consumers' impulsivity during the pandemic because people with extraversion have a high amount of emotional expression (Husnain et al., 2016). A pandemic that forced people to self-isolate could threaten people with extraversion traits since they could not satisfy their desire to seek social activities to fulfill their pleasure (Wijnngards et al., 2020). During social restriction, extraverted people in Indonesia will mostly use social networking sites, including e-commerce, to keep their excitement. In fact, extraversion people are associated with impulsivity, and they will have the urge to buy products while seeking out excitement.

### **1.1 Objectives**

In addition, people in Indonesia like to see and read reviews of the product they are interested in. This phenomenon developed a habit for extraverted people to seek out excitement by social networking during this pandemic time and could lead to impulsive buying behavior while seeing products on e-commerce. According to Farid and Ali (2018), impulsive buying is likely to occur when individuals are emotionally attached to a product easily and get persuaded

to make the purchase. For these reasons, persons with a high extraversion trait level tend to be emotionally expressive compared to other personality traits that regulate their impulsive purchase behavior. Furthermore, extroverted people are more likely to respond to promotional offers (Farid and Ali, 2018). Therefore, this study will analyze e-commerce users in Indonesia during the pandemic to see the direct influence of hedonic motivation, FOMO tendency, and sales promotion towards impulsive buying behavior and moderated by extraversion trait. Hence, the study's results are expected to support further research and provide helpful information for related sectors in designing strategies for consumers with hedonic motivation and FOMO tendency and designing shopping promotions strategies to stimulate consumers with extraversion traits to trigger their impulse buying behavior.

## **2. Literature Review**

### **2.1 Hedonic Motivation**

A psychological conceptualization called hedonic motivation is the eagerness to commence behaviors that enhance or stimulate positive experiences such as pleasant or good that could reduce the negative experience of someone (Kaczmarek, 2017). Hedonic motivation can be classified as a pleasure where consumers enjoyed the feeling of joy and excitement for buying and owning something; this kind of motivation stimulates consumers' impulsive buying behavior and buys something they like without thinking about its benefit (Vinerean, 2013). Based on Arnold and Reynolds (2003), hedonic motivation stimulates purchasing activities related to the five senses and includes disappointment and emotion. It is stated by Japariato and Sugiharto (2011) that shopping lifestyle, which refers to consumers' consumption that shows how they spend their time and money because of hedonic motivation, could also impact the way people behave impulsively. Furthermore, with a high hedonic drive, the shopping lifestyle will lead to impulsivity (Tambuwun, 2016).

### **2.2 Fear of Missing Out (FOMO)**

Fear of Missing Out or FOMO is a social-cultural phenomenon (Herman, 2012) that can make a person feel anxious with the idea that others might experience something that one is not (Jones, 2016). According to Kang et al. (2018), FOMO is a widespread social-cultural phenomenon and a key extrinsic motivator for consumption behavior. Herman (2011) defined FOMO as a fearful attitude against failure to achieve opportunities and losing the expected joy if one fails to achieve those opportunities. According to Good and Hyman (2020), FOMO tends to appear when ones have to choose between uncertain current and potential option which they also believe that the experience will be favorable. Good and Hyman (2020) added that FOMO could subsequently influence one's purchase behavior because it typically will trigger their emotional response (Zeelenberg and Pieters, 2006). People, who are social beings, get concerned when they are left out of what others are doing and feel the need to alleviate these social concerns (Kim et al., 2020). Seeing other people's experiences, lives, and lifestyles may lead an individual to feel incapable and triggered by the desire not to miss out. For instance, consumers may think that they have to buy more, consume more, and experience more, or even think that they have the most experiences due to FOMO (Çelik et al., 2019). Due to this phenomenon, it is reported that 68% of millennials in Indonesia experience FOMO (Kurniawan, 2019).

### **2.3 Sales Promotion**

Sales promotion is defined as "special offers" that primarily attempt to drive demand within a specific period (Lehman and Winner, 2006; Walsh, 2000). Kotler and Keller (2012) defined sales promotion as a tool to encourage consumers to purchase products. According to William and Ferrell (1987), sales promotion refers to direct inducing activities that provide added value or incentives for a product to resellers, salespeople, or customers. Cuizon (2009) mentioned that sales promotion is a more cost-effective method of achieving short-term sales than advertising. Based on Renwarin (2019), people in Jakarta prefer to buy products with buy one get one free promotion and get satisfied with the additional free product. Other countries in Asia, such as Malaysia, Singapore, Pakistan, prefer discounts, coupons and buy one get one to make them purchase the products (Jallow and Dastane, 2016; Shamout, 2016; McNeill, 2013). Coupons are certificates with a defined value that reduces certain items' price and are shown to the store (Arens, Weigold and Arens, 2011). To promote product testing to consumers, a free sample is provided, a trial-sized version of the product with no additional cost (Belch and Belch, 2012). Fill (2002) mentioned that a price discount or reduction is a value strategy in which items or products are given at a discounted or reduced price. According to Sinha and Smith (2000), the most commonly used sales promotion tool is a buy-one-get-one-free, whereby consumers will get an additional product for a product they purchase without additional cost and perceived to be of great value.

## 2.4 Extraversion Trait

Personality represents an individual's uniqueness portrayed in a social and physical environment (Schiffman et al., 2008). According to De Raad (2000), the 'Big Five' or Five-Factor Model (FFM) refers to the personality trait model formed by five elements: extraversion, Agreeableness, Conscientiousness, and neuroticism, Intellect, or Openness to experience. Among these five personality traits, it is believed that individuals with high extraversion traits tend to be more impulsive (Farid and Ali, 2018). They also have the positivity in themselves that makes them tend to be more open to anything than others, leading them to engage in impulse buying (Judge et al., 2014). Farid and Ali (2018) added that highly open-minded individuals are easier to engage with promotional offers. Extraversion is a personality trait that measures assertiveness, friendliness, talkativeness, and emotional expressiveness (Husnain et al., 2016). Furthermore, extraverted people are more social, dominant, energetic, joyful, and optimistic (Larson and Sachau, 2008). They are also extroverted, very sociable, active, seek excitement, and enjoy interpersonal relationships (Mooradian and Swan, 2006).

## 2.5 Impulsive Buying Behavior

Impulsive buying behavior happens when consumers experience intense and continuous feelings of the urge to buy something immediately (Parsad, 2020). When consumers have their decisions to buy something, and their decisions do not depend on their thoughts, it is acknowledged as impulsive buying behavior (Suryaningsih, 2020; Zafar et al., 2019). Strengthened by the statement from Husnain, Qureshi, Fatima, and Akhtar (2016), consumers behave impulsively by having no consideration and without having any reason why they purchase a product. Furthermore, Ahmed et al. (2020) stated that impulsive buying behavior might occur from external stimuli. Impulsive buying behavior is defined as spontaneous activities with a positive mood and lack of consideration for cost or repercussions (Leong et al., 2018).

## 2.6 Hypotheses Development

According to a recent study by Tirtayasa et al. (2020), hedonic motivation plays a significant part in consumer impulsivity since it significantly correlates with impulsive purchasing behavior. Wahab et al. (2018) demonstrated that hedonic motivation directly impacts impulsive buying, whereby consumers are easily enticed by online shopping and seek to fulfill their emotional wants. Furthermore, Sahetapy et al. (2020) claim that customers' purchasing habits enhance their impulsive behavior tendencies, and the study found how impulse buying significantly and positively impacted their hedonic tendencies. Furthermore, Gultekin and Ozer (2012) support the notion that hedonic motives impact impulsive purchasing when consumers' emotions are dominant. As a result, the following hypotheses are tested:

H1: Hedonic motivation has a positive influence on impulse buying behavior.

According to Kang et al. (2019), FOMO is a mental state of an individual blindly imitating or following others' behavior, which may be a useful tool to describe conformity consumption behavior. They also state FOMO could trigger consumption by pressuring consumers' decisions that lead into impulsive buying behavior. Furthermore, FOMO is described as an impulsive tool in marketing and communication activities to increase consumers' buying behavior in online platform (Aydin et al., 2019). Since FOMO could trigger consumers' consumption and pressure them to make a purchase, it may be reasonable to assume that consumers with FOMO are more likely to do impulsive buying. This assumption is supported by past study which discovered a substantial effect of FOMO on consumers' impulse buying behaviour. This study also stated that FOMO leads to individuals' tendency to make purchases impulsively due to their sentimental actions because of FOMO (Çelik et al., 2019). Therefore, the following hypothesis is derived:

H2: FOMO tendency has a positive influence on impulse buying behavior.

According to Mayasari (2019), more impulsive buying behavior occurred with the increase of sales promotions. Previous research (Ismail and Siddiqui, 2019; Kumar and Kaur, 2018; Akram et al., 2017) revealed that sales promotion positively impacted customers' impulsive buying behavior. Akram et al. (2017) found that the spontaneousness of consumers in purchasing goods is owed to the sales promotions offered, which this spontaneous will leads to impulse buying behavior. Fitri (2018) stated that to achieve a higher level of consumers' impulse buying behavior, e-commerce should give a better level of sales promotions. Thus, the hypothesis as follows:

H3: Sales promotion has a positive influence on impulse buying behavior.

According to Husnain et al. (2016), individuals with a high level of extraversion traits would likely increase impulsive purchasing behavior, whilst those with a low level of extraversion traits reduce their impulse buying behavior. Furthermore, those who score high on the extraversion traits are more impulsive due to the lack of self-control when trying new things (Farid and Ali, 2018). Mathai and Haridas (2014) have also proven that individuals with extraversion traits make more impulse purchases than others who are not extroverted. Individuals with a high level of extraversion trait are exerted by the hedonic motives and contemplate their social status, where it could strengthen their impulsive behavior (Ringbeck et al., 2019). Gohary and Hanzae (2014) mentioned that consumers with the extraversion trait tend to be hedonic because they tend to feel joy and pleasure when they purchase something. This is bolstered because consumers with extraversion traits have a positive relationship with the product's hedonistic value (Matzler et al., 2006). Due to the tendency of being sociable and updated, past studies believed that the higher the extraversion trait in individuals, the higher fear of missing out they have (Tresnawati, 2016). Additionally, Chein et al. (2020) discovered that extroverted customers are likely impacted by a variety of marketing techniques, including shopping promotions. Therefore, the following hypotheses are derived:

H4: Extraversion trait moderates the relationship between hedonic motivation and impulse buying behavior.

H5: Extraversion trait moderates the relationship between fear of missing out (FOMO) and impulse buying behavior.

H6: Extraversion trait moderates the relationship between sales promotion and impulse buying behavior.

### **3. Methods**

#### **3.1 Measures**

The items used were mostly modified from prior research to guarantee content validity. Hedonic motivation is indicated by five items that are adapted from Choirul and Artanti (2019), Tambuwun (2016), and Mohammad (2016). Fear of Missing Out (FOMO) tendency is measured by items that are adapted from Çelik et al. (2019) and Kim et al. (2020). Promotional sale items are adapted from Ismail and Siddiqui (2019) and Shamout (2016). To measure extraversion traits, six items were taken from previous extraversion traits towards buying behavior (Chen et al., 2020; Farid and Ali, 2018; Pelau et al., 2018). Finally, five items for impulse buying behavior are adapted from Chen, Hui, and Lee (2020). Likert scales (1~5) with a range between "strongly disagree" to "strongly agree" were applied to all statements.

#### **3.2 Subjects**

This research executed a non-probability sampling which is a convenience sampling technique considering its efficiency. To achieve the research objectives, quantitative research was conducted. The questionnaire was distributed to 265 respondents with some specifications based on their location and experience, and 206 completed the questionnaire were analyzed. Jakarta, Bogor, Depok, Tangerang, Bekasi (Jabodetabek), and Surabaya cities were chosen for this study because of the findings of Priceza Indonesia (2018), Jabodetabek and Surabaya are the cities with the largest online shoppers in Indonesia. This research focused on respondents who did unplanned shopping on e-commerce during the COVID-19 pandemic regardless of their genders and age. The respondents were self-administered a 25-items questionnaire. Respondents from Jabodetabek who have purchased items on e-commerce during the pandemic are eligible to participate in the study. They were required to select statements that best matched their circumstances. Structural equation modeling of partial least square (PLS-SEM) was used for data analysis because this study was an exploratory of an existing structural theory which Hair et al. (2011) suggested to use PLS-SEM for exploratory study.

### **4. Results and Discussion**

#### **4.1 Data Analysis Result**

The validity and reliability test were conducted to check the measurement instruments of the data collected from the respondents. Convergent validity was examined by considering the factor loading and average variance extracted (AVE). Hair et al. (2017) stated that the factor loading should be greater than 0.7 and 0.5 for average variance extracted (AVE). The final result of factor loadings in this study ranges from 0.766 to 0.912, while the range of AVE scores is from 0.641 to 0.809. Discriminant validity was also tested and fulfilled using the Fornell and Larcker (1981) criterion, where the square root of all AVE scores is greater than the correlation between the constructs. The instruments also demonstrated composite reliability exceeds 0.7 for each construct (Hair et al. 2011), ranging from 0,842 to 0,955.

Two items from hedonic motivation which are HM1 scored 0,668 and HM2 scored 0,586 and two items from extraversion trait which are ET3 scored 0,453 and ET4 scored 0,673 were dropped since the factor loading of each item scored lower than 0,7. The remaining 21-items from all constructs with factor loading scored higher than 0,7

were valid. The remaining constructs with AVE scores of more than 0,5 and composite reliability greater than 0,7 indicate that the reliability test was passed. Table 2 demonstrates that the square root of each AVE score is greater than the correlation between the constructs, suggesting that all constructs are valid. Tables 1 and 2 provide the complete findings of each construct's validity and reliability tests.

**Table .1** Convergent Validity and Discriminant Reliability Test Results

| <b>Construct</b>                | <b>Item</b> | <b>Factor Loading</b> | <b>AVE</b> | <b>Composite Reliability</b> |
|---------------------------------|-------------|-----------------------|------------|------------------------------|
| Hedonic Motivation (HM)         | HM3         | 0,726                 | 0,641      | 0.842                        |
|                                 | HM4         | 0,706                 |            |                              |
|                                 | HM5         | 0,790                 |            |                              |
| Fear of Missing Out (FM)        | FM1         | 0.884                 | 0.809      | 0.955                        |
|                                 | FM2         | 0.886                 |            |                              |
|                                 | FM3         | 0.911                 |            |                              |
|                                 | FM4         | 0.905                 |            |                              |
|                                 | FM5         | 0.912                 |            |                              |
| Sales Promotion (SP)            | SP1         | 0.871                 | 0.695      | 0.901                        |
|                                 | SP2         | 0.876                 |            |                              |
|                                 | SP3         | 0.817                 |            |                              |
|                                 | SP4         | 0.767                 |            |                              |
| Extraversion Trait (ET)         | ET1         | 0.773                 | 0.660      | 0.886                        |
|                                 | ET2         | 0.794                 |            |                              |
|                                 | ET5         | 0.805                 |            |                              |
|                                 | ET6         | 0.826                 |            |                              |
| Impulsive Buying Behavior (IBB) | IBB1        | 0.803                 | 0.691      | 0.918                        |
|                                 | IBB2        | 0.829                 |            |                              |
|                                 | IBB3        | 0.833                 |            |                              |
|                                 | IBB4        | 0.891                 |            |                              |
|                                 | IBB5        | 0.795                 |            |                              |

**Table 2.** Discriminant Validity Test Results

|           | <b>ET</b> | <b>FM</b> | <b>HM</b> | <b>IB</b> | <b>SP</b> |
|-----------|-----------|-----------|-----------|-----------|-----------|
| <b>ET</b> | 0.812     |           |           |           |           |
| <b>FM</b> | 0.579     | 0.900     |           |           |           |
| <b>HM</b> | 0.691     | 0.647     | 0.800     |           |           |
| <b>IB</b> | 0.524     | 0.556     | 0.615     | 0.831     |           |
| <b>SP</b> | 0.573     | 0.517     | 0.446     | 0.385     | 0.834     |

**Table 3.** Hypotheses Test Results

| <b>Hypotheses</b> | <b>Path</b> | <b>Path Coefficient</b> | <b>t-Statistics</b> | <b>p-value</b> | <b>Conclusion</b> |
|-------------------|-------------|-------------------------|---------------------|----------------|-------------------|
| H1                | HM → IBB    | 0.380                   | 3.997               | 0.000          | Supported         |
| H2                | FM → IBB    | 0.201                   | 2.496               | 0.013          | Supported         |
| H3                | SP → IBB    | 0.048                   | 0.566               | 0.572          | Not Supported     |
| H4                | HM*ET → IBB | 0.007                   | 0.088               | 0.930          | Not Supported     |
| H5                | FM*ET → IBB | 0.034                   | 0.381               | 0.703          | Not Supported     |
| H6                | SP*ET → IBB | 0.045                   | 0.525               | 0.599          | Not Supported     |

Using a 95% confidence level, the criteria to determine whether hypotheses are supported or not supported in this study is by looking at the t-value or the p-value. A t-value>1.96 and a p-value<0.05 indicates that a hypothesis is supported, whereas a t-value>1.96 and a p-value>0.05 showed the hypothesis is not supported. Thus, out of six hypotheses, two hypotheses are supported (H1 and H2), while four other hypotheses are not supported. Hedonic

motivation ( $b=0.380$ ,  $t>1.96$ ) and fear of missing out ( $b=0.201$ ,  $t>1.96$ ) are substantially effective on impulse buying behavior which supports H1 and H2. The details of the hypotheses result are shown in Table 3. Thus, the hypotheses test result with its path coefficient is shown on Figure 1. The figure shows which path is supported and which path is not supported.

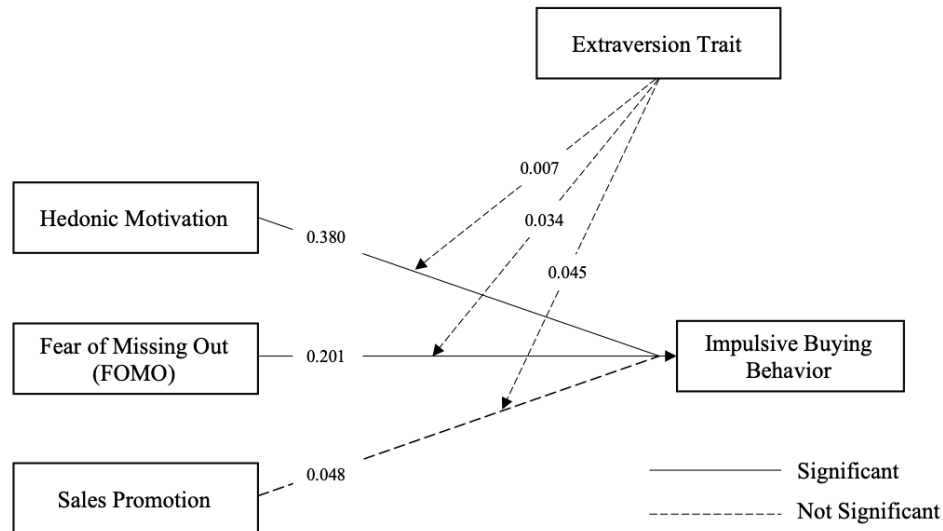


Figure 1. Hypotheses Test Result

#### 4.2 Result Discussion

The study's result shows that impulse buying behavior is significantly affected by hedonic motivation. The result corresponds to previous research conducted by Widagdo and Roz (2021) that hedonic motivation triggers individuals to shop unexpectedly because people with hedonic motivation tend to spend their time browsing on e-commerce which leads to unplanned purchases. Customers who were self-isolating during lockdown developed a higher level of hedonic motivation than before the pandemic. Since offline stores in shopping malls are closed or partially restricted during the lockdown, consumers had few opportunities to enjoy their free time, which corresponds to the increasing of hedonic motives. This research indicates that self-isolation reduces and restricts customers from recreational opportunities, which leads them to do online shopping impulsively because of the increase of hedonic motives. In public, the impulse to purchase products without considering whether they are necessary or not occur frequently, and many are unaware (Zheng et al., 2019).

Furthermore, this study demonstrates that the fear of missing out has a substantial impact on impulsive purchasing behavior. People tend to keep on track and stay connected with what other people are doing to feel anxious, fear, and concern about missing out (Çam, 2020). Since a mobile phone is the only option for entertainment during self-isolation, especially social media, influencers or friends could influence consumers on the current trend even in the middle of a pandemic. Accordingly, respondents tend to be influenced and feeling fear of missing out on the current trend where the respondents could not purchase it directly, so it leads to impulsivity and the usage of e-commerce to do a transaction to be on the same track with the current trend. FOMO relates to the frequency of social media use, where the higher levels of problematic social media and smartphone use lead to severe anxiety and negative affectivity when they are missing out on what people are up to right now (Elhai, Yang and Montag, 2020) where this could lead to the impulsivity on e-commerce.

Furthermore, this study demonstrates no substantial impact of sales promotion on impulsive buying behavior, which contradicts previous studies that stated otherwise (Kempa et al., 2019; Omid, 2016). Most of the respondents of this study were aware of the sales promotion given by e-commerce when they make purchases. However, sales promotion was not a stimulus of their impulse buying behavior means that most of the respondents know that most e-commerce platforms provide rebates, price discounts, free trials, and coupons. Hence, the respondents chose certain e-commerce to get the promotion offered. Moreover, most Indonesian consumers are seeking discounted products and will purchase only discounted products.

This research found no significant moderating effects from extraversion trait to the direct effects of hedonic motivation, FOMO, and sales promotion towards impulsive buying behaviour. The result displayed that correlation of hedonic motivation, FOMO and sales promotion, and impulsive buying behaviour does not get influenced by extraversion trait. Consumers tend to have hedonic motivation naturally when using e-commerce, where consumers are triggered by the products available on the e-commerce. Moreover, consumer's feeling of FOMO refers to the preoccupied with lost opportunities to align with the current trend through offline channels and leads them to browse on e-commerce to see and purchase the current trend. Both hedonic motive and FOMO's relationship with impulsive buying behaviour are purely and directly connected without interference from other variables. Therefore, consumers with or without extraversion trait impulsivity could be affected by both hedonic motivation and FOMO.

## **5. Conclusion**

This study aimed to identify if extraversion traits moderate consumers' impulse buying behavior and identify if hedonic motivation, fear of missing out (FOMO), and sales promotion can trigger consumers' impulse buying behavior. Prior research focused on customers' impulsive buying behavior on e-commerce platforms during COVID-19. This study shows that most respondents are triggered by their hedonic motivation and fear of missing out (FOMO) rather than sales promotions while making purchases on e-commerce platforms during the COVID-19. E-commerce platform usage helps the respondent satisfy their consumption needs and wants, considering that mobile phone is the only way to keep consumers entertained during the pandemic. Moreover, it could help consumers to purchase without making them leave their house since there is a high risk of being infected by the virus if they go outside. According to this study, people with or without extraversion traits do not affect the respondents' impulsivity triggered by hedonic motivation or the feeling of fear of missing out (FOMO). Therefore, the extraversion trait does not moderate the relationship of hedonic motivation and FOMO towards impulsive buying behavior.

## **5. Managerial Implications**

The important managerial implication is that the e-commerce manager should design strategies as a whole, business-to-consumer (B2C), consumer-to-consumer (C2C) that relevant to users' hedonic motivation and fear of missing out (FOMO) so their impulsive buying behavior can be triggered. E-commerce platforms can focus on making their consumers happy by creating a positive and happy atmosphere on their platform and providing more hedonic shopping value for the consumers. In detail, e-commerce could create a positive and happy atmosphere, such as creating a huge event and designing an attractive home page that advertises the event, and it is effective to attract consumers who will feel curious about the current event on the e-commerce website.

Besides, the website quality of e-commerce is an important aspect to keep consumers loyal, where consumer with hedonic motivation enjoys their time shopping through e-commerce. Having a good design structure of the web page could make the website easy to use where many consumers are looking for that kind of website to keep on looking on the products they are looking for. Furthermore, e-commerce platforms also have to ensure that their users feel comfortable because e-commerce could provide all of the things needed by the consumers and safe by having good security to secure all of the consumers' data. Consumers' trust towards sellers and products' quality sold in C2C e-Commerce platforms has a strong influence on their attention to buy. As a result, sellers need to be highly reliable so consumers could enjoy their shopping experience and purchase at ease. Integrating these actions could make consumers stay longer browsing and selecting products to buy, leading them to unplanned purchases.

In addition, to attract more consumers with fear of missing out (FOMO), sellers in e-commerce should keep up to date on the current trends to be their target website to visit and make purchases on products in line with the current trend. Moreover, the seller should also have a strategy like offering an exclusive limited edition or limited quantity products where it could trigger the feeling of urgency. Moreover, showing the number of stocks could also trigger the way consumers think they need to buy the product as soon as possible; if not, they will miss the opportunity to have a high-end product. As a result of integrating this kind of strategy, consumers with fear of missing out (FOMO) get triggered and buy products impulsively on the e-commerce.

## **5. Suggestions for Future Research**

Future studies could consider numerous limitations found in this study. The first limitation is adding openness as a moderating variable. People with openness traits tend to have a wide range of interests and are ready to push those interests into unplanned purchases. Furthermore, people who score high on the openness trait are eager to try a new experience and are fairly adventurous. Thus, it is natural for them to try out new products.



Second, further research should consider other factors such as buyer emotion and online behaviour that can trigger individuals' impulse buying behaviour on e-commerce platforms. Buyer emotion could lead to an individual's impulse buying behaviour because the affective mood of the buyer is substantial in determining the buyer's impulse buying decision. Furthermore, online behaviour can be measured through users' internet usage and expected that the higher level of internet use leads to a higher chance of internet influencing users' impulse buying behaviour.

Third, this study lacks generality since this study only uses samples from Jabodetabek and Surabaya. Adding a bigger number of respondents and conducting the survey more broadly in Indonesia could be very useful to develop more general and objective results. Consequently, future research may utilize a wider variety of samples to determine the consistency of the results. Moreover, this research only considers e-commerce platforms in general and not focusing on any e-commerce platform.

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