

THE EFFECT OF BIG FIVE MODEL (BFM) PERSONALITY TRAITS ON ONLINE IMPULSIVE BUYING: EVIDENCE FROM WEBSITE USER IN DKI JAKARTA AREA

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ABSTRACT

The rapid growth of e-commerce drives impulsive buying behaviors because consumers can browse and respond more easily depending on their moods. Therefore, marketers need to understand the factors that can affect online impulse buying. Although much research has been conducted to analyze the factors of online impulse buying, only a few of them discuss the effect of Big Five Personality Traits (BFM) on online impulse buying. A purposive sampling method was used and an online survey was distributed using google form. A sample of 100 respondents above the age of 22 who have been using a website from DKI Jakarta area was taken. PLS-SEM was used to analyze the measurement model and the structural model. Results show that personality traits Extraversion, Conscientiousness, and Neuroticism were found to have a positive and significant impact on online impulse buying, whilst Agreeableness and Openness to Experience do not significantly affect online impulse buying. This research suggests that website owners or administrators should target people with a high level of Extraversion, Conscientiousness, and Neuroticism to generate more sales from online impulsive buying. This research's contribution to the body of knowledge is to add more evidence on the effect of Big Five Personality Traits, which consists of Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism on online impulse buying, particularly from the perspective of the website user in DKI Jakarta Area.

Keywords: Online Impulse Buying, Big Five Model, Personality Traits, Online Marketing

INTRODUCTION

In 2019, Indonesia has the fastest growing online population in the world with around 90% of internet users aged 16 to 64 years old in Indonesia having done online purchases (cnnindonesia.com, 2020). By the year 2025, online purchase is projected to reach US\$ 56,3 billion, increasing by 7 times compared to 2017 which was only US\$ 8,4 Billion (Statista, 2020). Despite the growth in e-commerce, Website is the only sales media that faced a decline in sales from 2019 to 2020 (Lestari & Supriadi, 2020). Website is struggling to compete against other online sales media such as marketplace, social media, and instant message applications. Despite losing to the competition, a website still offers lots of benefits for the owners. According to Salehi, Abdollahbeigi, Langroudi, and Salehi (2012), website information convenience plays a very important role in the success of companies in competition through e-commerce. Compared to a marketplace that displays various brands in the same product category, websites only allow visitors to see products that the business is selling so there will be no competition from other brands. Also, building a brand is more difficult in the marketplace because most visitors only view the product page instead of the store's page. Consequently, messages about the brand may not be fully transferred to potential customers and this can limit brand awareness and knowledge about the company's reputation (Pham, 2021).

One of the strategies to increase website sales is to promote impulse buying on a website. Madhavaram and Laverie (2004) suggest that e-commerce drives impulse buying because consumers can browse and respond more easily depending on their moods (Donthu & Garcia, 1999; Hong & Gyoung, 2005; Madhavaram & Laverie, 2004; Rowley, 2000). Impulse buying occurs when a consumer experiences a sudden, often powerful, and persistent urge to buy something immediately (Dennis W. Rook, 1987). Impulse buying activities are often followed by guilt and regret because the person doing it may feel that they have made an unnecessary purchase (Zhou & Gu, 2015). On the contrary, some researchers also found that impulsive buying may also lead to happiness, pleasure, excitement, and joy (Gardner & Rook, 1988).

While literature and consumers themselves claim that impulsive buying behavior is normatively wrong, a considerable volume of purchases across a wide scope of categories could be classified as impulsive (Paul & Gutierrez, 2004). Verhagen and van Dolen (2011) assert that nearly 40% of the spending consumed on e-commerce websites is credited to impulse purchases. According to Nicholls, Li, Roslow, Kranendonk, and Mandakovic (2001), approximately 50% of the mall shoppers were impulsive shoppers. Research made by Hausman (2000) that summarized findings from previous studies found that buyers classified 30 percent to 50 percent of their purchases as impulsive buying and almost 90% of people make occasional impulsive purchases. According to Shahjehan, Qureshi, Zeb, and Saifullah (2012), in certain product categories, impulsive buying records for over 80% of the total purchase. Moreover, research by W. Zhang, Leng, and Liu (2020) shows that when it comes to new products, even more purchases come from online impulsive buying behaviors. These findings show that impulse buying has played an important part in e-commerce activities.

Internal factors affecting consumer impulse buying behavior are important to discuss because it directly impacts the consumers (Drossos, Kokkinaki, Giaglis, & Fouskas, 2014), however, there are still few researchers discussing internal stimuli that could cause online impulse buying. Internal factors of impulse buying denote the individual's internal cues and characteristics that make him/her engage in impulse buying (Bhakat & Murugantham, 2013). Intrinsic factors such as personality traits, culture, shopping enjoyment tendency, materialism, and impulse buying tendency were found to have a significant effect on consumers' impulse buying behavior (Badgaiyan & Verma, 2014; Chavosh, Halimi, Namdar, Hosseinikhah Choshaly, & Abbaspour, 2011; Herabadi, 2003).

Personality traits sufficiently explain the tendency of an individual to display impulsive buying behaviors (Hussain & Siddiqui, 2019; Shahjehan & Qureshi, 2019). Likewise, Saran, Roy, and Sethuraman (2016) 'validate' that consumer impulsive

buying decisions are based on their personality traits and identities. Evidence from the previous research also shows that impulse buying tendency is an individual trait, rooted deeply in basic personality (Herabadi, 2003). Nowadays, the Big Five Model (BFM) established by McCrae and Costa (1990) is considered as a benchmark for a theory of personality traits (Leong, Jaafar Noor, & Sulaiman, 2017). BFM entails five dimensions namely Openness to experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. Although personality trait is a key determinant of consumer decision-making, their role, especially Extraversion, Neuroticism, and Conscientiousness, in impulse buying is not conclusive (Parsad, Prashar, & Vijay, 2020). Research from European countries suggested that personality traits are a key driver of impulse buying (Fenton-O'Creevy & Furnham, 2019; Olsen, Tudoran, Honkanen, & Verplanken, 2016; Rehman & Manjur, 2018). On the contrary, Jamali and Baloch (2019a) and Yoon and Lim (2018) found that there is no significant relationship between personality traits and impulse buying behavior. Some researchers argue that geographical factors could be the reason why there are differences in the research findings (Jamali & Baloch, 2019b).

The purpose of this study is to perform an analysis on the effect of Big Five Personality Trait (Openness to experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism) on online impulsive buying. The result of this study is expected to be useful for adding more evidence surrounding the topic, particularly among website users in DKI Jakarta Area. Findings can also be useful to study further about factors that affect online impulse buying and also for marketers who want to design a marketing strategy to promote impulse buying on a website.

LITERATURE REVIEW

1. Impulsive Buying

Consumer impulse buying has been studied by researchers for over 60 years (Leh et al., 2020). Impulsive buying has been recently defined "as a sudden, hedonically complex purchase behavior in which the rapidity of the impulse purchase prevents any thought, deliberate consideration of alternative or future implications" (Sharma, Sivakumaran, & Marshall, 2010). Dennis W. Rook (1987) characterizes impulse buying with "impulse buying occurs when consumers experience a sudden, intense, and continual impulse to buy something immediately. Impulse buying is generally considered unplanned, it is characterized by "relatively rapid decision making and a subjective bias in favor of immediate possession" (Madhavaram & Laverie, 2004). According to von Böhm-Bawerk (1959) and Freud, Strachey, Freud, Strachey, and Tyson (2001), impulse buying is associated with naive, immature, ignorant, and intellectual deficiencies. Impulsive buying is primarily driven by strong hedonic temptations of immediate satisfaction that make the urge during impulsive buying extremely powerful and difficult to resist (Amos, Holmes, & Keneson, 2014; Kacen, 2003; Madhavaram & Laverie, 2004). Lee and Kacen (2008) suggest that impulsive purchase decision is made without a profound thought process.

Early research sometimes conveyed impulse buying as an unplanned purchase and often used these terms synonymously (Stern, 1962). However, impulse buying behavior can typically be categorized as unplanned purchase, but unplanned purchases cannot always be categorized as impulse buying (Kacen, 2003; Kollat & Willett, 1969; Verhagen & van Dolen, 2011; Y. Zhang, Winterich, & Mittal, 2012). The unplanned purchase may occur simply because a consumer forgets to place the item on a structured shopping list and it not be accompanied by a powerful urge or strong positive feelings that usually associated with an impulse buying (Amos et al., 2014). The major differences between impulse and planned purchases are the amount of information and the length of time that is spent on the decision process (Lee & Kacen, 2008). An impulse purchase decision is made due to a sudden urge of appreciation of the beauty of the product and own desire for recreational purpose (Kovač Žnideršić, Grubor, & Marić, 2014). The person making an impulse purchase decision is more likely to be irrational rather than rational.

Amos et al. (2014) categorized impulse buying into three criteria:

- (1) The act is spontaneous and is usually accompanied by a positive emotional charge,
- (2) The individual making an impulse buy shows diminished regard for any costs or consequences,
- (3) The act usually involves a hedonic temptation for immediate self-fulfillment through consumption.

According to Sofi and Najar (2018), impulsive buying is caused by external and internal factors. External factors include culture, social system, and marketing stimuli. Marketers need to design their tactics so that people recognize their product more and they also need to place their products properly to trigger impulse buying (Floh & Madlberger, 2013). Internal factors of impulsive buying may include the consumer's cognitive state, affective state, confusion, and advertisement involvement. Hirschman (1992) believed that most people would not easily get affected by the external factors on buying impulsive decisions, it's their mindset and emotions that caused them to engage in impulse buying activities. The factors of psychological and emotional feelings and motivations lead them to make impulse purchases more than an individual considering the benefits and functions that may get from the products (Butkouskaya, Llonch, & Alarcón-del-Amo, 2020).

Several studies on consumer buying behavior showed that buyers vary in their impulsive shopping inclination (Beatty & Elizabeth Ferrell, 1998; D. Rook & Fisher, 1995; Dennis W. Rook, 1987; D. W. Rook & Gardner, 1993). Verplanken and Herabadi (2001) suggested that the impulse buying tendency has a strong basis in personality. This means that someone's personality may predict how likely someone is going to commit to impulsive buying. Studies on consumer behavior have shown that product choice and brand preference can be predicted through individuals' personalities (Malhotra, 1988; Muntinga, Moorman, & Smit, 2011). Thus, this research aims to find out the effect of personality traits (Openness to experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism) on online impulsive buying.

2. Big Five Model Personality Traits

In recent years, the trait-based approach for the quantitative measurement of personality has gathered more traction (Sofi & Najar, 2018). The most influential of these theories is the Big Five Personality Traits theory or the Big Five Model (BFM) (Judge, Higgins, Thoresen, & Barrick, 2006; Myszowski, Storme, & Tavani, 2019; Soldz & Vaillant, 1999). The BFM is the most widely accepted solution to the problem of describing trait structure—that is, finding a simple and effective way to understand relations among traits (Goldberg, 1990; McCrae & Costa Jr, 2008). With many studies confirming that quite consistently the big-five factors

emerged in different populations of individuals (Liao & Chuang, 2004), it would not be an exaggeration to state that the big-five model, which entails five dimensions namely Agreeableness (A), Neuroticism (N), Extraversion (E), Openness to experience (O) and Conscientiousness (C), has achieved the greatest degree of consensus among all trait taxonomies (Doost, Akbari, Charsetad, & Akbari, 2013; Larsen & Buss, 2008; S Feldman, 2009). Moreover, with the introduction of the internet, personality traits have been used to study as predictors for online behavior, and (BFM) big five models turned out to be a very useful tool to examine particular behaviors on the internet (Husnain, 2016). Tsai (2004) found a significant effect of personality attributes on online consumer behavior. She argued that the personality variables offered effective segmentation and the ability to differentiate online consumer behavior and the marketers could easily identify the marketing niches for products and services for online consumers.

1. Openness to experience

In general, openness also referred to as 'intellect' is characterized by original, imaginative, and broad interests (McCrae & Costa Jr, 2008) and describes people who are neither rigid in their views, nor their expectations toward others (Mondak, Hibbing, Canache, Seligson, & Anderson, 2010). Shahjehan et al. (2012) found that openness is characterized by imagination, culture, broad-mindedness, intelligence, artistic sensitivity, and is significantly correlated with Impulsive-buying behaviors. Hogan, Barrett, and Hogan (2007) relate openness with individual innovativeness. Innovativeness has a positive direct effect on attitudes toward mobile commerce (K. Yang, 2007) and it also positively influences perceived ease of use and usefulness of M-commerce (K. C. C. Yang, 2005), and both of them can increase someone's chance of committing to impulsive buying. On the other hand, openness can be characterized as opposed to conservative and close-mindedness (John & Srivastava, 1999). People with a low level of openness tend to dislike changes and don't trust something new easily.

High openness individuals adapt to new things rapidly, appreciate new adventurous experiences, and their interests are various (John, Naumann, & Soto, 2008). Further, it has been reported by Hirsh (2010) that people with the dominant personality trait of openness are curious about new experiences and products, and are expected to adopt new products more quickly than people who are less open to experience. Thus, people with relatively high scores on this trait are considered to have broad interests and are more likely to seek out new experiences, while those low on this trait are considered to be practical and traditional (McCrae & Costa Jr, 2008). The Internet can help people with this trait to find various products, so the possibility of making an impulse purchase can be higher.

Considering the intellectual curiosity associated with the Openness to Experience trait (McCrae & Costa Jr, 2008), it is expected that people with a high level of openness are likely to be more impulsive. The statement is in line with the findings of (Leh et al., 2020; Rehman & Manjur, 2018) which point that openness to experience is positively related to impulsive buying and therefore, this research proposed that,

H1: Personality trait (Openness to Experience) has a positive effect on the impulse purchasing behavior of online website customers.

2. Conscientiousness

The personality trait 'conscientiousness' describes individual differences in the propensity to be self-controlled, responsible to others, hardworking, and goal-directed behavior (McCrae & Costa Jr, 2008; Roberts, Smith, Jackson, & Edmonds, 2009). Needless to say, individuals scoring highly on this trait are considered methodical, well organized, and dutiful, while those low on this trait are thought to be less focused and more likely to be distracted from tasks. Also, researchers Donnelly, Iyer, and Howell (2012) have reported that conscientiousness was likely to play a major role in planning for future expenses. Verplanken and Herabadi (2001) exhibited that cognitive aspects of shoppers were associated with a low need to evaluate, and a lack of conscientiousness. The lack of planning and making thorough evaluations while purchasing products are a few of the characteristics of impulse buyers, which can influence their impulse buying tendency.

Conscientiousness is associated with greater impulse control and the planning and self-regulation of behavior (Carver, 2006); thus likely reducing impulsive buying tendencies. They have a strong internal locus of control and are also known as reliable, punctual, self-disciplined, neat, and competent (Maltby, Day, & Macaskill, 2010). It is self-evident why conscientiousness individuals have the strongest correlation with low impulsive buying because it shows the tendency of being organized, planning, and able to delay gratification (Joshani, Rastegar, & Bakhshi, 2012). Conscientiousness could be seen as the ability to restrain any form of impulsivity.

Consumers with higher degrees of conscientiousness tend to, in the process of online shopping, form or learn such things as cognition, information processing, alternative evaluation, etc. (Boucher et al., 2007). While shopping online, this type of consumer will harness their knowledge to evaluate whether products are appropriate for their social standing to assess alternative products and make product selections (Tsao & Chang, 2010). Verplanken and Herabadi (2001) expected that this personality trait would be negatively related to impulsive behavior. The statement is supported with the findings of Leh et al. (2020), Fenton-O'Creevy and Furnham (2019), Dewi, Nurrohmah, Sahadi, Sensuse, and Noprison (2017), and Otero-López and Pol (2013), so this research proposed that,

H2: Personality trait (Conscientiousness) has a negative effect on the impulse purchasing behavior of online website customers.

3. Extraversion

Extraversion is involved in impulsive buying because of its association with the need for stimulation and impulsive social behavior (A. Furnham & Heaven, 1999). Individuals high on the trait 'extraversion' have an energetic approach to the social and material world and are social, active, and have a tendency to experience positive emotions (John & Srivastava, 1999; McCrae & Costa Jr, 2008). This sociability means they are more likely to come in contact with salespeople and given the risk-taking propensity being consistent with the extrovert disposition toward excitement-seeking and uncertainty preference (Herabadi, 2003). The variety and high levels of excitement that are attributed to impulse buying distinguish it from more rational consumer decision-making (Dennis W. Rook, 1987). People with high extraversion are more likely to act impulsively when shopping due to their excitement-seeking nature.

According to Chen (2011), the chances of extraverts committing impulsive buying are likely to be more compared to those low in this trait. This assumption is given further support by the views of Eysenck and Eysenck (1985) who suggested that extraversion implied a more impulsive person with lower self-control. Extraversion is positively related to customer-employee interaction, which in turn leads to more utilitarian and hedonic values perceived by customers (Itani, El Haddad, & Kalra, 2020).

Several characteristics of extraversion are assertive, friendly, talkative, and having a high amount of emotional expression (Sims, 2016). Extraverts seek engagement in social situations more than introverts (Adrian Furnham & Brewin, 1990). This personality trait is positively linked to impulsive buying behavior as they are heavier users of the internet (Mowen & Spears, 1999), and they create electronic word of mouth content (Husnain, 2016), which could cause them to be easily influenced when they are online. Several studies have also confirmed that Extraversion has a positive effect on impulse buying (Chein, Hui, & Lee, 2020; Dewi et al., 2017; Leh et al., 2020). Therefore, this research proposed that,

H3: Personality trait (Extraversion) has a positive effect on the impulse purchasing behavior of online website customers.

4. Agreeableness

Agreeableness indicates caring, compassion, obliging, and sincere attitude (Ratnawat & Borgave, 2019). Agreeableness deals with motives for maintaining positive relations with others and is considered a tendency to be compassionate and cooperative rather than suspicious and antagonistic towards others (McCrae & Costa Jr, 2008). According to (Husnain, 2016), agreeableness personality comprises kindness, altruism, trust, affection, and other social behaviors that positively impact the ability of subjects to portray impulsive buying behaviors.

According to Milfont and Sibley (2012), individuals whose score high in agreeableness are compliant, pleasant, cooperative, and strongly cared about the well-being of family members and friends. They also tend to trust rather than doubt and will not have strong negative emotions as compared with individuals with low agreeableness. It is reasonable to believe that more agreeable consumers may trust online vendors more than those who are more cautious, which would inhibit their buying urge (Chen & Lee, 2015).

High agreeable individuals consider money to be less important and are usually less wealthy than those low in agreeableness (Lin-Healy & Small, 2013; Matz & Gladstone, 2018). Placing little importance on money can be detrimental to the financial health of those agreeable individuals who lack the economic means to compensate for their predisposition and can increase the likelihood of money mismanagement (Matz & Gladstone, 2018). Taking into account the tendency of trust, cooperativeness, and the chance of money mismanagement, agreeable individuals may be more prone to spending money impulsively.

As agreeable people spend considerable time online, they are motivated toward interaction, seek acceptance from others, develop strong relationships with others, and tend to get engaged with Online Brand Communities (Marbach, Lages, & Nunan, 2016; Tsao, 2013). Electric word of mouth also plays a significant role in influencing high agreeableness individuals to make an impulsive purchase, especially if the product that they are targeting has a good review or comments (Husnain, 2016; Marbach et al., 2016; Tsao, 2013). Considering all of this literature, even though the evidence of the effect of agreeableness on online impulse buying is still lacking, this research assumes that,

H4: Personality trait (Agreeableness) has a positive effect on the impulse purchasing behavior of online website customers.

5. Neuroticism

Neuroticism refers to the tendency to experience negative effects such as sadness and vulnerability (Costa & McCrae, 1985). It is sometimes called emotional instability or is reversed and referred to as emotional stability. As per literature, individuals scoring highly on neuroticism traits are prone to insecurity and emotional distress, while individuals scoring lowly on this personality trait of emotional instability tend to be more relaxed and less prone to distress (McCrae & Costa Jr, 2008)

As per Shahjehan et al. (2012) impulsive buying positively correlated with neuroticism (emotional instability) which meant that individuals that experienced emotional instability, anxiety, moodiness, irritability, and sadness were more likely to display impulsive buying behaviors. Considering the emotional nature of impulsive buying (Silvera, Lavack, & Kropp, 2008), it is believed that impulsive buying behavior is expected to be positively related to neuroticism. Besides that, the correlation between neuroticism and impulsivity also have been studied extensively by researchers, and it was found that there was a significant positive association between them (Borgave, 2019; Bratko, Butković, & Bosnjak, 2013; Farid & Ali, 2018; Herabadi, 2003; Leh et al., 2020; Silvera et al., 2008). Neuroticism influenced impulsive buying behavior especially when the individuals tried to overcome their low self-esteem (Borgave, 2019).

Specifically, with IB, Neuroticism through its relationship to emotional liability may increase reliance on behaviors aimed at mood enhancement or repair, underpinning the “retail therapy” aspect of buying (Atalay & Meloy, 2011). Impulse buying can also help in effectively reducing depression and help improve mood in a positive manner (Leh et al., 2020; Sneath, Lacey, & Kennett-Hensel, 2009). Research by Otero-López and Pol (2013) concluded that neuroticism, extraversion, agreeableness, and openness affect compulsive buying behavior where neuroticism is the most significant trait.

H5: Personality trait (Neuroticism) has a positive effect on the impulse purchasing behavior of online website customers.

METHODOLOGY

This research is using quantitative methodology as the research approach. Questionnaires will be distributed to people who have used a website to purchase something online. Cross-sectional data is selected to observe the variables in the research framework, and the data will be connected at one time period only within August 2021. The data collection strategy shall be carried out by conducting a sample of study respondents. Primary data in this study were collected by distributing online questionnaires using Google forms and survey monkey which were then distributed through social media such as digital messaging applications such as Line and WhatsApp, in these study data collection techniques using questionnaires as research instruments, the questionnaire is a set of written formulas questions answered by respondents (Sekaran & Bougie, 2019).

Questionnaires distributed were addressed to respondents from the sampling population, which was limited to above 22 years old who have used a website to make a purchase and live around DKI Jakarta area, questions used in the questionnaire are closed-ended type questions consisting of the scale used is a Likert scale. In this study, researchers used a scale range of 1-5 with each meaningful scale as follows: "1" Strongly Disagree, "2" Disagree, "3" Neutral, "4" Agree, and "5" Strongly Agree (Hair, Sarstedt, Hopkins, & Kuppelwieser, 2014). Secondary data sources in this research were collected from previous research that has a connection with this research, literature review from the library, books, reports made by several organizations, and also websites. Moreover, this study also add entering screening questions into questionnaire questions according to the criteria needed to prevent error.

This study uses a sampling technique with non-probability sampling, more specifically, judgmental sampling in which the selected population elements become the sample chosen by the researcher based on the assessment of the researcher because the researcher believes that these elements can describe the target population needed by this study well. Judgmental sampling is referred to as purposive sampling; it is done by selecting samples because they have the attributes that are important to understand the research topic. (Hair et al., 2014).

Table 1 Operationalization of the variables

Variable	Items	Measurement item	Source
Online Impulse Buying	IB1	I often buy online things spontaneously.	Zou, 2016
	IB2	I often buy online things without thinking	
	IB3	Sometimes I feel like online buying on the spur of the moment.	
	IB4	Sometimes I am a bit reckless about what I buy online.	
Openness to Experience	O1	I have unlimited creative ideas.	Tom Buchanan et al. (2005)
	O2	I have ample imagination.	
Conscientiousness	C1	Am always prepared.	
	C2	Make plans and stick to them.	
	C3	Carry out my plans.	
	C4	Never put off till tomorrow what you can do today.	
Extraversion	E1	Am the life of the party.	
	E2	Am skilled in handling social situations.	
	E3	Make friends easily.	
	E4	Know how to captivate people.	

Variable	Items	Measurement item	Source
Agreeableness	A1	Respect others.	
	A2	Insult people.	
	A3	Get back at others.	
	A4	Cut others to pieces.	
Neuroticism	N1	Have frequent mood swings.	
	N2	Dislike myself.	
	N3	Seldom feel blue.	
	N4	Panic easily.	
	N5	Am often down in the dumps.	
	N6	Often feel blue.	

Source: Data Process (2021)

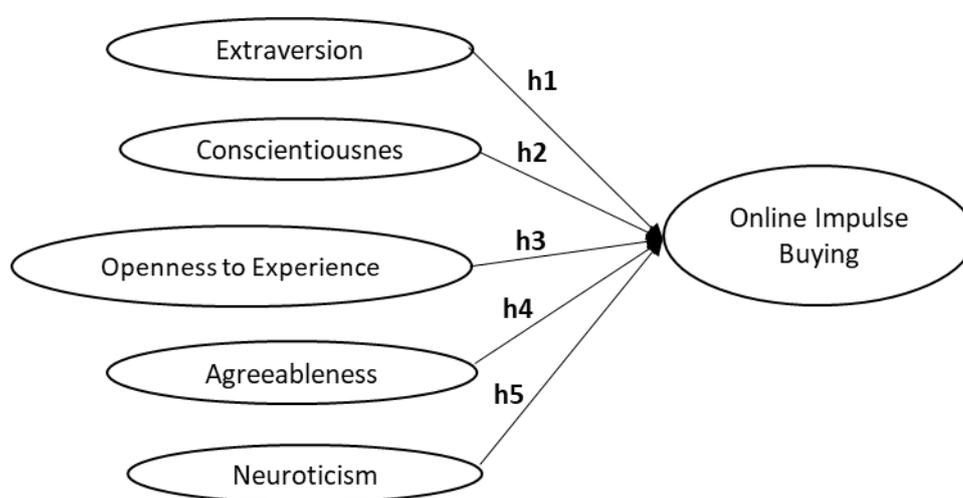


Figure 1. Theoretical Framework

Source: Data Process (2021)

Data obtained from the distribution of questionnaires will be collected and tested its validity and reliability. In testing the validity and reliability, the researcher will use Smart PLS 3.2 and in processing the data, the researcher will use the SEM (Structural Equation Modeling) analysis method. Evaluation of PLS models is done by looking at the outer model (measurement model) and inner model (structural model). The outer model shows the specification of the relationship between latent variables, ie between independent variables and dependent variables (Ghozali & Fuad, 2008).

ANALYSIS AND RESEARCH FINDINGS

1. Research Implementation

Before the main stages are carried out, the researcher runs the pre-test stage first. The pre-test was conducted to determine the validity and reliability of the questionnaire questions. This is done to prevent problems that may arise when processing data in the main test. Data collected from respondents were processed using smartpls 3.2. The results of the pre-test questionnaire showed that the questions contained in the questionnaire were mostly valid and reliable. Therefore, the researcher distributed the questionnaire to the main test.

The distribution of questionnaires for the main test is done by Google Forms. The questionnaire method the researcher used consisted of a series of statements with choices answers that are already available so that they are easily analyzed into statistical data processing, questionnaires distributed were addressed to respondents from the sampling population, which was limited to above 22 years old who have used a website to make a purchase and live around DKI Jakarta area. Researchers managed to get 111 respondents, and 100 respondents who passed the screening stage. Based on these considerations, this study used 100 respondents for further processing.

2. Demographic Characteristics

The majority of the respondents are female; and it takes up to 55%, while the rest, 45% are male. On the other hand, the majority age of the respondents is 26 - 30-Year-Old years old which the percentage is 33%. The lowest percentage of the respondents' age is 1% in which the age is <21 years old. 70% of the respondents identified themselves as a private employee, and the lowest percentage is 2% for the respondents who identified themselves as a public employee. 63% of the respondents identified themselves as S1, and the lowest percentage is 1% for the respondents who identified themselves as other.

3. Central Tendency of Variables

Based on the respondent input, data were processed using SPSS. Below is the result for 6 variables, Neuroticism, Extraversion, Agreeableness, Conscientiousness, Openness to Experience, and Online Impulse Buying.

The variable contribution in this research shows the indication of meaningful contribution and standard deviation of Neuroticism with a mean of 16.690 and standard deviation of 3.271, Extraversion with a mean 14.550 and 3.208 as its standard deviation, Agreeableness with a mean of 10.120, and the standard deviation of 2.051, Conscientiousness with mean 15.400 and the standard deviation of 2.462, Openness to Experience with mean 7.470 and the standard deviation of 1.761, while for Online Impulse Buying with mean 12.820 and the standard deviation of 3.586

4. Evaluation of Measurement Model

Evaluation of the research model using path analysis with Smart PLS version 3.2. Evaluation of the research model is carried out to evaluate the measurement model (outer model) and structural model (inner model). Outer models are used to determine the construct validity and reliability in the model, while the structural model is used to determine the relationship between latent variables.

I. Measurement Model

a. Outer Loading

The results of the study explained that all of the construct indicators of the study have an outer loading value above 0.70. Hair et al. (2014) state that instruments with outer loading above 70% can be used for further analysis because they are considered to be eligible, the researcher did a recalculation and obtained results like the table above. The results of the analysis explained that the research instrument had passed the convergent validity test.

b. Cronbach's Alpha

The results of the Cronbach's alpha value are more than 0.60 and the composite reliability construct is greater than 0.70. All constructs have higher values than measurements. So they can be said to meet the criteria of validity and reliability so that they can be used in testing structural models and hypotheses.

c. Composite Reliability

The result of Composite Reliability shows that Agreeableness 0.910, Conscientiousness 0.928, Extraversion 0.922, Neuroticism 0.955, Online Impulse Buying 0.901, and Openness to Experience 0.898, that so composite reliability was accepted.

d. Average Variance Extracted (AVE)

The results obtained that all research constructs have a composite reliability value greater than 0.7. In addition, the AVE value of the research construct is higher than 0.5. These results provide the conclusion that the research instrument has passed the reliability test, and can be used as a research instrument.

e. Discriminant Validity

The discriminant validity of each construct is greater than the correlation value between latent variables. The conclusion that can be drawn is that the research instrument has passed the discriminant validity test.

f. Path Coefficient

The path coefficient estimates are evaluated based on T-statistic values. The path coefficient estimation explains how strong the effect of one variable is on another variable obtained by the bootstrap procedure. The measurement items used can be said to be significant if the t-value is above 1.96 at an error margin of 5%.

Table 4.1 Patch Coefficient

	Coefficient	T-values>1.96	P-values <0.05	Result
Agreeableness >> Online Impulse Buying	0.041	0.403	0.687	Rejected
Conscientiousness >> Online Impulse Buying	0.228	2.286	0.023	Accepted
Extraversion >> Online Impulse Buying	0.401	2.679	0.008	Accepted
Neuroticism >> Online Impulse Buying	0.328	3.302	0.001	Accepted
Openness to Experience >> Online Impulse Buying	0.108	0.862	0.389	Rejected

Source: Data Process 2021

g. Coefficient of Determination (R² value)

The result shows that the value of R² for online impulse buying is 0.428, it illustrates that the construct of online impulse buying can be explained by the construct of Big Five Personality Traits by 42,8%, whereas 57.2% is explained by other constructs outside of the proposed research model.

Based on the value of R-square adjusted above in which each has been multiplied by 100%, produces a determination coefficient value of online impulse buying of 39,7%. Such value shows that 39,7% of the variation in online impulse buying values can be explained by Big Five Personality traits, while the remaining 60.3% can be explained by other variables outside the analysis model.

h. Effect Size f square (f²)

The result shows that the value of f² explains agreeableness and openness to experience has a medium effect on online impulse buying. Otherwise, conscientiousness, extraversion, and neuroticism have a strong effect on online impulse buying.

5. Result of Hypothesis Test

Effect of Openness to Experience to Online Impulse Buying shows the T-value and p-value. The T-value is 0.862(<1.96), and the p-value 0.389 (>0.05). Therefore, the hypothesis is rejected.

Effect of Conscientiousness on Online Impulse Buying shows the T-value and p-value. The T-value is 2.286 (>1.96), and the p-value 0.023(<0.05). Therefore, the hypothesis is accepted.

Effect of Extraversion on Online Impulse Buying shows the T-value and p-value. The T-value is 2.679 (>1.96), and the p-value 0.008(<0.05). Therefore, the hypothesis is accepted.

Effect of Agreeableness on Online Impulse Buying shows the T-value and p-value. The T-value is 0.403 (<1.96), and the p-value 0.687 (>0.05). Therefore, the hypothesis is rejected.

Effect of Neuroticism on Online Impulse Buying shows the T-value and p-value. The T-value is 3.302 (>1.96), and the p-value 0.001 (<0.05). Therefore, the hypothesis is accepted.

6. Analysis and Discussion

Considering the intellectual curiosity associated with the Openness to Experience trait (McCrae & Costa Jr, 2008), it is expected that people with a high level of openness are likely to be more impulsive. Therefore, this research proposes that openness to experience will positively impact online impulse buying. However, the hypothesis test result shows that openness to experience does not have a significant relationship with online impulse buying. This is in contrast with the findings of Rehman and Manjur (2018) and Leh et al. (2020). This means that people with high intellectual curiosity and people that seek out new experiences do not necessarily involve more online impulse buying activity. This is in line with the findings of Ratnawat and Borgave (2019). Therefore, the hypothesis is rejected.

Conscientiousness is associated with greater impulse control and the planning and self-regulation of behavior (Carver, 2006). Consumers with higher degrees of conscientiousness tend to use more of their cognitive abilities, information processing, and usually analyzing alternatives when shopping online (Boucher et al., 2007). Therefore, people with high conscientiousness are less likely to involve in online impulse buying because they usually think and plan first before making a purchase. The result of this study shows the T-value and p-value. The T-value is 2.286 (>1.96), and the p-value 0.023(<0.05). Therefore, the hypothesis is accepted. This means that the higher the Conscientiousness of a consumer, the higher the chance of them making an impulsive buying. However, instead of having a negative effect on online impulse buying, this research found that conscientiousness has a positive effect. This is not in line with the findings of Leh et al. (2020), Fenton-O'Creevy and Furnham (2019), Dewi et al. (2017), and Otero-López and Pol (2013). When thinking rationally, a consumer may purchase something impulsively to get the best price and therefore does not want to miss the chance to get a product even though they don't have an initial plan to purchase it,

especially for consumers with lower income and higher price sensitivity. Waheed Khan (2021), Farid and Ali (2018), and Rehman and Manjur (2018) found that conscientiousness positively affects online impulse buying.

Extraversion is involved in impulsive buying because of its association with the need for stimulation and impulsive social behavior (A. Furnham & Heaven, 1999). Individuals high on the trait 'extraversion' have an energetic approach to the social and material world and are social, active, and have a tendency to experience positive emotions (John & Srivastava, 1999; McCrae & Costa Jr, 2008). Chen (2011) and Eysenck and Eysenck (1985) suggest that people who scored higher on extraversion people have a higher chance of making an impulsive purchase. With this literature, the researchers propose that extraversion is positively correlated with online impulse buying. The result of smartpls shows the T-value and p-value. The T-value is 2.679 (>1.96), and the p-value 0.008(<0.05). Therefore, the hypothesis is accepted. This is in line with the finding of Dewi et al. (2017), Chein et al. (2020), and Leh et al. (2020). This means that the higher the Extraversion of a consumer, the higher the chance of them making an impulsive buying.

According to Husnain (2016), Agreeableness personality comprises kindness, altruism, trust, affection, and other social behaviors that positively impact the ability of subjects to portray impulsive buying behaviors. Because of the tendency to trust rather than mistrust, this research proposes that agreeableness has a positive relationship with online impulse buying. The result of smartpls shows the T-value and p-value. The T-value is 0.403 (<1.96), and the p-value 0.687 (>0.05). Therefore, the hypothesis is rejected. This means that there is no significant relationship between agreeableness and online impulse buying. This is in line with the findings of Chein et al. (2020), Jamali and Baloch (2019a), and Badgaiyan and Verma (2014).

Neuroticism refers to the tendency to experience negative effects such as sadness and vulnerability (Costa & McCrae, 1985). In terms of online impulse buying, when people face an emotional liability, they may commit to impulse buying to make themselves feel better. Atalay and Meloy (2011) refer to this act as "retail therapy". According to Sneath et al. (2009), impulse buying can effectively reduce depression and positively improve mood. The result of smartpls shows the T-value and p-value. The T-value is 3.302 (>1.96), and the p-value 0.001 (<0.05). Therefore, the hypothesis is accepted. This is in line with the findings of Leh et al. (2020), Otero-López and Pol (2013), and Rehman and Manjur (2018), which concluded that neuroticism is positively related to online impulse buying. This means that the higher the level of Neuroticism, the higher the chance of someone committing to an online impulsive buying.

CONCLUSION AND RECOMMENDATION

1. Theoretical implication

Study about the effect of personality traits on online impulse buying Indonesia is still limited. Therefore, this research provides additional reference regarding the effect of personality traits on the online impulse buying behavior of consumers. This research provides empirical evidence and validates previous research that three out of five personality traits, namely Conscientiousness, Extraversion, and Neuroticism, are having a positive and significant effect on online impulse buying.

Most previous research found that there is a negative effect of Conscientiousness on impulsive buying behavior. In short, it is less likely for an individual to act impulsively if they are planned, organized, and efficient because of their well-organized nature. However, the result in this research shows otherwise where Conscientiousness is positively related to impulse buying. Moreover, this research also found that Agreeableness and Openness to Experience do not significantly affect online impulse buying. These findings create an opportunity for future studies to further analyze the effect of these three personality traits on online impulse buying.

2. Managerial Implication

The result of this study shows that there is a positive and significant effect of Conscientiousness, Extraversion, and Neuroticism on Online Impulse Buying. To increase sales on a website, marketers should trigger customers with these three personality traits to make an online impulse buying.

3. Limitation and Recommendation for Future Research

Future researchers should consider the limitation in this research if they would like to study the same topic. First of all, in this study, the author only focuses on the personality trait factor of online impulsive buying. Researchers can add other internal factors of online impulse buying such as hedonic motivation, utilitarian motivation, materialism, collectivism, shopping enjoyment tendency, and many more. Moderating variables between personality traits and online impulse buying can also be added such as demographic profiles of each respondent, for example, age, education, and income. Second, the author of this research can only obtain 100 samples. A larger number of samples is always recommended to produce better results. Third, the sample of this study was limited to the website users in DKI Jakarta Area. To obtain more variation in the data, the author suggests expanding the sampling area, for example, the whole population in West Java. Future research could also gather data about income, since it may be useful to find out if income plays a role in moderating the relationship between personality traits and online impulse buying. In addition, it will be interesting if research studies could be conducted on how intrinsic and extrinsic factors interact with each other to instigate impulse buying.

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