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# The Role of Website Quality, Positive Emotion and Personalized Advertising in Triggering Impulse Buying Behavior: A Study of Online Retailer in Indonesia

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## Abstract

**Purpose:** The primary objective of this study is to investigate the impact of website quality on impulse buying of the online retailer, which is mediated by positive emotion and moderated by personalized advertising. **Research design, data and methodology:** The present study used a survey methodology conducted on many user's smartphones. The sample in this study included 409 college students in Indonesia. Purposive sampling was used as the sampling technique. Data was collected by distributing questionnaires to many respondents through the Google Documents online survey. **Results:** The findings derived from the application of structural equation modelling for data analysis show that 1). Website quality affects impulse buying and positive emotion, and 2). The impact of website quality on impulse buying was mediated by positive emotion and moderated by personalized advertising. **Conclusions:** The findings presented in this study has significant theoretical implications that contribute to the existing concept on the relationship between website quality, positive emotion, personalized advertising and impulse buying. The findings of the research possess managerial implications. It can be used as a reference in determining website quality and the appropriate personalized advertising that increases online impulse buying at online retailer In Indonesia.

**Keywords :** Impulse Buying, Website Quality, Positive Emotion, Personalized Advertising, Online Retailer

**JEL Classification Code :** M20, M30, M31, M37

## 1. Introduction

Impulse buying is one of the essential aspects of consumer behavior that has received significant attention from marketers (Sharma et al., 2014). The rapid growth of

e-commerce, which provides a lot of shopping pleasure and offers many opportunities for consumers to shop wherever and whenever they want, has the potential to cause impulsive shopping behavior of the online retailer (Verhagen & Van Dolen, 2011). Studies conducted in the

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United States related to impulse buying found that the total sales of the online retailer caused by impulse buying in the United States reached US\$ 4 billion per year (Dawson & Kim, 2010). Verhagen and Dolen (2011) stated that as many as 40 per cent of online tourism product purchases were made impulsively. The results of a survey conducted by MasterCard in 2017 showed that as many as 51.2% of consumers in Taiwan had shopped impulsively via mobile devices (Tendelilin, 2010). Zheng et al. (2013) estimated that about 40% of all purchases made by consumers on online retailers are due to online impulse buying. Thus, the increase in online impulse buying at the online retailer has motivated the need to study online impulse buying behavior in Indonesia.

In online shopping, website quality is one of the stimuli derived from external environmental factors that influence consumers impulse buying (Turkyilmaz et al., 2015a; Verhagen & Van Dolen, 2011; Zheng et al., 2013). To attract consumers to visit the company's website, online retailer invests in building a quality website that meets customer needs. Through a quality website, marketers can attract consumer attention and visits to the online retailer leading consumers to engage in impulse buying online (Wu & Ye, 2013). A website designed with good quality by an online retailer can effectively lead consumers to make impulse buying (Akram et al., 2016; Hasanov & Khalid, 2015; J. Kim & Lennon, 2013). Akram et al. (2016) state that website quality positively and significantly influences online impulse buying behavior among customers of these online retailer. The results of the study are in line with the results of research conducted by several previous researchers (Liu et al., 2013; Turkyilmaz et al., 2015a; Wells et al., 2011) which state that the quality of an online retailer's website has a positive and significant influence on triggering impulse buying.

Furthermore, various research results on website quality and its influence on impulse buying have yet to provide a consistent result. For example, some research results show that website quality influences increasing impulse buying (Akram et al., 2018; Q. Chen et al., 2005; Jibril et al., 2020; Liu et al., 2013; Turkyilmaz et al., 2015a; Verhagen & Van Dolen, 2011; Wells et al., 2011; Wu & Ye, 2013; Zou, 2018). However, other research results show that website quality is not directly related to impulse buying (Salman et al., 2014). Likewise, According to Turkyilmaz et al.'s (2015b) research findings, the quality of websites does not significantly affect online impulse buying made by online retailers.

Furthermore, studies by Mummalaneni et al. (2016) and Kim and Lennon (2013) found that good website quality has a positive and significant influence on positive emotions, namely the pleasure and excitement of consumers who shop online. The study's results explain that good website quality influences a pleasant consumer shopping experience. The

study results strengthen several previously conducted studies on the effect of website quality on consumer responses, including emotions, cognitions, and behavioral intentions (Eroglu et al., 2003; Ha & Im, 2012). Additionally, the findings of a study by Mohan et al. (2013) indicate that positive emotion have a positive and significant impact on impulse buying. Herabadi et al. (2009) say that the buying experience of impulsive consumers of the retail store is based on high emotions. The results of research conducted by Verhagen and Van Dolen (2011) state that the dimensions of website quality, which include functional convenience as measured by merchandise attractiveness and aspects of ease of use, have a positive and significant influence on impulse buying at the online retailers through positive emotions. Thus, in this impulse buying research model positive emotion can be a significant mediating factor.

One crucial aspect that has received significant attention from online retailers in current marketing activities is personalized advertising. Personalized advertising is created and addressed personally using personal information (Wolin et al., 2002; Yu & Cude, 2009; Yuan & Tsao, 2003). Personalized advertising makes customers feel that advertisements are addressed to customers personally and makes customers have considerable interest in advertisements (Kreuter & Wray, 2003). When consumers visit an impressive website of the online retailers with vital transaction security aspects, attractive visual displays, quality information, and intuitive navigation and get personalized advertising that suits personal preferences and needs, it can significantly strengthen the impact of website quality on impulse buying behavior (Froughi et al., 2013; Hanzae & Taherikia, 2010). This statement is relevant to the results of research conducted by Kwak et al. (2006), Li and Liang (2010), and Lin and Chuang (2005) which state that the strength of the relationship between the determinants of impulse buying and impulse buying may be enhanced by other factors, such as age, gender, income, money availability, time pressure, promotions and personalized advertising. Therefore, in this research model, personalized advertising is included as a variable that moderates the impact of website quality on impulse buying of the online retailers.

Based on a review of previous research, it is known that no impulse buying model considers the indirect relationship between website quality, positive emotions, and personalized advertising with impulse buying. Therefore, it is necessary to conduct research examining the indirect relationship between website quality, positive emotions, and personalized advertising with impulse buying because research focusing on one problem can produce an overly simplistic and one-sided view of behavior (Turkyilmaz et al., 2015a).

The primary objective of this study is to investigate the direct impact of website quality on impulse buying behavior in online retailers. Additionally, this study aims to explore the indirect influence of website quality on online impulse buying by examining the role of positive emotions. This study is also intended to examine the effect of personalized advertising in moderating the impact of website quality on impulse buying behavior. The contribution of this research can be used for the online retailer to develop marketing strategies based on website quality and positive emotion and also determine the appropriate personalized advertising to increase online impulse buying, company sales and profitability. This study focuses on the website quality of the web app downloaded through the App Store or Play Store on the user's smartphone because most research on website quality is conducted on company's website visitors, and there are still few studies on website quality conducted on web app users (Idzni, 2020). Relevant to the study, according to the results of global market research regarding e-commerce consumer behavior in Indonesia during the end of 2021, it is known that almost all users (98%) more often access e-commerce through applications downloaded on their smartphones or tablets (Idzni, 2020).

This research is also contributed theoretically in developing an alternate research model of online impulse buying behavior that explicitly explains the impact of website quality directly or indirectly on the impulse buying through positive emotions and personalized advertising.

## 2. Literature Review

### 2.1. Website Quality, Positive Emotions, and Impulse Buying

Website quality is a consumer's perception of a website based on features that can meet customer needs. Perception of website quality is an internet user's evaluation of a website that includes the ability to meet needs and all the necessary information about the product (Aladwani & Palvia, 2002; G.-D. Chen et al., 2008). Various results of previous studies also mention various dimensions of website quality, including security, convenience, information quality, ease of use, and service quality (Hasanov & Khalid, 2015). Similarly, some previous researchers have successfully developed website architecture quality models and structures (Bergebala-Mirabent et al., 2016; Liu et al., 2013; Verhagen & Van Dolen, 2011). Effective website design is essential to e-commerce success, ranging from functionality, usability, ease of navigation and site interface (Constantinides, 2004; Deng & Poole, 2012; Law & Bai, 2008; Verhagen & Van Dolen, 2011). The results of that study are relevant to research conducted by several previous

researchers who stated that perceived ease of use has a positive and significant influence on impulse buying online (J. Chen et al., 2001; Venkatesh & Morris, 2000).

The results of research conducted by Verhagen and Van Dolen (2011) state that the dimensions of website quality, which include functional convenience as measured by aspects of merchandise attractiveness and aspects of ease of use, have a positive and significant influence on impulse buying through positive emotions. The study conducted by Mummalaneni et al. (2016) found that website quality dimensions, including layout organization, appearance and signage, have a positive and significant influence on positive emotions, namely the pleasure and excitement of online shoppers. A study conducted by Mohan et al. (Mohan et al., 2013) on 733 respondents at 44 supermarkets in Chennai, southern India, revealed that positive emotions have a positive and significant influence on impulse buying. The results of the study explain that supermarket customers who feel enthusiastic, passionate and happy in India tend to make impulse buying. A study by Zhang et al. (2022) states that positive emotions produce more impulse buying. Furthermore, a study by Martaleni et al. (2022) found that respondents who experienced positive emotions were more conducive to impulse buying than negative emotions. Consumer feel that in positive emotions, they have feelings that are not restricted or restrained, have a desire to value themselves, and have higher energy levels. Based on this explanation, the following hypothesis is formulated:

**Hypothesis 1 (H1):** Website Quality Has a Positive and Significant Effect on Impulse Buying.

**Hypothesis 2 (H2):** Website Quality Has a Positive and Significant Effect on Positive Emotions.

**Hypothesis 3 (H3):** Positive Emotions Has a Positive and Significant Effect on Impulse buying.

**Hypothesis 4 (H4):** Website Quality Has a Positive and Significant Effect on Impulse Buying Through Positive Emotions.

### 2.2. Personalized Advertising, Website Quality and Impulse Buying

Personalized Advertising is one of the critical factors in understanding consumer needs and wants, offering different products and services to each individual, and encouraging customers to buy impulsively (Sharma et al., 2014). Relevant to previous research, Hausman (2000) states that personalized advertising on a website can strengthen the influence of website quality on impulse buying. When consumers visit and experience a quality website (transaction security, visual appeal, quality information, ease of navigation) and receive personalized advertising that matches consumer preferences and needs, it can strengthen

the impact of website quality on impulse buying behavior. Other studies conducted by Kwak et al. (2006), Lin and Chuang (2005) and Rook and Fisher (1995) add that the strength of the relationship between determinants of impulse buying and impulse buying may be increased by other factors such as age, gender, income, money availability, time pressure, promotions, and ad personalization. The results of this study are supported by research conducted by Shahpasandi et al. (2020); Jeon and Kim (2015); Kim and Han (2014), which states that personalized advertising has a positive and significant influence on impulse buying. Likewise, research conducted by Dawson and Kim (2010); Zafar et al. (2021) states that personalized advertising positively and significantly influences impulse purchases. Personalized advertising is expected to moderate the effect of website quality on impulse buying.

**Hypothesis 5 (H5):** Personalized Advertising Moderates the Effect of Website Quality on Impulse Buying

### 3. Research Methods and Materials

This study used a survey methodology. The research population consists of consumers who are involved in online purchasing behavior. The research sample amounted to 409 respondents. The sample used in this research included students in Indonesia who were involved in online shopping at various online retailers: Tokopedia, Shopee, Lazada, Buka Lapak, Beli Beli, etc. and use social media (Facebook, Instagram, etc.) in interacting on social networks. Students are the users who use social media the most in interacting on social networks (Aslam et al., 2021), have groups to discuss with each other, and are more involved in online sales and purchases (Dodoo & Wu, 2019). The sampling technique

used in this study was purposive sampling. Data was collected by distributing questionnaires to many respondents through the Google Documents online survey. Before respondents took the survey, several questions were asked to determine the eligibility of respondents in this study, such as "Have you ever been involved in an impulse buying at an online retailer? Furthermore, respondents were asked if they had ever seen personalized advertising on social media pages or other internet-based media. If respondents answered "no," they were directed to the end of the survey. If the respondent said "yes," the respondent was directed to the next part of the question. Data relating to sample demographic characteristics are shown in Table 1.

Variable measurement is carried out using instruments that several previous researchers have developed. Website quality is measured using an instrument developed by Yoo and Donthu (2001). Positive emotion are measured using instruments developed by Beatty and Ferrell (1998). Meanwhile, personalized advertising is measured using an instrument developed by Baek and Morimoto (2012). Furthermore, impulse buying is measured by an instrument developed by Rook and Gardner (1993), and Utama et al. (2021). The construct measurement is shown in table 2. The data analysis technique in this study uses the multivariate Structural Equation Model (SEM) method with the Smart PLS 3 program (Latan et al., 2017). The examination of the path parameter coefficient and its significance level allows for the evaluation of the association between constructs. Hypothesis testing involves the examination of statistical t values and p-values, typically with a predetermined alpha level of 5%, in order to assess the statistical significance of a given hypothesis. The value utilized in the analysis is 1.96. By employing bootstrapping calculations, the values acquired are depicted in Figure 1 below:

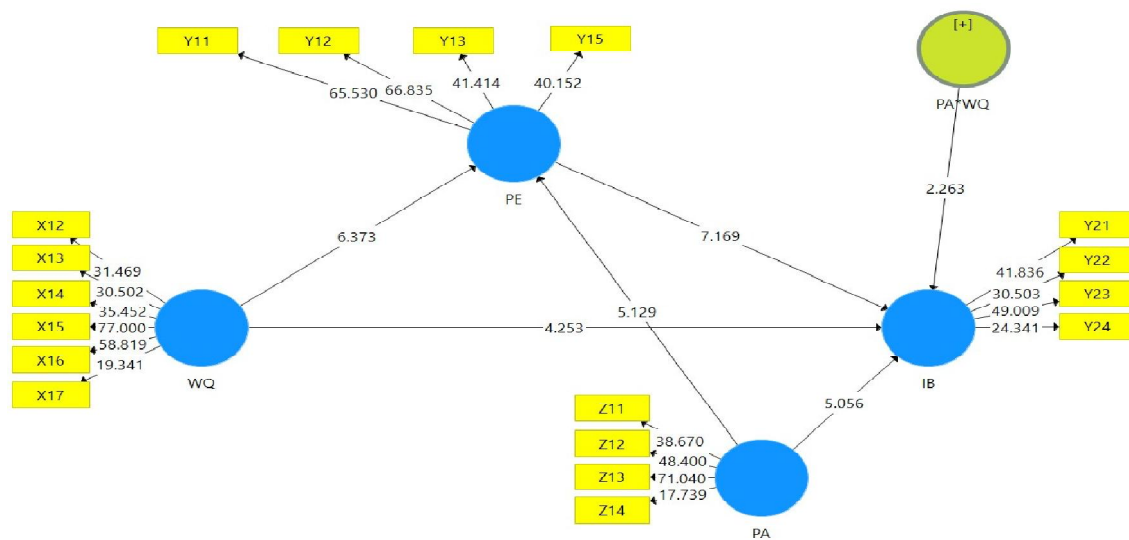


Figure 1: Structural Impulse Buying Model

**Table 1:** Construct Measurement

Construct	Items	Scale
Website Quality		Likert 1-5
X1.2	I find it easy to find information on the websites I visit.	
X1.3	I feel the appearance of the website I visit is full of exciting colors	
X1.4	I feel that the website I visit is creative	
X1.5	The website I visit displays product images well.	
X1.6	I feel it is easy to access the website I visit	
X1.7	I feel that the website I visit has fast processing	
Positive Emotion		Likert 1-5
Y1.1	I have a feeling of comfort when shopping at the online store I visit	
Y1.2	I feel happy when shopping at the online store I visit	
Y1.3	I have a sense of interest in shopping at the online store that I visit	
Y1.5	I feel excited when shopping at the online store I visit	
Personalized Advertising		Likert 1-5
Z1.1	Personalized advertising provide purchase recommendations for products/services that suit my needs.	
Z1.2	Personalized advertising allow me to order products/services that are tailor-made for me.	
Z1.3	Overall, personalized advertising are tailored to my needs.	
Z1.4	Personalized advertising make me feel that I am a particular customer.	
Impulse Buying		Likert 1-5
Y2.1	When I go shopping, I often buy things that I didn't intend/plan to buy beforehand	
Y2.2	I tend to think about items I have already bought that I did not plan to buy. (*)	
Y2.3	When I see an item that interests me, I buy it immediately.	
Y2.4	I often buy items without considering the consequences.	

**Table 2:** Demographic characteristics

		Frequency (n)	Percentage (%)
Gender	Male	99	24
	Female	310	76
Age	15-25	373	91
	26-35	21	5
	36-45	12	3
	46-60	4	1
Marital Status	Married	20	5
	Nor Married	389	95

## 4. Results and Discussion

### 4.1. Measurement Model Validation

The measurement model is evaluated using an evaluation consisting of convergent validity, discriminant

validity, and composite reliability. Table 3 summarizes convergent validity, reliability and average variance extracted (AVE). Convergent validity has a loading factor value greater than the benchmark value of 0.70 (ranging between 0.713 and 0.907), Cronbach’s alpha greater than the benchmark value of > 0.7 (ranging between 0.713 and 0.907), composite reliability value greater than the benchmark value > 0.6 (ranging between 0.862 and 0.930), AVE value greater than the benchmark value > 0.5 (ranging between 0.612 and 0.769). In addition, discriminant validity is calculated to ensure that each concept of each latent variable is different from other variables. Methods are used: Fornell-Larcker. The test results using Fornell-Larcker show that the square root of each construct's AVE is higher than the highest construct's correlation with other constructs in the model used (Hair, 2009). Each test result is shown in Tables 3 and 4 below:

**Table 3:** Convergent validity, reliability and average variance extracted (AVE)

Latent Variable	Convergent Validity		Reliability		Average Variance Extracted (AVE)
	Indicator	Loading	Cronbach's Alpha	Composite Reliability	
Impulse Buying	Y21	0.799	0.788	0.863	0.612
	Y22	0.773			
	Y23	0.829			
	Y24	0.724			

Latent Variable	Convergent Validity		Reliability		Average Variance Extracted (AVE)
	Indicator	Loading	Cronbach's Alpha	Composite Reliability	
Personalized Advertising	Z11	0.84	0.847	0.898	0.689
	Z12	0.869			
	Z13	0.888			
	Z14	0.713			
Positive Emotion	Y11	0.894	0.899	0.93	0.769
	Y12	0.907			
	Y13	0.872			
	Y15	0.832			
Website Quality			0.904	0.927	0.679
	X12	0.789			
	X13	0.807			
	X14	0.851			
	X15	0.893			
	X16	0.864			
	X17	0.728			

**Table 4:** Fornell-Larcker

	IB	PA	PE	WQ
IB	0.782			
PA	0.718	0.830		
PE	0.760	0.726	0.877	
WQ	0.713	0.745	0.748	0.824

## 4.2. Hypothesis Testing

### 4.2.1. Direct Effect Test

Each relationship path used to test the hypothesis receives a t-statistic value as a result of the bootstrapping technique. The t-statistic value will be compared with the t-table value. This study uses a 95% confidence level so that the level of precision or limit of inaccuracy ( $\alpha$ ) = 5% = 0.05, the value of the t-table value is 1.96 (Hair, 2009). The hypothesis is not supported if the t-statistic value is smaller than the t-table value (t-statistic < 1.96). The hypothesis is supported if the t-statistic value is greater than or equal to the t-table (t-statistic  $\geq$  1.96). Based on the data processing that has been done, the statistical value of the path coefficient is obtained in Table 5 below:

**Table 5:** Path Coefficient

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
PE -> IB	0.413	0.402	0.058	7.159	0.000
WQ -> IB	0.229	0.24	0.056	4.079	0.000
WQ -> PE	0.748	0.755	0.033	22.555	0.000

P Values significant at  $\alpha$  0.05

Based on Table 5, it is known that website quality with a parameter coefficient value of 0.229 and significant at 5%

with a p-value of 0.000, has a positive and significant impact on impulse buying. The calculated t value is greater than the t table (4.079 > 1.96). Similarly, website quality positively and significantly influences positive emotions with a parameter coefficient value of 0.748 and significant at  $\alpha$  5% with a p-value of 0.000. The calculated t value is greater than the t table (22.555 > 1.96). Furthermore, positive emotions positively and significantly influence impulse buying with a parameter coefficient value of 0.413 and significant at  $\alpha$  5% with a p-value of 0.000. The calculated t value is greater than the t table (7.159 > 1.96). Thus, hypotheses 1, 2, 3 in this research are supported.

### 4.2.2. Mediation Test

It is known that website quality influences impulse buying through positive emotions with a parameter coefficient value of 0.309 and significant at 5% with a p-value of 0.000 and a t-statistic value > t-table (7.308 > 1.96) based on the results of measuring indirect effects, as shown in Table 6. Thus, hypotheses 6 in this study are supported.

**Table 6:** Mediation Test

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
WQ -> PE -> IB	0.309	0.303	0.042	7.308	0.000
WQ -> IB	0.229	0.240	0.056	4.079	0.000

P Values significant at  $\alpha$  0.05

### 4.2.3. Moderation Test

To determine how strongly moderation variables are related to other variables, it can be seen through the path coefficients moderation effect as shown in Table 7 below:

**Table 7:** Path Coefficients Moderation Test

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
PA*WQ -> IB	0.061	0.057	0.029	2.141	0.033

P Values significant at  $\alpha$  0.05

According to Table 7 path coefficients for measuring the moderating effect, which are based on the original sample value of 0.061, p-value 0.033 and t-statistic value  $>t$ -table ( $2.141 > 1.96$ ), personalized advertising significantly and positively moderates the effect of website quality on impulse buying. As a result, this study's hypothesis is supported.

The empirical results of testing hypothesis 1 indicate that a positive and significant effect of website quality on impulse buying. The result of testing hypothesis 1 confirms the importance of a quality website display in stimulating consumers to make impulse buying on online shopping platforms. The results of this study are in line with the results of research conducted by Verhagen and Van Dolen (Verhagen & Van Dolen, 2011) which state that the dimensions of website quality, which include functional convenience as measured by basing on aspects of merchandise attractiveness and aspects of ease of use have a positive and significant influence on impulse buying. The results of this study are also in line with the results of research conducted by several previous researchers, which state that the quality of a website has a positive and significant impact on the occurrence of impulse buying. (Turkyilmaz et al., 2015a; Wells et al., 2011; Wu & Ye, 2013; Zheng et al., 2013). A high-quality website can increase the likelihood of a customer buying impulsively. Website quality depends on various characteristics such as usability, ease of use, and entertainment value, which affect consumers' impulse buying behavior online. The results of research conducted by Turkyilmaz et al. (2015a) show that higher levels of ease of use are associated with increased consumer impulsivity when shopping online.

The findings of testing hypothesis 2 demonstrate that positive emotions are positively and significantly impacted by the quality of websites. The findings of this investigation suggest that good website quality can positively influence website users' emotions. The study's results explain that website quality, which includes attractive design and user-friendly navigation, influences a pleasant consumer shopping experience. The results of this study are relevant to research conducted by Mummalaneni et al. (2016), which states that the dimensions of website quality, which include layout organization, appearance, and signage, have a positive and significant influence on positive emotions, namely the pleasure and passion of consumers who shop online. The results of this study reinforce several studies that have been conducted previously on the effect of website

quality on consumer responses, including: emotions, cognitions, and behavioral intentions (Eroglu et al., 2003; J. Kim & Lennon, 2013).

Based on the results of hypothesis 3 testing, it is known that positive emotions have a positive and significant effect on impulse buying. The result of this study relevant to a study conducted by Beatty and Ferrell (1998), and Flight et al. (2012) that states positive emotions produce more impulse buying. Consumers' positive emotions can trigger impulse buying because positive emotions can affect consumers' perceptions and information processing. When consumers feel positive emotions, such as excitement, enthusiasm, or satisfaction, the focus of their attention will automatically change from rational decision-making to more impulsive (McKinney et al., 2002). The results of study conducted by Mohan et al. (2013) on 733 respondents at 44 supermarkets in Chennai, southern India, revealed that Impulse buying are significantly and positively influenced by positive emotions. The findings of this study demonstrate that energetic, passionate, and cheerful supermarket patrons in India are more likely to make impulse buying.

Furthermore, the results of testing hypothesis 4 showed that the influence of website quality on impulse buying is mediated by positive emotion. This study found that consumers who experience positive emotions when interacting with websites tend to have higher impulse buying intentions than consumers who do not feel positive emotions. The results of this study are in line with research conducted by Kim and Lennon (2013) which states positive emotions can mediate the relationship between website quality and impulse buying intentions. Good website quality can trigger positive emotions in consumers, increasing the tendency to make impulse buying. Website quality, which includes attractive design and user-friendly navigation, influences a pleasant consumer shopping experience. Research by Eroglu et al. (2003) and Flight et al., (2012) state that good website quality can make consumers feel comfortable, happy, and satisfied interacting with the website, thereby increasing positive emotions. These positive emotions can then affect consumers' perceptions of the product, thereby increasing the tendency to make impulse purchases.

The result of hypothesis 5 testing shows that personalized advertising positively and significantly moderates the impact of website quality on impulse buying. The results of this hypothesis testing indicate that personalized advertising can increase the effect of website quality on impulse buying. When consumers see personalized advertising relevant to their interests or needs, good website quality will significantly impact consumers' impulse buying decisions. Websites designed with good quality based on the dimensions of security, convenience, information quality, ease of use, and service quality

(Hasanov & Khalid, 2015), functionality, usability, ease of navigation and site interface (Constantinides, 2004; Deng & Poole, 2012; Lim & Tang, 2008; Yen et al., 2007); website navigation, visual appeal, and transaction security (Wells et al., 2011) can bring pleasure and excitement to consumers who shop online (Mummalaneni et al., 2016). This conception is relevant to the results of research conducted by Kalyanaraman and Sundar (2006) which states that advertising personalization is seen as an essential aspect of advertising communication. When someone finds a personalized message on internet media, the message will be responded positively due to the innovation of the advertising message displayed. (Carpenter & Nakamoto, 1994; Kalyanaraman & Sundar, 2006). Relevant to the results of this study, when consumers see advertisements tailored to their interests or needs, good website quality has a more significant impact on consumer purchasing decisions.

## 5. Conclusions

The objective of this study is to examine the effect of website quality on impulse buying of the online retailer, which is mediated by positive emotion and moderated by personalized advertising. The hypothesis testing results reveal a significant and positive direct effect of website quality on impulsive buying. Additionally, website quality has a significant and positive effect on positive emotions, and positive emotions significantly and positively affect impulse buying. The results of this study suggest that there is a substantial influence of a good website quality on increasing impulse buying and eliciting positive consumer emotions of the online retailer. Consumers who experience positive emotions are more likely to engage in impulse buying. In testing the mediation effect, it was found that positive emotions mediate the effect of website quality on impulse buying. The findings of this study indicate that a high-quality website might elicit positive emotions in consumers, increasing the likelihood of impulse buying behavior of the online retailer. The findings of the moderating effect test revealed that personalized advertising moderates the influence of website quality on impulse buying. The results of hypothesis testing indicate that personalized advertising can enhance the influence of website quality on consumers' impulse buying of the online retailer. When consumers encounter advertisements tailored to their interests or needs, the impact of a good website quality would be more significant on impulse buying of the retail store.

Theoretical implication based on the research findings in this study support the hypothesis that website quality directly or indirectly influences impulse buying through positive emotions. Website quality can influence online

impulse buying because a good website can improve user experience and trust and reduce barriers to impulse buying of the retail store. A poor or poorly functioning website can cause frustration, reduce trust, and increase barriers to making impulse purchases. Website quality have a positive and significant influence on positive emotions, namely the pleasure and excitement of consumers shopping online. When consumers feel positive emotions, such as excitement, enthusiasm, or satisfaction, the focus of their attention will automatically change from rational to more impulsive decision-making. Positive emotions can increase the perceived value of the desired product and lower psychological barriers to impulse buying. Consumers who feel positive emotions tend to feel that the desired product has a higher value and feel more confident in making impulse buying decisions at the online retailer.

For online retailers, this study's results can contribute to creating and encouraging impulse buying behavior that can stimulate impulse buying in consumers. More specifically, online retailer in Indonesia can use websites that effectively influence consumers' positive emotions and subsequently create impulse buying. Given the importance of the contribution of personalized advertising in moderating the effect of website quality on impulse buying online retailer need to consider determining personalized advertising so that consumers are motivated or interested in personalized advertising. It is essential because personalized advertising can strengthen the impact of website quality on impulse buying.

This research was conducted in the context of online impulse buying, at this time impulse buying behavior is possible in the context of offline purchases because there is currently an increasing trend of consumer tendency to shop offline along with the end of the Covid-19 pandemic, which allows consumers to shop offline at various stores or shopping centers so that research on impulse buying in the future needs to be carried out in the context of impulse buying online and offline.

## References

- Akram, U., Hui, P., Khan, M. K., Hashim, M., & Rasheed, S. (2016). Impact of store atmosphere on impulse buying behaviour: Moderating effect of demographic variables. *International Journal of U-and e-Service, Science and Technology*, 9(7), 43-60.
- Akram, U., Hui, P., Khan, M. K., Yan, C., & Akram, Z. (2018). Factors affecting online impulse buying: Evidence from Chinese social commerce environment. *Sustainability (Switzerland)*, 10(2). <https://doi.org/10.3390/su10020352>
- Aladwani, A. M., & Palvia, P. C. (2002). Developing and validating an instrument for measuring user-perceived web quality. *Information & Management*, 39(6), 467-476.

- Aslam, H., Rashid, M., & Chaudhary, N. (2021). Impact of Personalized Social Media Advertising on Online Impulse Buying Behavior. *SEISENSE Business Review*, 1(3), 12-25.
- Baek, T. H., & Morimoto, M. (2012). Stay away from me. *Journal of Advertising*, 41(1), 59-76.
- Beatty, S. E., & Elizabeth Ferrell, M. (1998). Impulse buying: Modeling its precursors. *Journal of Retailing*, 74(2), 161-167. [https://doi.org/10.1016/s0022-4359\(98\)90009-4](https://doi.org/10.1016/s0022-4359(98)90009-4)
- Berbegal-Mirabent, J., Mas-Machuca, M., & Marimon, F. (2016). Antecedents of online purchasing behaviour in the tourism sector. *Industrial Management & Data Systems*.
- Carpenter, G. S., & Nakamoto, K. (1994). Reflections on "consumer preference formation and pioneering advantage." *Journal of Marketing Research*, 31(4), 570-573.
- Chen, G.-D., Chang, C.-K., & Wang, C.-Y. (2008). Ubiquitous learning website: Scaffold learners by mobile devices with information-aware techniques. *Computers & Education*, 50(1), 77-90.
- Chen, J., Zhou, B., Shi, J., Zhang, H., & Fengwu, Q. (2001). Function-based object model towards website adaptation. *Proceedings of the 10th International Conference on World Wide Web*, 587-596.
- Chen, Q., Griffith, D. A., & Shen, F. (2005). The effects of interactivity on cross-channel communication effectiveness. *Journal of Interactive Advertising*, 5(2), 19-28.
- Constantinides, E. (2004). Influencing the online consumer's behavior: the Web experience. *Internet Research*.
- Dawson, S., & Kim, M. (2010). Cues on apparel web sites that trigger impulse purchases. *Journal of Fashion Marketing and Management: An International Journal*.
- Deng, L., & Poole, M. S. (2012). Aesthetic design of e-commerce web pages—Webpage Complexity, Order and preference. *Electronic Commerce Research and Applications*, 11(4), 420-440.
- Dodoo, N. A., & Wu, L. (2019). Exploring the antecedent impact of personalised social media advertising on online impulse buying tendency. *International Journal of Internet Marketing and Advertising*, 13(1), 73-95. <https://doi.org/10.1504/IJIMA.2019.097905>
- Eroglu, S. A., Machleit, K. A., & Davis, L. M. (2003). Empirical Testing of a Model of Online Store Atmospherics and Shopper Responses. *Psychology and Marketing*, 20(2), 139-150. <https://doi.org/10.1002/mar.10064>
- Flight, R. L., Rountree, M. M., & Beatty, S. E. (2012). Feeling the urge: Affect in impulsive and compulsive buying. *Journal of Marketing Theory and Practice*, 20(4), 453-466.
- Foroughi, A., Buang, N. A., Senik, Z. C., & Hajmisadeghi, R. S. (2013). Impulse buying behavior and moderating role of gender among Iranian shoppers. *Journal of Basic and Applied Scientific Research*, 3(4), 760-769.
- Ha, Y., & Im, H. (2012). Role of web site design quality in satisfaction and word of mouth generation. *Journal of Service Management*.
- Hair, J. F. (2009). *Multivariate data analysis*.
- Hanzaee, K. H., & Taherikia, F. (2010). Impulse buying: an Iranian model. *China-USA Business Review*, 9(12), 31.
- Hasanov, J., & Khalid, H. (2015). The impact of website quality on online purchase intention of organic food in Malaysia: A WebQual model approach. *Procedia Computer Science*, 72, 382-389.
- Hausman, A. (2000). A multi-method investigation of consumer motivations in impulse buying behavior. *Journal of Consumer Marketing*.
- Herabadi, A. G., Verplanken, B., & Van Knippenberg, A. (2009). Consumption experience of impulse buying in Indonesia: Emotional arousal and hedonistic considerations. *Asian Journal of Social Psychology*, 12(1), 20-31.
- Idzni, D. (2020). *Selamat Jalan Website Selamat Datang Aplikasi Mobile*. Crocodic.Com.
- Jeon, S., & Kim, H. (2015). Clicking or Buying? Impacts of Website Quality and Website Attitude on E-Impulse Buying. In *Marketing Dynamism & Sustainability: Things Change, Things Stay the Same...* (pp. 644-646). Springer.
- Jibril, A. B., Kwarteng, M. A., Pilik, M., Botha, E., & Osakwe, C. N. (2020). Towards understanding the initial adoption of online retail stores in a low internet penetration context: An exploratory work in Ghana. *Sustainability (Switzerland)*, 12(3). <https://doi.org/10.3390/su12030854>
- Kalyanaraman, S., & Sundar, S. S. (2006). The psychological appeal of personalized content in web portals: Does customization affect attitudes and behavior? *Journal of Communication*, 56(1), 110-132.
- Kim, J., & Lennon, S. J. (2013). Effects of reputation and website quality on online consumers' emotion, perceived risk and purchase intention: Based on the stimulus-organism-response model. *Journal of Research in Interactive Marketing*.
- Kim, Y. J., & Han, J. (2014). Why smartphone advertising attracts customers: A model of Web advertising, flow, and personalization. *Computers in Human Behavior*, 33, 256-269.
- Kreuter, M. W., & Wray, R. J. (2003). Tailored and targeted health communication: strategies for enhancing information relevance. *American Journal of Health Behavior*, 27(1), S227-S232.
- Kwak, H., Zinkhan, G. M., DeLorme, D. E., & Larsen, T. (2006). Revisiting normative influences on impulsive buying behavior and an extension to compulsive buying behavior: A case from South Korea. *Journal of International Consumer Marketing*, 18(3), 57-80.
- Latan, H., Noonan, R., & Matthews, L. (2017). Partial least squares path modeling. *Partial Least Squares Path Modeling: Basic Concepts, Methodological Issues and Applications*.
- Law, R., & Bai, B. (2008). How do the preferences of online buyers and browsers differ on the design and content of travel websites? *International Journal of Contemporary Hospitality Management*.
- Li, X., & Liang, C. (2010). Research on the effects of reference group on impulse buying behavior. *2nd International Conference on Information Science and Engineering, ICISE2010 - Proceedings*, 530-535. <https://doi.org/10.1109/ICISE.2010.5689798>
- Lim, J. H., & Tang, S.-Y. (2008). Urban e-government initiatives and environmental decision performance in Korea. *Journal of Public Administration Research and Theory*, 18(1), 109-138.
- Lin, C. H., & Chuang, S. C. (2005). The effect of individual differences on adolescents' impulsive buying behavior. *Adolescence*, 40(159), 551-558.
- Liu, Y., Li, H., & Hu, F. (2013). Website attributes in urging online impulse purchase: An empirical investigation on consumer

- perceptions. *Decision Support Systems*, 55(3), 829–837. <https://doi.org/10.1016/j.dss.2013.04.001>
- Martaleni, M., Hendrasto, F., Hidayat, N., Dzikri, A. A., & Yasa, N. N. K. (2022). Flash sale and online impulse buying: Mediation effect of emotions. *Innovative Marketing*, 18(2), 49–59. [https://doi.org/10.21511/im.18\(2\).2022.05](https://doi.org/10.21511/im.18(2).2022.05)
- McKinney, V., Yoon, K., & Zahedi, F. “Mariam.” (2002). The measurement of web-customer satisfaction: An expectation and disconfirmation approach. *Information Systems Research*, 13(3), 296–315.
- Mohan, G., Sivakumaran, B., & Sharma, P. (2013). Impact of store environment on impulse buying behavior. *European Journal of Marketing*.
- Mummalaneni, V., Meng, J., & Elliott, K. M. (2016). Consumer technology readiness and e-service quality in e-tailing: what is the impact on predicting online purchasing? *Journal of Internet Commerce*, 15(4), 311–331.
- Rook, D. W., & Fisher, R. J. (1995). Normative Influences on Impulsive Buying Behavior. *Journal of Consumer Research*, 22(3), 305. <https://doi.org/10.1086/209452>
- Rook, D. W., & Gardner, M. P. (1993). In the mood: Impulse buying’s affective antecedents. *Research in Consumer Behavior*, 6(7), 1–28.
- Salman, M., Khan, S., & Sly Gul, M. S. (2014). Factors Influencing Impulse Buying of Sports Team Merchandise in Developing...: Trial Discovery Service for Loughborough University Library. *Pakistan Journal of Commerce and Social Sciences*. <http://eds.a.ebscohost.com/eds/detail/detail?vid=0&sid=1132af44-3947-44ce-a9bb-f9feec9a8c9d%40sessionmgr4008&bdata=JnNpdGU9ZWRzLWxpdmU%3D#AN=96167588&db=bth>
- Shahpasandi, F., Zarei, A., & Nikabadi, M. S. (2020). Consumers’ impulse buying behavior on Instagram: Examining the influence of flow experiences and hedonic browsing on impulse buying. *Journal of Internet Commerce*, 19(4), 437–465.
- Sharma, P., Sivakumaran, B., & Marshall, R. (2014). Exploring impulse buying in services: Toward an integrative framework. *Journal of the Academy of Marketing Science*, 42(2), 154–170. <https://doi.org/10.1007/s11747-013-0346-5>
- Tendelilin. (2010). Impact of Store Environment on Impulse Buying Behaviour. *Energies*, 6(1), 7.
- Turkyilmaz, C. A., Erdem, S., & Uslu, A. (2015a). The effects of personality traits and website quality on online impulse buying. *Procedia-Social and Behavioral Sciences*, 175, 98–105.
- Turkyilmaz, C. A., Erdem, S., & Uslu, A. (2015b). The Effects of Personality Traits and Website Quality on Online Impulse Buying. *Procedia - Social and Behavioral Sciences*, 175, 98–105. <https://doi.org/10.1016/j.sbspro.2015.01.1179>
- Utama, A., Sawitri, H. S. R., Haryanto, B., & Wahyudi, L. (2021). Impulse Buying: The Influence of Impulse Buying Tendency, Urge to Buy and Gender on Impulse Buying of the Retail Customers. *Journal of Distribution Science*, 19(7), 101–111. <https://doi.org/10.15722/jds.19.7.202107.101>
- Venkatesh, V., & Morris, M. G. (2000). Why don’t men ever stop to ask for directions? Gender, social influence, and their role in technology acceptance and usage behavior. *MIS Quarterly*, 115–139.
- Verhagen, T., & Van Dolen, W. (2011). The influence of online store beliefs on consumer online impulse buying: A model and empirical application. *Information and Management*, 48(8), 320–327. <https://doi.org/10.1016/j.im.2011.08.001>
- Wells, J. D., Parboteeah, D. V., & Valacich, J. S. (2011). Journal of the Association for Information Online Impulse Buying : Understanding the Interplay between Consumer Impulsiveness and Website Quality \* Online Impulse Buying : Understanding the Interplay between Consumer Impulsiveness and Website Quality. *Journal of the Association for Information Systems*, 12(1), 32–56.
- Wolin, L. D., Korgaonkar, P., & Lund, D. (2002). Beliefs, attitudes and behaviour towards Web advertising. *International Journal of Advertising*, 21(1), 87–113.
- Wu, Y.-L., & Ye, Y.-S. (2013). *Understanding impulsive buying behavior in mobile commerce*.
- Yen, B., Hu, P. J.-H., & Wang, M. (2007). Toward an analytical approach for effective Web site design: A framework for modeling, evaluation and enhancement. *Electronic Commerce Research and Applications*, 6(2), 159–170.
- Yoo, B., & Donthu, N. (2001). Developing a scale to measure the perceived quality of an Internet shopping site (SITEQUAL). *Quarterly Journal of Electronic Commerce*, 2(1), 31–45.
- Yu, J., & Cude, B. (2009). ‘Hello, Mrs. Sarah Jones! We recommend this product!’ Consumers’ perceptions about personalized advertising: comparisons across advertisements delivered via three different types of media. *International Journal of Consumer Studies*, 33(4), 503–514.
- Yuan, S.-T., & Tsao, Y. W. (2003). A recommendation mechanism for contextualized mobile advertising. *Expert Systems with Applications*, 24(4), 399–414.
- Yulianto, Y., Sisko, A., & Hendriana, E. (2021). The Stimulus Of Impulse Buying Behavior On E-Commerce Shopping Festival: A Moderated-Mediated Analysis. *Journal of Business and Management Review*, 2(10), 692–714. <https://doi.org/10.47153/jbmr210.2152021>
- Zafar, A. U., Shen, J., Shahzad, M., & Islam, T. (2021). Relation of impulsive urges and sustainable purchase decisions in the personalized environment of social media. *Sustainable Production and Consumption*, 25, 591–603.
- Zhang, L., Shao, Z., Zhang, J., & Li, X. (2022). The situational nature of impulse buying on mobile platforms: a cross-temporal investigation. *Electronic Commerce Research and Applications*, 56, 101204.
- Zheng, X., Liu, N., & Zhao, L. (2013). A Study of the Effectiveness of Online Scarce Promotion -Based on the Comparison of Planned Buying and Unplanned Buying. *12th Wuhan International Conference on E-Business, WHICEB 2013*, 247–257.
- Zou, T. (2018). Online impulse buying behavior amongst undergraduate students in Tianjin, The People’s Republic of China. *ABAC Journal*, 38(2), 94–113.