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## **The Impact of the Fear of Missing Out on Purchasing Trendy Fashion Products among Young Consumers on Social Media Platforms**

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### **Abstract**

Against the backdrop of digital transformation technology and the meteoric rise of the Internet, online business has brought economic efficiency to many industries in Vietnam (Ministry of Industry and Trade of Vietnam, 2021). Enterprises have shifted from directly providing products to consumers to doing so online, a change that has made online shopping increasingly popular. However, the ease of

participating in online platforms has led to an increase in the number of suppliers and competition between businesses. To attract customers, companies have used the fear of missing out (FOMO) effect through advertising messages that stimulate the fear of missing out in each individual, prompting them to make quick purchasing decisions.

**Keywords:** Fear of Missing Out, Impulsive Buying Behavior, Fashion, Young Consumers, Social Network

### **1. Introduction**

Nowadays, with the rapid explosion of digital transformation, consumer behavior in general and the shopping process in particular have been greatly affected, especially among young people. In Vietnam, the continuous use of phones and access to social media sites like TikTok, Facebook, YouTube, Twitter and e-commerce sites like Shopee, Lazada has become popular among young people. Businesses have cleverly taken advantage of the popularity of e-commerce and social media sites to create shopping pressure by using advertising messages to attract shopping behavior. These messages often stimulate the feeling of FOMO (Fear of Missing Out) in customers and make them buy things quickly based on instincts. However, online shopping can also be an action without reason or purpose. Many products are just attractive new marketing campaigns, creating stimulation and curiosity for customers. This study evaluates the relationship between FOMO and impulsive buying behavior, thereby analyzing its impact on customer loyalty and intention to return products after shopping for fashion products on different social media platforms. Using different methods and steps including building a model based on theoretical framework, identifying research model and testing its hypotheses.

### **2. Literature Review**

#### **2.1 Overview of Research on FOMO**

Social media sites like Facebook, Instagram, Tik Tok, etc. have become an indispensable part of many people's lives, leading to dependence on them becoming a common phenomenon. Therefore, a new term has been introduced to describe this phenomenon, called "Fear Of Missing Out" or FOMO.

Dan Herman's 1996 study first referred to the psychology of missing out or FOMO. Accordingly, FOMO is considered an attitude of fear and anxiety of an individual when they cannot take advantage of available opportunities. Some subsequent studies have proposed other concepts of FOMO by scholars. Reagan (2015) argues that FOMO is the anxiety about missed experiences. Jones (2016) <sup>[5]</sup> defines FOMO as the anxiety or fear that others may be experiencing something that one is not. According to the Cambridge dictionary, FOMO is a feeling of anxiety that one is missing rewarding experiences that others are having.

Although there are many concepts of FOMO, the common point of the concepts is that FOMO is the feeling that people are afraid of missing out or missing opportunities. This is a psychological symptom that people with it will feel afraid of missing out and lagging behind the experiences that others around them have. Therefore, those who fall into this syndrome will make decisions based on instincts and lack of rationality.

The FOMO effect varies between individuals. Studies show that the FOMO effect is more common among people whose basic psychological needs are not met (Odabaşı, 2017). Individuals experiencing this feeling often compare their lives to others more

intensely, they always think others have a better standard of living than them (Aydm, 2018) <sup>[1]</sup>. Because FOMO is a psychological phenomenon, it is easy to recognize the characteristics of an individual suffering from FOMO syndrome. For these people, FOMO manifests itself through the psychology of greed when wanting to achieve what others have; herd mentality, following the crowd to buy things that even they themselves do not know if they will use; It can be said that FOMO is a consequence of using social media, social networking sites, smartphones.

### **Information Overload**

Information overload is defined as a condition caused by a large amount of information generated on SNS, exceeding an individual's processing capacity (Jacoby *et al.* 1974). When an individual is provided with more information than they can perceive and process within a certain time, information overload occurs. In other words, information overload occurs when an individual lacks the capacity to process all the information they need to process (Eppler & Mengis, 2004; Farhoomand & Drury, 2002 <sup>[4]</sup>; Ho, 2001).

In the first study on the impact of information overload on organizational activity at the individual analysis level, O'Reilly (1980) found that seeking more information than necessary reduced decision-making performance. Although information overload reduced efficiency, it increased the confidence and satisfaction of decision-makers with their decisions. Therefore, although individuals believe that "the more information the better", this is not true. Indeed, O'Reilly noticed that cognitive information overload was associated with decreased overall performance (O'Reilly, 1980).

Gezgin *et al.*'s (2017) <sup>[3]</sup> study indicated that when an individual uses multiple social media accounts at the same time, they feel stronger FOMO. A few other studies have also shown that users with more than seven social media accounts often experience the highest levels of FOMO, because they constantly receive information from their connections (Gezgin *et al.*, 2017) <sup>[3]</sup>. Brandtzæg *et al.*'s (2012) <sup>[2]</sup> study suggested that using multiple social media accounts can lead to information overload. Since both FOMO and information overload are related to high social media use, examining the relationship between these two factors is very important.

### **Communication Overload**

The term "communication overload" is a new phenomenon that has emerged along with the development of social media in the past decade. Communication overload is an undesirable condition that arises when the communication demands from information and communication technologies, such as social media, exceed users' processing capacity (Yu *et al.*, 2018) <sup>[12]</sup>. The volume and complexity of communicative inputs for individuals can be described as communication overload (Cho *et al.*, 2011). Communication overload is measured by the extent to which an organizational participant experiences the volume, complexity, and uncertainty of information in a given time period as exceeding what he/she wants, needs, or can handle in the course of communication (Chung & Goldhaber, 1991).

## **2.2 Overview of Impulsive Buying**

In 1950, Clover used the term "impulsive buying" to refer to the immediate purchase behavior without a specific plan. He investigated the relationship between impulsive buying and the store environment. This definition was used in DuPont's early studies and the Institute of Advertising at the point of purchase as well as Clover's (Ünsalan, 2016: 575) <sup>[10]</sup>. Stern (1962) considered impulsive buying synonymous with impulse buying and defined this term as the unplanned prior purchase action of an individual. In subsequent years, researchers provided a broader definition of impulsive buying by including the emotional aspect of this phenomenon, indicating that impulsive buying is more than just a lack of prior purchase intention (Sirhindi, 2010: 1).

Hausmann (2000) states that the keyword "impulsive buying" was only defined based on the product until the 1980s. Thus, that time focused more on the stimulating impact of the product than the psychology of the consumer. Many believed that the product itself prompted consumers to shop impulsively. However, subsequent studies have shown that consumers tend to shop impulsively rather than being influenced by the products offered. Based on this perspective, the behavioral aspects of impulsive buying actions have been studied, showing that this action has psychological factors (Arkturan, 2009: 65).

Consumers can buy a product or service to relieve boredom, express personality, or just for fun without meeting any need. Such irrational buying behaviors are called impulsive buying by Verplanken and Herabadi (2001) <sup>[11]</sup>. According to Rook (1987), impulsive buying occurs when consumers experience a sudden, powerful and persistent urge to buy something immediately. Impulse buying causes many emotions, conflicts and its consequences are often overlooked. Beatty and Ferrell (1998) define impulsive buying as the sudden and immediate purchase behavior without prior intention to buy a specific product or to complete a specific shopping task. According to Rook and Gardner (1993), impulsive buying refers to an unplanned behavior involving quick decision making and the tendency to immediately purchase the product.

In summary, Impulsive buying behavior is defined as "experiencing a sudden and unplanned urge to act in a way that provides immediate gratification and then acting on impulse without careful consideration of the negative consequences that may follow" (Sengupta and Zhou, 2007; Das *et al.*, 2015) and this behavior occurs extremely quickly (Wells *et al.*, 2011). Because of the complexity and prevalence of impulse shopping for different products, it has become a popular topic in research on consumer behavior (Sharma *et al.*, 2010).

## **2.3 Overview of Research on the Impact of FOMO on Impulsive Buying Behavior of Young Consumers on Social Media Platforms**

According to Quynh Nga & Phuong Anh (2022), they studied the development of a general model of the influence of FOMO on Gen Z's shopping behavior in the context of the increasing development of e-commerce sites in Vietnam. From there, they were able to make recommendations for applying "FOMO" in Shopee Vietnam's marketing activities, helping Shopee Vietnam attract Gen Z consumers to shop,

while also improving their shopping experience on this e-commerce site.

It can be seen that the number of studies on the impact of FOMO on consumer shopping behavior in Vietnam is still limited and not yet popular. This creates an opportunity for the research group to develop and exploit factors affecting FOMO in the online context, thereby researching the influence of FOMO on impulsive buying behavior of young consumers on social media platforms, drawing research results that can support more in-depth studies later.

In addition, many studies around the world have been conducted to investigate the impact of FOMO on consumer behavior. Among them, notable studies on fear of missing out have shown that appeals full of "FOMO" can influence consumers' purchase intentions, creating a reinforcing or dampening effect on their purchase determination. The study by Hirschman and Holbrook (1982) also showed that FOMO has a significant influence on consumer behavior. The authors argue that FOMO is defined as the anxiety and restlessness of not being present in social activities or not experiencing the best things in life. They surveyed consumers and found that high FOMO individuals tend to shop and use services more than those without FOMO. The study by Kozinets and Handelman (2004) showed that FOMO influences consumer behavior in online environments. The authors surveyed online shoppers and found that FOMO positively influenced their consumer behavior, especially in purchasing the latest products or participating in the latest online activities. In a study on the impact of FOMO on online consumer behavior, Tifferet and Vilnai-Yavetz (2018) found that FOMO affects the consumer behavior of social media users. They also noticed that high FOMO users often buy products to express themselves on social media and tend to buy more products and services than those without FOMO.

In today's era, the use of the Internet is increasing significantly and the need to search for information and shop for products online is becoming a strong development trend. Therefore, businesses are developing online business models, especially on social media. Along with that strong development, the FOMO trend is also increasing. Recognizing this situation, in the last few years, there have been many studies investigating the level of influence of the FOMO trend on consumers' impulsive buying behavior. In marketing, Yang & Ma (2018) conducted a study on the influence of information sources and FOMO on the use of social media as well as consumer behavior.

In summary, these studies show that FOMO has a major influence on consumer behavior of consumers in today's digital age, especially in the online environment and on social media. FOMO can lead consumers to impulsive consumption behaviors and reduce their satisfaction with life, but can also enhance consumer experience and social interaction on social media.

### 3. Research Theories

#### 3.1 Drive-Reduction Theory (FOMO, Cognitive Dissonance)

According to (Lim, 2016), these negative feelings like fear and anxiety are more likely to become manifestations of a negative drive state that can undermine the sense of balance. However, Hull's (1943) drive reduction theory argues that people need to maintain a sense of balance. In that context, the more the internal imbalance increases, the more the

negative tendency increases, the state develops, if it is not alleviated by proper behavior (Anagnostaras & Taras, Sage, 2010). Therefore, people are trying their best to reduce the negative motivational states that disrupt the sense of balance. In such a context, the drive reduction theory tells us that there is an undeniable relationship between motivation and behavior, and to reduce stress, people tend to act immediately.

We find that the action that occurs in this case will lead to regret or hesitation about this decision. Thus, the relationship between FOMO and Cognitive Dissonance has been established. When the fear of missing out on a product is triggered in each consumer, they tend to make quicker and more impulsive decisions, leading to the phenomenon of cognitive dissonance or negativity about this purchase decision.

#### 3.2 Oliver's (1980) Expectation Confirmation Theory

Oliver's (1980)<sup>[6]</sup> expectation confirmation theory explains how people determine and evaluate information provided to them, especially in social communication situations. According to this theory, when a person seeks information, they have expectations and assumptions about what they will find. After collecting the information, that person will evaluate and reconfirm their initial expectations and assumptions.

This theory argues that when initial expectations and assumptions are confirmed, the person will feel satisfied and increase confidence in the information and information provider. In contrast, if initial expectations and assumptions are not confirmed, the person may feel disappointed and reduce confidence in the information and information provider. This theory is the basis for current research to explore the relationship between cognition, loyalty and customer satisfaction.

According to this theory, customer satisfaction consists of two independent processes that affect the level of customer satisfaction: pre-purchase expectations and post-experience perceptions. This process includes three stages. First, customers create expectations about the quality of service that the provider can provide to consumers before deciding to purchase. Next, purchasing and using the service helps customers gain confidence in its actual effectiveness. Finally, customer satisfaction depends on the difference between the expectation and the reality of the product or service, including three scenarios. First, satisfaction occurs when the service performance fully meets customer expectations. Second, when the results of the product or service are not enough to meet customer desires, it will easily lead to disappointment. Third, when customers get better product or service experiences than they expected before use, they will more easily feel satisfied.

#### 3.3 Cognitive Load Theory

Objective environmental factors are often assumed to influence emotions. Cognitive load theory shows that human cognitive capacity is limited, and learning can be impeded if too much capacity is required (Chandler & Sweller, 1991). Research by Maier *et al.* (2017) found that social overload affects psychology, including fatigue, dissatisfaction, and boredom. S. Zhang *et al.* (2016) pointed out that the relationship between cognitive overload and fatigue on social media has a positive influence on each other, and they analyzed cognitive overload into three aspects: social

overload, information overload, and system feature overload (Zhang *et al.*, 2016).

### 3.4 Impulsive Buying Behavior Theory

The impulsive buying behavior theory of Hawkins Stern is one of the most important theories in marketing and market research. This theory was proposed by Hawkins and Stern in 1962, based on research on consumer shopping behavior in the United States.

According to this theory, impulsive buying behavior is unplanned, unthoughtful shopping behavior. Impulsive shoppers will buy products hastily, without comparing products and regardless of price. Impulsive shopping behavior is seen as irrational and non-optimal behavior, and often occurs when consumers are influenced by psychological factors such as FOMO (fear of missing out).

Specifically, Stern's theory argues that impulsive buying behavior has three basic elements: Psychological factors: This is the most important factor in impulsive buying behavior. According to Stern's theory, psychological factors such as curiosity, desire for possession, and need for novelty seeking are the main causes of impulsive buying behavior. Social factors: This theory argues that some impulsive buying behaviors may result from group influence, competition between groups, or influence from celebrities. Economic factors: Stern argues that some impulsive buying behaviors may result from discounts, special promotions, or incentive programs. However, impulsive shopping can also lead to negative consequences, including wasting money, feeling regret, and losing self-confidence.

## 4. Research Model and Hypotheses

### 4.1 Research Model

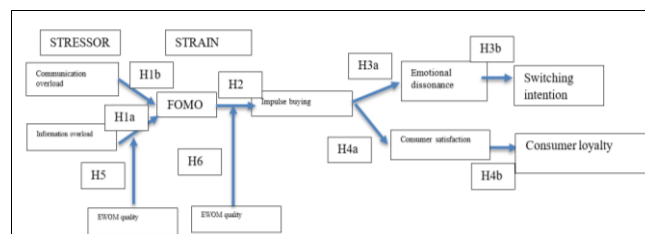
According to the author group, by combining Oliver's (1980) [6] expectation confirmation theory model, cognitive load theory model, SSO theory framework, drive reduction theory framework, and impulsive buying theory. The group has proposed a research model to examine the influence of FOMO on consumers' product return intention and their loyalty.

In addition, the author group also paid attention to the

impact of subjective knowledge on the relationship between FOMO and impulsive shopping; The quality of EWOM plays a role in the relationship between information overload and FOMO. These two variables are included in the model as moderating variables.

The author group has assessed that consumers' FOMO trends can be influenced by 2 factors: information overload and communication overload. In addition, the fear of missing out can also affect consumers' impulsive shopping behavior, significantly affecting consumers' intention to return products as well as their loyalty.

The proposed research model includes 10 variables including 2 independent variables "Information Overload" and "Communication Overload"; 4 intermediate variables "FOMO", "Impulsive Shopping", "Cognitive Dissonance", "Consumer Satisfaction"; 2 moderating variables "Ewom Quality", "Subjective Knowledge" and 2 dependent variables "Product Return Intention" and "Consumer Loyalty". The research model is shown in the following figure:



Source: Research group's synthesis

Fig 1: Proposed research model

### 4.2 Research Hypothesis

Chae and Lee (2016) conducted an analysis of the correlation between FOMO and the impact of social media on shopping behavior. Based on the analysis results, it shows that FOMO can cause impulsive shopping behavior, and the use of social media can increase FOMO and lead to unnecessary shopping. In summary, information overload can lead to an increase in FOMO. Therefore, the first hypothesis proposed by the research group is as follows.

Hypothesis	Content
H1a: "Information overload has a positive effect on consumers' FOMO trends"	Communication overload is the state when users face overload due to communication demands from social media platforms that exceed their communication capacity. According to studies, the impact of communication overload on FOMO is very significant. The results from the above studies indicate that psychological issues, stress, anxiety, and emotional imbalance can be caused by the phenomenon of communication overload.
H1b: "Communication overload has a positive effect on consumers' FOMO trends"	Madhavaram and Laverie (2004) pointed out that online imagery, advertising banners, discounts in online advertising and special offers can stimulate impulsive consumer buying. Burgess <i>et al.</i> (2014) also showed an increase in impulsive purchasing behavior through the use of mobile services. By using slogans and catchphrases in advertising campaigns on the Internet and social media, FOMO has been stimulated and impulsive buying trends have been created.
H2: "Consumers' FOMO trends have a positive effect on consumers' impulsive buying behavior"	Powers and Jack (2013, 2015) suggest that when consumers doubt a product or their choice, they may consider returning the product to the seller. Nadeem (2012) and Lee (2015) suggest that consumers may experience post-purchase dissonance when they feel dissatisfied with a product they purchased, which will affect their decision to return the product. Lim <i>et al.</i> (2017) suggest that if consumers experience emotional dissonance after an impulsive purchase, they may consider returning the goods to the store. Furthermore, Lim <i>et al.</i> (2017) and Zhang (2018) suggest that when consumers experience cognitive dissonance after an impulsive purchase, they may feel regret and want to return the product. Therefore, the group hypothesizes H3a.
H3a: Impulsive shopping has a positive impact on consumers' emotional dissonance. H3b: Consumers' emotional dissonance has a positive relationship	. Another study by Laroche <i>et al.</i> (2004) also found that impulse buying can create feelings of indulgence and increase customer satisfaction. Customers who shop impulsively are more likely to feel satisfied with their shopping experience. They feel happy to find a product they did not expect could meet their needs, or even exceed them, thus giving them a greater sense of indulgence in the impulsive shopping process.

<i>with consumers' product return intention.</i>	
<i>H4a: Impulse buying impacts customer satisfaction for Vietnamese consumers.</i>	In the case of impulse buying in Vietnam, if customers are not satisfied with the shopping experience, they will be less likely to continue impulse buying and return to the store. Therefore, it is hypothesized that customer satisfaction with the impulsive buying experience affects the intention to continue buying impulsively and revisiting the store in the future.
<i>H4b: Customer satisfaction has a positive relationship with customer loyalty (loyalty intention) for Vietnamese consumers (related to impulse buying).</i>	Studies by Chen <i>et al.</i> (2011) and Hennig-Thurau <i>et al.</i> (2004) show that the quality of EWOM (electronic Word of Mouth) has a positive impact on consumers' purchase decisions and their trust in EWOM information. In summary, the quality of EWOM plays an important role in resolving the relationship between information overload and consumer FOMO. Quality EWOM information helps consumers search for and use information efficiently, reduces anxiety, and increases their trust in EWOM information.
<i>H5: "The quality of EWOM moderates the relationship between information overload and consumers' FOMO trends"</i>	Research by Chen <i>et al.</i> (2021) shows that consumers' subjective knowledge can help reduce the impact of FOMO on their impulsive shopping behavior. However, FOMO still affects impulsive shopping behavior, but consumers' subjective knowledge can reduce this influence by helping them evaluate product quality and make more considered purchase decisions. Yang <i>et al.</i> (2021) also pointed out that subjective knowledge is an important factor to control FOMO and consumers' impulsive shopping behavior. Subjective knowledge helps reduce the fear of missing out and control impulsive shopping behavior. The research has shown that subjective knowledge can help consumers evaluate product quality and assess the product's ability to meet their needs. This helps them avoid the feeling of missing out and reduce reckless shopping behavior according to Kim and Park (2019).
<i>H6: "Subjective knowledge moderates the relationship between information overload and their FOMO trends"</i>	

**5. Data and Research Methodology**

In order to examine the factors of fear of missing out on impulsive product purchases, the paper needs to control all factors that may affect impulsive product purchase behavior and the correlation between fear of missing out and impulsive product purchase behavior. Therefore, the group of authors used desk research methods; Basic theoretical research; To assess the impact of factors in the model; The techniques the author group used in the estimation are as follows:

**Table 1:** Survey sample characteristics (sample size: 368)

Criteria	Characteristics	N = 368	Percentage (%)
Gender	Male	155	42, 2
	Female	213	57, 8
Age	< 18	81	21, 9
	18-25	179	48, 6
	26-35	108	29, 5
Monthly income (million-VND)	< 1	86	23, 4
	1-5	90	24, 4
	5-10	138	37, 5
	> 10	54	14, 7
Occupation	Students	152	41, 2
	Office workers	105	28, 6
	Civil servants	76	20, 7
	Others	35	9, 5
Educational Level	High School	91	24, 8
	University	172	46, 6
	Graduate school	73	19, 9
	Others	32	8, 7

Source: Survey results from the author team

**6. Research Results**

The study was conducted with a sample size of 284 questionnaires, with the questionnaire structure as follows: 48.2% of participants were male and 51.8% were female. According to age, the largest percentage of respondents was aged 18 to 22 with 190 questionnaires, accounting for 66.9%. Next was the under 18 age group with 40 questionnaires (14.1%), the 22 to 26 age group with 34 questionnaires (12%) and the over 26 age group accounted for the least with 20 questionnaires (7%). Thus, it can be

seen that the majority of survey participants were young people. In terms of occupational structure, among the survey participants, there were 217 students accounting for 76.4%. This was followed by self-employed workers with 22 questionnaires (7.7%), office workers with 21 questionnaires (7.4%), students with 10 questionnaires (3.5%) and finally other occupations with 14 questionnaires (5%). In terms of income, the majority of respondents had an income below 2 million dong with 102 questionnaires accounting for 31.7%. This was followed by income from 2 to 5 million dong with 90 questionnaires (30.3%), 5 to 10 million dong with 86 questionnaires (35.9%), 10 to 20 million dong with 6 questionnaires accounting for 2.1%. There were differences in respondents' daily social media usage time, of which 108 questionnaires (accounting for 38.1%) were recorded with usage time from 2 to 4 hours. In addition, usage from 4 to 6 hours, from 6 to 8 hours, less than 2 hours and over 8 hours had 82 questionnaires (28.8%), 64 questionnaires (22.5%), 27 questionnaires (9.5%) and 3 questionnaires (1.1%) respectively. In terms of shopping frequency, there were 118 respondents (41.5%) who shop occasionally. After that, there were 107 respondents accounting for 37.7% who shop frequently, 39 respondents (13.7%) who shop very frequently, 19 respondents (6.7%) who rarely shop, and 1 respondent (0.4%) who never shops.

**6.1 Test Results**

**6.1.1 Scale Testing**

After proposing a more detailed analytical method to eliminate unsuitable or inadequate variables, the group used the Cronbach's Alpha method to test the reliability of each variable. The analysis results show that the variables included in the model all have Cronbach's Alpha coefficients greater than 0.7, indicating that the measurement scale used has high reliability. Moreover, the correlation coefficients between the variables and the total CITC scores are all greater than 0.3, indicating that the variables are eligible for further analysis steps and there is no need to eliminate any variables.

**6.1.2 Exploratory Factor Analysis EFA**

After testing the reliability of the measurement scale, the research group decided to keep the original research model with 10 variables and 41 criteria expected to affect customer loyalty and product return intention. The data was entered into SPSS software and analyzed using the Principal Axis Factoring extraction method, Promax orthogonal rotation, KMO test and Bartlett's test to assess suitability and correlation between observational variables.

**\*EFA Analysis for the Set of 41 Observational Variables**

The analysis results show that the data meets the requirements for analysis, as the KMO coefficient here reaches.  $854 > 0.5$ . The Sig value ( $.000 < 0.05$ ) of the Bartlett's Test of Sphericity also meets the requirement. In addition, the cumulative total variance is  $66.883\% > 50\%$  (according to the appendix) indicating that the observational variables interact with each other in the factors. All variables have factor loadings greater than 0.5, with no variables needing elimination. After conducting EFA analysis, we still keep the 41 observational variables which are extracted into 10 main factors.

**FA for Independent Variables**

There are 2 components with 7 observational variables that achieve reliability in Cronbach's Alpha test which are included in exploratory factor analysis EFA. The test results are as follows:

The data meets the requirements for analysis as the KMO coefficient here has reached.  $780 > 0.5$ . The Sig value ( $.000 < 0.05$ ) of Bartlett's Test of Sphericity also satisfies the requirement. In addition, the cumulative total variance is  $66.959\% > 50\%$  (according to the appendix) indicating that the observational variables interact with each other in the factors. All variables have factor loadings greater than 0.5, with no variables needing elimination. After EFA analysis, the 7 observational variables are kept and extracted into 2 main factors.

All observational variables have factor loadings greater than 0.5 and no adverse variables, therefore the measurement scale achieves convergence value, the observational variables in the scale contribute to the measured concept.

**EFA for Moderating Variables**

There are 6 components with 24 observational variables that achieve reliability in Cronbach's Alpha test which are included in exploratory factor analysis EFA. The test results are as follows:

The analysis results show that the data meets the requirements for analysis as the KMO coefficient here has reached.  $821 > 0.5$ . The Sig value ( $.000 < 0.05$ ) of Bartlett's Test of Sphericity also satisfies the requirement. In addition, the cumulative total variance is  $60.459\% > 50\%$  (according to the appendix) indicating that the observational variables interact with each other in the factors. All variables have factor loadings greater than 0.5, with no variables needing elimination. After EFA analysis, the 10 observational variables are kept and extracted into 2 main factors.

**EFA for Dependent Variables**

There are 6 components with 24 observational variables that achieve reliability in Cronbach's Alpha test which are

included in exploratory factor analysis EFA. The test results are as follows:

The data meets the requirements for analysis as the KMO coefficient here has reached.  $873 > 0.5$ . The Sig value ( $.000 < 0.05$ ) of Bartlett's Test of Sphericity also satisfies the requirement. In addition, the cumulative total variance is  $67.331\% > 50\%$  (according to the appendix) indicating that the observational variables interact with each other in the factors. All variables have factor loadings greater than 0.5, with no variables needing elimination. After EFA analysis, the 24 observational variables are kept and extracted into 6 main factors.

All observational variables have factor loadings greater than 0.5 and no adverse variables, therefore the measurement scale achieves convergence value, the observational variables in the scale contribute to the measured concept.

After assessing reliability using Cronbach's Alpha and exploratory factor analysis EFA, the research group decided to keep the original 10 factors and proposed research model without any adjustments. Therefore, the model will be used for subsequent research steps.

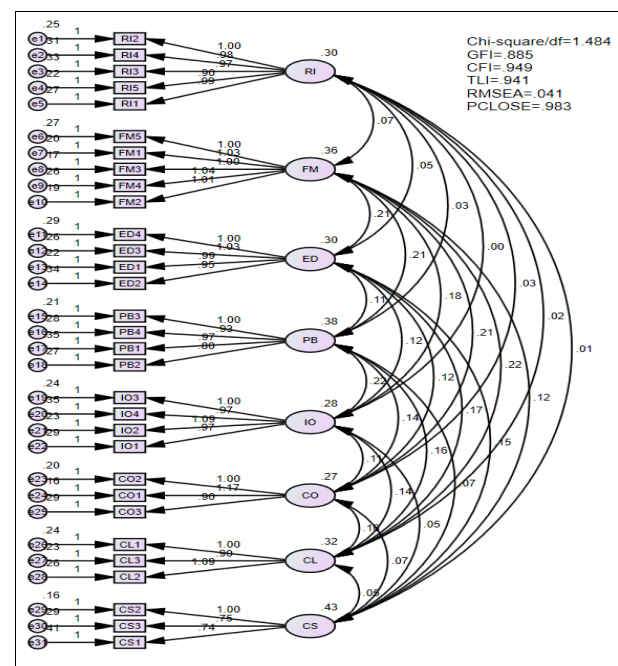
**6.1.3 Confirmatory Factor Analysis CFA**

After initial assessment using the two methods of reliability testing and exploratory factor analysis, the authors continued to evaluate the measurement scale using confirmatory factor analysis CFA.

**Comprehensive Evaluation of Indices in CFA Analysis**

The CFA analysis results show: Chi-square/df reaches 1.484 which is less than 3; GFI value reaches 0.885; CFI value reaches 0.949; TLI value reaches 0.941. Additionally, RMSEA value is at 0.041, less than 0.06 and PCLOSE reaches 0.983 greater than 0.05.

These results indicate the model is considered suitable and compatible with market data.

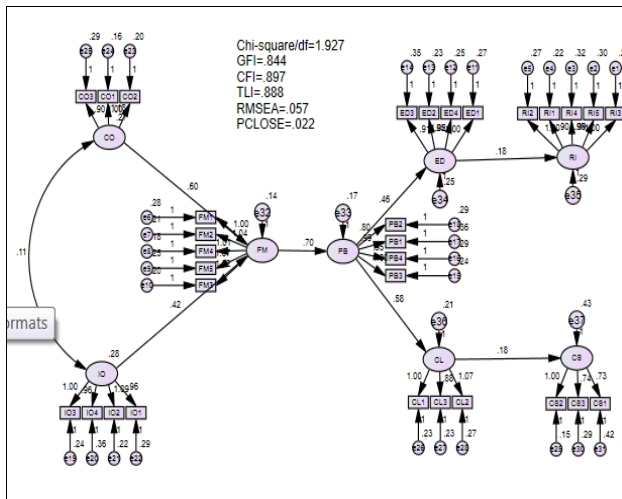


Source: Research group

Fig 2: Proposed model

## 6.2 Results of Hypothesis Testing

### 6.2.1 Results of Testing the Fit of the Research Model



Source: Research group

Fig 3: Results of running SEM analysis on the proposed research model

Looking at the coefficients that the model shows, The indices GFI= 0.844; CFI=0.897; TLI=0.888 > 0.8 (i.e. meeting the requirements for model fit).

In addition, the RMSEA coefficient = 0.057 < 0.06 is a good result demonstrating the fit of the model and hypotheses that the research group has proposed.

The SEM analysis group analyzed the linear structural model to determine the direct impacts between the relationships:

Table 2: Results of testing direct effects

Direct effects	Unstandardized coefficient	S.E.	C.R.	P-value	Standardized coefficient
CO → FM	.602	.081	7.472	***	.530
IO → FM	.420	.073	5.744	***	.379
FM → PB	.668	.074	9.016	***	.651
PB → ED	.404	.069	5.833	***	.433
PB → CS	.270	.077	3.498	***	.254
ED → RI	.178	.070	2.552	.011	.185
CS → CL	.134	.066	2.013	.044	.152

Source: Research team's synthesis

P: significance level; \*\*\* = p < 0.001.

From the results table, we can see that all relationships in the proposed model are statistically significant. Based on the standardized index column, we can determine the impacts of variables on the relationships. Fear of missing out (FM) is the variable with the strongest impact on Impulsive buying behavior (PB), with an Estimate index of 0.651. Communication overload (CO) and Information overload (IO) also have significant impacts on Fear of missing out (FM), with indices of 0.530 and 0.379 respectively. Impulsive buying behavior (PB) directly impacts Emotional dissonance (ED) and Consumer satisfaction (CS), with indices of 0.433 and 0.254 respectively. Emotional dissonance (ED) influences Intention to return products with an index of 0.185 and finally, Consumer satisfaction (CS) impacts Consumer loyalty (CL) with an index of 0.152.

### 6.2.2 Testing the Indirect Effects of Factors (Indirect Effect)

Results of Indirect Effect test for independent - dependent - mediating variables.

Table 3: Results of mediation effect testing

Indirect Path	Unstandardized Estimate	Lower	Upper	P-Value	Standardized Estimate
CO --> FM --> PB	0.402	0.309	0.520	0.001	0.345
CO --> FM --> PB --> ED	0.025	0.011	0.048	0.001	0.345
CO --> FM --> PB --> ED --> RI	0.029	0.008	0.066	0.013	0.345
CO --> FM --> PB --> CS	0.109	0.044	0.198	0.003	0.345
IO --> FM --> PB	0.280	0.166	0.417	0.001	0.246
IO --> FM --> PB --> ED	0.113	0.051	0.206	0.001	0.246
IO --> FM --> PB --> ED --> RI	0.020	0.005	0.055	0.013	0.246
IO --> FM --> PB --> CS	0.076	0.028	0.159	0.002	0.246
FM --> PB --> ED	0.270	0.151	0.432	0.001	0.282
FM --> PB --> ED --> RI	0.048	0.014	0.108	0.015	0.282
FM --> PB --> CS	0.180	0.070	0.325	0.003	0.166
PB --> ED --> RI	0.072	0.019	0.147	0.018	0.080

Source: Research team's synthesis

The results table shows that all relationships between the dependent variables are statistically significant with P-values less than 0.05. Communication overload and information overload through the mediating variable fear of missing out (FOMO) affect impulsive buying behavior with values of 0.345 and 0.246 respectively. Fear of missing out (FOMO) through the mediating variable of impulsive buying impacts emotional dissonance and consumer satisfaction with values of 0.282 and 0.166 respectively. Impulsive buying behavior through the mediating variable of emotional dissonance impacts intention to return products with a value of 0.080. With the collected market data, it can be seen that the model and research hypotheses are appropriate.

From the data in the table, we can see that the P-value of the product term EWIO is 0.027 (<0.05), indicating that this product term significantly impacts the variation of FM. Thus, EW is considered a moderating factor in the relationship between IO and FM. The regression coefficient of the product term IOEW is 0.115 and positive, indicating that when EW increases, the impact of IO on FM also increases. Therefore, we can write the equation expressing the variation in FM value as:

$$FM = 0.734 + 0.398IO + 0.194EW + 0.115EWIO + e_i$$

### 6.3 Hypothesis Testing

**Table 4:** Summary of hypothesis testing results

Hypothesis	Content	Impact coefficient ( $\beta$ )	Sig coefficient (p-value)	Testing result
H1a	Information overload positively affects FOMO	.530	***	Accepted
H1b	Communication overload positively affects FOMO	.379	***	Accepted
H2	FOMO positively affects impulsive buying behavior	.651	***	Accepted
H3a	impulsive buying behavior positively affects cognitive dissonance	.433	***	Accepted
H4a	Impulsive buying behavior impacts consumer satisfaction	.254	***	Accepted
H3b	Cognitive dissonance positively impacts product return intention	.185	.011	Accepted
H4b	Consumer satisfaction positively impacts consumer loyalty	.152	.044	Accepted
H5	Subjective knowledge positively moderates the impact of FOMO on impulsive buying behavior	0.092	0.073	Rejected
H6	eWOM quality positively moderates the impact of information overload on FOMO	0.119	0.027	Accepted

Source: Research team's synthesis

The proposed research model of the research group includes 10 factors and 9 research hypotheses. All factors are suitable for market data after testing. The results of evaluating the criteria in the paper expressing concepts through Cronbach's Alpha reliability analysis and EFA exploratory factor analysis show that the specific criteria meet the requirements of reliability and value. The results have the following meanings:

The results of testing the linear structural equation model (SEM) indicate that the theoretical model fits the market data collected and surveyed by the group, in which 8 out of 9 hypotheses about the relationships of concepts in the model are accepted. Of the two factors affecting Fear of Missing Out (FOMO), the communication overload factor has the strongest impact with  $\beta = 0.602$ , followed by information overload with  $\beta = 0.420$ . The results obtained from the research are consistent with studies by Przybylski and Weinstein (2017), Kuss and Griffiths (2017), Baumeister *et al.* (2013), Moon *et al.* (2016),... Combined with the above research results around the world, it can be seen that the phenomena of communication overload and information overload in consumers are related to the FOMO trend. Specifically, the higher the information or communication overload, the more the FOMO trend in them also grows.

Next, Fear of Missing Out (FOMO) has a strong influence on consumers' impulsive buying behavior with  $\beta = 0.668$ . Impulsive buying behavior in turn affects emotional dissonance with  $\beta = 0.404$  and consumer satisfaction with  $\beta = 0.270$ . Compared to some other studies by authors such as Rook and Fisher (1995); Soman and Cheema (2002), the results of this study have different degrees of impact. Specifically, the coefficient  $\beta = 0.270 > 0$  indicates that the relationship between impulsive buying behavior and consumer satisfaction has a mutually positive impact, which shows that the more impulsive buying behavior of Vietnamese youth increases, the more their satisfaction also increases. This result is consistent with the research results of Kim & Dan (2017) and Laroche *et al.* (2004).

Continuing the process of influence, the impact of Emotional Dissonance on Intention to Return Products with  $\beta = 0.178$  and Consumer Satisfaction on Consumer Loyalty with  $\beta = 0.134$  are both positive, which has demonstrated the hypothesis proposed by the research group. The above results are compatible with the results of the following studies: Fornell and Wernerfelt (1987); Wilson (1995); Lim *et al.* (2017); Zhang (2018).

The group has studied the role of Subjective Knowledge in the relationship between Fear of Missing Out (FOMO) and

Impulsive Buying. With the results the group has run, it can be seen that Subjective Knowledge does not have a moderating role in the relationship between FOMO and impulsive buying. This contrasts with the results of some previous studies such as: Chen *et al.* (2021), Yang *et al.* (2021), Kim and Park (2019). It can be seen that in different research environments with different conditions as well as differences in the research subjects of previous scientific research compared to the research topic of the research group. Therefore, the difference in results can be acceptable. Finally, eWOM Quality has performed well in moderating the relationship between Information Overload and Fear of Missing Out, while also positively influencing this relationship with a beta coefficient of 0.115. This result is consistent with previous studies by Chen *et al.* (2011); as well as by Hennig-Thurau *et al.* (2004). Based on these results, it can be seen that eWOM quality plays a very important role in the relationship between FOMO and impulsive buying, it helps consumers accurately identify necessary product information to make better purchasing decisions.

Disregarding the rejected hypotheses, the research model of the research group is currently doing a good job of explaining and interpreting the 2 major variables of the model, which are Fear of Missing Out and Impulsive Buying Behavior, along with the interactions between the other variables in the model.

However, a hypothesis that the research group proposed regarding the impact relationship from Impulsive Buying Behavior to Consumer Satisfaction is a relationship between independent and dependent variables in a negative direction. But the results of linear structural equation model (SEM) analysis show that the unstandardized coefficient  $\beta = 0.270 > 0$ , meaning that Impulsive Buying Behavior positively affects Consumer Satisfaction.

In summary, the research group has basically proposed and demonstrated the hypotheses they proposed and rejected erroneous hypotheses according to market research.

## 7. Conclusions and Policy Implications

Thanks to the development of the market and social media platforms, businesses have leveraged the FOMO effect as an optimal tactic to boost sales and marketing. The fear of missing out (FOMO) impacts everything individuals do, including what they purchase. Since FOMO is more prevalent among individuals who frequently use social media platforms, businesses can employ strategies that stimulate FOMO in their social media campaigns (Gotter, 2018). The potential for FOMO marketing growth is



assessed to be very high, with statistics showing about 69% of young Gen Z individuals having FOMO psychology and up to 60% of individuals having made purchases simply because they felt they might miss out. Applying FOMO in corporate marketing strategies delivers clear results, however if not properly implemented it can have the opposite effect. Therefore, businesses need appropriate solutions to effectively apply the FOMO effect into their marketing strategy:

Firstly, use phrases that create a sense of urgency. Consumers with FoMo tendencies are known to be receptive to persuasive messages and offers. The use of scarcity, found to increase product desirability, triggers FoMo tendencies in individuals (Gierl & Huettl, 2010). Advertisers emphasize product scarcity through crafty messages like “limited time only”, “valid for a limited time” or “almost sold out”, in order to reach as many customers as possible (Cheng, 2016). Missed opportunities are emphasized by businesses using phrases to stimulate FOMO in each individual, causing anxious and confused states, fear of missing out, etc. Using strong verbs and adjectives in social media posts and product imagery to show consumers the scarcity and uniqueness of these opportunities, creating a desire to own the products.

Secondly, Promote information about product scarcity. The internet and social media have made consumers’ lives constantly changing and accustomed to novelty (Hermann, 2011). Product scarcity is a tactic widely used in FOMO marketing. Unlike common and mass-produced items, the human psyche is often drawn to special, rarely available products. For these scarce items, people have a higher craving to own them. Cleverly applying the scarcity tactic, businesses can earn significant revenue from this approach. Businesses can list remaining quantities to spur customer thought. When stock is low, customers feel rushed and anxious about missing out, desiring to secure them.

Thirdly, Limit consumer shopping timeframes, applying the “Countdown Clock” method. When businesses use the scarcity of time, communications and marketing content like “Flash Sales”, “Huge discounts today”, “Deals ending in 1 hour”, etc. Creating a “Countdown Clock” is one of the FOMO techniques, this countdown unconsciously pressures customers. When customers access e-commerce sites, social media, sales websites, etc. and encounter discount opportunities, huge deals about to end with a countdown, they tend to click to purchase immediately so as not to miss the chance regardless of personal needs.

Fourthly, Use prominent imagery. Consumers react faster to images than text, especially creative, logical, prominent, eye-catching images. Therefore, designing an attractive image will better retain customers when they inadvertently see information via advertising banners accompanied by content like “Huge discounts”, “Don’t miss out”, “Black Friday, huge sales”, etc. Although prominent images help businesses attract many consumers, content and messaging should still be emphasized in each image. Because customers spend time on what they find appealing.

Fifthly, Innovate promotional messages. Applying FOMO trends in marketing campaigns requires businesses to understand consumers’ general psychology. What they want, what they need and what businesses can provide. Creating scarcity and missed opportunities to stimulate customer consumption lies in policies businesses enact. Nowadays, most companies, retail stores, etc. focus on

stimulating consumers’ fear of missing out via shocking discount programs, buy 1 get 1 or buy 2 get 1 free, etc. For consumers to access these promotions, Marketing teams need to be more meticulous regarding the messages they want to convey. Use strong verbs and adjectives to “implant” the FOMO effect into potential customers. Phrases like “Don't miss out” or “The last items are being added to carts” are typical examples of messages.

Sixthly, Improve customer experience by deploying more diverse promotional programs. For customers, in addition to common discounts and vouchers, free shipping is currently very popular. Up to 90% of online shoppers say free shipping is their top priority when choosing to shop online. Minimum-spend free shipping offers - designed based on FOMO psychology. Besides product discount information, customers now also care a lot about free shipping. They tend to prioritize items with lower shipping fees over those with higher fees. Therefore, in addition to stimulating FOMO in each customer, businesses should care about the customer shopping experience, as this helps them boost sales volumes as well as earn significant revenue. Let your customers know how much more they need to spend to get free shipping, or simply put a message at the top of your page indicating the price threshold to get that benefit.

Seventh, Enhance promotional communication strategies through influential individuals and popular groups. Today, social media is considered one of the fastest communication channels to users, with good user interaction capabilities, quickly and effectively conveying information to consumers. In addition, social media is also where FOMO is most strongly influenced today. Businesses can use FOMO as a tool to implement product marketing strategies online, especially on social media platforms.

Eighth, Improve product quality. To complement customer FOMO psychology stimulation techniques, prioritizing product quality improvements is very important. Providing good quality products that fully meet customer needs increases customer satisfaction and loyalty after shopping and minimizes product return or exchange intentions. In addition, businesses need to innovate, enhance, and renew product features to serve the frequent changes in the consumer market.

Ninth, Improve EWOM quality. Businesses can create high-quality content about products and share information on features, pros, cons, usage instructions, pricing, customer reviews and other information. This will help increase the authenticity and reliability of electronic word-of-mouth. In addition, businesses should create customer interactions through questions, feedback, reviews and comments. This helps businesses understand customer opinions and modify products to meet customer needs. Proactively responding to and resolving customer feedback creates trust and better meets customer needs. Overall, improving the quality of electronic word-of-mouth in communicating product information on social media platforms is very important to ensure information authenticity and reliability, increase product credibility, and help businesses increase sales.

## 8. Conclusion

Choosing to research the impact of FOMO on young consumer shopping behavior on social media platforms is very important today, because online shopping forms on social media platforms are developing rapidly and becoming a new consumer trend for young consumers. Research

results show that FOMO is prevalent among young consumers. The study also analyzes factors affecting FOMO and the impact of FOMO on other factors such as impulsive buying behavior, product return intention, and loyalty. From there, recommendations are proposed for businesses to apply FOMO trends into their business strategies.

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