

The Influence of Personality Traits on Egyptian Female Consumers' Online Impulsivity

Sara Abdel Hamid Abdel Mo'men Emam*

Supervisor: Prof.Dr. Salwa El-Awadly**

Abstract:

This paper aims to study the influence of Egyptian female consumers' personality traits, mediated by the influence of positive emotions during online shopping, on their online impulsive buying. A mixed research method, quantitative and qualitative approaches, was used to achieve the research objectives. First, an online survey was answered by 400 Egyptian female consumers, who are 18-45 years old and are used to making frequent online impulsive purchases on the Internet. Then, six focus group discussions among 60 participants, with the same sample criteria, were conducted to justify and elaborate the survey results. The results indicate that the five personality traits studied (Extraversion, agreeableness, neuroticism, conscientiousness, and openness) significantly influence Egyptian female consumers' online impulsivity. Extraversion, agreeableness, and neuroticism have a positive influence on online impulsivity. On the other hand, conscientiousness has a negative influence. Moreover, the results conclude that positive emotions, during online shopping, are influenced by personality traits and positively influence online impulsive buying.

Key Words:

Personality Traits – Positive Emotions – Online Impulsivity.

* Assistant Lecturer at PR and Advertising Department, Faculty of Mass Communication, Cairo University

** Professor at the PR and Advertising Department, Faculty of Mass Communication, Cairo University

تأثير السمات الشخصية للمرأة المصرية على سلوكها الشرائى المندفع عبر الإنترنت

الباحثة/سارة عبد الحميد عبد المؤمن إمام*
إشراف/ أ.د. سلوى العوادلى**

ملخص الدراسة:

تهدف هذه الورقة البحثية إلى دراسة تأثير السمات الشخصية للمرأة المصرية على مشاعرها الإيجابية أثناء التسوق عبر الإنترنت والتي تؤدي بدورها إلى شراء مندفع. اعتمدت الدراسة على المنهجين الكمي والكيفي لتحقيق أهداف الدراسة. أولاً، تم توزيع استبيان إلكتروني على ٤٠٠ امرأة مصرية تتراوح أعمارهن من ١٨ إلى ٤٥ عاماً وتضمن بالشراء المندفع بشكل متكرر عبر الإنترنت. ثانياً، تم عقد ست مجموعات مناقشة مركزة بين ٦٠ مبحوثة – تنطبق عليهن شروط اختيار العينة – لتفسير وتوضيح نتائج الدراسة الكمية. أشارت نتائج الدراسة أن السمات الشخصية الخمس للمرأة المصرية (الانبساط، والاتفاقية، والعصبية، والوعي، والانفتاح) لها تأثير معنوي على سلوكها الشرائى المندفع عبر الإنترنت. كذلك أشارت النتائج إلى وجود تأثير إيجابي لكل من سمات الانبساط، والاتفاقية، والعصبية على الشراء المندفع عبر الإنترنت، ووجود تأثير سلبي لسمة الوعي على الشراء المندفع عبر الإنترنت. كما أشارت الدراسة إلى تأثير السمات الشخصية على المشاعر الإيجابية أثناء التسوق عبر الإنترنت، والتي تؤثر بدورها بشكل إيجابي على السلوك الشرائى المندفع للمرأة المصرية.

الكلمات الدالة:

السمات الشخصية، المشاعر الإيجابية، الشراء المندفع عبر الإنترنت.

*مدرس مساعد بقسم العلاقات العامة والإعلان، كلية الإعلام – جامعة القاهرة
**أستاذ بقسم العلاقات العامة والإعلان، كلية الإعلام – جامعة القاهرة

Introduction

Since the quarantine of 2020, people have started staying longer at home and working from home, which has increased their online purchases in various product categories. Thus, many businesses tried to adapt to the dramatic changes in consumers' online buying behaviour. They started investing more in customizing their brand communication messages to match consumers' personalities, evoke positive emotions towards online shopping, and increase the frequency of unplanned impulsive purchases.

Social distancing caused by the quarantine of 2020 caused people to suffer from various social and psychological disorders, such as stress and anxiety. This made impulsive online buying a stress relief for most online consumers worldwide (Naeem, 2020; Lavuri, 2021).

There are many consumer-related and firm-related factors influencing consumers' online impulsivity. Consumers' personality traits and positive emotions are among the most influential internal consumer-related factors leading to impulsive buying (Saran, Roy, & Sethuraman, 2016).

Literature Review

Companies nowadays design their brand communication and marketing strategies based on satisfying consumers' demands, desires, and concerns and understanding their emotions, taking into consideration the internal psychological and emotional factors influencing the consumer's online buying behaviour. The tremendous changes occurred in Egyptian society, such as the increasing number of working women (Al-Awadly, 2006), the emergence of local brands, and the huge technological development of digital platforms made online shopping a convenient way to satisfy individuals' needs since 2020 (Francioni, Curina, Hegner, & Cioppi, 2020). Previous studies on online buying behaviour focused on comparing the different types of online buying behaviour, especially unplanned buying behaviour, and the various factors triggering unplanned impulsive buying. The majority of previous studies concluded that consumers' personality traits and positive emotions are the most influential internal psychological consumer-related factors influencing online impulsivity.

Most previous studies categorized personality traits, according to the Big Five Model (BFM), into five main traits that people are genetically born with. The five personality traits are extraversion, agreeableness, conscientiousness, neuroticism, and openness (Saran et al., 2016). As for positive emotions, many scholars divided the positive emotions that

consumers experience during online shopping into two main emotions, pleasure and arousal (Liu, Li, Edu, Jozsa, & Negricea, 2020).

Online Impulsive Buying

Online impulsive buying refers to the buying process that takes place randomly during online shopping without thinking or prior planning to acquire positive emotions, such as excitement, pleasure, satisfaction...etc. (Silvera, Lavack, & Kropp, 2008; Veludo-de-Oliveira, Falciano, & Perito, 2014; Singh & Nayak, 2015; Zhang et.al., 2018).

Online impulsive buying is the most frequently performed type of unplanned buying behaviour since 75% of consumers' online purchases are impulsive, especially since the increased dependence on online shopping in 2020 (Muratore, 2016). Thus, many scholars and marketers focused on studying the various factors influencing online impulsive buying (Meng & Xu, 2012), especially the internal psychological factors related to the consumer.

The Internal Factors Influencing Online Impulsive Buying

The internal factors influencing online impulsivity are psychological consumer-related stimuli that make the consumer vulnerable to impulsive buying or resistant to it (Duarte, Raposo, & Ferraz, 2013). Consumers' personality traits and positive emotions are among the most influential internal psychological consumer-related factors in online impulsive buying (Saran, et.al., 2016; Chen, Hsu, & Lu, 2018).

Personality Traits. They refer to how people react to the surrounding environmental stimuli around them (Saran et.al., 2016). According to the Big Five Model, consumers have five different personalities that differently influence their online buying behaviour in general, and online impulsive buying in specific (Piper, Sestino, & Guido, 2020).

Previous studies that focused on identifying the influence of consumers' personalities on online impulsivity categorized individuals' personalities into five main categories (Johnson & Attmann, 2009), including neuroticism, extraversion, conscientiousness, openness, and agreeableness (Saran et al., 2016).

Neuroticism. Neuroticism is the individual's emotional instability in solving problems or reacting to negative emotions, like anxiety, stress, bad mood, low self-confidence, sadness, or other psychological disorders (Kulkarni, Kalro, & Sharma, 2019; Piroth, Ritter, & Rueger-Muck, 2020). These negative emotions influence individuals' online buying behaviour, by

making more frequent impulsive purchases to overcome these negative emotions (Balleyer & Fennis, 2022). That's why neurotic consumers are more likely to suffer from post-purchase regrets due to wasting their money on unneeded products or services (Leong, Jaafar, & Sulaiman, 2017). Piper et.al., (2020) studied how the five personality traits influence Italian consumers' type of consumption and buying behaviour. Their results showed that neuroticism cognitively and behaviourally influences individuals' ways of dealing with stress and problems, making them more materialistic, consuming more hedonically, and buying more impulsively to gain more emotional stability, especially through online shopping in order not to interact with human beings.

Extraversion. Extraversion is people's interest in social interactions (Kulkarni et al., 2019; Piroth et al., 2020). Extroverted people tend to be more talkative, outgoing, independent, positive, ambitious, open to trying new things, and have less self-control. Extroverted consumers are vulnerable to impulsive buying to have a more appealing look that makes them gain social acceptance from their peers in the outings and social events they like to attend (Leong et al., 2017; Tarka, Kukar-Kinney, & Harnish, 2022). Piper et al., (2020) added that extroverted consumers buy more impulsively because they like to acquire the feeling of excitement at the cost of not planning for the future and wasting their money on buying unnecessary stuff.

Saran et al. (2016) studied the effect of personality on impulsive buying of fashion products, and they indicated that extroverted consumers buy more impulsively, compared to introverts, because they are good at expressing and sharing their emotions with others in social gatherings or different life events. This makes them make more fashion-impulsive purchases to look in a certain way and be confident enough for such social interactions. Miao, Jalees, Qabool, and Zaman (2019) also studied the effect of personality traits on consumers' impulsive buying and their results concluded that extraversion makes consumers more vulnerable to being influenced by the various online stimuli during online shopping, which makes them more impulsive.

Conscientiousness. Conscientiousness is people's likelihood of being organized, task and goal-oriented, hardworking, determined, seeking perfectionism, and reliable (Kulkarni et al., 2019; Piroth et.al., 2020). Conscious consumers are less likely to buy impulsively because they always like to have a plan to follow and buy according to a buying list to satisfy their basic functional needs, rather than hedonic ones (Tarka et al., 2022).

Piper et al., (2020) studied the influence of consumers' personality traits on their impulsiveness. They stated that conscious consumers have organized plans for what to purchase, and they are not distracted or influenced by any external stimuli while shopping, so they are less likely to buy impulsively.

Openness. Openness is people's ability to adapt, deal with new ideas, try new things, or go through new experiences (Piroth et al., 2020). Open people tend to think widely, imagine, be creative, accept other viewpoints, and participate in various activities and hobbies (Kulkarni et.al., 2019).

As for the open people's impulsive buying behaviour, open consumers tend to try new shopping platforms, and new local unknown brands, products, or services. In contrast, less open consumers are more traditional in what they purchase and like to stick to certain previously tried brand names to be on the safe side. That's why open consumers are more impulsive than less open consumers, but in particular product categories with unique distinguishing characteristics, like environment-friendly products or those products supporting an issue (Leong et al., 2017; Piper et al., 2020). Salem and Alanadoly (2020) indicated that open individuals are imaginative, creative, and different, which makes them accept and support new ideas, like environment-friendly products, recommend them to other social media users, and even buy those products impulsively without much thinking. Piroth et al. (2020) added in their study that open consumers have a high demand for new inventions, like shopping mobile applications, through which they make a lot of impulsive purchases. Unlike less open consumers, who prefer traditional offline shopping to minimize any possible risks associated with online shopping through mobile Apps.

Agreeableness. Agreeableness is people's tendency to be sociable, sympathetic, trusting, and caring for others (Kulkarni et al., 2019). Agreeable individuals aim to keep their friendships with others, follow their rules, and gain social acceptance (Piroth et al., 2020). This makes agreeable consumers buy impulsively whatever makes them be accepted by others and belong to a certain social group (Diogo & Dias Baptista, n.d.). Saran et.al., (2016), and Salem and Alanadoly (2020) examined the relationship between personality traits and consumers' online buying behaviour. Their results indicated that agreeableness has an indirect effect on impulsivity, when the consumer experiences more positive emotions during shopping, is involved in the shopped product category, and has a hedonic consumption tendency. On the other hand, Indrajaya and Mahesha (2022) contradicted the previous results and indicated that agreeableness does not influence consumers' online impulsive buying.

Positive Emotions. Consumers' positive emotions are being mentally ready due to the positive evaluation/ experience with a product or service (Leri & Theodoridis, 2020). Positive emotions influence online impulsive buying more than negative ones because positive emotions are more sustainable and long-lasting even after the purchase is made (Rahadhini, Wibowo, & Lukiyanto, 2020).

Pleasure, arousal, enjoyment, and fun are the most experienced positive emotions during online shopping, which in turn trigger online impulsivity to keep having these four positive emotions (Atulkar & Kesari, 2018; Liu et al., 2019; Chen, Ku, & Yeh, 2019; "Fun Definition & Meaning", 2023).

Previous studies referred to the impact of consumers' positive emotions during online shopping on their impulsive buying. Leri and Theodoridis (2020), and Piper et al. (2020) studied the influence of consumers' personalities on their positive emotions while shopping that often lead to impulsive purchases. Their results stated that openness, extraversion, agreeableness, or consciousness are the most influential personality traits on positive emotions, especially the emotions of pleasure and having a good mood.

Fraj and Martinez (2006) clarified the correlation between personality traits and positive emotions. They concluded that the personality trait of extraversion is positively correlated to positive emotions, while neuroticism is negatively correlated to positive emotions.

Zhang, Lu, Gupta, and Zhao (2014), and Pappas, Kourouthanassis, Giannakos, and Chrissikopoulos (2017) studied how positive emotions influence online buying behaviour in general, and impulsive buying in specific. Their results pointed to the impact of consumers' emotional state on impulsive buying, especially the two emotions of pleasure and arousal, which are considered the most generated positive emotions during online shopping that often lead to online impulsivity. Rafaeli and Reville (2006) referred to the sequence of these two emotions by stating that the positive emotion of arousal occurs before the emotion of pleasure. Song and Qu (2017) referred to the positive effect of positive emotions during shopping on consumer satisfaction, leading to impulsive buying behaviour.

Research Problem:

The internal factors related to Egyptian female consumers are among the most influential factors in online impulsive buying. Thus, this study aims to clarify the influence of Egyptian female consumers' personality traits and positive emotions on their online impulsivity.

Theoretical Framework

The proposed model of the current study is extracted from the fashion-oriented impulsive buying model of Saran, Roy, and Sethuraman (2016) which studies the influence of some internal consumer-related factors, including the consumer's five personality traits, positive emotions, fashion-involvement, and fashion-oriented hedonic consumption on impulsive buying behaviour.

The Proposed Model

The new proposed model of the study focuses on the influence of only two internal psychological consumer-related factors, which are the five personality traits, according to the Big Five Model, and positive emotions on Egyptian female consumers' online impulsivity. The model excluded the other two internal factors because they are related to the impulsive buying of fashion products in specific, while the current study examines online impulsive buying in general, not in a specific product category. The influence of positive emotions intermediates the influence of personality traits on online impulsive buying. The proposed model includes the following variables:

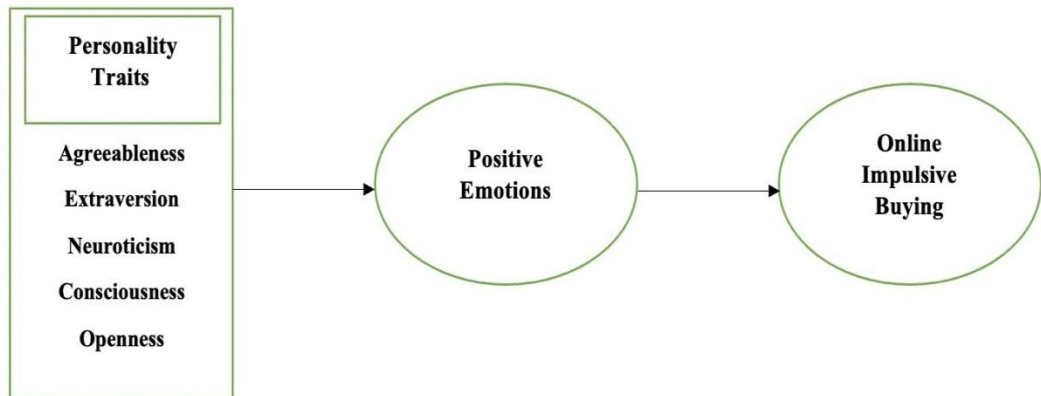
1) Personality Traits: According to the Big Five Model, there are five main personality traits of individuals, which are as follows:

- **Extraversion:** People's ability to socially interact with others.
- **Openness:** People's ability to accept other viewpoints, go through new experiences, and try new things.
- **Conscientiousness:** The individual's tendency to seek perfectionism and be goal-oriented.
- **Agreeableness:** The individual's empathy and tendency to help others.
- **Neuroticism:** The degree of the individual's ability to handle stress and negative emotions.

2) Positive Emotions. It is the consumers' emotional state after going through a positive shopping experience with the advertised product or service.

3) Online Impulsive Buying. It is the purchase process that occurs randomly during online shopping without much thinking, just to keep having positive emotions.

Figure (1)
The Proposed Model



(Sara Emam & Salwa El-Awadly, 2025)

Research Questions

- Q1. What is the most influential personality trait in Egyptian female consumers' online impulsive buying?
- Q2. How do the five personality traits affect online impulsive buying?
- Q3. How do personality traits influence Egyptian women's positive emotions during online shopping?
- Q4. How do positive emotions, generated during online shopping, lead to online impulsive buying?

Research Hypotheses

- H_1 Egyptian female consumers' personality traits have a significant influence on positive emotions during online shopping.
- H_2 Egyptian female consumers' personality traits have a significant influence on online impulsive buying.
- H_3 Positive emotions during online shopping have a significant influence on Egyptian female consumers' online impulsive buying.

Methodology

This descriptive research depended on a mixed research methodology. The quantitative approach used was an online survey to accurately describe the

sample's personality traits, positive emotions, and online impulsive buying. After that, the qualitative approach was applied, using focus group discussions to elaborate and justify the survey results.

Data Collection Tools

The survey was distributed to 400 Egyptian females who frequently buy fashion products through brands' official websites, mobile Apps, and social media platforms. Then, six focus group discussions were conducted until data saturation was achieved, and 10 participants were included in each group.

Online Survey. The online survey included various measures used in previous studies. The five personality traits were measured using Rammstedt and John's scale of The Big Five Inventory (BFI), including ten sentences. A five-statement scale of Beatty and Ferrell was used to measure the sample's positive emotions during online shopping. Rook and Fisher's nine-statement scale was used to measure the sample's online impulsive buying.

Focus Group Discussion Guide. The focus group guide included some follow-up questions, set according to the survey's quantitative results, to make the participants open about sharing their online buying behaviour, so the researcher could explain how the two studied internal consumer factors influence online impulsive buying.

Moreover, the researcher divided the 60 participants into groups out of ten who know each other and fall within the same age group because individuals are more likely to speak freely and openly in the existence of people they are familiar with, and from their age group (Eliot & Associates, 2005; Jones et al., 2018). The participants of each focus group had various demographic features.

At the beginning of each focus group discussion, the participants answered a 40-sentence scale of the BFI to identify their personality characteristics and relate them to their online impulsivity. The six discussions were conducted online through "Zoom", except for one group conducted offline in the "Shooting Sports Club", throughout February 2024. Each discussion lasted 60-100 mins, and the researcher moderated, noted, and audio-recorded the discussions.

Sample

The survey was administered to a purposeful sample of 400 Egyptian females because previous studies agreed that females tend to buy more impulsively than males (Phau & Woo, 2008; Veludo-de-Oliveira et al.,

2014). The sample represented Egyptian women who make frequent online impulsive purchases from middle age (18 – 45 years old), dividing it into three sub-age groups: From 18 to less than 25 years, from 25 to less than 35 years, and from 35 to 45 years. The study relied on the middle age group because they are more familiar with online shopping through online shopping platforms (Johnson & Attmann 2009), making them the most vulnerable to online impulsivity (Goldsmith et al., 2015; Saran et al., 2016; Francioni et al., 2020). Each focus group discussion included ten participants, who met the same sample criteria of the survey.

Statistical Data Analysis

The quantitative survey results were collected, coded, and statistically analyzed using the SPSS. The study relied on some statistical tests that provided statistical analysis for the study's various statistical variables. These statistical tests and treatments included Mean and Standard Deviation, Cronbach's Alpha Coefficient, Spearman-Brown Coefficient, and Guttman Split-Half Coefficient to statistically verify the consistency and sincerity of the study measures. The study further used a Multiple Linear Regression to measure the influence of more than one independent variable on the dependent variable.

Results

Both the quantitative and qualitative results indicated that the respondents' online impulsive buying is influenced by the five studied personality traits and positive emotions as follows:

Personality Traits

Extraversion. The survey results showed that 46.5% of the sample are moderately extroverted, and 46.3% of the sample are highly extroverted (see Table 1). Most of the sample are sociable and outgoing (M= 3.762) (see Table 2).

The focus group analysis justified the extroverts' online impulsivity due to their outgoing personalities, their likelihood to show off and be under the spotlight, and their flexibility in taking risks.

Their Outgoing Personality. Extroverted participants are sociable and outgoing, which motivates them to try new things, products, and shopping experiences. This makes them more vulnerable to being influenced by various online marketing stimuli and buying impulsively. Sara, a participant in Group 5, who has an extrovert personality according to the personality test, said,

“I often buy impulsively for the sake of trying something different, a new App, a new brand, or anything that makes me feel outgoing”.

Their Love of Being Under the Spotlight. Extroverted participants like to look unique, show off, and be under the spotlight anywhere they go. This makes them pay more attention to how they look, what car they ride, what cell phone they own, where they spend their vacations...etc. This makes them impulsive in various product and service categories.

Basma, a participant in Group 2 who has an extrovert personality according to the personality test, said,“I often buy unnecessary fashion products without much thinking as long as this product makes me unique among others”.

Their Flexibility in Taking Risks. Extroverted participants are flexible when it comes to risk-taking in any shopping-related context, even if they are not generally risk-takers in their lives. This makes extroverted participants less vulnerable to post-purchase regrets associated with online impulsivity-related risks, such as buying non-refundable products.

Nariman, a participant in Group 3 who has an extrovert personality according to the personality test, said,“I often take the risk of buying fashion products from unknown pages, even if they provide no refund or exchange, as long as I’m happy and satisfied with what I buy”.

Consciousness. The survey results indicated that 52% of the sample are moderately conscious (see Table 1), who are precise, and can do a thorough job (M=4.032) (see Table 2).

The focus group discussions revealed that the more conscious the participant is, the less impulsive she will be because conscious people are goal-oriented, which makes all their online purchases planned to satisfy certain basic predetermined needs, rather than wasting their money on unnecessary products.

Rahaf, a participant in Group 2 who has a conscious personality according to the personality test, said,“I think and plan very well before buying anything online in order not to waste my time and money on unnecessary purchases”.

Openness. The quantitative results also revealed that 57.8% of the sample are moderately open (see Table 1) who tend to have an active imagination (M=3.700) (see Table 2).

The six focus groups confirmed that online impulsivity is not associated with being open or not because open individuals do not seek attention, focus on valuable issues rather than shopping, and have artistic characteristics influencing their buying behaviour.

Not seeking Attention. Open participants are not attention seekers, unlike extroverts. That's why they do not focus on buying what impresses others, but rather they focus on buying what they need.

Focusing on Valuable Issues. Open participants focus on spending their time supporting valuable issues, like helping others, doing a charity, or enhancing themselves, rather than wasting their time, money, and effort on buying unneeded products through digital platforms. Radwa, a participant in Group 1 who has an open personality according to the personality test, said, "I do not like to buy anything for the sake of buying, and I prefer investing my free time in something useful rather than shopping".

Having Artistic Characteristics. Open participants indicated that they value arts, music, nature, and beauty, which make their taste unique in whatever they purchase online. For example, they could be impulsive in brands supporting valuable issues, like saving the environment and rescuing breast cancer patients. This means they do not buy according to the spontaneous emotions they experience during online shopping, but rather buy what is valuable, inspiring, and artistic.

Neuroticism. More than half of the sample are moderately neurotic (59%) (see Table 1), who are more likely to be relaxed and handle stress well (M=3.400), rather than getting nervous easily (M=3.378) (see Table 2). The focus group analysis showed that the more neurotic the participant is, the more impulsive she will be because online buying relieves stress, eliminates negative feelings, and enhances the bad mood.

Sara, a participant in Group 4 who has a neurotic personality according to the personality test, said, "Online buying is the only thing that can change my bad mood and make me stress-free".

Agreeableness. 68.5% of the sample are moderately agreeable (see Table 1), who like to find fault with others (M=3.370), rather than trusting them (M=3.052) (see Table 2).

The focus group analysis suggested that the more agreeable the participant is, the more impulsive purchases she makes because agreeable people seek

social acceptance from others, so they make online impulsive purchases that enhance their image, appearance, and social standard in front of others.

Mona, a participant in Group 4 who has an agreeable personality according to the personality test, said, "I often buy many unneeded fashion items because I'm surrounded by highly fashion-involved friends and working colleagues, who obligate me to look fashionable to be socially accepted".

Table (1)
Personality Traits Level

Personality Traits	The Level						Total		Mean	SD
	High		Moderate		Low		F	%		
	F	%	F	%	F	%				
Extraversion	185	46.3	186	46.5	29	7.2	400	100.0	2.3900	.61956
Consciousness	172	43.0	208	52.0	20	5.0	400	100.0	2.3800	.58004
Openness	135	33.8	231	57.8	34	8.5	400	100.0	2.2525	.59970
Neuroticism	84	21.0	236	59.0	80	20.0	400	100.0	2.0100	.64104
Agreeableness	44	11.0	274	68.5	82	20.5	400	100.0	1.9050	.55384

Table (2)
Personality Traits

Personality Trait	Agreement Degree (n=400)										Mean	SD
	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree			
	F	%	F	%	F	%	F	%	F	%		
Outgoing and sociable	102	25.5	149	37.3	109	27.3	32	8.0	8	2.0	3.762	.9867
Reserved	26	6.5	56	14.0	118	29.5	126	31.5	74	18.5	2.585	1.1340
Tends to find fault with others	49	12.3	154	38.5	111	27.8	68	17.0	18	4.5	3.370	1.0444
Generally trusting	30	7.5	94	23.5	165	41.3	89	22.3	22	5.5	3.052	.9885
Does a thorough job	155	38.8	142	35.5	70	17.5	27	6.8	6	1.5	4.032	.9843
Tends to be lazy	33	8.3	105	26.3	102	25.5	99	24.8	61	15.3	2.875	1.1992
Relaxed, handles stress well	57	14.2	141	35.3	122	30.5	65	16.3	15	3.8	3.400	1.0381
Gets nervous easily	77	19.3	115	28.7	111	27.8	76	19.0	21	5.3	3.378	1.1482
Has an active imagination	115	28.7	114	28.5	121	30.3	36	9.0	14	3.5	3.700	1.0853
Has few artistic interests	42	10.5	93	23.3	102	25.5	103	25.8	60	15.0	2.885	1.2250

Positive Emotions

The survey results indicated that most of the sample (61%) have a high level of positive emotions during online shopping, which is determined by how excited, inspired, proud, satisfied, and enthusiastic they are while shopping (see Table 3).

The focus group analysis concluded that having positive emotions while shopping through digital platforms positively influences online impulsivity. The positive emotions the participants have while shopping could be acquired from achieving success in social life or at work, which encourages online impulsive buying as a self-reward.

Nariman, a participant in Group 3, said, “Whenever I got promoted at work, I reward myself by making any online fashion purchase, even if it is unneeded”.

Some participants said they experience positive emotions while shopping online, whenever there are promotional offers or sales. The positive emotions acquired from having such financial benefits often lead to online impulsive purchases as self-rewarding for not missing on a good chance.

**Table (3)
Positive Emotions Level**

Positive Emotions Level	F	%	Mean	SD
High	244	61.0	2.5900	.53161
Moderate	148	37.0		
Low	8	2.0		
Total	400	100.0		

Being enthusiastic is reported by the respondents to be the most experienced positive emotion during online shopping (M=4.130), while being satisfied is found to be the least experienced positive emotion by the respondents while shopping (M=3.535) (see Table 4).

**Table (4)
Positive Emotions**

The Positive Emotion	Agreement Degree (n=400)										Mean	SD
	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree			
	F	%	F	%	F	%	F	%	F	%		
Enthusiastic	133	33.3	198	49.5	58	14.5	10	2.5	1	0.3	4.130	.7646
Excited	109	27.3	190	47.5	92	23.0	8	2.0	1	0.3	3.995	.7788
Inspired	100	25.0	172	43.0	104	26.0	19	4.8	5	1.3	3.857	.8912
Proud	101	25.3	143	35.8	103	25.8	42	10.5	11	2.8	3.703	1.0449
Satisfied	52	13.0	152	38.0	160	40.0	30	7.5	6	1.5	3.535	.8664

Online Impulsive Buying

The results concluded that 45.5% of the sample are moderately impulsive buyers, and 39.25% are considered highly impulsive when it comes to online shopping (see Table 5).

Table (5)
Online Impulsive Buying Level

Online Impulsive Buying Level	F	%	Mean	SD
High	157	39.25	2.2400	.69901
Moderate	182	45.5		
Low	61	15.25		
Total	400	100.0		

Furthermore, the results showed that most of the respondents tend to buy impulsively once they get exposed to online products/services (M=3.700), and then comes those who buy impulsively based on their emotions at the purchasing moment (M=3.695) (see Table 6).

Table (6)
Online Impulsive Buying

Online Impulsive Buying Behaviour	Agreement Degree (n=400)										Mean	SD
	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree			
	F	%	F	%	F	%	F	%	F	%		
"I see it, I buy it' describes me	108	27.0	157	39.3	63	15.8	51	12.8	21	5.3	3.700	1.1504
I buy things according to how I feel at the moment	115	28.7	147	36.8	67	16.8	43	10.8	28	7.0	3.695	1.1940
I carefully plan most of my purchases	90	22.5	137	34.3	107	26.8	56	14.0	10	2.5	3.603	1.0594
Sometimes I feel like buying things on the spur of the moment	89	22.3	143	35.8	89	22.3	61	15.3	18	4.5	3.560	1.1268
Sometimes I am a bit reckless about what I buy	91	22.8	136	34.0	61	15.3	84	21.0	28	7.0	3.445	1.2433
I often buy things spontaneously	87	21.8	142	35.5	64	16.0	75	18.8	32	8.0	3.443	1.2412
"Buy now, think about it later" describes	86	21.5	137	34.3	68	17.0	82	20.5	27	6.8	3.433	1.2224

Online	Agreement Degree (n=400)											
me												
"Just do it' describes the way I buy things	89	22.3	124	31.0	72	18.0	78	19.5	37	9.3	3.375	1.2761
I often buy things without thinking	64	16.0	123	30.8	78	19.5	96	24.0	39	9.8	3.193	1.2427

Hypotheses Testing

A regression analysis was used to validate H₁, H₂, and H₃ by clarifying the extent to which the independent variables justify the dependent variable, using the determination coefficient (R²). Moreover, the correlation coefficient (R) was used to determine the nature and strength of the relationship between the independent variables and the dependent variable.

H₁ Egyptian female consumers' personality traits have a significant influence on positive emotions during online shopping.

The quantitative results indicated that the five studied personality traits have a significant influence on the sample's positive emotions during online shopping (F=3.728, sig= .003), and explain 4.5% of the variance occurs in consumers' positive emotions while shopping online (R²=.045). Thus, H₁ is supported.

As for the most influential personality trait on positive emotions, the results concluded that openness has the most statistically positive influence on generating positive emotions during online shopping (t=3.518, sig=.001) (β=.174) (see Table 7).

Table (7)
The Regression Analysis Testing the Influence of Personality Traits on Positive Emotions

Dependent Variable	Independent Variables	R	R ²	F-Test		B	t-Test	
				Value	Sig.		Value	Sig.
Positive Emotions	Extraversion	.213	.045	3.728	.003	.077	1.527	.128
	Agreeableness					-.068	-1.344	.180
	Consciousness					.035	.697	.486
	Neuroticism					.027	.533	.594
	Openness					.174	3.518	.001

H₂ Egyptian female consumers' personality traits have a significant influence on online impulsive buying.

The quantitative results indicated that the five studied personality traits have a significant influence on the sample's online impulsive buying (F=5.454, sig=.001), and explain 6.5% of the variance occurs in their online impulsive buying behaviour (R²=.065). Thus, H₂ is supported.

As for the most influential personality trait on online impulsivity, the results concluded that extraversion has the most statistically positive influence (t=2.430, sig=.016) (β =.122), then comes agreeableness (t=2.386, sig=.018) (β =.119), then neuroticism (t=2.285, sig=.023) (β =.114), and consciousness comes in the fourth place with a negative influence on the sample's online impulsive buying (t=-2.284, sig=.023) (β =-.115) (see Table 8).

Table (8)
The Regression Analysis Testing the Influence of Personality Traits on Online Impulsive Buying

Dependent Variable	Independent Variables	R	R ²	F-Test		β	t-Test	
				Value	Sig.		Value	Sig.
Online Impulsive Buying	Extraversion	.254	.065	5.454	.001	.122	2.430	.016
	Agreeableness					.119	2.386	.018
	Consciousness					-	-	.023
	Neuroticism					.114	2.285	.023
	Openness					.034	.703	.483

H₃ Positive emotions during online shopping have a significant influence on Egyptian female consumers' online impulsive buying.

The quantitative results indicated that the sample's positive emotions during online shopping significantly influence their online impulsivity (F=41.010, sig=.001; β=.306) and explain 9.3% of the variance in their positive emotions while shopping online (R²=.093) (see Table 9). Thus, H₃ is supported.

Table (9)
The Regression Analysis Testing the Influence of Positive Emotions on Online Impulsive Buying

Dependent Variable	Independent Variables	R	R ²	F-Test		β	t-Test	
				Value	Sig.		Value	Sig.
Online Impulsive Buying	Positive Emotions	.306	.093	41.010	.001	.306	6.404	.001

Discussion

The study suggests that Egyptian female consumers' personality traits and positive emotions make them buy impulsively during online shopping. This result agrees with Saran, Roy, and Sethuraman's (2016) and Chen, Hsu, and Lu's (2018) findings, confirming personality traits' positive influence on impulsive buying. Fraj and Martinez (2006), Rafaeli and Revelle (2006), and Pappas, Kourouthanassis, Giannakos, and Chrissikopoulos (2017) confirmed the positive influence of positive emotions, especially arousal and pleasure, on impulsive buying.

The results showed that the personality traits of extraversion, neuroticism, and agreeableness are the most positively influential on online impulsivity. In other words, the more extrovert, neurotic, and agreeable the Egyptian female consumer is, the more impulsive she will be in online shopping. Consciousness is the only personality trait that negatively influences online impulsivity, meaning that the more conscious the woman is, the less online impulsive she will be.

The qualitative results indicated that extroverts are the most impulsive because of their outgoing personalities, love of being under the spotlight, and flexibility in taking risks. Their sociable and outgoing personality makes them more excited to try new products, services, online shopping platforms, and new experiences. Their personality makes them tend to be under the spotlight and show off, which requires spontaneous buying of online products to help them be perceived in a certain way by others. This result agrees with the results of Leong et al. (2017), and Tarka et al. (2022), indicating that extroverted consumers are more likely to buy impulsively to be unique among their social circles. The results further indicated that extroverts are flexible in taking online shopping-related risks, such as post-purchase regrets or receiving a not meeting expectations product. Miao, Jalees, Qabool, and Zaman (2019) justified this result by stating that extroverts take problems easily and deal well with negative emotions and

online shopping-related problems; that's why they are more likely to buy impulsively.

The results suggested that agreeableness is the second most influential personality trait in online impulsivity because agreeable consumers seek others' social acceptance and approval by imitating their buying behaviour. Their online impulsive purchases enhance their image and increase their self-confidence in front of others by owning appealing products. This result can be justified by Saran et al., (2016) who stated that agreeable people like to follow the rules set by others to be close to them and gain their acceptance and belonging. Neuroticism is the third most influential personality trait in online impulsivity because online impulsive purchases are used as a stress relieving technique by neurotic consumers. This agrees with the result of Piper et al., (2020) concluding that neurotic consumers are materialistic, which means they gain mental and emotional stability from online impulsive purchases that they can make without dealing with people or existing in crowded shopping malls.

Consciousness also comes in third place in influencing online impulsivity of Egyptian females, but negatively since conscious female consumers are goal-oriented and plan well for their purchases, meaning that more conscious females are the least impulsive. This result aligns with the result of Piper et al. (2020), who confirmed the negative influence of consciousness on impulsive buying.

Openness does not have a statistically significant influence on online impulsive buying because open consumers do not seek attention but rather focus on valuable issues and have artistic characteristics that make them more selective in purchasing. The focus groups' analysis indicated that open female consumers are not attention seekers and this makes them less impulsive buyers because they do not want to impress others with what they have. Moreover, they focus on valuable issues, like their well-being, helping others, and being sympathetic to them rather than shopping. Open female consumers also have artistic characteristics that affect what they might impulsively purchase. This result can be justified by Salem and Alanadoly (2020), who stated that open people are creative, imaginative, and different, making them selective in what they buy, like buying products that support an issue or the environment.

The study revealed that positive emotions experienced during online shopping, like pleasure and arousal, increase Egyptian women's online impulsive buying behaviour. The qualitative results concluded that when female consumers have positive emotions during online shopping, after

achieving something in work, social, or personal life, they tend to enjoy the online shopping experience and make more online impulsive purchases as self-rewarding. Song and Qu (2017), and Piper et al. (2020) justified the influence of positive emotions on online impulsive buying by stating that having positive emotions while shopping increases consumers' satisfaction and changes their bad mood, which facilitates, in turn, impulsive buying decisions.

The study further revealed that personality traits influence positive emotions, especially the personality trait of openness, which positively influences consumers' positive emotions during online shopping because open females enjoy the excitement feeling they have from trying new experiences, resulting in the positive emotions of pleasure and arousal. This result is the same result of Leri and Theodoridis (2020) who confirmed the positive influence of openness on consumers' positive emotions during online shopping.

Conclusion

The study suggests that Egyptian female consumers' online impulsive buying is affected by two internal psychological consumer-related factors, which are their personality traits (Extraversion – neuroticism – agreeableness – conscientiousness – openness) and positive emotions while shopping.

As for the influence of personality traits, the study indicates that the personality traits of extraversion, neuroticism, and agreeableness have a positive influence on online impulsive buying, while the personality trait of conscientiousness has a negative influence on online impulsivity. Openness does not have a statistically significant influence on online impulsivity. As for the influence of positive emotions, the study concluded that positive emotions during online shopping increase online impulsive buying and intermediate the influence of personality traits on Egyptian women's online impulsivity.

Practical Implications

In practice, the results of this study can assist online businesses in Egypt in approaching their target customers and potential customers with the right brand communication message that matches their personalities and evokes more shopping-related positive emotions, which increases, in turn, online impulsive purchases. Companies should target their brand communication messages to extroverted Egyptian females because they are the most likely to make online impulsive purchases. Their communication messages should suit the outgoing and sociable aspect of the extroverted personality, its

tendency to show off, and its flexibility with online shopping-related risks, such as participation in online competitions and taking the risk of paying with a credit card to take the extra discounts made on online payment.

Limitations and Recommendations

The survey was self-reported, which caused some online questionnaires to be excluded because some respondents provided contradicted answers.

The study provides the following recommendations for future research to enrich the literature of this research area:

1. Conducting a comparative study between two different nations with various cultures to identify how culture could intermediate the influence of the internal factors on online impulsive buying.
2. Applying the model of this study on male consumers to identify the differences in online impulsive buying behaviour because of gender.
3. Comparing the influence of the studied internal factors in both the online and offline shopping contexts.

References

١. سلوى العوادلى. (٢٠٠٦). الإعلان وسلوك المستهلك – الطبعة الثالثة - القاهرة: دار النهضة العربية.
2. Atulkar, S., & Kesari, B. (2018). Role of consumer traits and situational factors on impulse buying: Does gender matter? *International Journal of Retail & Distribution Management*, 46(4), 386–405. <https://doi.org/10.1108/ijrdm-12-2016-0239>
3. Balleyer, A. H., & Fennis, B. M. (2022). Hedonic Consumption in Times of Stress: Reaping the Emotional Benefits Without the Self-Regulatory Cost. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.685552>
4. Chen, C.-D., Ku, E. C. S., & Yeh, C. C. (2019). Increasing rates of impulsive online shopping on tourism websites. *Internet Research*, 29(4), 900–920. <https://doi.org/10.1108/intr-03-2017-0102>
5. Chen, Y., Hsu, T., & Lu, Y. (2018). Impact of flow on mobile shopping intention. *Journal Of Retailing And Consumer Services*, 41, 281-287. doi: 10.1016/j.jretconser.2017.04.004
6. Diogo, J., & Dias Baptista. (n.d.). *The Impact of Agreeableness on Consumer Purchasing Motivations Dissertation presented as partial requirement for obtaining the Master's degree in Information Management*. <https://run.unl.pt/bitstream/10362/149747/1/TGI1372.pdf>
7. Duarte, P., Raposo, M., & Ferraz, M. (2013). Drivers of snack foods impulse buying behaviour among young consumers. *British Food Journal*, 115(9), 1233–1254. <https://doi.org/10.1108/bfj-10-2011-0272>
8. Eliot & Associates. (2005). *Guidelines for Conducting a Focus Group*. https://irep.olemiss.edu/wp-content/uploads/sites/98/2016/05/Trinity_Duke_How_to_Conduct_a_Focus_Group.pdf
9. Fraj, E., & Martinez, E. (2006). Influence of personality on ecological consumer behaviour. *Journal Of Consumer Behaviour*, 5(3), 167-181. doi: 10.1002/cb.169
10. Francioni, B., Curina, I., Hegner, S., & Cioppi, M. (2020). Brand addiction: brand characteristics and psychological outcomes. *Journal Of Consumer Marketing*, 38(2), 125-136. doi: 10.1108/jcm-02-2020-3678
11. Fun Definition & Meaning. (2023). In *Britannica*. Retrieved August 30, 2023, from <https://www.britannica.com/dictionary/fun#:~:text=Britannica%20Dictionary%20definition%20of%20FUN,was%20a%20lot%20of%20fun.>
12. Goldsmith, R., Flynn, L., & Goldsmith, E. (2015). Consumer characteristics associated with compulsive buying. *Journal of Multidisciplinary Research*, 7(3), 21-38
13. Haq, M., Khan, N., & Ghouri, A. (2014). Measuring The Mediating Impact of Hedonic Consumption on Fashion Involvement and Impulsive Buying Behaviour. *Indian Journal of Commerce and Management Studies*, 50-57.
14. Indrajaya, A., & Mahesha, G. (2022). The Effect of Big Five Model (BFM) Personality Traits on Online Impulsive Buying: Evidence from Website User

- in Dki Jakarta Area. *International Journal of Business, Economics and Law*, 26(1). https://ijbel.com/wp-content/uploads/2022/03/IJBEL26.ISU1_226.pdf
15. Johnson, T., & Attmann, J. (2009). Compulsive buying in a product specific context: clothing. *Journal Of Fashion Marketing And Management: An International Journal*, 13(3), 394-405. doi: 10.1108/13612020910974519
 16. Jones, C. D., Newsome, J., Levin, K., Wilmot, A., McNulty, J. A., & Kline, T. (2018). Friends or Strangers? A Feasibility Study of an Innovative Focus Group Methodology. *The Qualitative Report*, 23(1), 98-112. <https://doi.org/10.46743/2160-3715/2018.2940>
 17. Kulkarni, K., Kalro, A., & Sharma, D. (2019). Sharing of branded viral advertisements by young consumers: the interplay between personality traits and ad appeal. *Journal Of Consumer Marketing*, 36(6), 846-857. doi: 10.1108/jcm-11-2017-2428
 18. Lavuri, R. (2021). Intrinsic factors affecting online impulsive shopping during the COVID-19 in emerging markets. *International Journal of Emerging Markets*, 18(4), 958–977. <https://doi.org/10.1108/ijoem-12-2020-1530>
 19. Lee, C., & Wu, J. (2017). Consumer online flow experience. *Industrial Management & Data Systems*, 117(10), 2452-2467. doi: 10.1108/imds-11-2016-0500
 20. Leong, L.-Y., Jaafar, N. I., & Sulaiman, A. (2017). Understanding impulse purchase in facebook commerce: Does big five matter? *Internet Research*, 27(4), 786–818. <https://doi.org/10.1108/intr-04-2016-0107>
 21. Leri, I., & Theodoridis, P. (2020). How do personality traits affect visitor's experience, emotional stimulation and behaviour? The case of wine tourism. *Tourism Review, ahead-of-print*(ahead-of-print). doi: 10.1108/tr-05-2019-0148
 22. Liu, Y., Li, Q., Edu, T., Jozsa, L., & Negricea, I. C. (2020). Mobile shopping platform characteristics as Consumer Behavior Determinants. *Asia Pacific Journal of Marketing and Logistics*, 32(7), 1565–1587. <https://doi.org/10.1108/apjml-05-2019-0308>
 23. *Meaning and Definition of Online Buying Behaviour*. (2022, September 1). indiafreenotes. <https://indiafreenotes.com/meaning-and-definition-of-online-buying-behaviour/#:~:text=Online%20shopping%20behavior%20is%20the,of%20their%20home%20or%20office.>
 24. Meng, F., & Xu, Y. (2012). Tourism shopping behavior: planned, impulsive, or experiential?. *International Journal Of Culture, Tourism And Hospitality Research*, 6(3), 250-265. doi: 10.1108/17506181211246401
 25. Miao, M., Jalees, T., Qabool, S., & Zaman, S. (2019). The effects of personality, culture and store stimuli on impulsive buying behavior. *Asia Pacific Journal Of Marketing And Logistics*, 32(1), 188-204. doi: 10.1108/apjml-09-2018-0377

26. Muratore, I. (2016). Teens as impulsive buyers: what is the role of price?. *International Journal Of Retail & Distribution Management*, 44(11), 1166-1180. doi: 10.1108/ijrdm-08-2015-0120
27. Naeem, M. (2020). Understanding the customer psychology of impulse buying during COVID-19 pandemic: Implications for retailers. *International Journal of Retail & Distribution Management*, 49(3), 377-393. <https://doi.org/10.1108/ijrdm-08-2020-0317>
28. Pappas, I., Kourouthanassis, P., Giannakos, M., & Chrissikopoulos, V. (2017). Sense and sensibility in personalized e-commerce: How emotions rebalance the purchase intentions of persuaded customers. *Psychology & Marketing*, 34(10), 972-986. doi: 10.1002/mar.21036
29. Peters, R. (2022, July 27). *Impulse Buying in Social Commerce: Fact or Fiction?* / *SimplicityDX*. www.simplicitydx.com. <https://www.simplicitydx.com/blogs/impulse-buying-in-social-commerce-fact-or-fiction#:~:text=The%20%20types%20of%20impulse%20buying%20are%3A%20pure%20impulse%20like>
30. Phau, I., & Woo, C. (2008). Understanding compulsive buying tendencies among young Australians. *Marketing Intelligence & Planning*, 26(5), 441-458. doi: 10.1108/02634500810894307
31. Piper, L., Sestino, A., & Guido, G. (2020). Gluttony as predictor of compulsive buying behaviour. *British Food Journal*, 123(4), 1345-1361. doi: 10.1108/bfj-05-2020-0375
32. Piroth, P., Ritter, M., & Rueger-Muck, E. (2020). Online grocery shopping adoption: do personality traits matter?. *British Food Journal*, 122(3), 957-975. doi: 10.1108/bfj-08-2019-0631
33. Rafaeli, E., & Reville, W. (2006). A premature consensus: are happiness and sadness truly opposite affects?. *Motivation And Emotion*, 30(1), 1-12. doi: 10.1007/s11031-006-9004-2
34. Rahadhini, M., Wibowo, E., & Lukiyanto, K. (2020). The Role Of Positive Emotion In Hedonic Shopping Value Affecting Consumers'' Impulse Buying Of Fashion Products. *International Journal of Science & Technology Research*, 9(02), 780-783. <http://www.ijstr.org/final-print/feb2020/The-Role-Of-Positive-Emotion-In-Hedonic-Shopping-Value-Affecting-Consumers-Impulse-Buying-Of-Fashion-Products.pdf>
35. Salem, S., & Alanadoly, A. (2020). Personality traits and social media as drivers of word-of-mouth towards sustainable fashion. *Journal Of Fashion Marketing And Management: An International Journal*, 25(1), 24-44. doi: 10.1108/jfmm-08-2019-0162
36. Saran, R., Roy, S., & Sethuraman, R. (2016). Personality and fashion consumption: A conceptual framework in the Indian context. *Journal of Fashion Marketing and Management*, 20(2), 157-176. <https://doi.org/10.1108/jfmm-04-2015-0032>

37. Sharma, V., & Sonwalkar, J. (2013). Does Consumer Buying Behavior Change During Economic Crisis?. *International Journal Of Economics And Business Administration, I*(Issue 2), 33-48. doi: 10.35808/ijeba/9
38. Silvera, D., Lavack, A., & Kropp, F. (2008). Impulse buying: the role of affect, social influence, and subjective wellbeing. *Journal Of Consumer Marketing, 25*(1), 23-33. doi: 10.1108/07363760810845381
39. Singh, R., & Nayak, J. (2015). Life stressors and compulsive buying behaviour among adolescents in India. *South Asian Journal Of Global Business Research, 4*(2), 251-274. doi: 10.1108/sajgbr-08-2014-0054
40. Song, J., & Qu, H. (2017). The mediating role of consumption emotions. *International Journal Of Hospitality Management, 66*, 66-76. doi: 10.1016/j.ijhm.2017.06.015
41. Tarka, P., Kukar-Kinney, M., & Harnish, R. J. (2022). Consumers' personality and compulsive buying behavior: The role of hedonistic shopping experiences and gender in mediating-moderating relationships. *Journal of Retailing and Consumer Services, 64*, 102802. <https://doi.org/10.1016/j.jretconser.2021.102802>
42. Veludo-De-Oliveira, T. M., Falciano, M. A., & Perito, R. V. B. (2014). Effects of credit card usage on young Brazilians' compulsive buying. *Young Consumers Insight and Ideas for Responsible Marketers, 15*(2), 111-124. <https://doi.org/10.1108/yc-06-2013-00382>
43. Yu, C., Cheah, J.-H., & Liu, Y. (2022). To stream or not to stream? exploring factors influencing impulsive consumption through gastronomy livestreaming. *International Journal of Contemporary Hospitality Management, 34*(9), 3394-3416. <https://doi.org/10.1108/ijchm-09-2021-1137>
44. Zafar, A. U., Qiu, J., Shahzad, M., Shen, J., Bhutto, T. A., & Irfan, M. (2020). Impulse buying in Social Commerce: Bundle offer, top reviews, and emotional intelligence. *Asia Pacific Journal of Marketing and Logistics, 33*(4), 945-973. <https://doi.org/10.1108/apjml-08-2019-0495>
45. Zhang, H., Lu, Y., Gupta, S., & Zhao, L. (2014). What motivates customers to participate in social commerce? The impact of technological environments and virtual customer experiences. *Information & Management, 51*(8), 1017-1030. doi: 10.1016/j.im.2014.07.005
46. Zhang, K., Xu, H., Zhao, S., & Yu, Y. (2018). Online reviews and impulse buying behavior: the role of browsing and impulsiveness. *Internet Research, 28*(3), 522-543. doi: 10.1108/intr-12-2016-0377