Impulse buying in the fast-fashion: the role of self-control, marketing stimuli, and motivation*

Compra impulsiva en la moda rápida: el papel del autocontrol, los estímulos de marketing y la motivación

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Fecha de recepción: 12 de agosto de 2025
Fecha de aprobación: 23 de septiembre de 2025
Fecha de publicación: 16 de noviembre de 2025

DOI:https://doi.org/10.18041/1900-0642/criteriolibre.2025v23n43.13362

Abstract

The dual-system model suggests that self-control and impulsivity coexist and regulate decision-making; however, this relationship has been scarcely studied in the context of consumer behavior in fast-fashion. In this regard, the present study investigates the role of self-control in impulsive buying, as well as the influence of intrinsic motivation, extrinsic motivation, and marketing actions in fast-fashion purchases. This study employed a descriptive, cross-sectional, and quantitative approach with a sample of 388 participants between 18 and 35 years of age. Exploratory and confirmatory factor analyses and the

Citar como: Cristancho, L. C., Cancino, Y. A. y Cristancho, G. J. (2025). Impulse buying in the fast-fashion: the role of self-control, marketing stimuli, and motivation, 23 (43), 146-172. https://doi.org/10.18041/1900-0642/criteriolibre.2025v23n43.13362

* Artículo de investigación derivado de un trabajo de grado relacionado con la conducta del consumidor impulsivo en la industria de la moda. El proyecto no contó con soporte financiero institucional.
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bootstrapping technique, were used to process the data and evaluate the proposed model. The results confirm that self-control acts as a regulatory mechanism between marketing stimuli, motivations, and impulsive behavior; nevertheless, its effect is partial and vulnerable to intense external stimuli. Likewise, the relationship between self-control and impulsive buying shows that, although consumers attempt to self-regulate, the fast-fashion environment encourages unplanned purchases. Finally, it is considered necessary to continue investigating the role of self-control in different contexts of impulsive buying and across diverse populations.

Keywords: Mindful consumption, Self-control, Self-regulation, Fast-fashion consumption, Impulsive buying.

Resumen

El modelo de sistema dual sugiere que el autocontrol y la impulsividad coexisten y regulan la toma de decisiones; sin embargo, esta relación ha sido poco estudiado en el contexto del comportamiento de consumo en la moda rápida. En este sentido, el presente estudio investiga el papel del autocontrol en la compra impulsiva, así como la influencia de la motivación intrínseca, la motivación extrínseca y las acciones de marketing en las compras de moda rápida. Este estudio empleó un enfoque descriptivo, transversal y cuantitativo con una muestra de 388 participantes entre los 18 y 35 años de edad. Para el procesamiento de los datos se emplearon análisis factorial exploratorio y confirmatorio, además de la técnica de *bootstrapping*, con el fin de evaluar el modelo propuesto. Los resultados confirman que el autocontrol actúa como un mecanismo regulador entre los estímulos de marketing, las motivaciones y el comportamiento impulsivo; no obstante, su efecto resulta parcial y vulnerable frente a estímulos externos intensos. Asimismo, la relación entre el autocontrol y la compra impulsiva evidencia que, aunque los consumidores intentan autorregularse, el entorno de la moda rápida favorece la realización de compras no planificadas. Finalmente, se considera necesario continuar investigando el papel del autocontrol en distintos contextos de compra impulsiva y en diferentes poblaciones.

Palabras Clave: Consumo consciente, Autocontrol, Autorregulación, Consumo de moda rápida, Compra impulsiva.

Resumo

O modelo de sistema dual sugere que o autocontrolo e a impulsividade coexistem e regulam a tomada de decisões; no entanto, essa relação tem sido pouco estudada no contexto do comportamento do consumidor na moda rápida.. Nesse sentido, o presente estudo investiga o papel do autocontrole na compra impulsiva, bem como a influência da motivação intrínseca, da motivação extrínseca e das ações de marketing nas compras de moda rápida. Este estudo utilizou uma abordagem descritiva

transversal e quantitativa, com uma amostra de 388 participantes entre 18 e 35 anos de idade. Para o processamento dos dados, foram empregadas análises fatoriais exploratória e confirmatória, além da técnica de bootstrapping, com o objetivo de avaliar o modelo proposto. Os resultados confirmam que o autocontrole atua como um mecanismo regulador entre os estímulos de marketing, as motivações e o comportamento impulsivo; contudo, seu efeito é parcial e vulnerável a estímulos externos intensos. Da mesma forma, a relação entre o autocontrole e a compra impulsiva evidencia que, embora os consumidores tentem se autorregular, o ambiente da moda rápida favorece a realização de compras não planejadas. Finalmente, considera-se necessário continuar investigando o papel do autocontrole em diferentes contextos de compra impulsiva e em diferentes populações.

Palavras-chave: Consumo consciente, autocontrolo, autorregulação, consumo de moda rápida, compras impulsivas.

1. Introduction

The fashion market has experienced significant growth in recent decades. Women currently own approximately four times more clothing than they did in the 1980s (Sapper, 2018), while the fashion industry has nearly doubled its production capacity due to annual demand growth rate of around 2% (Niinimäki et al., 2020). This increase in production has generated negative economic, social and environmental impacts (Buzzo & Abreu, 2019; Reichart & Drew, 2019; Roozen & Raedts, 2020; Yoon et al., 2020; Bailey et al., 2022; Centobelli et al., 2022; Long & Nasiry, 2022), directly involving manufacturers, marketers, and consumers.

Consumers have increased their purchases of clothing, accessories, and textiles in response to marketing stimuli and social influences. This behavior is driven by marketing strategies (Chen, 2021; Kaczorowska-Spychalska, 2018; Zhang & Fong, 2020), including pricing tactics, rapid collection turnover, and advertising, as well as by cultural influences (Sari & Hanifah, 2018), social environments (Pop et al., 2023; Shao & Lassleben, 2021), and family contexts (Zhang et al., 2021). Additional factors such as fashion trends, lifestyles, self-concept, and aspirational goals also contribute to social and affiliative pressures that encourage consumption.

The growth of apparel production and the increasing tendency to purchase more garments have drawn attention to the fast-fashion industry and, specifically, to impulse buying. Impulse buying is a complex form of purchasing behavior (Wu et al., 2020) driven by stimuli that leads to spontaneous decisions, which are commonly observed in clothing purchases (Xiao et al, 2023). Fast fashion has been strongly associated with impulsive purchasing behavior (Gawior et al., 2022), particularly in online shopping environments and is also related to consumers' attitudes toward fast-fashion retailers (Cook & Yurchisin, 2017).

Nevertheless, consumers should not be viewed simply as agents who respond automatically to stimuli and increase their spending on clothing products. Purchasing behavior also involves awareness (Rahman et al., 2021), motivations (Kumar & Sadarangani, 2018), and self-control mechanisms (Efendi et al., 2019; Kaur & Singh, 2018), which enable individuals to assess their needs and regulate their purchasing decisions.

Awareness of the environmental and labour-related impacts of the fast-fashion industry can reduce positive consumer attitudes toward this sector (Roozen & Raedts, 2020). Concerns regarding the consequences of fashion consumption have encouraged the emergence of new approaches aimed at producing and consuming fashion with lower environmental and social impacts (Buzzo & Abreu, 2019). Consequently, companies have increasingly promote sustainable fashion while simultaneously encouraging consumption, thereby creating an ambiguous discourse that fosters awareness of ethical consumption (Binet et al., 2019). However, such awareness does not always translate into actual purchasing behavior beyond a preference for natural and durable products (Zhang et al., 2021), since consumers are often driven by desire and personal satisfaction (Sapper, 2018).

Impulsive buying behavior and self-control are therefore fundamental variables for understanding the complexity of consumer behavior. Both are influenced by lifestyles (Dhewi & Azzahra, 2023), psychological factors, motivations, available resources, and marketing stimuli (Iyer et al., 2020). Consumers do not make purchasing decisions entirely without control; rather, they evaluate their decisions regarding apparel consumption. In this context, self-control refers to the ability to reduce or postpone purchasing desires (Horváth et al., 2015). It reflects the capacity to suppress undesirable desires or behaviors (Siswanti & Halida, 2020) and acts as a mediating factor between impulsivity and impulsive buying behavior (Dhewi & Azzahra, 2023; Iyer et al., 2020). Consequently, impulse buying tends to occur when self-control is weakened or insufficient (Victoria et al., 2021).

Previous research on consumer behavior has primarily focused on the food industry and financial decision-making (Francke & Carrete, 2023), with comparatively less attention given to the clothing sector (Iyer et al., 2020), and even less to the fast-fashion industry specifically. This gap has prompted further inquiries into the role of self-control in relation to variables such as price, advertising, personal selling, public relations (Francke & Carrete, 2023), and social media influence (Redine et al., 2023).

Considering demographic differences in consumer behavior, the importance of studying self-control in developing economies has been highlighted (Redine et al., 2023). Moreover, expanding research to include general consumers has been recommended, as many studies rely primarily on student samples (Francke & Carrete, 2023). Previous research has shown that self-control moderates fast-fashion purchasing behavior and influences the relationship between impulsivity and purchasing decisions (Xiao et al., 2023). However, the functioning of the dual-system model—which describes the coexistence of self-control and impulsive

processes that regulate purchasing decisions in fast-fashion context—remains insufficiently understood.

Accordingly, the research question guiding this study is: **How does consumer self-control mediate between stimuli and motivations in impulse clothing purchases?** This research aims to address a gap in the existing literature on purchasing behavior in the fast-fashion industry, particularly regarding the role of self-control in impulse buying. Therefore, the objective of this research is to describe how consumer self-regulation operates simultaneously with impulsive behavior in fast-fashion purchasing decisions.

Investigating the regulatory effect of consumer self-control in this purchasing process will contribute to the theoretical understanding of this phenomenon and provide practical insights for key stakeholders in the fashion industry, while also encouraging more conscious and sustainable consumption practices that benefit consumers.

2. Literature review and development of hypotheses

The fast-fashion strategy is characterized by the frequent renawal of clothing collections offered at relatively affordable prices (Centobelli et al., 2022). This accelerated production-and-sales process has evolved into the ultra-fast-fashion model, in which production cycles can be completed within only a few days (Camargo et al., 2020). These shortened cycles are driven by constant changes in trends, consumer tastes, and personal needs related to self-presentation within social environments. Such dynamics are further influenced by marketing stimuli motivated by a search for self-expression, confidence, and concern for personal image (Nunes & Silveria, 2016).

Fast-fashion purchasing behavior is commonly associated with impulsive buying, where emotions, sensations, hedonic value, consumer involvement, and promotional strategies play a significant role (Ngyen & Ha, 2021). However, some consumers have shifted from purchasing low-quality trend-based fashion toward seeking products with greater quality and durability (Gupta & Gentry, 2018). In addition, demographic factors such as age, monthly household income, and family size significantly influence expenditure on fast-fashion clothing consumption (Bishnoi & Guru, 2023).

The store environment also affects consumer perceptions (Taşkın & Bozbay, 2023), stimuli can trigger impulse buying (Gupta & Gentry, 2018; Hashmi et al., 2020) like its design and layout are linked to loyalty (Anggara et al., 2023). Similarly, perceptions of store clutter and human crowding lead to a perception of scarcity and competition (Ballantine et al., 2015; Coskun et al., 2020). Likewise, impulsive buying behavior and fast-fashion purchasing have been observed in online environments (Al Mutanafisa, 2021; Boardman et al., 2023; Fares et al., 2023; Luo et al., 2018).

At first glance, it may appear contradictory that consumers simultaneously exhibit self-control practices within fast-fashion purchasing contexts.

Consumers may intentionally delay their purchases, waiting for promotional periods or more favorable purchase conditions (Jin et al., 2012). This behavior supports the notion that impulsive buying tends to occur when cognitive reflection is diminished, since failures in the self-control system can lead to impulsive actions (Müller et al., 2015).

However, the dual system theory suggests that self-control functions as a moderating variable between reactive and reflective processes (Moayery et al., 2019b). This perspective indicates that impulsive buying behavior and self-control coexist across a broad range of consumer behaviors (Sun et al., 2024), such as cell phones (Ding et al, 2022), internet addiction (Li et al, 2021a), financial management (Goyal, et al, 2022), as well as online impulsive purchases of fashionable clothing items (Xiao et al., 2023). Despite these advances, research examining the role of self-control in fast-fashion consumption remains limited. Existing evidence is largely restricted to identifying a weak correlation between self-control and fast-fashion purchasing behavior (Syahidah & Suryawati, 2023).

2.1 Marketing stimuli, self-control, and impulse buying

Impulse buying has received considerable attention in consumer behavior research (Al Mutanafisa & Retnaningsih, 2021; Rodrigues et al., 2021). Consumers are frequently attracted by advertising and persuasive marketing messages, which are reflected in their purchasing behavior and intentions (Kollat & Willett, 2023). Advertising influences impulse buying behavior by generating stimuli that trigger immediate desires and needs (Iyer et al., 2020; Mittal et al., 2015). These stimuli may include offering discounts or promotions, creating a sense of urgency or scarcity, presenting products attractively, or using testimonials and positive recommendations (Gong & Jiang, 2023), personal identity motivates individuals to stay updated with the latest fashion trends and overspend (Rana & Malik, 2023).

Understanding consumer behavior and decision-making processes is essential for developing effective strategies capable of influencing consumer choices, particularly when self-control mechanisms mediate purchasing decisions (Xu et al., 2020). Marketing stimuli can significantly affect consumers' self-control and their tendency toward impulsive buying (Zheng & Alba, 2021). Sales promotions and advertising messages may stimulate impulsive purchasing behavior while simultaneously weakening self-control mechanism (Moser, 2020). Marketing stimuli can also deplete self-control mechanisms and inhibit the generation of counterarguments, thereby contributing to a negative relationship between self-control and impulse buying (Sun et al., 2024).

However, self-control also moderates the relationship between marketing stimuli and the impulsive response system (Xu et al., 2020). The impulsive system is automatic and reactive, whereas the reflective system is controlled and inhibitory (Goschke & Job, 2023). Both systems operate in parallel (De Neys, 2021; Li et al., 2021b), with self-regulation moderating the influence of

impulsive and reflective determinants on impulse buying. Nevertheless, the reflective system requires greater self-regulatory resources to function effectively (Moayery et al., 2019b).

Hypotheses:
H1: Marketing stimuli influences impulse buying behavior.
H2: Marketing stimuli influences self-control.

2.2 The link between motivations, self-control, and impulse buying

According to self-determination theory, intrinsic motivation and autonomous forms of self-regulation are closely associated (Ryan & Deci, 2020). Intrinsic motivation refers to the internal drive derived from satisfaction obtained through engaging in an activity itself, whereas self-control refers to the ability to regulate and manage own thoughts, emotions, and actions. These mechanisms operate interdependently due to their closely conceptual and behavioral relationship.

Impulse buying is a common consumer behavior that represents a substantial volume of goods and services across different product categories and geographical contexts (Iyer et al., 2019; Moayery et al., 2019a). It refers to the act of making unplanned purchases (Sohn & Ko, 2021), driven more by emotions, feelings, and attitudes than by rational decision-making (Ahmad et al., 2019; Lee et al., 2023; Santini et al., 2019). Motivation plays a significant role in impulse buying behavior (Erdem et al., 2021), and intrinsic motivation specifically influences this behavior (Lee, 2018; Sritanakorn & Nuangjamnong, 2021) through consumers' negative emotions (Luo et al., 2018).

Intrinsic motivation refers to the internal pleasure or satisfaction individuals experience when engaging in a particular activity without the need for external rewards or incentives (Hsu, 2022; Rheinberg & Engeser, 2018 In the context of impulse buying, consumers with high levels of intrinsic motivation are more likely to engage in impulsive purchasing behavior (Lavuri et al., 2022; Lee et al., 2021).

H3: Intrinsic motivation influences self-control.
H4: Intrinsic motivation influences impulse buying behavior.

Extrinsic motivation refers to the influence of external factors on consumer behavior and decision-making processes (Fariana et al., 2021). These motivations encompass rewards, social pressures, and cultural norms (Aguiar, 2020). Such external factors may influence compulsive buying behavior through the moderation of self-control (Luo et al., 2018), potentially undermining an individual's ability to resist temptations or impulses to purchase unwanted or unnecessary products (Otero-López & Villardefrancos, 2015). Impulsive purchases may be triggered by both internal and external stimuli; however, self-control negatively moderates the relationship between these stimuli and impulsive buying behavior (Sun et al., 2024).

Extrinsic motivation is associated with behavioral adaptation in response to external pressure (Halfmann, 2021), thus representing self-control behavior. Previous studies have demonstrated that external stimuli can affect consistently or inconsistently planned impulse buying behaviors (Melati et al., 2024).

Consumers with higher levels of self-control generally exhibit greater self-discipline, as they are more capable of regulating their thoughts and actions (Farmer et al., 2017). Such consumers are also more likely to delay gratification (Watson & Milfont, 2017; Yu et al., 2024) and adapt their purchasing habits by strengthening self-control in response to external influences (Gordon, 2021). However, they can also display impulsive buying behavior when self-control is low (Burton et al., 2018).

H5: Extrinsic motivation influences self-control.
H6: Extrinsic motivation influences impulsive buying behavior.
H7: Self-control influences impulsive buying behavior.

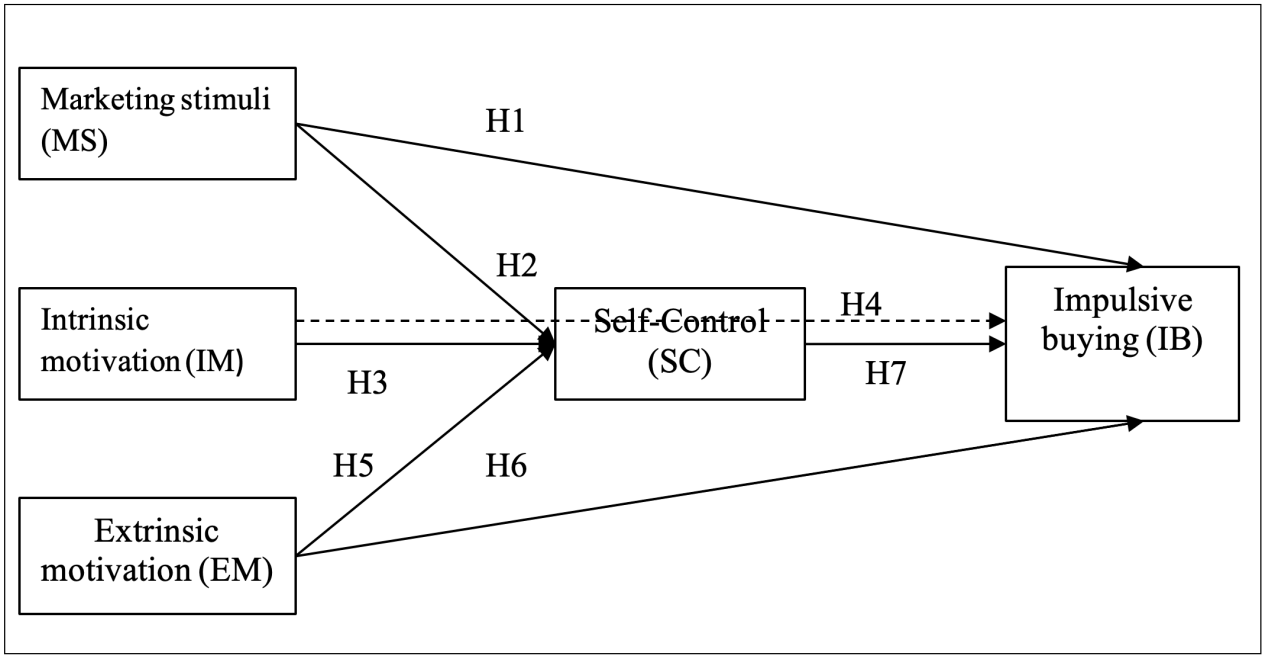

Figure 1. Proposed theoretical model.

3. Methodology

This study adopts a descriptive, cross-sectional, and quantitative approach to examine how intrinsic motivation, extrinsic motivation, and marketing actions influence self-control and impulse buying. The target population consisted of men and women between 18 and 35 years of age residing in Bogotá. According to the National Department of Statistics (DANE), the population of Bogotá exceeds seven million inhabitants. However, for sampling purposes, the study considered a representative population framework. The sample size was calculated using a 95% confidence level, a 5% margin of error, and a population proportion of 50% ($p = 0.5$), resulting in a minimum required sample of 384 participants. A non-probability convenience sampling method was employed, and a total of 388 respondents in the study.

Data were collected through a questionnaire distributed digitally via online channels, with voluntary participation. The instrument consisted of six sections. The socio-demographic section included nominal variables, whereas the sections related to impulse buying, intrinsic motivation, extrinsic

motivation, marketing stimuli, and self-control contained variables measured using five-point Likert scales ranging from "completely disagree" to "completely agree," as presented in Table 1.

For the development of the questionnaire, the researchers adapted established scales: Anand and Kaur (2018) for motivation, Malone et al. (2010) for self-control, Nakalinda (2018) for fast-fashion purchasing behavior, and Song et al. (2016) for marketing stimuli.

The data analysis process employed the statistical package SPSS Statistics version 27 for exploratory factor analysis (EFA) and descriptive analyses, as well as AMOS version 24 for confirmatory factor analysis (CFA) and structural equation modelling using the bootstrapping technique.

Data processing was based on Cronbach's alpha, CFA, and structural equation modelling SEM analyses. Cronbach's alpha was used to assess the internal consistency of the items within each factor. CFA enabled the evaluation of the fit between the observed data and the proposed theoretical structure and establishing convergent and discriminant validity. In addition, SEM was employed to analyze the complexity of direct and indirect relationships among the study factors.

4. Results

The surveyed population was predominantly female (n=184, 47.42%), followed by male participants (n=161, 41.49%) and participants identifying with other gender categories (n=43, 11.08%). Participants' educational levels ranged from secondary education (n=69, 17.8%) to university education (n=183, 47.2%), university graduated (n=122, 31.4%), and postgraduate education (n=14, 3.6%).

Regarding income levels, the distribution was as follows: less than one Minimum Monthly Legal Wage (MLMW) (n=60, 15.5%), between one and two MLMW (n=145, 37.4%), between two and three MLMW (n=140, 36.1%), between three and four MLMW (n=29, 7.5%), and more than four MLMW (n=14, 3.6%).

In terms of occupation, the majority indicated they are employed only (n=218, 56.2%), studying and working (n=115, 29.4%), and studying (n=55, 14.2%).

The researchers conducted an exploratory factor analysis (EFA) using the principal component extraction method with varimax rotation, yielding acceptable values (KMO=0.846, Bartlett's test of sphericity $p<0.001$, $X^2=373.6$, $df=175$, $p<0.001$). The findings indicated that the 21 items were clustered into five factors with factor loadings above 0.6, explaining 67.18% of the variance.

Based on these results, the researchers performed a confirmatory factor analysis (CFA), yielding $X^2=373.6$, $df=175$, $p<0.001$, considering all factor loadings above 0.6. While some authors suggest a minimum criterion of 0.7 for factor loadings (Comrey & Lee, 1992; Tabachnick & Fidell, 2007; Yana et al., 2015), it is deemed acceptable in this type of study to have factor loadings starting from 0.6. The CFA results are displayed in Table 1.

Table 1. Factor Loadings and Cronbach's Alpha

Construct	Variable	Item	Factor Loading	Cronbach's Alpha
Marketing Stimuli (MS)	MS1	Discounts	0.686	0.870
	MS2	Paid Advertising (influencers, blogs, etc.)	0.722	
	MS3	Seasonal SALE	0.749	
	MS4	Brand Advertising (launches, commercials, etc.)	0.833	
	MS5	Brand's Own Social Media Content	0.721	
Intrinsic Motivation (IM)	IM1	Identity	0.641	0.861
	IM2	Attention for being authentic	0.696	
	IM3	I like change	0.712	
	IM4	I like dressing differently every day	0.691	
	IM5	Buying clothes gives me pleasure	0.682	
	IM6	I like spending money on clothes	0.706	
Extrinsic Motivation (EM)	EM1	Family member's behavior	0.75	0.838
	EM2	Workplace culture	0.863	
	EM3	Social status	0.777	
Self-Control (SC)	SC1	I limit my purchases to my defined budget	0.61	0.645
	SC2	I think about whether I really need it before buying	0.784	
Impulse Buying (IB)	IB1	I buy impulsively	0.627	0.852
	IB2	Whenever I window shop, I end up buying something	0.757	
	IB3	I buy clothes when there is a change of season	0.809	
	IB4	I buy when the brand releases new items	0.825	
	IB5	I always buy something on Black Friday and Cyber Monday	0.64	

Note. Own elaboration

Internal consistency reliability was assessed using Cronbach's alpha. All constructs achieved values above the recommended threshold of 0.70, except for the self-control (SC) construct, which obtained an alpha of 0.645. This value can nevertheless be considered acceptable given the limited number of items comprising the construction.

Furthermore, alpha values ranging between 0.50 and 0.70 are considered moderate but acceptable in exploratory research, particularly when inter-item correlations exceed 0.30 (Hinton et al., 2004; Said, 2018; Wim et al., 2008). In this study, the self-control (SC) construct demonstrated an average inter-item correlation of 0.48, supporting its internal consistency. Therefore, the reliability of the construct falls within an acceptable range (Hajjar, 2018; Nawi et al., 2020).

Regarding the composite reliability index (CR), values greater than 0.7 were obtained, excluding the SC construct, which showed a value of 0.657, considered acceptable according to the criteria proposed by Fornell & Larcker (1981) and Bagozzi & Yi (1988).

Similarly, the average variance extracted (AVE) showed values greater than 0.5. However, the intrinsic motivation IM and impulse buying IB constructs presented slightly lower values. Despite this, the criteria established by Fornell and Larcker (1981) and Henseler (2015) were satisfied. To assess discriminant validity, the square root of the AVE was used as a reference, which turned out to be greater than the correlations between each construct (Fornell & Larcker, 1981). Additionally, the values of the AFC results can be observed in Table 2.

Tabla 2. Convergent and Discriminant Validity of CFA

Construct	CR	AVE	MS	IM	EM	IB	SC
MS	0.861	0.553	0.744				
IM	0.844	0.474	-0.021	0.689			
EM	0.854	0.542	0.589***	0.239***	0.736		
IB	0.84	0.637	0.447***	-0.1	0.323***	0.798	
SC	0.657	0.493	0.350***	-0.134†	0.324***	0.296***	0.702

Note: ***= p<0.001 Source: Own elaboration.

4.1 Descriptive analysis

Regarding the goodness-of-fit indices, the absolute fit measures were assessed using the chi-square to degrees of freedom ratio (CMIN/DF=2.135), the root mean square error of approximation (RMSEA=0.054), along with the goodness-of-fit index (GFI=0.916). For the incremental fit measures, the analysis included the normed fit index (NFI = 0.906), non-normed fit index (TLI=0.937), and comparative fit index (CFI=0.947). Lastly, the parsimony fit measures, the general parsimony goodness-of-fit index (PGFI=0.694), normed parsimony fit index (PNFI=0.755), and normed parsimonious fit index (PCFI=0.789) were assessed, all yielding acceptable results according to the criteria outlined (Hu & Bentler, 1999).

The researchers developed the causal model using structural equation modeling (SEM) with the bootstrapping technique for hypothesis testing, employing 2,000 sub-samples and a confidence level adjusted to 95%. The path coefficients and significance levels indicate that hypotheses H1, H2, H4, H5, and H7 were supported, whereas hypothesis H3 was rejected, indicating that intrinsic motivation (IM) does not influence self-control (SC). Similarly, H6 was rejected, suggesting that extrinsic motivation (EM) does not influence impulse buying (IB). These findings are presented in Table 3.

However, the analysis of indirect effects revealed partial moderation in the relationship between marketing stimuli (MS) and impulse buying (IB) when self-control SC) acts as the moderator (Direct effect = 0.502***, indirect effect =0.045*).

Similarly, partial moderation is observed in the relationship between intrinsic motivation (IM) and impulse buying (IB) when self-control (SC) is the moderator (Direct effect = 0.279***, indirect effect = -0.18). Conversely, moderation is absent in the relationship between extrinsic motivation (EM) and impulse buying (IB) when self-control (SC) is the moderator (Direct effect = 0.079, indirect effect = 0.026).

Tabla 3. Hypothesis Testing

	Hypothesis	Path coefficients	P-Value	Comment
H1	MS → IB	0.502	***	Accepted
H2	MS → SC	0.276	***	Accepted
H3	IM → SC	-0.112	0.092	Rejected
H4	IM → IB	0.279	***	Accepted
H5	EM → SC	0.161	0.031	Accepted
H6	EM → IB	0.079	0.173	Rejected
H7	SC → IB	0.162	0.016	Accepted

Note: *=p<0.05, ***= p<0.001. Source: Own

5. Discussion

This research contributes to the understanding the operation of the dual-system model, where impulsive behaviors and self-control coexist. Although previous studies have examined this relationship (Iyer et al., 2020; Redine et al., 2023), there is still limited empirical evidence within specific sectors such as fast-fashion using representative population samples (Francke & Carrete, 2023), except for Syahidah and Suryawati (2023), who report a low relationship between these elements.

The findings confirm that marketing exerts a strong direct effect on impulsive purchasing (H1). The high statistical significance indicates that promotions, social media advertising, and seasonal campaigns stimulate fast-fashion consumption with similar findings are consistent with Iyer et al. (2020), Gong & Jiang (2023), and Melati et al. (2024).

Despite the direct influence of marketing stimuli on purchasing behavior, it can also activate self-control mechanisms (H2). This relationship explains that marketing stimuli interacts with the consumer's reflective system (Zheng & Alba, 2021), which requires self-regulation resources to inhibit automatic responses (Goschke & Job, 2023). Consequently, practices such as limiting purchases to a predetermined budget or restricting purchases to explicit needs may reduce the impact of promotional activities on purchasing behavior.

Although previous studies have demonstrated that promotions and advertising messages can directly trigger impulsive purchases or weaken self-control (Moser, 2020), the present findings indicate that self-control moderates this relationship by activating reflective processes that counteract the initial impulse (Xu et al., 2020). This finding highlight that the dual-system model operates through parallel processes (De Neys, 2021; Li et al., 2021b).

Intrinsic motivations demonstrated a significant effect related to impulsive purchasing (H4), as Erdem et al. (2021), Lee (2018), and Sritanakorn & Nuangjamnong (2021), who concluded that identity construction and the pursuit of authenticity influence purchasing decisions. Therefore, individuals with higher levels of intrinsic motivation may be more likely to engage in impulsive buying, particularly when products are acquired to enhance self-esteem, image, and status (Wicklund & Gollwitzer, 1982), or to remain aligned with current trends (Rana & Malik, 2023). Similar behavior has also been associated with hedonic and materialistic motivations (Lavuri, 2023).

In contrast, the absence of a relationship between intrinsic motivations and self-control (H3) demonstrates that self-expression and pleasure may hinder the activation of control mechanisms. This finding contradicts the results reported by Wang et al. (2024) who identified self-control as a mechanism linking materialism with the reduction of risk behaviors. Likewise, Roberts and Manolis (2012) suggested that consumers experiencing conflicting desires may become more susceptible to impulsive purchasing behavior.

Extrinsic motivation was found influence self-control (H5), indicating that social factors trigger regulatory behaviors. External factors such as social pressures or cultural norms may influence a person's ability to regulate and resist impulsive buying temptations and likely influence individuals' ability to control their buying impulses (Fares et al., 2023; Nguyen & Ha, 2021).

As a result, self-control demonstrated a moderating effect on impulsive purchasing (H7), however, its impact was limited and appeared to depend on both social stimuli and personal motivations. Although self-control reduces impulsive behavior, its effect does not completely suppress such conduct, and consumers may rationalize their decisions. Similar research in other contexts, identifies self-control as a negative moderating variable in impulsive purchasing (Luo et al., 2018; Melati et al., 2024; Mittal et al., 2015; Pradipto et al., 2016; Ramadan et al., 2021; Roberts and Manolis, 2012). Nevertheless, although it acts negatively, fast-fashion purchasing behavior increases impulsive levels, which is difficult to resist.

Iyer et al. (2020) examined the mediating effects of self-control between impulsive buying, marketing stimuli, and both internal and external motivations through a meta-analysis. The authors found consistent results regarding the positive influence of stimuli on impulsive regardless self-control mediation. However, they also identified an indirect effect between self-control and impulsive buying.

Finally, no direct evidence was found to support the hypothesis that extrinsic motivations influence

impulsive behavior (H6), indicating that social and cultural pressure do not always promote the impulsive purchase of clothing. These results may be contradictory because Amaral and Djuang (2023), who identified a relationship between social aspects and purchase intention but isolated the relationship between extrinsic motivations and impulsive buying, while Chowdhury (2020) established this relationship but did not consider the mediating effect of self-control in garment purchase.

5.1Theoretical contributions

The main contribution of this research highlights that self-control exerts a partial mediation between marketing stimuli, motivations (both intrinsic and extrinsic), and impulsive purchasing behavior. This finding emphasizes that consumers regulate their clothing purchases in a context where impulsive buying is the predominant behavior. This dynamic demonstrates the coexistence of both intuitive and analytical behavior, suggesting that, in this industry, consumer behavior operates under the parameters of the dual-system model.

The acceptance that, in fast-fashion purchasing behavior, some sources of motivation are processed by the control system while others are not, suggests that self-control is not an immutable trait rather a mechanism that can be modulated by external factors. However, its moderating effect is suppressed when the behavior is driven by motives related to identity and self-expression.

Several aspects demonstrate this process of modulation. On the one hand, self-control operates when individuals evaluate marketing stimuli and the social environment before deciding to purchase. On the other hand, self-control mechanisms appear to be less effective when personal motivations — such as the desire for authenticity or the pleasure associated with purchasing clothing— become predominant.

5.2 Limits and future directions

This research does not discriminate between subjects, future research may establish relationships between genders, degrees of propensity for impulsive buying, and the effectiveness of control mechanisms to establish whether this mechanism is triggered by the factors described above.

Although the consumer profiles included in this research extend beyond student samples, demographic, cultural, and economic limitations remain. These factors may affect the generalization of the results. Future research could therefore develop intercultural studies across different Latin American countries and compare consumer behavior between developed and developing economies to inquire if levels of self-control (high, medium, low) affect the interaction between the impulse and stimulus systems in fast-fashion.

6. Conclusions

This research contributes to a deeper understanding of how self-control mediates the relationship between marketing stimuli, motivations, and impulsive purchasing behavior in the fast-fashion industry. The findings indicate that self-control is not a fixed or immutable trait, but rather a

mechanism influenced and modulated by external factors. The study emphasizes the complexity of consumer behavior in fast-fashion, demonstrating the ongoing interplay between impulsive and reflective processes in purchasing decisions.

The results provides further insight into the operation of the dual system model in fast-fashion purchasing, specifically regarding the interaction between control mechanisms and impulsive behavior. The self-control system partially moderates purchasing behavior when consumers are influenced by advertising strategies or social motivations, demonstrating a reflective process. However, this moderating effect appears to weaken when clothing purchases are driven primarily by personal interests, demonstrating an impulsive process. This dynamic highlight the coexistence of both intuitive and analytical systems within consumer behavior.

Intrinsic motivations were found to directly influence impulsive behavior, suggesting that consumers with higher levels of intrinsic motivation may be less likely to exercise self-control in certain purchasing situations. Personal desires related to authenticity and pleasure, correspond with impulsiveness in purchases that are not based on explicit needs. This impulsiveness is reflected in emotionally driven behaviors and openness to change, such as the need to buy something, purchasing due to seasonal changes or brand novelties, and pursuit of immediate gratification or the desire to seize momentary opportunities.

Extrinsic motivation, such as social pressure and cultural norms, may also influence individuals' ability to control their buying impulses. However, these motivations did not have a direct relationship with impulsive buying, suggesting that social and cultural motives do not always drive impulsive clothing purchases. Nevertheless, the indirect effect between extrinsic motivation and impulsive buying, mediated by the self-control system, facilitates impulsive behavior. This highlights the need for further research on whether self-control reinforces social motivations as a pretext for acting impulsively.

Finally, the findings confirm that consumer behavior in this scenario is strongly driven by promotions, social media advertising, and seasonal campaigns, but it is moderated when the consumer activates reflective processes in their purchase decisions, which regulate impulsive decisions. The presence of self-control affects marketing efforts and their impact on impulsive buying by diminishing such behavior, as it weakens the relationship. In the absence of such mediation, impulsive purchasing behavior tends to increase significantly.

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