



Article

Antecedents of Online Impulse Buying: An Analysis of Gender and Centennials' and Millennials' Perspectives

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Abstract: Impulse buying continues to be a relevant topic for retail management, yet few studies have examined the role of online impulse buying. This study analyzes the effect of impulse buying tendency on online impulse buying behavior through the mediation of normative evaluation and the urge to buy impulsively on the Internet. As a secondary objective, we aim to identify whether gender and generation influence the model. The research was conducted in Mexico with millennials and centennials who had previously bought products on the Internet. We used quantitative, explanatory, non-experimental, cross-sectional research. We applied an electronic survey, and, for the statistical technique, we used PLS. According to the results, impulse buying tendency both directly and indirectly influences online impulse buying behavior through the mediating roles of normative evaluation and the urge to buy impulsively on the Internet. Moreover, we found that gender does not have an effect on the model. Regarding generation, two significant differences were found between centennials and millennials.



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Keywords: impulse buying tendency; online; normative evaluation; urge to buy impulsively; impulse buying behavior; gender; centennials; millennials

1. Introduction

After six decades of research, impulse buying continues to be a relevant topic for retail management because it represents a significant percentage of retail sales in different formats [1]. In recent years, much of the work has been conducted in Asia, mainly in India. Few studies have focused on the role of online impulse buying [2]. The Internet, as a marketing channel, is prone to stimulating this type of purchase, as consumers feel less inhibition because of the relative social anonymity [3]. Impulse buying through Internet channels ranges from e-shopping to social commerce [2], and its process starts with the tendency or desire to buy impulsively until the purchase is made, without considering the negative consequences associated with this behavior [4].

Impulse buying tendency (IBT) is one factor influencing consumers to buy impulsively, and previous research has found that IBT has a direct effect on impulse behavior [5,6]. The value of IBT as a moderating variable between sales promotion and the urge to buy impulsively has also been reported [7]. Moreover, some studies have found that IBT is a mediator variable between constructs such as store environment, personality factors, and impulse buying [8]. However, as relevant situational factors exist that may mediate the relationship between IBT and online buying behavior, further work is still needed to comprehend the effect of IBT on other mediator variables that affect impulse buying [9].

In addition, research about the influence of gender on impulse buying lacks consistent results [10]. Although some studies have identified that women usually buy more frequently and, consequently, make more unplanned buying, Kollat and Willet [11] indicated that, if the number of purchases remains constant, there is no significant difference between

women and men. On the other hand, Bellenger, Robertson, and Hirschman [12] found that gender has no significant effect on impulse buying behavior. Furthermore, some studies [13–15] have indicated that women, compared to men, have a higher emotionality that increases their proclivity to impulse buying, which intensifies their propensity to buy in an impulsive way [14]. In contrast, other works, such as Cobb and Hoyer's study [16], point out that men tend to buy more impulsively.

The literature also highlights the importance of studying the online buying behavior of different generations [17]. Generation Y, or millennials, and Generation Z, also called centennials, are currently the largest generations on the planet; previous research has stated that their consumption behavior patterns seem to be different in a significant way [18]. Millennials, which include those born between 1981 and 1996 [19], feel comfortable with their ability to browse and make purchases online [20], even those of a spontaneous nature [21]. Compared to the previous generation, millennials tend to make quick decisions in their buying process and make more impulsive purchases [22]. Millennials are also considered materialistic and self-controlled [23], and they tend to spend their money quickly on consumer goods and personal services [24]. On the other hand, centennials were born between 1997 and 2012 [19]; they grew up completely immersed in digital technologies and communications [25]. They are described as more educated consumers who assess the propositions of brick-and-mortar versus online retailers; they are also considered responsible spenders [26], materialistic [27], and strong content consumers who value instant results [28]. Research that analyzed the impulse buying tendency, comparing centennials and millennials in Bangladesh, found that centennials are more prone to impulse buying [29]. In this study, we investigate the existence of possible significant differences in the proposed relationships.

Therefore, the purpose of this study is to analyze the effect of impulse buying tendency on online impulse buying behavior through the mediation of normative evaluation and the urge to buy impulsively on the Internet. In addition, as a secondary objective, we aim to identify whether gender and generation are demographic variables that influence the model. The following sections include a review of the literature and a description of the research model, followed by the research method, analysis of the results, discussion, and conclusions.

2. Conceptual Framework and Hypotheses Development

A consumer's impulse buying tendency is defined as an "internal trait of responding quickly to a given stimulus without deliberating regarding action outcomes" [30]. Rook and Fisher [31] pointed out that IBT is a unidimensional construct that includes personal tendencies to think and behave in specific ways—that is, spontaneously, immediately, and thoughtlessly. The behavioral approach that assesses consumer decision making postulates that IBT is a personal trait that, under certain circumstances, leads to impulse buying [10]; in other words, IBT elicits consistent responses to environmental stimuli [5,32]. IBT is different from impulsive buying behavior because it is a relatively enduring consumer trait that generates impulses or motivations that lead to behavior [33]. Although a variety of research has examined the effects of IBT in the offline context, its antecedents and associated effects on online transactions are still being investigated [3,34].

IBT influences the normative evaluation (NE) of online shopping. NE is conceptualized as "consumer judgments regarding the positive appropriateness of impulsive buying behavior" [30]. For many consumers, impulse buying is considered normatively wrong [31,35]; however, according to the context, it may be classified as acceptable [36]. Thus, purchase situations tend to evoke different normative evaluations [36]. It is important to note that a highly impulsive consumer does not necessarily respond to every stimulus, as there are factors that can stimulate or hinder the transition from feeling to impulsive action, as is the case with NE [10]. Similar to physical stores, NE has a positive effect on online impulse buying behavior (OIBB) [37]. In their research on travel behavior, Chih et al. [30] found that IBT positively and significantly influences NE. Therefore, it is possible to assume that:

Hypotheses 1 (H1). *Impulse buying tendency positively influences normative evaluation.*

The concept “urge to buy impulsively on the Internet” (UBII), introduced by Rook and Fisher [31], refers to a consumer characteristic that is part of the state of desire to buy immediately; it unintentionally conducts instant or unplanned purchases in a given environment [38–40]. Gupta and Gentry [41] defined it as “a desire of the consumer to buy the product right away, thus limiting consumers’ freedom to delay a buying decision.” UBII is also described as a specific state of desire that the consumer feels when encountering a certain brand, product, or service [42].

The extent of UBII may vary among consumers [43]. Although some of them may frequently experience the urge to buy impulsively [44], the likelihood of making impulsive purchases will depend on their impulse buying tendency and their normative judgments [45]. This means that consumer judgments are aspects that influence irrational cravings that can appear when consumers find products in a shopping environment [30,46]. Therefore, we propose that:

Hypotheses 2 (H2). *Normative evaluation positively influences the urge to buy impulsively on the Internet.*

IBT and UBII are different yet closely related constructs [42,47]. The former has been related to several variables, its effect is accentuated in marketing channels such as the Internet [3,48], and its influence is difficult to resist when the consumer faces an impulsive purchasing situation [31]. The latter is triggered by stimuli experienced by the consumer; it is activated as a felt need that occurs prior to the purchase decision [49]. IBT influences UBII. When a consumer’s IBT interacts with their positive emotions, their need to buy also increases [48]. Several researchers have found that high IBT positively affects UBII [38,39,48]. For instance, Bandyopadhyaya [50] validated a model in the retail context of Indian supermarkets that proved that IBT significantly influences the urge to buy. Therefore, it is possible to assume that:

Hypotheses 3 (H3). *Impulse buying tendency positively influences the urge to buy impulsively on the Internet.*

Compared to physical stores, shopping online gives consumers more freedom and fewer restrictions [51]. Many consumers prefer this format because of its convenience, choice of options, and availability of information; these features increase the likelihood of impulsive buying [2]. When the consumer browses websites, UBII leads to online impulse buying [52,53]. UBII is considered one of the most proximal determinants of impulse buying behavior [50]. Additionally, experts consider that UBII exists only when the uncontrollable impulse arises in response to different stimuli [38,50,54].

Although UBII is a state of desire [55], OIBB refers to purchases made suddenly and immediately without prior intention [56]. A consumer with an increased desire to buy is likely to make an impulse purchase [51], and several previous empirical works have verified this relationship [6,38,39]. For instance, Verhagen and van Dolen [57] studied the context of online stores and consumers in the Netherlands, demonstrating that a significant and positive effect exists between UBII and OIBB. Additionally, other research in the fields of sustainability [46] and hedonic purchases [7] not only highlight the role of the impulse to buy as a mediating variable, but also its direct and positive effect on impulse buying. Therefore, we propose that:

Hypotheses 4 (H4). *The urge to buy impulsively on the Internet influences online impulse buying behavior.*

Impulsive buying is usually used as a dependent variable in the comprehension of impulsive consumption [58]. Impulse buying has three key attributes: it is unplanned, it results from exposure to a stimulus, and it is decided in the moment [15,37]. This kind of purchase is triggered when the consumer with a high tendency to buy impulsively experiences a purchase stimulus, and, once analyzed, values it as normatively appropriate [31].

IBT is conceptualized as “a consumer’s tendency to buy spontaneously, unreflectively, immediately, and kinetically” [31].

Impulse buying tendency, as an individual trait, may be positively associated with impulse buying [32]. Impulsive online shopping is a result of the consumer’s personality traits [52]. When a consumer has a high IBT, he or she spends time searching for products and reacts to impulse buying [58]. In other words, IBT has a positive and significant influence on impulse buying behavior [30]. In theory, when an impulsive consumer experiences an impulse buying stimulus and assesses the potential purchase as appropriate, impulsive buying behavior unfolds [59]. Research such as that of Iyer et al. [60] and Parsad et al. [58] have confirmed a direct, positive, and significant effect between those variables. Therefore, it is considered that:

Hypotheses 5 (H5). *Impulse buying tendency positively influences online impulse buying behavior.*

Figure 1 presents the theoretical model.

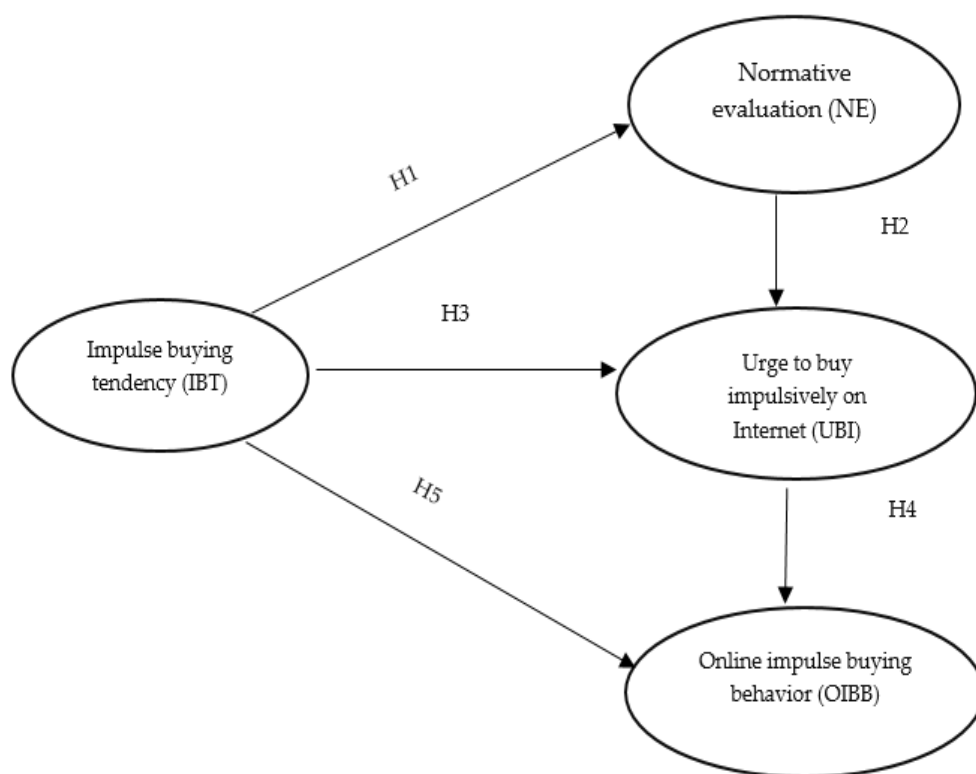


Figure 1. Theoretical model.

3. Materials and Methods

As an analysis technique, we used structural equation models with partial least squares (PLS-SEM) in order to measure the proposed model and the two multigroup analyses [61]. PLS-SEM has been widely applied to management and marketing research, since it can estimate complex statistical models that emphasize causal explanation or prediction when several constructs are involved [61]. Indeed, previous investigations in the field of impulse purchasing have used this technique successfully [46,62,63].

This study was conducted in Mexico with millennials and centennials who had previously bought products on the Internet. We performed quantitative, explanatory, non-experimental, and cross-sectional research. An electronic survey was applied to collect the data. The instrument included previously validated scales (see Table 1). The fieldwork was conducted between May and September of 2020.

The variables were measured using scales available in the literature that were adapted to the research. The following three constructs were evaluated using a Likert-type scale, including five points of response, from “totally disagree” to “totally agree”. UBII was

measured using five items: four from the scale of Beatty and Ferrell [38] and one from the scale of Zhao et al. [64]. IBT was measured using five items: four from Xiang et al. [65] and one from the scale of Beatty and Ferrell [38]. OIBB was adapted from Zhao et al. [64] with four items. Finally, the NE from Rook and Fisher [31], with nine adjectives, was evaluated with a semantic differentiation scale.

Table 1. Questionnaire.

Impulse Buying Tendency	Normative Evaluation
Xiang et al. [65]	Rook and Fisher [31]
IBT1. I frequently buy things spontaneously.	A fictitious impulse purchase situation was developed about Mary, a college student who purchased more products through the Internet than she needed for a social event. Participants were requested to evaluate the following: Rate Mary’s behavior according to the following attributes:
IBT2. I often buy things without thinking.	
IBT3. “I see it, I buy it” describes the way I buy.	
IBT4. Sometimes I am a bit reckless with what I buy.	
Beatty and Ferrell [38]	
IBT5. I am a person who makes unplanned purchases.	NE1. Bad Good
	NE2. Illogical Rational
	NE3. Productive Spender
	NE4. Unpleasant Pleasant
	NE5. Dumb Clever
	NE6. Unacceptable Acceptable
	NE7. Selfish Generous
	NE8. Reckless Prudent
	NE9. Immature Mature
Urge to buy impulsively on the Internet	Online impulse buying behavior
Beatty and Ferrell [38]	Zhao et al. [64]
UBII1. I have experienced the sudden urge to make unplanned purchases online.	The last time I bought on the Internet:
UBII2. I’ve seen things I want to buy on websites, even though they weren’t on my shopping list.	OIBB1: I bought more than I had planned to buy.
UBII3. I have had a strong urge to make unplanned purchases on the Internet.	OIBB2: I spent lots of money on unplanned goods.
UBII4. While browsing the Internet, I feel the sudden urge to buy items.	OIBB3: I ended up spending more money than I originally set out to spend.
UBII5. I have had a desire to buy things that were not in my online-shopping goal.	OIBB4: Unplanned goods took up a great proportion of the total goods I purchased

We used a non-probabilistic sample by convenience. We obtained 412 valid surveys. According to Hair et al. [66], we would need 145 observations to achieve an R² of 0.10, with a statistical significance of 1% and a power of 80%. Demographic characteristics showed that 142 centennials and 270 millennials participated in the investigation. In terms of gender, 178 men and 234 women were surveyed. Centennial participants were between 18 and 24 years old, whereas millennial participants were between 25 and 40 years old. The majority of centennials were students (119) whereas the majority of millennials reported being employees (116).

4. Results

4.1. Common Method Bias

Considering that the data for all the variables to be analyzed came from the same source, a common method bias analysis was performed through Harman’s single factor test [67] and the revision of the Variance Inflation Factor (VIF) values. Harman’s test showed that a single factor explains 41.45% of the variance, which is below the 50% limit tolerable to consider that variations in responses are not caused by the instrument [68]. Also, all VIF values are less than three. This is considered acceptable since, when values exceed this value, there is problematic collinearity and common method bias [69].

4.2. Assessing the PLS-SEM Results of the Measurement Model

According to Anderson and Gerbing [70], the analysis should be conducted in two stages. In the first stage, we reviewed the measurement model in order to ensure the reliability and validity of the constructs. In the second stage, we analyzed the structural model [66]. We used SmartPLS 3.3 as statistical software. We ran the PLS algorithm using 5000 iterations. From the original 25-item measurement model, 5 were eliminated (i.e., IBT4, IBT5, NE2, NE3, and NE5) because they did not fit the criteria recommended for the measurement model.

In the context of PLS-SEM, the appropriate analysis to confirm the quality of the model is the confirmatory composite analysis (CCA) [69]. The results showed that all the loadings, except UBII2 (0.680), were greater than 0.708. Therefore, it was eliminated. The standardized factor loadings were squared and, in all cases, exceeded the value of 0.50. Cronbach’s alpha and composite reliability indicators should show values between 0.70 and 0.95. When eliminating the UBII2, it was identified that the composite reliability of the OIBB exceeded the value of 0.95, so it was necessary to eliminate the OIBB2, since it showed a high correlation with other items. Then, both indicators showed acceptable values. The AVE (see Table 2) and heterotrait–monotrait (HTMT) values comply with the suggested values (see Table 3). Consequently, there is convergent validity and discriminant validity as detailed below. In Table 2 we show the reliability and validity data of the measurement model. The recommended minimum cut-off points were exceeded: 0.70 (loads, alpha, rho, and composite reliability) and 0.50 (AVE).

Table 2. Reliability and convergent validity of measurement model.

Construct	Item	Loadings	Cronbach’s Alpha	Rho_A	CFI	AVE
Online impulse buying behavior	OIBB1	0.882	0.936	0.938	0.950	0.797
	OIBB3	0.866				
	OIBB4	0.910				
	OIBB5	0.899				
	OIBB6	0.904				
Normative evaluation	NE1	0.801	0.889	0.907	0.914	0.640
	NE4	0.811				
	NE6	0.846				
	NE7	0.764				
	NE8	0.795				
Impulse buying tendency	IBT1	0.889	0.867	0.878	0.918	0.790
	IBT2	0.923				
	IBT3	0.853				
Urge to buy impulsively on the Internet	UBII1	0.849	0.872	0.873	0.912	0.722
	UBII3	0.884				
	UBII4	0.857				
	UBII5	0.808				

Note: Rho_A: Dillon–Goldstein’s rho, CFI: Comparative Fit Index, AVE: Average Variance Extracted.

Table 3. Heterotrait–monotrait ratio (HTMT).

	Online Impulse Buying Behavior	Normative Evaluation	Impulse Buying Tendency	Urge to Buy Impulsively on the Internet
Online impulse buying behavior				
Normative evaluation	0.273			
Impulse buying tendency	0.831	0.318		
Urge to buy impulsively on the Internet	0.732	0.307	0.723	

To establish the discriminant validity, we used the heterotrait–monotrait ratio. The recommendation for this indicator is that the ratios have values lower than 0.85 (for conceptually different constructs) or 0.90 (for conceptually similar constructs) [61]. In our model, none of the ratios exceeded the suggested cut-off points. Thus, we confirmed that the measurement model had discriminant validity (see Table 3).

Additionally, nomological validity was determined by correlating the scores of the constructs of the model with other variables of the model, in this case with the variable “age” (see Table 4). The results showed that there is no significance in the correlations of the variables of the model with age. This shows that there is nomological validity in the reflective measurement model. Finally, the predictive validity was reviewed by testing the measurement invariance of composite models [69]. This step is presented below in the multigroup analysis. The results of compositional invariance and equality of means, and variances in construct scores showed that different estimates between specific groups do not stem from different content or meaning [71].

Table 4. Correlation of age with the constructs of the measurement model.

Correlation Age and Constructs	Online Impulse Buying Behavior	Normative Evaluation	Impulse Buying Tendency	Urge to Buy Impulsively on the Internet
Pearson correlation	−0.05	−0.54	−0.018	0.026
Sig [2 sides]	0.92	0.27	0.718	0.592
n	412	412	412	412

4.3. Structural Analysis

We assessed the prediction’s quality of the structural model through the coefficients of the structural effects and the R^2 values of the endogenous variables (see Figure 2). We revised the algebraic sign, magnitude, and significance of path values. According to the results, four of them exceeded the recommended minimum cut-off point of 0.20; however, all of them coincided with the algebraic sign postulated and were significant (t values greater than 1.96, 95% confidence level). Thus, according to the criteria, all the hypotheses were validated (see Table 5).

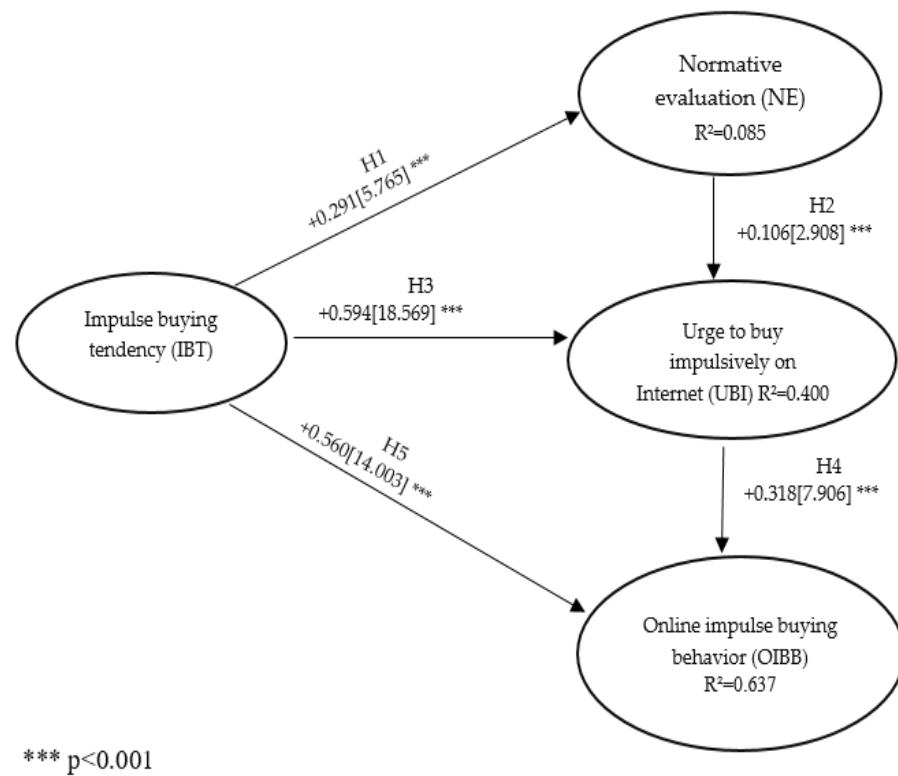


Figure 2. Contrasted model.

Table 5. Model structural direct path values and *t* values.

Direct Effects Path	Path Value	<i>t</i> Value	Result
H1: Impulse buying tendency positively influences normative evaluation	0.290	5.555	Supported
H2: Normative evaluation positively influences the urge to buy impulsively on the Internet	0.109	2.869	Supported
H3: Impulse buying tendency positively influences urge to buy impulsively on the Internet	0.607	18.253	Supported
H4: Urge to buy impulsively on the Internet influences online impulse buying behavior	0.307	7.337	Supported
H5: The impulse buying tendency positively influences online impulse buying behavior	0.558	13.390	Supported

We also analyzed the indirect effects between IBT and OIBB. These effects were examined through a multiple mediator model, since several additional mediators exist. We used an explicit procedure through PLS bootstrapping [72]. It was found that the relationship between IBT and OIBB is partially mediated by NE and UBII ($\beta = 0.0010, p = 0.021$) and the relationship between IBT and OIBB is partially mediated by UBII ($\beta = 0.186, p = 0.000$). The two indirect effects were significant, as shown in Table 6. Therefore, it is possible to affirm that NE and UBII are mediator variables between IBT and OIBB. In both cases, it is a complementary partial mediation, since the direct and indirect effects are significant and point in the same direction [73]. Additionally, we performed the Variance Accounted For (VAF) analysis. This ratio calculates the magnitude to which the mediation process explains the variance in the dependent variable [73]. The results of the VAF were the following: 1.3% in the relationship $IBT \rightarrow NE \rightarrow UBII \rightarrow OIBB$, and 24.7% in the relationship $IBT \rightarrow UBII \rightarrow OIBB$. If we consider the joint effect of both indirect relationships, the VAF value is 26.0%, which shows that the indirect effects reveal 26% of the explained variance of OIBB; the remaining 74% of the variance is expressed directly by the relationship between IBT and OIBB.

Table 6. Indirect effects tests.

	Coefficient	p Value	Bootstrap 90% CI				
			Percentile		BC	VAF	
Direct effects							
IBT → OIBB	0.558	0.000	0.472	0.635	0.471	0.634	74.0%
Indirect effects							
IBT → NE → UBII → OIBB	0.010	0.021	0.003	0.020	0.003	0.020	1.3%
IBT → UBII → OIBB	0.186	0.000	0.134	0.245	0.134	0.245	24.7%
Total indirect effects	0.196	0.000	0.143	0.256	0.142	0.255	26.0%
Direct effect (IBT → OIBB) + indirect effects	0.754	0.000	0.704	0.800	0.700	0.797	100.0%

Additionally, we reviewed the R² indicator. The model weakly explained NE (0.084), moderately explained UBII (0.419), and substantively explained (0.624) OIBB (see Figure 2). Finally, we examined Stone–Geisser’s Q² indicator, which shows the degree as observed values are reconstructed by the model and its parameter estimates [74,75]. The model must have the ability to predict the reflective indicators of the endogenous constructs; when Q² indicators are greater than zero, it has predictive relevance [74,76]. The Q² values of our model met these criteria: OIBB Q² = 0.492, NE Q² = 0.049, and UBII Q² = 0.295. Figure 2 shows the contrasted structural model. Beta values, t values, and R² values are included.

4.4. Multigroup Analysis

We performed two multigroup analyses (MGAs) to determine if significant differences occurred between men (178) and women (234) as well as centennials (142) and millennials (270) in the model’s trajectory indicators. These samples sizes are adequate to obtain a 5% significance level and a statistical power of 80% [77]. For this purpose, two nonparametric methods were used—namely, the permutation test and Henseler’s MGA method—because they allow for determining such differences. According to Sarstedt et al. [78], before comparing model estimates between groups, it is necessary to verify that the measures of the constructs are invariant between them. In the first phase, measurement invariance, also known as measurement equivalence, was verified. We conducted a measurement invariance of composite models’ analysis (MICOM) in order to confirm that the differences in the model estimators did not result from different contents in the composite variables. The MICOM procedure involves the assessment of configurational invariance, compositional invariance, and equality of composite means and variances [66].

4.4.1. Assessment of Configurational Invariance

This kind of invariance implies that the indicators are identical in the measurement model. This means that each measurement model uses the same indicators and scales among the groups, the data are treated in the same way, and the optimization criteria and algorithms used are the same. These conditions were met in the groups created in this study.

4.4.2. Compositional Invariance

A permutation analysis was applied to analyze the degree of variation in the results of the composite variables. The correlation of the composite between the groups was examined to determine that it was not significantly different from 1 and $p > 0.05$. In Table 7, we present the results of the compositional invariance for men–women and centennials–millennials. In all cases, the correlations were significantly equal to 1, with p -values > 0.05 . As there is configurational invariance and compositional invariance, it is possible to state that partial measurement invariance exists. However, in order to verify the presence of complete measurement invariance, we ran step 3 of the MICOM analysis.

Table 7. Step 2 of the MICOM procedure.

Men–Women	Original Correlation	Compositional Invariance		
		Correlation of Permutation Means	5.0%	Permutation <i>p</i> -Values
Online impulse buying behavior	1.000	1.000	1.000	0.162
Normative evaluation	0.998	0.995	0.987	0.759
Impulse buying tendency	1.000	1.000	0.999	0.655
Urge to buy impulsively on the Internet	1.000	1.000	0.999	0.735
Centennials–Millennials	Original Correlation	Correlation of Permutation Means	5.0%	Permutation <i>p</i> -Values
Online impulse buying behavior	1.000	1.000	1.000	0.093
Normative evaluation	0.998	0.994	0.985	0.681
Impulse buying tendency	1.000	1.000	0.999	0.158
Urge to buy impulsively on the Internet	1.000	1.000	0.999	0.858

4.4.3. Equality of Composite Means and Variances

This condition is established through step 3. In this case, it is necessary to ensure that no significant differences exist between the mean values and variances among the groups. This can be determined when the permutation-based confidence intervals include the original differences in the mean values and variances from the original model estimation. The results show that, in both cases, the original differences in the mean values and variances are included in the permutation difference of means and variances, and $p > 0.05$ (see Table 8). This indicates that no significant differences exist between them. Thus, it is possible to state that complete measurement invariance occurred.

MGA compares the bootstrap-generated estimators for one group with the estimators for the other group. The results of the comparison of men and women show no significant differences in the structural paths of the model. In other words, both men and women presented the same pattern of behavior. On the other hand, in the comparison between centennials and millennials, two significant differences emerged. The first occurs in the relationship between UBII and OIBB where the effect was greater in centennials than in millennials ($\beta_c = 0.470$ versus $\beta_m = 0.223$, β difference 0.247, $p = 0.007$). The second occurred in the relationship between IBT and OIBB where the effect was greater in millennials than in centennials ($\beta_c = 0.430$ versus $\beta_m = 0.626$, β difference -0.196 , $p = 0.026$). Table 9 shows these results. In order to deepen in this relationship, we also reviewed the specific indirect effects. We also found a significant difference between millennials and centennials in the relationship: $IBT \rightarrow UBII \rightarrow OIBB$ ($\beta_c - \beta_m$ difference 0.145, $p = 0.013$).

Table 8. Step 3 of the MICOM procedure.

Men–Women	Mean Original Differences (Men–Women)	Mean Permutation Mean Difference (Men–Women)			Permutation <i>p</i> -Values	Variance Original Difference (Men–Women)	Variance Permutation Mean Difference (Men–Women)			Permutation <i>p</i> -Values
		2.5%	97.5%				2.5%	97.5%		
OIBB	−0.142	0.002	−0.192	0.201	0.149	0.168	−0.004	−0.213	0.198	0.109
NE	0.023	0.001	−0.195	0.194	0.814	0.227	−0.005	−0.292	0.283	0.121
IBT	−0.103	0.003	−0.193	0.204	0.302	0.034	−0.002	−0.238	0.224	0.770
UBI	−0.009	0.003	−0.197	0.201	0.936	0.068	−0.004	−0.198	0.182	0.487
Centennials–Millennials	Mean Original Differences (Centennials–Millennials)	Mean Permutation Dean difference (Centennials–Millennials)			Permutation <i>p</i> -values	Variance Original Difference (Centennials–Millennials)	Variance Permutation Mean Difference (Centennials–Millennials)			Permutation <i>p</i> -values
		2.5%	97.5%				2.5%	97.5%		
OIBB	−0.045	0.001	−0.203	0.212	0.668	0.040	−0.004	−0.223	0.210	0.719
NE	0.126	−0.000	−0.203	0.205	0.225	0.177	−0.009	−0.312	0.287	0.247
IBT	−0.084	0.000	−0.210	0.212	0.417	−0.011	−0.005	−0.265	0.236	0.934
UBI	−0.035	0.003	−0.203	0.208	0.736	−0.146	−0.006	−0.210	0.188	0.150

Table 9. Gender and generation multigroup analyses.

PLS-MGA			Confidence Intervals				<i>p</i> Value Differences			
			Men (178)		Women (234)					
Path Coefficients			2.50%	97.50%	2.50%	97.50%	Path Differences	Henseler's MGA (<i>p</i>)	Permutation (<i>p</i>)	Supported
Hypotheses	Men	Women								
NE -> UBII	0.080	0.141	-0.028	0.172	0.031	0.240	-0.062	0.405	0.432	No/No
IBT-> OIBB	0.537	0.570	0.374	0.677	0.477	0.657	-0.034	0.722	0.690	No/No
IBT -> NE	0.313	0.277	0.153	0.466	0.143	0.391	0.036	0.731	0.738	No/No
IBT -> UBII	0.640	0.580	0.534	0.724	0.482	0.659	0.060	0.354	0.376	No/No
UBII -> OIBB	0.320	0.303	0.173	0.472	0.212	0.393	0.017	0.856	0.834	No/No
			Centennials (142)		Millennials (270)		<i>p</i> Value Differences			
Path Coefficients			2.50%	97.50%	2.50%	97.50%	Path Differences	Henseler's MGA (<i>p</i>)	Permutation (<i>p</i>)	Supported
Hypotheses	Centennials	Millennials								
NE -> UBII	0.103	0.118	-0.033	0.223	0.025	0.203	-0.014	0.859	0.866	No/No
IBT-> OIBB	0.430	0.626	0.292	0.552	0.509	0.720	-0.196	0.022*	0.026*	Yes/Yes
IBT -> NE	0.363	0.259	0.212	0.501	0.126	0.377	0.104	0.296	0.351	No/No
IBT -> UBII	0.599	0.612	0.480	0.696	0.524	0.688	-0.012	0.870	0.867	No/No
UBII -> OIBB	0.470	0.223	0.346	0.586	0.120	0.328	0.247	0.003*	0.007*	Yes/Yes

5. Discussion and Conclusions

The objective of this research was to examine the effect of IBT on OIBB through the mediation of NE and UBII. The model was also contrasted considering individuals' gender and generation. This work advances the knowledge of IBT in the online context, in which its effects continue to be investigated [3,34].

In the context studied, IBT is mainly reflected in usual and frequent purchases without previous consideration. According to the results, among the proposed relationships, this tendency exerts its greatest effect on UBII. This variable manifests itself mostly in the strong and sudden urge to make unplanned purchases on the Internet. Our findings confirm that IBT and UBII are closely related constructs [42]. IBT, as an internal personal trait, generates UBII. These results are consistent with previous findings reported by Beatty and Ferrell [38], Foroughi et al. [39], and Flight et al. [48]. Similar to what Verhagen and van Dolen [57] found, we identified that UBII directly and favorably affects OIBB. In addition, it mediates the relationship between IBT and OIBB, corroborating what some researchers [49] have postulated.

In this study, we found that IBT directly and positively influences OIBB. This variable is mainly manifested by the excessive spending of money on unplanned items and in the high proportion that these items represent of total online purchases. These results confirm previous findings regarding unplanned purchasing [15,37] as an attribute of behavior (i.e., OIBB). Additionally, they reconfirm that IBT favors OIBB [30,32,50,52].

Furthermore, IBT positively influences NE. The latter is manifested mainly by consumer judgments regarding how acceptable, enjoyable, and good an impulse purchase made on the Internet is. This is consistent with previous works that indicate the effect of NE on OIPT [30,37]. Furthermore, we identified that NE has a positive influence on UBII, confirming previous work that found that UBII depends on normative judgments [45]. Moreover, NE is a mediator variable between IBT and OIBB. This finding confirms that NE can foster or hinder the transition to impulsive action [10,31,45,59].

As a secondary objective, we analyzed whether gender (men–women) and generation (centennial–millennial) have an influence on the model. In the first case, the results indicated no significant differences between men and women. These results are consistent with previous studies of IBB [11,12] and with this study; there are no significant differences in the antecedent variables. Regarding generation, two significant differences were found. First, in the relationship between UBII and OIBB, the effect is greater in centennials. Furthermore, in the relationship between IBT and OIBB we found a greater effect in millennials. This coincides with the recent findings of Thangavel et al. [18], who delved into the purchasing behavior of these generations. While millennials tend to feel more comfortable browsing and shopping online [20], centennials grew up fully immersed in digital technologies and communications. Therefore, millennials may have developed a greater urge to buy impulsively on the Internet. This generation has an appreciation for instant results; when they buy, they expect to get the products faster than previous generations do, and they are strong consumers of digital content [25,28]. These differences cause a generational gap associated with the influence of IBT on UBII and, ultimately, on OIBB.

Based on our analysis and discussion, this study concludes that in the context of online shopping, IBT has a positive, direct, and significant effect on NE, UBII, and OIBB. Furthermore, it was found that NE is a mediator variable between IBT and UBII, while UBII mediates the relationship between IBT and OIBB. Moreover, we conclude that there are no significant differences between men and women. However, when evaluating by generation, we found two significant differences between centennials and millennials: one focused on UBII and OIBB, and the other was associated with IBT and OIBB.

This study, like others, has limitations. It was a cross-sectional research design, with non-probabilistic sampling and only two generational groups. Additionally, the subsamples used in the multigroup analyses were relatively small. This limits the likelihood of generalizing results. Future research should evaluate the proposed model by analyzing other generations. In addition, it would be valuable for the line of research to delve deeper

into impulse buying in new models of social commerce on different platforms and even in mobile applications. Furthermore, incorporating consumer protection variables such as privacy and security could be a beneficial next step.

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