

VALUE CONSCIOUSNESS, ENJOYMENT OF MOBILE COUPONS, AND IMPULSE BUYING TENDENCY. EFFECTS ON MOBILE COUPON REDEMPTION INTENTIONS.

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ABSTRACT

This study has two purposes. First, it examines the effects of value consciousness, the enjoyment of mobile coupons, and the impulse buying tendency (IBT) on the intention to redeem mobile coupons from smartphones in a sample of 280 mobile coupon users. The scales used to capture and assess the data are adapted to the context of mobile coupons. The use of structural equation modeling reveals that value consciousness and the enjoyment of mobile coupons affect the intention to redeem mobile coupons in the context of mobile marketing. We also find that the enjoyment of mobile coupons mediates the relation between value consciousness and coupon redemption intention. Second, the data analysis yields an internal factorial structure of both the cognitive aspects (need satisfaction-based buying tendency, spontaneity-based buying tendency, and value secured-based buying tendency) and the affective aspects (excitement-based buying tendency and internal conflict-based buying tendency) of the IBT. We explore the influence of these factors in the relationship between the enjoyment of mobile coupons and intention to redeem, allowing us to expand the theory of the IBT.

Keywords: Mobile marketing, coupon redemption, consumer behavior, mobile coupon enjoyment, mobile impulse buying.

INTRODUCTION

Mobile phone marketing is defined as the use of mobile phones to provide consumers with time- and location-specific and personalized information to promote goods, services, and ideas. The novel status of the mobile phone as a one-to-one communication device suggests that mobile phone marketing is an innovative form of direct marketing (Mort & Drennan, 2002; Pousttchi & Wiedemann, 2006; Salo & Tahtinen, 2005). It also allows consumers to enjoy the convenience of purchasing products.

Convenience is a well-known motivation that encourages consumers to shop via their mobile devices. This shopping alternative provides a broader selection of opportunities and greater access to information on an online store; further, it allows consumers to compare the offerings of sellers worldwide (Kim, 2002) and enables them to buy around the clock without facing social disfavor and making efforts to obtain delivery. This exposes consumers to rich stimuli and provides them ever-increasing opportunities for impulsive spending (LaRose et al., 2001; Verhagen & Van Dolen, 2011). This communication channel also allows the delivery of relevant and personalized messages and promotions, such as mobile coupons, to target audiences (Watson et al., 2002; Moffett et al., 2002; Trappey & Woodside, 2005).

Mobile marketing uses personal devices, such as mobile phones and tablets, to provide firms with unique possibilities to build and maintain one-to-one relationships with their

customers (Camponovo et al., 2005). The consumers have easier access to products and services to make 24/7 purchases, leading to an increase in impulse buying by them, as well as sales for vendors. This mode of shopping eliminates constraints of time and space usually experienced by consumers when making traditional purchases (Kalakota & Whinston, 1997, p. 219; Eroglu et al., 2001) in a brick-and-mortar shopping environment.

Based on the preliminary evidence of the prevalence of this behavior in the online context, there is always a real opportunity to identify the characteristics of the mobile channel interface that influences impulse buying. Sales promotion tools, such as mobile coupons, are instruments seeking to increase sales of products and brands, usually over a short period (Wierenga & Soethoudt, 2010); this is because they are perceived as a benefit by the consumer, thereby inducing relevant consumer behavior (Yusuf, 2010). Therefore, the use of a mobile coupon as a marketing promotion tool has a positive influence on purchase intention (De Oliveira et al., 2017).

Mobile marketing, which is called the next generation of eMarketing, is becoming more common now. Mobile marketing is growing at a very fast rate because it is considered more cost-effective, personalized, and results-driven. Advertisers are deploying digital coupons on mobile phones, with the aim to identify the original location of consumers and real-time delivery capabilities in a way that makes for a more compelling solution than traditional paper coupons. According to the mobile coupons market report (Cision PR Newswire, 2018), “one of the primary drivers of the market is growth in smartphone and Internet users. With the rise in Internet users, new vendors are providing m-commerce services on cell phones and tablets that will allow users to make instant purchases, resulting in the rise in online purchases through cell phones during the forecast period.”

Smartphone penetration continues to rise, and along with it, all the mobile marketing tools. Subscriptions associated with smartphones account for around 70% of all mobile phone subscriptions. Estimates indicate that there will be 5.6 billion smartphone subscriptions by the end of 2019. “The number of smartphone subscriptions is forecast to reach 7.4 billion in 2025, accounting for 83% of all mobile subscriptions” (Ericsson Mobile Report, 2019).

A mobile coupon (m-coupon) is an electronic ticket solicited and delivered on a mobile phone that can be exchanged for a financial discount or rebate when purchasing a product or service. The coupons can carry messages including text, pictures, audio, and, of late, even videos offering value and enjoyment to consumers when they are used to make purchases. The number of mobile coupon users in the US was expected to touch 142.4 million by the end of 2019, constituting more than half of the mobile phone population; further, roughly half of the adults in the US will use a mobile coupon this year—a 9.7% increase over 2017. By 2022, this figure will grow to 57.5% because of sustained higher adoption rates by Internet users (64.6%) (eMarketer, 2018).

Jung & Lee (2010) compared the redemption rates of printed and electronic coupons and analyzed how redemption rates change in each case with the discount offered. E-coupons lead to higher redemption rates because of the following factors: (1) consumers have full control over the coupons to be redeemed in an online context, especially over their favorite brands; (2) this increases coupon providers’ financial profitability (Fortin, 2000); and (3) timing affects consumers’ processing of advertising information (Mantel & Kellaris 2003). The ability to incrementally redeem a coupon appears to depend upon the extent of consumer heterogeneity in the market in terms of loyalty toward the couponed brand (substitution costs), responsiveness to face values (economic benefits), and disposition toward the type of coupon vehicle (effort costs

and psychological benefits). Additionally, the coupons' distribution method had different impacts on different types of consumers.

Current trends suggest further growth in mobile coupon usage. Moreover, the theory on mobile coupon and consumer behavior has yet to be expanded. Thus, the interest in continuing to research mobile coupon redemption stimulates researchers' eagerness to keep making theoretical contributions to the fields of consumer behavior and marketing. As a promotional tool, coupons have been studied in the bricks-and-mortar context; however, contributions to the online context remain scant. Jung and Lee (2010) found that consumers download and redeem mobile coupons because of coupon issuers' (e.g., service providers and manufacturers) brands, economic benefits, the relevancy of gifts, and competitions. Other factors such as message timing, product category, discount size, discount format, and personalization have also been found to influence mobile coupon redemption rates (Banerjee & Yancey, 2010). Alpar and Winter (2014) studied the performance of print coupons and electronic coupons, finding non-significant redemption rates for print coupons. However, other factors such as the enjoyment of mobile coupons were also found to influence redeeming mobile coupons and their redemption rates. Guimond et al. (2001) found that consumers enjoy using mobile coupons more than just because of the economic benefits. Therefore, it might be worth studying the influence of the enjoyment of mobile coupons as a mediator between the face value/economic benefits/value consciousness of mobile coupons and the intention to redeem.

Some coupon usage studies have applied different psychological approaches to explain how customers respond to coupons as a marketing tool. For instance, Fishbein and Ajzen (1975) and Bagozzi et al. (1992) applied the theory of reasoned action, while other authors have based their studies on the theory of planned behavior to explain e-coupon usage (Ajzen, 1985; Fortin, 2000). The act of redeeming mobile coupons is also considered to be a part of impulse purchasing behaviors. Buying impulsiveness, or the impulse buying tendency (IBT), makes an individual adopt an unplanned and unreactive purchasing method when stimulated by marketing tools (Weun et al., 1998; Beatty & Ferrell, 1998). It thus measures the impulsivity shown by a shopper in both a bricks-and-mortar context and an online shopping context; however, the IBT has not been found to be a predictor or a mediator of the intention to redeem mobile coupons. As mentioned above, when referring to consumers' enjoyment of mobile coupons, the IBT is also worth exploring to expand consumer behavior theory into the mobile coupon context.

This study evaluates how customers' value consciousness, mobile coupon enjoyment, and the IBT impact the intention of redeeming mobile coupons by consumers; it uses a sample of mobile coupon users with smartphones.

Through the evaluation of its hypotheses, this study contributes to consumer behavior and marketing strategies theory and management practices by explaining the direct and indirect (moderating) effects of customers' value consciousness, enjoyment, and IBT on their intention to redeem mobile coupons.

LITERATURE REVIEW

Value consciousness and coupon redemption

Value consciousness is a concern for paying low prices, subject to some quality constraint. (Lichtenstein et al., 1990, p. 56). Value consciousness is derived from the concept of value regularly found in the marketing literature, and it is conceptualized from two points of

view: (1) as a price/economic benefit or face value of the discount, and (2) as an overall utility. As an *economic benefit*, value is defined by Monroe and Petroschius (1981) as the ratio of quality to price and pertains to a specific concern for value received—defined in terms of need-satisfying properties of the product—for price paid by the consumers (Thaler, 1985; Kashyap & Bojanic, 2000). Nickels & Wood (1997) found that coupon face value is a primary determinant of consumers' redemption behaviors. It is associated with sales conversion because consumers can reduce their consumption expenditures; in other words, they save money by using it (Liu et al., 2015).

As *utility*, value consciousness is defined as an overall assessment of the benefit of the product based on what is received and given (Zeithaml, 1988). Utility is conceptualized as a multidimensional construct composed of consumer behavior factors, such as quality, price, search, learning, time, cognitive and physical efforts, social acceptance, emotional response (enjoyment), reputation, psychological risks, and convenience value (Kashyap & Bojanix, 2000; Sweeney & Soutar, 2001; Huber et al., 2001; Petrick, 2002; Pura, 2005; Liu et al., 2015).

Mobile coupons also provide a utility to consumers because of the effect of mobile coupons redemption over the short-term. Considering the promotional incentive time frame, the construal level theory (CLT) explains how the short- or long-term exposure of consumers to stimuli impacts their responses to the face value or brand choices (Blattberg & Neslin 1990; Klein 1985; Leone & Srinivasan 1996; Ward & Davis 1978). The theory states that near-term events are construed via “low-level” concrete features. In contrast, distant events are construed via “high-level” abstract features that may often relate to the inner meaning of the event and its link with one's broader aspirations in life (Liberian *et al.*, 2002; Trope and Liberman, 2003). In other words, responses to stimuli and preferences for them may vary systematically as a function of whether the event is expected to occur in the relatively short term (“near future”) or over the longer term (“distant future”). Danaher et al. (2015) found that time of delivery significantly influences redemption and suggested that short expiration length of the mobile coupon help signal time urgency. As a result, people place a higher value on a near-future reward than a distant-future reward (Ainslie & Haslam 1992; Elster & Loewenstein 1992). Because mobile coupons reach people faster, at any time, and from anywhere, they might trigger short-term impulsive purchases, as reflected in consumers' intention to redeem them over the short term.

In the context of mobile marketing, marketing research shows that consumers with higher levels of price/value consciousness, and, thus, more likely to search for a better price, regardless of the level of advertised discount, have a higher intention to redeem m-coupons (Palazon & Delgado 2009; Jayasingh & Eze, 2010).

This study also considers the enjoyment (a component of the utility value) experienced by the consumers when redeeming a mobile coupon. Enjoyment implies the fun, pleasure, and attractiveness (emotional response) perceived by the online shopper from the online experience. It refers to the joy that customers expressed when: clicking on the mobile coupon, reading its content, and experiencing a good purchase deal (Gonzalez, 2016). If consumers perceive the mobile coupon service as enjoyable, they will respond to coupons in a more emotional way. They will exhibit more enjoyment in using coupons than evaluating their economic benefits (Guimond et al., 2001); thus, they may perceive the service as potentially more convenient to use

(Im & Ha, 2014). Therefore, mobile coupons, perceived as providers of value, may positively affect consumer attitudes toward the more rapid adoption of mobile shopping technology (Hsu & Lin, 2008).

Most e-businesses provide visual and exciting mobile marketing advertising and mobile coupons to satisfy customers during their online shopping experience and differentiate themselves from other companies. Because individuals do not find it challenging to learn to use mobile coupons for online shopping, they find the usage process appealing and enjoyable (Venkatesh, 2000; Venkatesh et al., 2002), and underestimate the difficulty in a technological component's ease of use (Celik, 2011). During such instances, perceived enjoyment has been found to be a robust and well-established construct for capturing the affective reactions to an environment (Koufaris, 2002). A higher correlation of enjoyment of coupons with the use of mobile coupons indicates that the pleasure and satisfaction experienced by customers, when finding attractive and enjoyable elements in the mobile promotion, minimizes the impact of the sole economic benefit of cost saving (Garretson & Burton, 2003; Guimond et al., 2001; Liu et al., 2015; Gonzalez, 2016; Saprikis et al., 2017).

However, evaluating the consumers' coupon redemption behavior without discriminating between value consciousness (value concept) and coupon enjoyment (Zeithaml, 1988), for instance, or coupon enjoyment (perceived value concept), means that all these factors are cofounded and correlated; then, the impact of the cost is diffused. Further, its effects on the intention to redeem coupons as an attitude and behavior cannot be clearly described. Some consumers may redeem coupons because of the increase in value rather than a proclivity to respond to the lower price offered in the form of a coupon. As a result, value consciousness should be conceptualized and measured at the psychological level as only one of the constructs affecting the behavior of redeeming coupons, as stated by Lichtenstein et al. (1990). In addition, these authors found that value consciousness explains a significant variation in coupon redemption behavior after one accounts for the change in coupon redemption behavior described by coupon proneness.

As an extension of the results obtained by Lichtenstein et al. (1990) (based on four product-category-specific measures of coupon redemption behavior in stores), our study focuses on testing the impact of value consciousness (concern about paying low prices according to Monroe and Petroschius, 1981) on the intention to redeem mobile coupons context mediated by the enjoyment of mobile coupon (emotional component experienced by the consumers). This study hypothesizes that:

Hypothesis 1a: Value consciousness has a positive impact on the intention to redeem mobile coupons.

Hypothesis 1b: Mobile coupon enjoyment has a positive impact on the intention to redeem mobile coupons.

Hypothesis 1c: Enjoyment of mobile coupon mediates the effect of value consciousness on mobile coupon redemption intention.

Impulse Buying Tendency (IBT) in the mobile purchase context

There are two broad approaches in research on impulse buying: one based on consumption impulse formation and enactment and another based on environmental characteristics. First, consumption impulse formation and enactment (Dholakia, 2000) considers the IBT to be a personality trait that contributes to the formation of consumption impulses. Second, *latent state–trait theory* states that human behavior is dependent on one's traits, environmental characteristics, and the interaction between them (Steyer et al., 1999). Individuals tend to exhibit steady personality traits and behave consistently across situations, but the tendency to buy impulsively differs from person to person (Verplanken & Herabadi, 2001).

However, impulsive individuals may have difficulty in restricting their behaviors and make frequent and consistent impulse purchases in different shopping contexts. Therefore, traits alone are not always a good predictor of behavior, which often depends on how individuals react to specific circumstances in a given context (e.g., state of mind) (Mischel, 1973). However, the state of mind of an individual at any given point is inherently volatile, making it less reliable as a consistent predictor of behaviors (Hertzog & Nesselrode, 1987).

Consumers exhibit different behaviors when making purchases in the bricks-and-mortar and online settings after being exposed to mobile marketing promotions. The decision to purchase by responding to mobile promotions (e.g., mobile coupons) can be a planned or unplanned action when shopping in a physical store, at home, or elsewhere. However, shopping online leads to a higher likelihood of behaving impulsively (Kukar-Kinney et al., 2016) because this setting provides attractive features such as ease of access at lower cost and anonymity for users (Beard, 2005). Unplanned decisions are based on carefree thinking and often caused by affection and emotional status (Govind et al., 2014). Impulse purchasing behavior represents a long-standing enigma for consumer and marketing researchers, and many efforts have been made to conceptualize and measure it (Rook, 1987).

An impulse that regularly manifests itself via an action has a secret origin—buying impulsiveness or the IBT. A consumer's personality traits determine the degree of his/her IBT (Weun et al., 1998; Puri, 1996), internal cues such as emotional states (Donovan et al., 1994; Rook & Gardner, 1993), normative evaluation of impulse buying engagement (Rook & Fisher, 1995), and demographic factors (Wood, 1998). However, the consumer's reactive behavior given by the IBT does not always come from direct visual encouragement; consumers are also suddenly motivated to shop (Rook, 1987). Consumers' personality traits can exemplify impulsive behavior more than other characteristics (Rook & Fisher, 1995; Beatty & Ferrell, 1998; Weun *et al.*, 1998) and can help determine the degree of a person's IBT (Beatty & Ferrell, 1998; Rook & Fisher, 1995).

The IBT in marketing is treated as an essential lifestyle trait for humans (Rook & Fisher, 1995; Rook, 1987; Weun et al., 1998). Individuals show an inherent propensity to engage (or not) in impulsive behaviors (Wells et al., 2011). The IBT is the degree to which an individual is likely to resort to an unplanned, unintended, immediate, distinctive, unreactive, and identifiable way of purchasing (Weun et al., 1998; Beatty & Ferrell 1998). It has been characterized as a conflict between the desire to consume and willpower to resist (Hoch & Loewenstein, 1991). The

IBT thus provides a good measure of the impulsivity exhibited by a shopper in a physical store as well as online. Higher IBT scores trigger more and more frequent impulse purchases online than in a traditional shopping context (Rook & Fisher, 1995).

In addition, external factors affect impulse buying behaviors. External factors are identified as visual encounters with products and/or promotional stimuli (Piron, 1991) such as mobile coupons and mobile advertising. Rook and Hoch (1985) emphasized that buying impulses begin with a consumer's sensation and perception driven by external stimuli and are followed by a sudden urge to buy. With the continuing growth of online shopping, there is greater scope for consumers to engage in online impulse buying. For instance, attractive mobile coupons and the incentive they provide for extra shopping allow online shoppers to make frequent visits to online retail shops, which may raise impulsive buying (Dawson & Kim, 2009).

The IBT relates to two mental states: cognitive and affective. Internal stimuli are processed by consumers affectively and cognitively, resulting in impulsive or non-impulsive behavior. A significant relationship is found between the emotional and cognitive states of individuals and their impulse buying behavior online, or, more precisely, their urge to buy impulsively (Parboteeah et al., 2009). For instance, when online users visit a website, they have both cognitive and affective reactions and these ultimately determine their response (Ozen & Engizek, 2014). Nonetheless, consumers who are more responsive to their affective state than their cognitive one experience a strong urge to buy that manifests itself as a loss of self-control (Moulding et al., 2017); they are also more likely to engage in impulsive buying behavior (Dawson & Kim, 2009; Bellini et al., 2017).

Affective mental states manifest themselves as emotional states such as mood, feelings of pleasure, excitement, joy, contentment, and fear (Ozen & Engizek, 2014). These feelings may also include an irresistible urge to buy, positive buying emotions, and mood management (Coley & Burgess, 2003). When a consumer experiences an overwhelming urge to buy, he/she feels compelled to make an impulse purchase. Consumers might buy products for non-economic reasons such as fun, fantasy, and social or emotional gratification. Therefore, the affective component is related more to feelings and emotions and the impulse purchase might be a way to deal with the emotional shopping environment and use of affective components in marketing campaigns (Dincer, 2010).

On the other hand, cognitive aspects refer to how one understands, thinks about, and interprets information; they can result in unplanned buying tendencies with little cognitive deliberation during shopping (Ozen & Engizek, 2014) and disregard for the future (Youn & Faber, 2000). The IBT is linked to a lack of cognitive control that prevents purchasing on impulse. Higher IBT levels are more likely to be affected by marketing stimuli such as advertisements, visual elements, and promotional gifts. When engaged in in-store browsing, consumers tend to respond more frequently to urges to buy impulsively (Youn & Faber, 2000). These results are consistent with those of previous research that has noted both the affective and the cognitive aspects of impulse buying in traditional shopping behavior (Rook, 1987; Dholakia, 2000; Youn & Faber, 2000).

Additionally, consumers with a buying impulse may not necessarily act on it because certain factors can mediate the relationship between impetus and behavior (Sun & Wu, 2011). In

this respect, Kwak et al. (2006) confirmed that the relationship between the buying impulsiveness trait and impulsive purchase decisions is moderated by subjective norms within a different cultural context as well as by the normative evaluation of impulse purchase behavior (Rook & Fisher, 1995; Peck & Childers, 2006). However, from a hierarchical perspective, Beatty and Ferrell (1998) found that situational variables (e.g., time) and individual difference variables (e.g., the IBT) influence a set of endogenous variables (e.g., affect) and, ultimately, the impulse purchase.

Moreover, Govind et al. (2014) showed that buying impulsiveness traits have a significant moderating effect on the relationship between pleasure and the impulsive buying intention. While the level of satisfaction, experience, and dominance when seeing the product is a substantial predictor of sudden buying intention, the effect is mediated by consumers' impulsiveness traits when purchasing. An enjoyable web store encourages shoppers to spend more time on shopping websites and explore items in which they are interested; moreover, perceived enjoyment grants a sense of confidence, and consumers become emotionally attached to shopping online (Wakefield et al., 2011). As mentioned previously, impulsive consumers are more likely to be sensitive to their emotions and feelings than non-impulsive consumers. The IBT might be a good predictor of impulse buying (Kim & Eastin, 2011) as a behavior in the mobile coupon context; thus, it might be worth exploring the influence of IBT in the relationship between enjoyment of mobile coupons and the intention to redeem mobile coupons by consumers.

METHODOLOGY

Research design

This work aimed to answer the following research questions: How does consumers' enjoyment of mobile coupons mediate between value consciousness and mobile coupon redemption intention? How does impulse buying tendency influence the relationship between enjoyment of mobile coupon and mobile coupon redemption intention? Consumers who use smartphones or tablets for communications and entertainment, are targeted by mobile promotions and advertising to stimulate them to make mobile purchases from in and out home, on the Internet, or in-stores.

The research used an electronic questionnaire to validate four variables: value consciousness, enjoyment, IBT, and the intention to redeem mobile coupons. The research design was developed to test the hypotheses and measures of the variables by conducting an extensive literature review; the questionnaire items were adapted or adopted to ensure the quality of the measurement after being reviewed by three experts to verify the validity of its content and flow. In this study, the value consciousness construct adopted the approach used by Lichtenstein et al. (1990), and it is seen as the concern among consumers about paying low prices and getting the minimum quality expected. So, value consciousness should explain the response of consumers in the form of a redeemed coupon. This study hypothesized that value consciousness, as an exogenous (predictor) variable, would potentially affect the intention to redeem the mobile

coupon by consumers, and it uses the value consciousness 6-item scale in Lichtenstein et al. (1990), but adapts it to the mobile coupon context.

The second scale used in previous studies is mobile coupon enjoyment. The enjoyment is the extent to which the activity of using the computer or mobile devices system is perceived to be enjoyable, apart from any performance consequences that may be anticipated (Davis et al., 1992); their 5-item scale was used to measure enjoyment. Mobile coupon enjoyment was the second exogenous (predictor) variable, and it was expected to affect the intention to redeem mobile coupons.

This study proposed a mediator construct with different mediation paths, through which enjoyment would potentially affect the intention to redeem mobile coupons. The latent mediator variable was the IBT. In the context of mobile marketing, IBT is the degree to which an individual is likely to adopt an unplanned, unintended, immediate, distinctive, unreflective, and identifiable way of purchasing (Weun et al., 1998; Beatty & Ferrell, 1998). Verplanken & Herabadi (2001) suggested a 20-item scale to measure both cognitive and affective components of the IBT; this was used in this study.

The fourth scale—for the intention to redeem mobile coupons—was adapted from Venkatesh & Davis (2000) and Chen & Lu (2011) and contained six items.

The subjects of the study were business students at the Florida National University. The study adopted a sample of business students because students are useful to inspect in terms of their mobile service behavioral intentions given by their overmuch usage of mobile smartphones (Burns, 2005) to fill time with checking emails, making calls, texting, and also use technology for purchasing and entertainment (Thottam, 2005, Kim et al., 2008). The questionnaire contained items related to the variables mentioned earlier, with an introduction detailing the purpose of the study, followed by all the items that were measured through a 7-point Likert-type scale, ranging from 1 (Totally disagree) to 7 (Totally agree). The last part of the questionnaire incorporated questions related to demographics, such as gender, age, income, marital status, family structure, and the frequency of redeeming mobile coupons. The frequency variable used a 3-point nominal scale ranging from 1 (very frequent) to 3 (occasionally). The study was conducted from April 2019 to June 2019.

Data analysis

The data analysis of this study was done in different stages. The first stage was the univariate analysis of the data by performing the normality test, missing values detection, and dataset correction. The second stage was the exploratory factor analysis (EFA) to verify whether the constructs used in the model to test the hypotheses had the same structure as those taken from the theoretical framework proposed by different authors. The third stage was: the confirmatory factor analysis (CFA); the re-specification of the model to obtain a higher model fit, if needed; and the follow-up analysis to assess the indirect effects hypothesized previously. The last analysis evaluated the possibility of getting complete mediation in the full models by assessing the unmediated model (Meyers et al., 2017).

The data were obtained from 382 business students who have made mobile purchases by using mobile coupons on their smartphones or tablets. A total of 297 questionnaires were received (77.7%). Twelve surveys were rejected after being reviewed. The data was entered into an excel datasheet and exported into SPSS v.26 and Amos v.26 for data analysis. The normality test of the univariate variables indicated a departure from the normal distribution. The values of kurtosis and skewness were abnormal. After performing the Kolmogorov-Smirnov and Shapiro Wilk normality tests, the results showed a difference that was statistically significant from a normal distribution. The variables were transformed into z-variables by using the log base-10 function to increase the normality. The results from the transformation yielded an improved kurtosis and skewness values of the variables, resulting in improved normality.

The data analysis process included the identification of data outliers. Five cases were removed from the original sample (135, 171, 241, 248, and 270). The Mahalanobis distance value calculation displayed values equal to or greater than 91.872, which was selected as the critical value of the Chi-square with 54 degrees of freedom. The variance-covariance matrices' homogeneity, measured by Box's test, offered a statistically significant result ($F = 1.517, p < 0.001$); this indicates that there was inequality in the variance-covariance matrices.

Internal structure of constructs and measurement model evaluation

The EFA conducted to identify the multidimensional factorial structure in each construct provided results on expected lines (see Table 1). EFA is a technique part of the factor analysis used to identify underlying relationships between measured variables. The purpose of the EFA is to identify a small number of themes, components, dimensions, or factors underlying a large set of variables (Meyers et al., 2017) specific for the population-data being analyzed.

As expected, the constructs value consciousness, enjoyment, and intention to redeem mobile coupons showed only one component. This result indicated that the data showed sufficient correlation between the variables. Thus, these original scales were kept invariable, as suggested by the literature and previous studies. Each construct resulted in adequate alpha values (with Cronbach's alpha coefficients higher than 0.7, showing satisfactory reliability -see Table 1). It is the most common measure of the internal consistency of a measurement scale. A minimum acceptable value for Cronbach's alpha is 0.70. Below this value, the internal consistency of the items of the scale range is low, which lead to a lack of reliability (Nunnally, 1978). In the case of IBT, the factor analysis test reported an embedded factorial structure in both affective and cognitive components. Specifically, two factors were found for the emotional component and three for the cognitive part.

CONSTRUCT	Kaiser-Meyer-Olkin (KMO) Sampling adequacy	Bartlett's test of sphericity	Cumulative variance explained (%)	Cronbach's Alpha coefficient (≥ 0.70 , acceptable)
Value consciousness (1 component)	0.804	$\chi^2 = 382.594$, df = 15, $p < 0.001$)	46.589	0.765
Mobile coupon enjoyment	0.780	$\chi^2 = 694.892$, df = 10, $p < 0.001$)	64.504	0.883
Impulse buying tendency (IBT):				
Affective (two factors)	0.861	$\chi^2 = 1070.727$, df = 36, $p < 0.001$)	62.098	0.870
Cognitive (three factors)	0.764	$\chi^2 = 716.867$, df = 45, $p < 0.001$)	63.119	0.710
Intention to redeem mobile coupons	0.885	$\chi^2 = 1388.66$, df = 15, $p < 0.001$)	73.725	0.925

After obtaining the results from the EFA, CFA was conducted to determine whether the hypothesized factor for the affective and cognitive components of IBT, with their associated indicator variables, showed evidence of validity (Meyers et al., 2017). The confirmatory process used Amos (structural equation modeling -SEM) software. The SEM uses various types of models to illustrate the relationships among observed variables and is intended to provide a quantitative test of the theoretical model hypothesized by the researcher (Schumacker & Lomax, 2000).

The indices used to interpret the good fit of the model are goodness-of-fit (GFI), comparative fit index (CFI), normed fit index (NFI), and root mean square error of approximation (RMSA) (Bentler & Bonnet, 1980; Bentler, 1990; Byrne, 1998). The results of the SEM with Chi-square of 46.377, df of 32, and p -value < 0.05 (0.048) fitted the indexes for NFI (0.936), CFI (0.979), GFI (0.91) (with values greater than 0.90 as acceptable), and RMSA (0.040, $p = 0.726$, > 0.05 , acceptable); therefore, it helped describe each factor identified within the cognitive component of the IBT construct.

However, the cognitive component of the IBT yielded three factors and these demonstrated eigenvalues above 1.00. Factor one grouped variables 2, 4, 5, 6, and 8 of the cognitive scale used (see the questionnaire). These items referred to the behaviors triggered by the tendency to evaluate criteria that can determine whether thoughtless or impulsive purchase behaviors occur. Thus, factor one was named *the need satisfaction-based buying tendency (NSBT)*. Factor two, with items 3, 9, and 10, referred to spontaneous purchase behaviors. High and low levels of spontaneous purchasing traits characterize upper and lower levels of impulsiveness, respectively; hence, this was called the *spontaneity-based buying tendency (SBT)*. Finally, factor three combined items 1 and 7 of the scale; these items referred to the previous action taken by consumers before redeeming the coupon to minimize purchasing risks and post-purchase dissonance. These items relate to consumers' prior confirmation of feeling

secure about the need for satisfaction through the act of coupon redemption and ensure they have certain information about the purchase conditions such as expected prices before redeeming the coupon. This third factor was named the *value secured-based buying tendency (VSBT)*; this is related to the high or low intrinsic tendency to verify in advance whether a purchase using a mobile coupon provides a good alternative.

On the other hand, the original model for the affective component of IBT yielded two factors. Factor one grouped variables 2, 8, 9, and 10 of the affective scale used. These factors referred to the emotional excitement when looking for a product to purchase. Factor one was labeled *excitement-based buying tendency (EXBT)*. Factor two referred to an internal conflict or a feeling of frustration on not realizing a purchase. This factor was named as *internal-conflict-based buying tendency (INTCONFT)*, and included variables 1, 3, 5, 6, and 7.

The confirmatory factor analysis performed on the affective component of the IBT did not fit the indexes NFI (0.84), CFI, (0.863), GFI (0.88), and RMSA (0.141, $p < 0.05$, not acceptable; Chi-square of 170.284, df of 26, and $p\text{-value} = 0.000$). This model was considered a good candidate for re-specification. The modification indices from the confirmatory analysis results showed the possibility of adding the correlation between pairs of error variables within the same factor to improve the model fit. The correlations decrease the Chi-square value and change the parameters (Arbuckle, 2013).

Within factor one (EXBT), the possibility of adding to the model a correlation between almost all the following error-pairs of variables was found: 1-2/1-4, 2-3, and 3-4; within factor two (INTCONFT), it was between 6-9 and 7-8. After adding the correlations for the pairs mentioned, the new model fit parameters indicated that the re-specified model with its standardized coefficients indicated values for Chi-square of 109.569 with 24 degrees of freedom, and $p = 0.001$ (still significant), GFI (0.969), CFI (0.976), and NFI (0.959) were greater than 0.90, which are acceptable; the RMSA value was 0.07 ($p = 0.08, > 0.05$). Thus, the re-specified model has a good fit to the data. In conclusion, it was decided to keep two factors for the affective component of the IBT. Cinjarevic (2010), using the integrative view and role of both emotions and cognition in the impulse buying, found three factors in the structure of the IBT scale. However, our study found five factors, confirming the multidimensional composition of the IBT.

ANALYSIS AND DISCUSSION

Sample characteristics

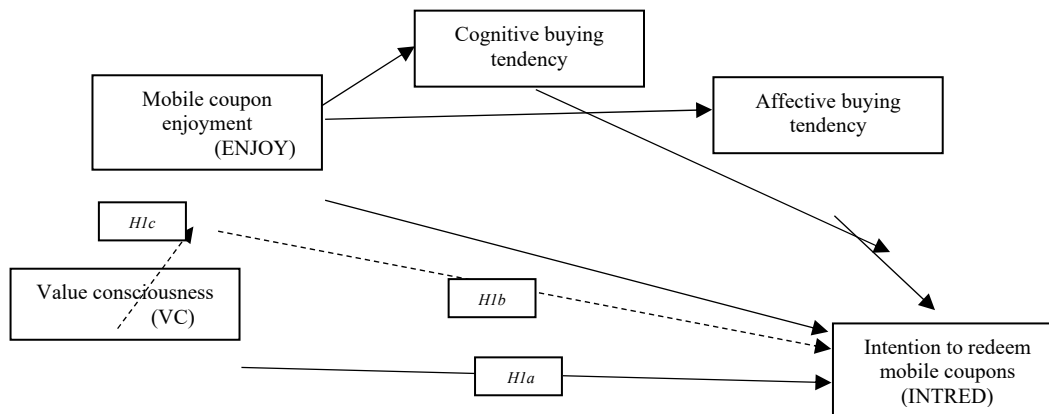
A total of 297 questionnaires were received (77.7%) from the 382 business students covered. Twelve questionnaires were rejected after being reviewed for completion and correctness, giving a total sample size of 285 (See Table 2).

Table 2		
Sample characteristics		
VARIABLES	Amount	Percentage
Gender:		
Male	116	41.8
Female	164	58.2
Age range:		
18-25		47.4
26-35		37.2
36-45		9.5
46+		6
Status:		58.2
Single		21.8
Married		20
In a relationship		14.7
Single with children		42.1
Single without children		21.4
Couple with children		21.8
Couple without children		
Income:		
Under \$10,000		34
\$10,000-\$20,000		18.9
\$21,000-\$30,000		17.5
\$31,000+		29.5
Mobile coupon redemption frequency:		
Very frequently		41.4
Frequently		37.5
Occasionally		21.1
Total	280	

Research model and hypotheses development

This study suggested the research model hypotheses shown below to answer the research questions mentioned in the research design section (see Figure 1). Structural equation modeling (SEM) was used for measurement validation and modeling to satisfy the initial theoretical model and assumptions. Because many variables were included in this study, we tested different models independently, as appropriate when the model is complex and the research objectives are to make predictions and advance theory (Hair et al., 2011).

Figure 1
Theoretical research model



Testing the mediation of mobile coupon enjoyment between value consciousness and intention to redeem mobile coupons

The first model tested included the predictor variables value consciousness (VC) and enjoyment of mobile coupons (ENJOY) and the effect variable of consumers' intention to redeem mobile coupons (INTRED). The purpose was to test the hypotheses *H1* (*a*, *b*, and *c*). *H1a* stated that value consciousness has a positive impact on the intention to redeem mobile coupons, and *H1b* stated that enjoyment of mobile coupons has a positive impact on the intention to redeem mobile coupons. The third sub-hypothesis, *H1c*, proposed that enjoyment of mobile coupons mediates the effect of value consciousness on mobile coupon redemption intention. It is expected that a mediation occurs when the effect of VC on INTRED decreases to zero with enjoyment of mobile coupon in the model (Baron & Kenny, 1986).

The output of the model tested is shown in Table 3. The output showed a very good model fit (GFI = 0.918; NFI = 0.925; CFI = 0.958; RMSA = 0.064, $p = 0.028$). The unstandardized regression weights showed that the pattern linking the measured variables (VC, ENJOY, and INTRED) to their latent variable was statistically significant. The squared multiple correlations for VC and ENJOY accounted for approximately 70% ($R^2 = .699$) of the variance of INTRED. However, the direct path from VC to INTRED was not statistically significant ($p = 0.332$). It is likely that VC affects INTRED indirectly through ENJOY, and the indirect effects were at play in the model. Still, the theoretical background and previous research indicate that VC predicts INTRED in isolation, but the result might be mediated as the model is configured (see Table 3). The full model was then assessed to address this issue via follow-up analysis by applying the Aroian test (Aroian, 1944/1947; Meyers et al., 2017). From the unstandardized path coefficient values in the full model (Table 3), the estimated value from ENJOY to INTRED was 1.038, with a standard error of 0.10.

The Aroian test (Preacher & Leonardelli, 2019) resulted in a z score of approximately 2.80 ($p < 0.005$), so the indirect path through ENJOY in the full model is statistically significant; this result brought up the possibility of having observed complete mediation. The unmediated model with VC to INTRED (see Table 4), in the absence of another context, produced a path coefficient that was statistically significant ($p = 0.02$), with an estimate of 0.728 and a standardized error of 0.238. This model showed good fit with GFI = 0.952, NFI = 0.955, CFI = 0.978, and RMSA = 0.056 ($p = 0.275$).

Regression weights			Estimate	S.E.	C.R.	P Label	Standardized Regression Weights
ENJOY	<---	VC	.576	.197	2.932	.003	.250
INTRED	<---	VC	.146	.150	.970	.332	.050
INTRED	<---	ENJOY	1.038	.100	10.342	***	.822

* $p < 0.001$

Regression weights			Estimate	S.E.	C.R.	PLabel	Standardized Regression Weight
INTRED	<---	VC	.728	.238	3.064	.002	.254

* $p < 0.001$

The previous analysis suggests a complete mediation, through ENJOY, in the full model between VC and INTRED. However, to verify complete mediation, the level of impact of ENJOY as a mediator variable was evaluated through the Freedman-Schatzkin test (Freedman & Schatzkin, 1992). The Freedman-Schatzkin test uses the unstandardized path coefficients and standard errors of the mediated model (0.146 and 0.15, respectively) and the unmediated model (0.728 and 0.238, respectively). The Freedman-Schatzkin test yielded a value of approximately 58.57, with degrees of freedom equal to 198; the t value applicable to our study, with a reliability of 0.05, was higher than 1.96. Thus, the path between VC and INTRED was significantly lower in the mediated model than the unmediated model.

Because the path in the mediated model was significant, partial mediation was the conclusion. The relative strength of the mediated effect in this portion of the full model was determined as a ratio of the standardized indirect impacts to the standardized direct effects (Meyers et al., 2017). The patterned indirect consequence of VC to INTRED and ENJOY to INTRED was $(0.2055 / 0.254) = 0.809$ (81%). In an isolated evaluation, approximately 81% of

the effect of VC on INTRED is mediated through ENJOY. Thus, we conclude that *H1c* is supported.

Exploring the influence of IBT between enjoyment of mobile coupon and intention to redeem mobile coupons

The second model of the study featured the IBT, ENJOY, and INTRED. A SEM was used to explore the influence of IBT in the relationship between ENJOY and INTRED. As stated in the theoretical framework section, the cognitive and affective components of IBT as generic factors influencing consumers purchasing decisions have been studied previously. However, the data analysis performed in this study found a factorial composition in each IBT component. It motivated the author to treat each factor as a separate variable to explore and discover specific contributions to the theory of IBT in the context of consumer behavior and lay the foundations for future hypothesis testing.

The internal factorial composition in both the cognitive and affective components of the IBT yielded three factors for cognitive component: *need-satisfying-based buying tendency* (NSBT), *spontaneity-based buying tendency* (SBT), and *value-securing-based buying tendency* (VSBT). Further, there were two factors for the affective component: *excitement-based buying tendency* (EXBT), and *internal-conflict-based buying tendency* (INTCONFT). The output showed a very good model fit (GFI = 0.903; NFI = 0.912; CFI = 0.902; RMSA = 0.075, $p = 0.000$). Table 5 shows the SEM results.

From the SEM results shown in Table 5, there was a direct and significant effect of ENJOY ($p = 0.005$) and the IBT factors EXBT ($p = 0.021$), NSBT ($p = 0.017$), and SBT ($p = 0.02$) on INTRED. Even though the exogenous variable ENJOY related significantly with the factor INTCONFT, the latter did not have a significant impact on the variable effect INTRED. It appeared that these three variables mediate the impact of ENJOY on the INTRED. The factor also showing a non-significant impact on all paths between ENJOY and INTRED was VSBT ($p = 0.089$).

Regression Weights			Estimate	S.E.	C.R.	P Label	Standardized Regression Weights
EXBT	<---	ENJOY	2.558	.378	6.774	***	.922
INTCONFT	<---	ENJOY	1.683	.268	6.279	***	.942
NSBT	<---	ENJOY	-.301	.101	-2.988	.003	-.231
SBT	<---	ENJOY	1.830	.289	6.337	***	.773
VSBT	<---	ENJOY	.009	.024	.364	.716	.019
INTRED	<---	ENJOY	29.400	10.492	2.802	.005	13.552
INTRED	<---	EXBT	-4.134	1.787	-2.313	.021	-5.287
INTRED	<---	INTCONFT	-8.114	4.817	-1.685	.092	-6.683
INTRED	<---	VSBT	.324	.190	1.701	.089	.069
INTRED	<---	NSBT	.352	.148	2.378	.017	.212
INTRED	<---	SBT	-1.279	.420	-3.043	.002	-1.396

* $p < 0.001$

The full model was also assessed to test mediation of NSBT, SBT, and EXBT between ENJOY and INTRED via follow-up analysis by applying the Aroian test (Aroian, 1944/1947; Meyers et al., 2017). First, we tested the mediation of NSBT. The Aroian test (Preacher & Leonardelli, 2019) resulted in a z score of approximately 1.80 (< 1.96) ($p = 0.07$; > 0.05), so the indirect path through NSBT in the full model is not statistically significant; this result brought up the possibility of not having observed complete mediation. The unmediated model with ENJOY to INTRED (see Table 6), in the absence of another context, produced a path coefficient that was statistically significant ($p = 0.000$), with an estimate of 1.035 and a standardized error of 0.102. This unmediated model showed good fit with GFI = 0.941, NFI = 0.959, CFI = 0.97, and RMSA = 0.098 ($p = 0.000$).

Regression weights			Estimate	S.E.	C.R.	PLabel	Standardized Regression Weight
INTRED	<---	ENJOY	1.035	0.102	10.181	***	.827

Second, the Aroian test (Preacher & Leonardelli, 2019) to test the mediation of EXBT resulted in a z score of approximately 2.16 (> 1.96) ($p = 0.030$; < 0.05), so the indirect path through EXBT in the full model is statistically significant; this result brought up the possibility of having observed complete mediation. See the unmediated model with ENJOY to INTRED in Table 6. Third, the mediation of SBT yielded a z score of approximately 2.71 (> 1.96) ($p = 0.006$; < 0.05), so the indirect path through SBT in the full model is statistically significant also brought up the possibility of having observed complete mediation.

The IBT was configured through several factors of both components, cognitive and affective, and finally, two ingredients (one from cognitive and one from the affective components) confirmed mediation. Regardless of the confirmed mediating effect, the direction of the impact of both SBT and EXBT sub-factors on mobile coupon redemption was negative. From Table 5, the factor EXBT (affective component) showed a higher standardized and negative estimate than the SPNBT factor (the cognitive component).

Theoretical implications

The major result of this study is related to value consciousness in the context of marketing promotions—in this case, mobile coupon redemptions by consumers. When a consumer perceives that a certain amount paid for a product through promotional coupons is beneficial and satisfies his/her purchase expectations, the coupon's face value appears as a determinant of his/her redemption behaviors (Lichtenstein et al., 1990). Using SEM, this study found noteworthy results in the context of mobile coupon redemption by consumers. In particular, it confirmed some aspects of the theory related to traditional promotional coupons, yet applied to mobile coupons, thereby extending the theoretical background on mobile coupons and consumer behavior.

Mobile coupon value consciousness and mobile coupon redemption

Value consciousness has been found to be a strong determinant of coupon redemption in a bricks-and-mortar purchase environment (Lichtenstein et al., 1990). Further, this study found that value consciousness is also a predictor of the redemption of mobile coupons. The path coefficient between value consciousness (predictor) and intention to redeem mobile coupons (effect) proved that the first is a predictor of the second. Of the content of the six-item scale used to measure value consciousness, it emerged that all of them were positive and significant determinants of value consciousness when used as a predictor variable.

Customers, when prompted by a mobile coupon from their smartphones, compare the discounts offered by different brands on the basis of price-per-quantity to ensure the coupon amount is attractive. However, they also examine the benefits the coupon provides (e.g., information about the vendor's service quality) before redeeming it (Liu et al., 2015). The intention to redeem coupons is not only determined by the coupon's face value and its capacity to make the purchase worthwhile. According to the theoretical framework of the intention to redeem mobile coupons, even in the mobile purchasing environment, other factors determine customers' perceived utility from redeeming a coupon to purchase a product. For example, the enjoyment experienced by consumers when redeeming mobile coupons has been shown to be a relevant factor that defines purchases on an electronic device (Guimond et al., 2001; Liu et al., 2015).

This study revealed that when consumers redeem a mobile coupon, it makes them feel good. They like clicking on the coupon to read its text and see what it can offer. This experience provides them with the feeling that they are getting a good deal by obtaining an excellent

opportunity to purchase a product for which they are looking. In short, they enjoy using mobile coupons because they are a source of pleasure regardless of the coupon amount.

Value consciousness and enjoyment, as determinants of purchase intention, have been used to analyze the factors that predict consumer purchases. Using SEM, we showed that value consciousness predicts the intention to redeem mobile coupons. However, when treated in conjunction with the enjoyment of mobile coupons, value consciousness as a predictor of redeeming mobile coupons lost significance. It has been shown that the stimulus used to incentivize a purchase is primarily driven by the face value offered by promotional tools. Further, consumers pay significant attention to such stimuli, and other psychological factors affect the decision to redeem a coupon (Liu et al., 2015); in our study, such a factor was the enjoyment of mobile coupons.

This study found that the influence of value consciousness on the intention to redeem mobile coupons was mediated by the enjoyment experienced by the consumer when receiving the coupon and verifying whether the promotion offered by the coupon is a good deal. The use of the Aroian and Freedman–Schatzkin tests helped find the mediating effect of mobile coupon enjoyment on the relation between value consciousness and the intention to redeem mobile coupons. A direct and significant effect of value consciousness on coupon redemption intention was found when these two were tested in isolation. When value consciousness was tested together with mobile coupon enjoyment, value consciousness showed no significant relation with coupon redemption intention. These tests helped show the mediating effect of enjoyment in the dyadic relationship between value and redemption. Although this mediating effect was weak, it showed that the impact of value consciousness on the intention to redeem mobile coupons was influenced by the enjoyment of mobile coupons experienced by consumers (see Figure 2).

Mobile coupon enjoyment, IBT, and mobile coupon redemption

The second theoretical contribution is related to the influence of the IBT in the mobile coupon redemption context. The IBT has been studied by several researchers, as described in the theoretical section. Despite this, no studies have thus far examined the theory of the IBT by consumers or its impact on the momentum with which consumers decide to redeem a mobile coupon. While the two components of the IBT have been used to study impulsivity in consumer behavior (Cinjarevic, 2010), the present study found an embedded factorial structure in both the cognitive and the affective aspects of the IBT. Reading and interpreting the items used in each impulse tendency component thus allowed us to identify and name these factors.

Influence of the cognitive components of impulse buying tendency

The cognitive component of the IBT contains three factors related to the cognitive nature of the impulsivity consumers experience in their shopping decisions: NSBT, SBT, and VSBT. As stated by Ozen and Engizek (2014), cognitive aspects refer to how one understands, thinks about, and interprets information, resulting in an unplanned buying tendency with little cognitive deliberation during shopping. Hence, we found that the level of cognitive deliberation, when prompted by a promotional stimulus, affects the impulsivity to buy a product.

The results of the study showed that when consumers receive a mobile coupon, they redeem it without having any need to satisfy, without planning to buy the product, and without devoting the time and effort to compare brands before buying the one that meets their requirements. Further, they lack sufficient cognitive awareness of the consequences of making the purchase. They are tempted to buy the product under specific circumstances—a response based on high impulsivity.

Given that the IBT is part of an individual's personality or lifestyle, some people have low and high levels of impulsivity and intended self-control in the shopping environment. Table 5 shows the positive and significant impact of the cognitive factor of the NSBT and mobile coupon enjoyment on the intention to redeem mobile coupons. This table shows that the enjoyment of mobile coupons negatively affects the NSBT, suggesting that the higher the enjoyment experienced by the consumer, the lower is his/her tendency to verify the need satisfaction. This might be because the enjoyment experienced by consumers lowers their engagement in mental effort. If the consumer is convinced that the benefit obtained by redeeming the coupon is high, it will trigger an intent to redeem.

The other cognitive factor with a significant impact on the intention to redeem mobile coupons is the SBT (cognitive component). This showed a negative and significant impact on redemption, meaning that when consumers experience highly spontaneous deliberation, the intention to redeem mobile coupons decreases for different cognitive reasons. First, consumers, even when they experience an urge to buy because of the mobile coupon value, might sometimes find that the coupon's face value benefits are insufficiently attractive; this is likely to restrict spontaneity, thereby making the redemption less impulsive. Second, they might not feel the need for stimulation when prompted by the coupon because they might be in a stable environment without a great desire for change and tend not to purchase impulsively (Lesczyc & Timmermans, 2007).

Third, consumers might experience a low tendency to engage in and enjoy effortful cognitive activities (Kardes et al., 2011) other than paying attention to the coupon's face value. Fourth, they might lack the desire for definitive knowledge to reduce confusion or ambiguity—this is known as the need for cognitive closure (Kardes et al., 2011). Fifth, they may experience higher levels of inhibition when they make purchase decisions. Finally, the intensity of unreflective thoughts may not be sufficiently powerful to allow considered decisions to emerge. In summary, this exciting result requires more in-depth study in future research.

The relationship between enjoyment and the SBT (the second cognitive factor) was positive and significant. Moreover, the impact of the SBT on the intention to redeem mobile coupons was significant but negative, as mentioned above. This shows that higher levels of spontaneity lower the intention to redeem coupons. This might be mitigated by other cognitive or affective factors of the IBT, as highlighted when explaining the negative effect of the SBT on the intention to redeem mobile coupons.

Influence of the affective components of impulse buying tendency

Two factors identified from the affective component of the IBT were the EXBT and INTCONFT. The former showed a significantly positive relationship with mobile coupon

enjoyment and a significantly negative relationship with mobile coupon redemption intention. The latter also showed a positive relationship with mobile coupon enjoyment, but a negative and non-significant relationship with mobile coupon redemption. The theoretical rationale of these affective components might provide directions for future research.

First, the level of internal conflict that consumers experience when deciding whether to use a mobile coupon serves as an internal obstacle. These obstacles might originate from the inevitable struggle experienced by consumers after leaving the beautiful items they saw in an online shop because there is little possibility of purchasing them as well as from the guilt felt by consumers after having bought something that might lead to post-purchase discomfort and a repressed desire if they see something they would like to buy. As a result, they cannot obtain the product when the coupon becomes available to them; therefore, a conflict arises from the difficulty of not being able to take advantage of a bargain. Nevertheless, the absence of internal conflict is expected to increase the enjoyment experienced by consumers because, as negative feelings, their enjoyment might not be repressed owing to non-existent obstacles that impede a pleasant shopping experience.

Second, a high correlation was obtained between the EXBT and enjoyment/redemption intention. As mentioned in the data analysis, the EXBT, an affective factor, refers to the emotional and exciting experiences consumers enjoy when looking for a product to purchase using mobile coupons. This result was similar to that found with the SBT (a cognitive factor) mentioned previously. Although the EXBT had a positive and significant relationship with mobile coupon enjoyment, its impact on the intention to redeem mobile coupons was significant but negative. When consumers cannot suppress the feeling of wanting things they see in online shops, they make reckless purchases. Moreover, when they sometimes buy things because they expect high enjoyment rather than because these products are needed, they might not experience high levels of excitement when purchasing a product impulsively.

In contrast to our expectations, this study showed that a higher EXBT negatively impacted the intention to redeem mobile coupons. Consumers might enjoy making purchases using mobile coupons, so the EXBT might reinforce positively or negatively the intention to redeem mobile coupons. A possible explanation is that the affective factor might be influenced by other psychological factors present when consumers decide to redeem a mobile coupon, which lowers the intention to redeem.

In general, this study found that the EXBT (affective component) and SBT (cognitive component) significantly influenced the effect of mobile coupon enjoyment on the intention to redeem mobile coupons. However, the affective side of the IBT seems to be dominant according to this study's results on redeeming mobile coupons; this is in line with the results of Ozen and Engizek (2014), who posit that e-impulse buying is strongly related to hedonic and emotional motivations (see Figure 2).

Figure 2
Final research model

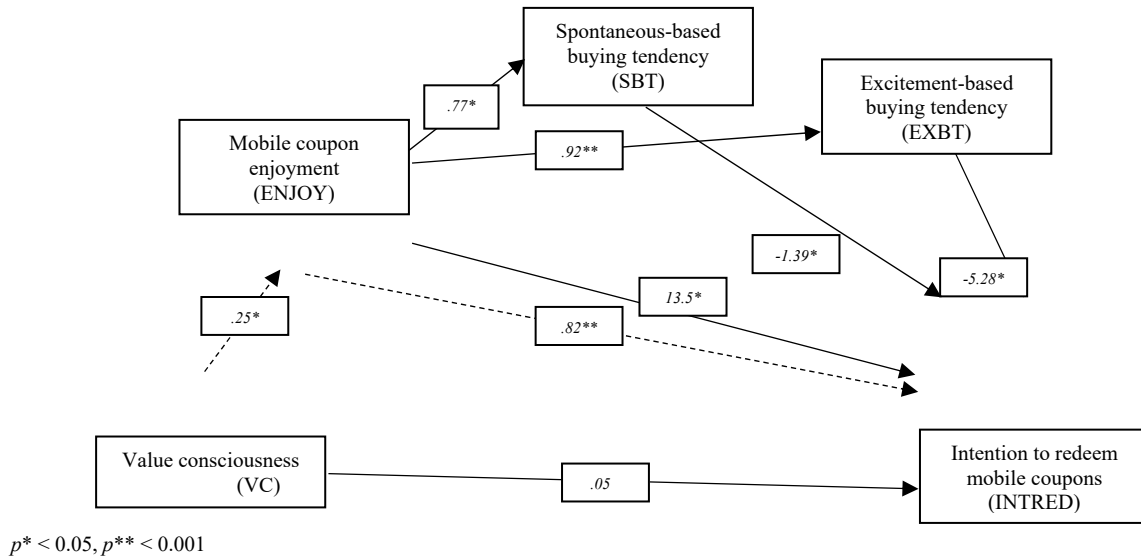


Table 6 briefly shows the outcome of analyzing the hypotheses that supported this study.

Table 6 Hypotheses results	
Hypothesis	Result
H1a: Value consciousness has a positive impact on the intention to redeem mobile coupons.	Supported Supported
H1b: Mobile coupon enjoyment has a positive impact on the intention to redeem mobile coupons.	Supported
H1c: Value consciousness explains a significant amount of variation in mobile coupon redemption intention after one account for the variation in coupon redemption behavior explained by coupon enjoyment.	

Managerial implications

The results obtained in this study have practical implications. Any business implementing e-marketing strategies such as mobile coupons should know as much as possible about their effectiveness as a promotional tool. Customers respond to marketing stimuli because they are sufficiently attractive to satisfy their needs during the shopping process. Therefore, highly attractive mobile promotions can have the inadvertent effect of minimizing impulse purchasing behavior (Ghose et al., 2019).

Mobile coupons are gaining in popularity because they can be used to target consumers through mobile devices, which have become a necessary tool for communication and purchase. The intention to redeem mobile coupons through mobile devices such as smartphones is impelled by (1) the discount offered by the coupon compared with the purchase price of the product and (2) the enjoyment consumers experience when using the mobile coupon to make purchases. Consumers pay attention to attractive coupons (coupon features) and the benefits the mobile coupon provides (e.g., enjoyment and emotions). This result is useful for managers interested in designing attractive mobile coupons to boost sales.

The intention to redeem mobile coupons is also determined by consumers' impulsivity when they receive the coupon and their willingness to redeem it. The IBT is an indicator of how successful mobile coupon redemption will be. Customers respond to a discount because of the value it offers, the level of enjoyment it provides, the excitement generated when receiving a coupon offer, and the spontaneity and need satisfaction reactions that arise in the process leading to coupon redemption. Thus, managers should know that mobile coupons stimulate purchases based on the cognitive and affective elements of the IBT present when consumers are targeted with mobile coupons.

Given the strong influence of leisure time and time available for both in-store and e-store browsing, managers can influence consumers by using more aggressive stimuli to leverage on urges and impulse purchases. Managers can mix the enjoyable features of mobile coupons with positive emotions to expand browsing time and create a positive shopping experience. They can also change consumers hesitant to use mobile coupons into more decisive consumers by reinforcing mobile coupons' effectiveness with enjoyable triggers to stimulate purchases and increase purchasing frequency. In addition, managers can target consumers based on their emotional and cognitive impulse tendencies, characteristics, and perceptions of the value of mobile coupons to predict potential purchases.

LIMITATIONS

This study has some limitations. First, the results lack generalizability, even though the sample consisted of Florida National University students familiar with the mobile coupon context and experienced in making purchases on electronic devices. Although we performed missing data analysis, data analysis has its inherent limitations (e.g., subjects may provide incomplete and/or inaccurate information when filling out surveys).

Second, we collected data through an online questionnaire. This method did not include those consumers who do not use smartphones for purchasing, especially older consumers or the smartphone illiterate. Third, value consciousness related to perceived value and mobile coupon enjoyment were used as original predictors of the intention to redeem mobile coupons. Besides

these two factors and the IBT, no other factors were taken into consideration in this study, thereby limiting our conclusions on mobile coupon redemption theory. After identifying the sub-factors of the cognitive and affective elements using the EFA (confirmed by the CFA), we decided to use them as part of the model to expand theory.

Fourth, the demographic variables adopted in the study to characterize the sample were not used to achieve more far-reaching outcomes. The study did not emphasize differences by gender, age, or other demographic variables as moderators or mediators of the impact of value consciousness, enjoyment, and the IBT on the intention to redeem mobile coupons. Although the demographic variables and behavioral variables (mobile coupon redemption frequency) were used to characterize the sample, they were not adopted to draw further conclusions.

Fifth, we used SEM to analyze, interpret, and test the effects and hypotheses. However, SEM does not allow researchers to define the direction of causality. Further, although structural models are easy to set up and estimate, their outcomes should be viewed with certain skepticism because of a number of difficulties (Bentler & Chou, 1987). The first difficulty is that although the sample used in this study comes from a population relevant to the theoretical concepts being evaluated, which is a condition for reliability when using SEM, the study could not assure that the responses given by subjects were from simple independent observations. Students responded to the questionnaire via email, and we could not confirm that they responded to the questions in isolation; therefore, we could not verify whether the responses given by one student were influenced by another (Bentler & Chou, 1987).

The second difficulty is that SEM compares the model with the empirical data and yields the effects among the variables. Although SEM can represent causal relationships, a well-fitting SEM outcome does not necessarily contain information on causal dependencies (Nachtigall et al., 2003). This difficulty might explain why this study found a contradictory result regarding the significant direct effect of value consciousness on the intention to redeem mobile coupons. However, this effect became non-significant when enjoyment mediated the effect between value consciousness and intention. Researchers wanting to test causality should therefore review the approaches to causation provided by Rubin (1986), Holland and Rubin (1988), and Pearl (2000).

Also, the present study found that although value consciousness exerts a significant influence on the intention to redeem mobile coupons when the enjoyment of mobile coupons is present in the model. However, the portion of the research model evaluating the influence of enjoyment of mobile coupons and impulse buying tendency on the intention to redeem mobile coupons showed an apparent issue of misspecification. Since a model is only an approximation to the truth, it is common to inevitably encounter problems with it (Hayashi & Yuan, 2011).

DIRECTIONS FOR FUTURE RESEARCH

Based on the results of this study, new research might be carried out to develop the theory of consumer behavior in the context of mobile coupon redemption as a marketing tool. It is suggested that future studies inquire into the moderating and mediating effects of other consumer behavior variables such as trust on value consciousness to visualize the nature of its impact on the intention to redeem mobile coupons.

Future studies should also consider segmentation variables (gender, age, and income) to discover more details about mobile coupon redemption. The IBT, in the context of mobile coupons where gender and other demographic variables seem apparent, deserves more attention. Both the cognitive and the affective components of the IBT have received attention (Rook, 1987; Dholakia, 2000; Youn & Faber, 2000; Coley & Burgess, 2003; Ozen & Engizek, 2014). Therefore, we recommend the creation of more in-depth knowledge about the cognitive components of the IBT, along with other concepts such as the need for stimulation and cognitive closure. Because cognition requires a person to make more mental effort, it is burdensome; hence, it would be interesting to expand the theory on cognitive IBT and its impact on redeeming mobile coupons.

New studies could further investigate the personality traits linked to the IBT and their impact on actual redemption behaviors, instead of just intentions. Moreover, because the perceived value of mobile coupons had a positive impact on the intention to redeem them, perceived value might be studied in conjunction with perceived acquisition, transaction values, and changes in coupon-using habits. New research in this direction would produce more information to explain how perceived value affects both intended and actual mobile coupon redemption.

SUMMARY

In the marketplace, the value of products to consumers is based on the ratio of quality to price and the economic benefits or face value of the discount; this is defined as value consciousness. Value consciousness pertains to a specific concern about the value received in terms of satisfying the properties of the product for the price paid by consumers (Thaler, 1985; Kashyap & Bojanic, 2000). If consumers perceive that the value of a mobile coupon satisfies their expectations in terms of receiving quality commensurate with the amount paid, they might redeem the coupon. Nevertheless, value consciousness also encompasses the overall utility obtained from using the coupon and is related to such concepts as search, learning time, cognitive and physical efforts, enjoyment, price, and quality (Liu & Zhao, 2014). This conclusion is also valid for the mobile coupon redemption intention context in which customers are willing to redeem mobile coupons when they find an expected value for the amount to pay.

This study confirms that the enjoyment customers experience when making online purchases on e-devices is a determinant of mobile coupons being redeemed. Enjoyment had a direct and positive effect but also indirect effects that partially offset that positive effect on the intention to redeem mobile coupons. As mentioned above, enjoyment is part of the overall assessment customers make of the utility arising from what is received and given; further, as part of perceived utility, customers show enjoyment as an emotional response as well as evaluating the economic benefits. Therefore, a lack of enjoyment may mitigate the effect of the benefits that mobile coupons intend to provide to customers, leading them to possibly refuse to redeem.

This study also found that the impact of customers' value consciousness on the intention to redeem mobile coupons is mediated by the level of enjoyment they experience when prompted by mobile coupons before, during, and after shopping. We therefore confirmed the results of previous studies of the impact of value consciousness and enjoyment on the intention to redeem

coupons (Linchestein et al., 1990; Guimond et al., 2001; Garretson & Burton, 2003; Palazon & Delgado, 2009; Jayasingh & Eze, 2010; Liu et al., 2015; Gonzalez, 2016; Saprikis et al., 2017), when these variables are measured in isolation.

Although the topic considered here has been studied before (Ozen & Engizek, 2014) in the online context, this study found that the IBT influences the relationship between the intention to redeem mobile coupons and one of its determinants—the enjoyment customers experience when doing so. By performing EFAs and CFAs, the study identified a new factorial composition in both the cognitive components (NSBT, SBT, and VSBT) and the affective components (EXBT and INTCONFT) of the IBT and their influence on enjoyment and intention to redeem mobile coupons. Previous research motivated us to delve into the internal composition of the cognitive and affective factors to find the sub-factorial structures to extend the theory. Specifically, one factor from the cognitive component (SBT) and one from the affective component (EXBT) significantly influenced the relationship between enjoyment and intention to redeem mobile coupons.

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APPENDIX
Questionnaire used in the study

Constructs	Adapted from:
Value consciousness	Lichtenstein et al. (1990)
I am very concerned about low prices, but I am equally concerned about product/service quality	
When doing online shopping, I compare the prices of different brands to be sure I get the best value for the money	
When purchasing a product/service, I always try to maximize the quality I get for the money I spend	
When I buy products/services, I like to be sure than I am getting my money's worth	
I generally shop around for lower prices on products/services, but they still meet certain requirements before I will buy them	
When I shop, I usually compare the "price per quantity" information for brands I normally buy	Verplanken & Herabadi (2001)
Impulse Buying Tendency -Cognitive component	
I always check prices at the Web site to be sure I get the best value for the money I spend	
I usually only buy things that I intend to buy.	
If I buy something, I usually do that spontaneously.	
Most of my purchases are planned in advance.	
I only buy things that I really need.	
It is not my style to just buy things.	
I like to compare different brands before I buy one.	
Before I buy something, I always carefully consider whether I need it.	
I am used to buying things 'on the spot'.	
I often buy things without thinking.	
Impulse Buying Tendency -Affective component	Verplanken & Herabadi (2001)
It is a struggle to leave nice things I see in an online shop.	
I sometimes cannot suppress the feeling of wanting things I see in online shops	
I sometimes feel guilty after having bought something.	
<i>I'm not the kind of person who 'falls in love at first sight' with things I see in online shops.</i>	
I can become very excited if I see something I would like to buy.	
I always see something nice whenever I pass by online shops.	
I find it difficult to pass up a bargain.	
If I see something new, I want to buy it.	
I am a bit reckless in buying things.	
I sometimes buy things because I like buying things, rather than because I need them.	
Mobile Coupon Enjoyment	Davis et al., 1992
Redeeming mobile coupon would make me feel good	
I would enjoy clicking on the mobile coupon to see its content	
If I use mobile coupons, I feel that I am getting a good deal	
I would enjoy using mobile coupons, regardless of the amount I save by doing so	
Beyond the money I save, redeeming mobile coupons would give me a sense of joy	Venkatesh & Davis (2000); Chen & Lu (2011).
Mobile Coupon Redemption	
I will search mobile coupons on the Internet for later usage	
I will obtain mobile coupons on the Internet for later usage	
I will intend to download mobile coupons for later usage	
I will intend to use mobile coupons in doing my shopping	
I will intend to get more details about mobile coupons	
I will intend to use mobile coupons if they offered to me	