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RESEARCH NOTE

FEELING THE URGE: AFFECT IN IMPULSIVE AND COMPULSIVE BUYING

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The constructs of impulsive buying tendencies (IBT) and compulsive buying tendencies (CBT) have individually received much attention. However, prior research has neither fully explored their distinctiveness nor the relationships between IBT or CBT and the affect involved in the shopping experience. In order to extend our understanding of both literatures, the current research finds support for the differential effects of IBT and CBT on urge to buy through affect, as well as discrimination, of the two tendencies, using a mixed methodology of a survey and an online shopping diary.

Most consumers buy spontaneously, at least some of the time (Kwak et al. 2006; Punj 2010). However, some consumers appear to do so more often than others. To understand this phenomenon, researchers focus on two types of trait-like characteristics individuals have that embody a tendency to engage in spontaneous and unplanned buying. These impulsive and compulsive buying tendencies are the focus of the current research.

Drawing from Jones et al.'s definition, impulsive buying tendency (IBT) is the "degree to which an individual is likely to make unintended, immediate [or spontaneous], and unreflective purchases" (2003, p. 506). A compulsive buying tendency (CBT) is a tendency to engage in uncontrolled and excessive purchasing, often due to internal tension, and often involving little regard to the financial, social, or personal ramifications (Billieux et al. 2008; Kyrios, Frost, and Steketee 2004; Ridgway, Kukar-Kinney, and Monroe 2008). The impact and importance of research on IBT is seen in the breadth of consumer behavior categories in which it is studied, such as variety seeking (Sharma, Sivakumaran, and Marshall 2010), atmospheric and environmental stimulation (Matilla and Wirtz 2008), consumer decision making (Martin and Potts 2009), social interactions (Luo 2004), and ability to self-monitor (Sharma, Sivakumaran, and Marshall 2010). Kwak et al. (2006) similarly discuss the importance of studying CBT, noting the strong growth of this tendency in the past 20 years.

Obviously, these constructs overlap to some degree, noting that both involve spontaneous, unplanned buying. A key question is how alike or different are the two concepts? Historically, the two tendencies have been studied separately, with numerous scales developed to measure both tendencies. However, confusion exists in regard to their similarity or distinction—that is, sometimes the terms are used interchangeably, such as Ninan et al.'s definition of CBT as "impulsive and/or compulsive buying of unneeded objects" (2000, p. 363), or Ridgway, Kukar-Kinney, and Monroe's (2008) work in which they develop a compulsive buying scale with two dimensions—obsessive compulsive buying and impulsive buying. The latter approach actually subsumes impulsive buying within the compulsive buying paradigm. This similarity of definitions increases the difficulty researchers have in accurately distinguishing between IBTs and CBTs. Therefore, the question is, are these two distinct concepts or are they merely points on a sliding scale of spontaneous, unplanned buying?

There is ample literature to support both ideas, with many researchers viewing IBT and CBT as separate points on a consumer-buying continuum, whereas others argue that they are two different theoretical constructs emerging from different emotional states (Billieux et al. 2008; DeSarbo and Edwards 1996; Edwards 1992; Frost, Meagher, and Riskind 2001). Thus, the first step in the current study is to address the distinction between IBT and CBT conceptually (and operationally) and then to address distinctions and

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similarities relative to other important variables, including affect (positive and negative mood states experienced in the setting) and urge to buy (a strong, spontaneous feeling to purchase something while in a retail setting). Past studies fail to clearly identify and examine these distinctions within the same study.

Trait activation theory (TAT) is a theory that aims to clarify the relationship between traits and situations. This theory suggests that the expression of a trait is contingent upon arousal from trait-relevant situational cues that affect behaviors. This theory is often used in organizational behavior research to explain the interaction between personality and environment in the prediction of behavioral outcomes (Kamder and Van Dyne 2007; Lievens et al. 2006; Tett and Guterman 2000). Used in the current research, TAT aids in addressing affect's interaction with IBT and CBT, thus helping to clarify the relationship between each variable.

To explore the blurred conceptualization and measurement of the constructs, as well as the relationships between affect, urge to buy, and the impulsive and compulsive buying tendencies, an online survey and follow-up online shopping diaries were used to assess a model that incorporates IBT and CBT, positive and negative affect, and urge to buy. The paper flows from a discussion of IBT and CBT to a description of the hypotheses and model. Following the presentation of method and results, we conclude with managerial implications and future research ideas.

THEORETICAL BACKGROUND

Two conceptualizations are most often proposed relative to impulsive and compulsive buying tendencies. The first view is that these two concepts are anchor points on the same behavioral continuum (Billieux et al. 2008; Frost, Meagher, and Riskind 2001; McElroy, Keck, and Phillips 1995), capturing the same trait of "consumer buying tendency" (Ninan et al. 2000, p. 362) or impulse control disorder (Billieux et al. 2008). Kwak et al.'s review research demonstrates that both IBT and CBT result in similar outcomes, are represented by the purchase of similar products, and are both thought of with the same stereotype of a "weak or foolish person" (2006, p. 60). Kwak et al. suggest that the primary difference between the two is in the strength of the behavior—with the "range on a continuum from mild forms often considered humorous to severe cases . . . that disrupt everyday functioning" (2006, p. 61). D'Astous (1990) coined the phrase "urge to buy continuum," labeling one end as impulsive buying and the upper extreme representing compulsive buyers. This concept continues to be used in areas such as retailing, services, and addiction studies (Clark and Callega 2008; Kwak, Zinkhan, and Roushanzamir 2004).

Another school of thought revolves around the idea that certain events or predispositions influence each behavioral tendency differently (DeSarbo and Edwards 1996). From this perspective, researchers argue that external triggers (e.g., celebrations, sales, and atmosphere) stimulate an individual's impulsive nature leading to an urge to buy, while internal triggers such as conscientiousness (Wang and Yang 2008), narcissism (Rose 2007), materialism, and depression (Ridgway, Kukar-Kinney, and Monroe 2008) stimulate a CBT, again leading to a similar urge to buy. DeSarbo and Edwards suggest that although producing the same outcome, impulsive and compulsive buying tendencies "differ in the underlying emotional motivations for excessive shopping and spending" (1996, p. 233), making them theoretically distinct constructs.

In agreement with this latter conceptualization, the current research suggests that while both tendencies may result in increased buying urges and excessive purchases, it is the focus and related affects that differ. The behaviors associated with IBT tend to be acute, outcome oriented, and product or situation focused, whereas the behaviors associated with CBT are typically repetitive and problematic, often made in response to negative events or feelings. Therefore, it is possible that both tendencies can exist simultaneously in the same individual, even though the emotional triggers associated with each are different.

Early research on impulsive buying describes it in its simplest terms as "unplanned buying" (Stern 1962, p. 59). More recently, researchers have addressed impulsive buying as a stimulating and emotionally charged experience related to high emotion and spontaneity wherein the rapidness of the behavior precludes thoughtful deliberation of alternatives or consequences (Jones et al. 2003; Rook 1987). IBT has been linked to a variety of personality factors and can be exacerbated using specific marketing channels such as the Internet (Lin and Lin 2005; Sun and Wu 2011; Zhang and Shrum 2009). Punj (2010) posits that impulsive buying is the result of the interaction between the state (condition) and the trait, suggesting that individuals balance between pleasure seeking and self-regulation—the more exciting the stimuli or the greater the internal motivation, the more likely an individual will be to impulse buy.

CBT has historically been attributed to potential causes that are "biochemical, psychological or sociological in nature" (Faber and Christenson 1996, p. 804). Viewed as "uncontrolled and excessive purchasing" (Billieux et al.

2008, p. 1432) and "excessive or poorly controlled preoccupations, urges or behaviors regarding spending" (Black 2001, p. 17), CBT tends to be triggered by internal tension, often involving frustration that can "only be relieved by buying" (Billieux et al. 2008, p. 1433). Once triggered, consumers may then attain a short-term and temporary burst of positive affect as a reward for their behaviors that provides compulsive buyers a way of altering and improving mood states, at least temporarily. This idea that buying serves a "psychological purpose" has been deemed "the self-medication hypothesis" by Dittmar, Long, and Bond (2007) and is consistent across the majority of accounts of CBT (Faber and Vohs 2004; Kellett and Bolton 2009; Miltenberger et al. 2003). The driving factor for CBT therefore appears to be this emotional cycle of mood alteration where CBT is "driven by negative affectivity, but maintained by the positive emotions experienced at the point of purchase" (Kellett and Bolton 2009, p. 89). Therefore, individuals high in CBT tend to experience irresistible urges to buy, coupled with a loss of control over buying, followed by a continuation of buying that aims to restore or maintain the emotional high previously felt—all of this despite potential social and financial disruptions (Dittmar, Long, and Bond 2007).

As mentioned above, TAT can be of use in differentiating between the tendencies. TAT developed from decades of debate as to how affect and behavior interact with one another. It attempts to address the issue by using the idea of situation-trait relevance (Tett and Guterman 2000). Used in a variety of disciplines, TAT helps explain the interaction between personality and environmental factors with behavior (Lievens et al. 2006) by demonstrating that each consumer has a unique dispositional profile that evokes a variety of responses dependent on the strength and intensity of the surrounding situational cues (Tett and Guterman 2000). Interactional psychologists acknowledge "both that individuals can behave consistently across different situations and that situations can cause different people to behave similarly" (Tett and Guterman 2000, p. 397). The fundamental idea is that personality traits are consistent between individuals, and yet acted upon differently because of different levels of arousal stemming from situational cues.

Applying TAT (Tett and Guterman 2000) to buying tendency research provides a framework that suggests that all consumers have both IBT and CBT traits that are subsequently triggered by internal (affect) and external (situational) cues. Lievens et al. (2006), using TAT, stressed the relevance of the situation to the trait in determining the likelihood that the behavior would manifest at any given time. In the development and testing of a theoretical model containing both IBT and CBT, therefore, a key difference between the tendencies' abilities to influence buying is the role that a consumer's own internal affect plays in the consumption experience. The TAT paradigm does not suggest that behavioral traits create feelings; instead, affect should be a feature or cue that brings out the tendencies inherent in each individual.

The connection between affect and IBT or CBT finds support in research on mood and shopping. Mood states often influence normal consumer reactions and behaviors to the point that consumers are motivated to prolong specific mood states that they find appealing (Faber, O'Guinn, and Krych 1987). Watson and Tellegen (1985) show that positive and negative affects are orthogonal or *t*-dimensional, and that individuals can experience various levels of intensity of each simultaneously. Many researchers support this view of affect being distinguished as either positive or negative (see, e.g., Beatty and Ferrell 1998; Dube and Morgan 1998; Jones et al. 2007; Mano and Oliver 1993; Phillips and Baumgarter 2002; Westbrook 1987). Positive affect represents a person's enthusiasm, energy, and excitement, whereas negative affect involves feelings of distress, anger, fear, or anxiety (Beatty and Ferrell 1998; Watson and Tellegen 1985).

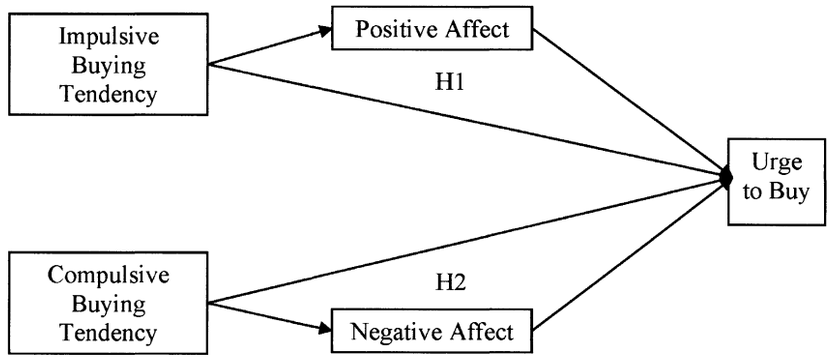
Pulling these ideas together, a conceptual model of the buying traits, affects, and buying urge appears in Figure 1, with the theoretical links addressed below.

HYPOTHESES

Theories of consumer motivation and goal achievement often focus on internal characteristics (Bagozzi and Dholakia 1999; Hausman 2000). These characteristics or tendencies respond differently to a variety of cues, including emotionally arousing situations that can create an affective-laden consumer. The subsequent positivity or negativity of the emotions may then influence a variety of purchase outcomes (Laros and Steenkamp 2003).

The TAT view of person–situation interaction argues that behaviors are multiply determined with internal and external cues interacting with other environmental cues that influence the choice of response (Tett and Guterman 2000). In regard to IBT, research suggests that it is associated with positive emotions (rather than negative) and with high arousal (Rook 1987; Rook and Gardner 1993; Weinberg and Gottwald 1982). Therefore, we expect to see that IBT manifests when positive affect and impulsive buying opportunities are present in the right environment,

Figure 1
Conceptual Model of Buying Traits, Affect, and Urge



such as in a retail store. Neumann and Strack (2000) argue for a causal relationship between emotion and action, and Baron and Kenny (1986) address the idea of an intervening variable between the stimulus and response that then affects the outcome. Therefore, positive affect should mediate the relationship between IBT and urge to buy; for instance, as a consumer's IBT level interacts with his or her positive emotions, the consumer's urge to buy should also increase. This idea follows from TAT, in which positive affect should enhance the tendency already inherent in the individual. In addition, IBT should directly influence urge or desire to impulse buy (given the closeness of the trait and behavior), as found in previous research (Beatty and Ferrell 1998):

Hypothesis 1: Positive affect partially mediates the relationship between IBT and urge to buy.

Compulsive buyers are particularly prone to make retail purchases in a negative mood rather than in a positive mood (Faber 2006; Faber, O'Guinn, and Krych 1987). Therefore, mood manipulation tied to negative feelings should be more strongly connected to CBT than IBT (Faber and Christenson 1996), and negative affect should be both directly related to urge to buy, as well as indirectly related through its interaction with CBT. TAT would thus predict that the relationship between CBT and urge to buy would be mediated by negative affect because according to the theory, the negative affect should enhance the tendency already inherent in the individual. In addition, CBT should directly influence buying urges in the store (Kwak et al. 2006) because of the activation of the tendency in the store setting. These points lead to the following hypothesis:

Hypothesis 2: Negative affect partially mediates the relationship between CBT and urge to buy.

Further, given the contradictory relationship that IBT and CBT share with respect to positive and negative affect, we anticipate an absence of association between IBT and negative affect and between CBT and positive affect:

Hypothesis 3: IBT is not associated with negative affect and CBT is not associated with positive affect.

METHOD

Data Collection

The data collection includes two complementary online methods that helped to facilitate the timely collection of information. The first is an online survey and the second is an online diary filled out by the respondents after a buying episode (defined as any time a purchase was made). The survey gathered data on trait elements, including IBT and CBT, as well as demographic variables. The shopping diaries provided data on the situational elements of the model—affect levels and urge to buy. Respondent data from each method were subsequently combined to provide an understanding of trait, situation, and behavior in purchasing contexts. The combining of data from surveys and diaries has been used in a number of fields to assess behaviors, such as Internet and media interaction (Greenberg et al. 2005), alcohol usage (Rudle-Thiele 2009), and time use in decision making (Schulz and Grunow 2011). Kubey, Larson, and Csikszentmihalyi (1996) support this method as a form of experience sampling (ESM), while Arnold and Reynolds (2003) point out that collecting the data at two points in time can reduce the likelihood of method bias. To allay concerns of data security and anonymity, unique response ID numbers aided in the match-up of the two data collection forms (Couper, Blair, and Triplett 1999).

Study Sample

Prior research relating to traitlike characteristics and abnormal buying suggests that habits specifically related to impulsive and compulsive behaviors form at a young age and are well established in college-age samples (Joireman, Kees, and Sprott 2010; Rindfleish, Burroughs, and Denton 1997; Roberts and Jones 2001). Therefore, young adults in several upper-division undergraduate classes at a large university in the southern region of the United States served as participants for this study. Marketing professors and lecturers using in-class and electronic announcements recruited research participants for this study. Respondents were incentivized by a small ($50) monetary reward awarded to a randomly selected participant.

As with all survey-driven research, nonresponse bias is an artifact that may lead to lost statistical power and biased relationships (Schwab 2007). This bias is addressed in three ways in this research. First, all the students received incentives in the form of class extra credit to encourage full participation at both the survey and diary stages of data collection. Second, follow-up e-mails sent to nonrespondents increased participation levels (Truell 2003). Finally, a comparison of early and late respondents assessed potential response bias, yielding no differences at $p < 0.05$ (Armstrong and Overton 1977).

A total of 621 students received the survey, with 469 completing the instrument—a response rate of 75.5 percent. All 469 respondents then received a link to the online shopping diary where they submitted an entry for every shopping experience over the following two-week period. This study coupled the first diary entry involving a retail experience for each respondent with his or her corresponding survey data. The choice to use the subject's first entry was due to the concern that multiple diary entries would disproportionally overweight the final data set. Participants that completed the initial survey but did not complete at least one diary entry were not included, as well as those whose shopping venue was not a retail store. Also removed were surveys with significant missing data. Thus, the attrition rate due to incomplete diary responses, data-related problems, or due to the reporting of shopping venues other than retail store was 24.7 percent, producing a final sample of 353 observations.

Just over half of the respondents were female (53.4 percent) and currently employed (47.9 percent). The respondents were between the ages of 19 and 42 ($\mu = 21.22$ years), and Caucasian (85 percent), African American (11.9 percent), or Asian (1.4 percent).

Measurement Development

Central to this research are the IBT and CBT constructs. As illustrated in Ridgway, Kukar-Kinney, and Monroe's (2008) discussion, there is a wealth of confusing definitions for each construct, which subsequently contributes to a wide variety of available scales that measure the constructs from a variety of dimensions. As the goal of this research was to capture the fundamental concepts of IBT and CBT, not to create a new IBT/CBT scale, choosing all of the items contained in current scales resulted in overly broad conceptualizations of the constructs that worked against the narrower view taken here. Therefore, to create usable scales matching the definitions adopted in this research, existing scales were scrutinized with the aim of selecting items that best measure (or represent) the conceptual definitions of each construct. This approach is often seen in psychological studies when investigators wish to comprehensively assess multiple characteristics while at the same time reduce administration time (Yarkoni 2010). Although not ideal in all cases, weaknesses of this method are noted when researchers fail to consider the full breadth of the original definition (Smith, McCarthy, and Anderson 2000; Yarkoni 2010). As this research purposefully takes a narrow view of each construct, it appears appropriate to abbreviate multiple scales into one that maximizes item-total correlations while maintaining internal consistency (Lang and Stein 2005).

With the above in mind, our scale items draw from items in established scales chosen for their representativeness of the underlying descriptors used in the conceptual definitions. Pulling together all of the literature and definitions on IBT, we borrow Jones et al.'s definition of IBT as the "degree to which an individual is likely to make unintended, immediate [or spontaneous], and unreflective purchases" (2003, p. 506). To measure this construct, items were chosen or adapted from Beatty and Ferrell's (1998), Rook and Fisher's (1995), and Weun, Jones, and Beatty's (1998) scale items that best represented the three descriptors addressed in the definition (unintended buying, immediacy/spontaneity of the act, and lack of reflection on the behavior before acting), but that did not overlap with one another conceptually. From these scales, two items were chosen to represent each descriptor, resulting in a six-item scale. After conducting an initial exploratory factor analysis (EFA), items 5 and 6 dropped out because of low loadings; an issue that might have been caused by the different scale anchors used in these items (1 = "never" to 5 = "often"). The remaining four items appear to adequately represent

Table 1
Scale Items: Sources and Path Coefficients

Factor and Item	Final EFA Factor Loadings (α)	CFA Path Coefficients (AVE)/CR	Source
Impulsive Buying Tendency (IBT)	(0.76)	(0.49)/0.75	
1. It is fun to buy spontaneously.	0.83	0.78	Weun, Jones, and Beatty (1998)
2. I often buy things without thinking.	0.72	0.58	Rook and Fisher (1995)
3. Sometimes I feel like buying things on the spur-of-the-moment.	0.89	0.83	Rook and Fisher (1995)
4. "Buy now, think about it later," describes me.	0.52	0.54	Rook and Fisher (1995)
5. I have bought things I had not intended to purchase.*	—	—	Weun, Jones, and Beatty (1998)
6. I make unplanned purchases.*	—	—	Weun, Jones, and Beatty (1998)
Compulsive Buying Tendency (CBT)	(0.85)	(0.49)/0.84	
1. I think others would be horrified if they knew of my store or catalog spending habits.	0.70	0.66	Faber and O'Guinn (1992)
2. I write checks or use a debit card even when I know I don't have enough money in the bank to cover it.	0.83	0.69	Faber and O'Guinn (1992)
3. I feel anxious or nervous on days I don't go shopping in stores or from catalogs.	0.73	0.61	Faber and O'Guinn (1992)
4. I buy things even though I can't afford them.	0.70	0.65	Edwards (1992, 1993)
5. I feel driven to shop and spend, even when I don't have the time or money.	0.81	0.83	Edwards (1992, 1993)
6. I go on buying binges.	0.78	0.72	Edwards (1992, 1993)
7. I buy things when I don't need them.*	—	—	Edwards (1992, 1993)
Urge to Buy	(0.80)	(0.58)/0.79	
1. I experienced a number of sudden urges to buy things I had not planned to buy on this trip.	0.87	0.76	Beatty and Ferrell (1998)
2. On this trip I saw a number of things I wanted to buy.	0.77	0.60	Beatty and Ferrell (1998)
3. On this trip, I felt a sudden urge to buy something.	0.87	0.90	Beatty and Ferrell (1998)
Positive Affect	(0.78)	(0.56)/0.78	
1. I was feeling happy.	0.77	0.73	O'Guinn and Faber (1989)
2. Overall, I was feeling pretty positive.	0.78	0.86	Frost, Meagher, and Riskind (2001)
3. I was feeling very confident.	0.77	0.65	Frost, Meagher, and Riskind (2001)
Negative Affect	(0.82)	(0.52)/0.82	
1. My self-esteem was lower than normal.	0.75	0.71	O'Guinn and Faber (1989)
2. I was feeling sad or depressed.	0.78	0.71	O'Guinn and Faber (1989)
3. I was experiencing some anxiety or apprehension.	0.66	0.65	Frost, Meagher, and Riskind (2001)
4. I was feeling a lot of tension and stress.	0.69	0.68	Frost, Meagher, and Riskind (2001)
5. Overall I was feeling pretty negative.	0.81	0.83	Frost, Meagher, and Riskind (2001)

Notes: EFA = exploratory factor analysis, CFA = confirmatory factor analysis, AVE = average variance extracted, CR = composite reliability. * Item removed items after initial EFA.

IBT, capturing the immediacy and unreflective nature of the buying tendency (see Table 1).

Following prior conceptualizations, the definition used here describes CBT as a tendency to engage in uncontrolled and excessive purchasing, often due to internal tension, and often involving little regard to the financial, social, or personal ramifications (Billieux et al. 2008; Kyrio, Frost, and Steketee 2004; Ridgway, Kukar-Kinney, and Monroe 2008). In light of this definition, items were sought from the two heavily used scales that captured these three

descriptors—unchecked buying behavior with potentially negative financial, social, or personal ramifications; internal tension or psychological distress; and uncontrolled or excessive buying. Items were chosen or adapted from Edwards's (1992, 1993) scale and Faber and O'Guinn's (1992) scale, which appeared to best represent these ideas, with two to three items chosen for each descriptor. However, one item, item 7, loaded too low on the EFA to retain and was subsequently removed.

After the initial EFA (in which the three items noted above were removed), a final EFA was conducted with the remaining 21 items representing IBT, CBT, positive affect, negative affect, and urge to buy. The EFA performed well; loadings and coefficient alphas ranging from 0.76 to 0.85 indicate acceptable reliability for all constructs of interest (Churchill 1979), and appear in Table 1 along with all the items and sources. Survey items are measured on five-point Likert scales, anchored by "strongly disagree" to "strongly agree."

RESULTS

Measurement Model

Once the initial scale analysis was completed, the psychometric traits of the retained scales were confirmed (Gerbing and Anderson 1988). In this study, LISREL 8.8 was used to estimate model fit statistics. Next, the researchers subjected the 21 items to a confirmatory factor analysis (CFA). The measurement model provided an acceptable fit with the nonnormed fit index (NNFI) = 0.95, the goodness-of-fit index (GFI) = 0.91, the comparative fit index (CFI) = 0.96, and the incremental fit index (IFI) = 0.96. In addition, the model's root mean square of approximation (RMSEA) is 0.058 with a chi-square statistic of 381.62 (176 df [degrees of freedom], $p < 0.001$), which provides an acceptable chi-square/df ratio of 2.16 (Tate 1998). In addition, convergent validity is evident, as each item loads on its intended construct with large path coefficients, as reported in Table 1.

Measuring the average variance extracted (AVE) indicates the degree to which scale items measure one common factor underscoring a scale's convergent validity, while also demonstrating discriminant validity. The AVE and composite reliabilities, shown in the second data column of Table 1, suggest acceptable AVEs in all five constructs with a range of 0.49 to 0.58 (Fornell and Larcker 1981). These measures, along with stable reliabilities (above 0.75), support construct validity. The AVE also provides evidence of discrimination among the factors. In this test, the AVEs for the two constructs of interest are compared to the squares of the correlations between the two affected constructs. The constructs have discriminant validity if the AVEs are greater than the squared correlations. All the constructs achieved discriminant validity. Table 2 provides scale statistics and correlations, indicating low to modest correlations. IBT and CBT correlate at 0.35, while negative and positive affects correlate negatively, as expected.

Discrimination of IBT and CBT

A fundamental assertion made in this research is that IBT and CBT are distinct constructs warranting further tests of construct divergence. Further evidence of the discrimination between IBT and CBT is provided by the statistical fit between the competing one- and two-dimensional measurement models. We compare a two-dimension model (with IBT and CBT as separate latent constructs) alongside a one-dimensional model that combines all of the IBT and CBT items into one construct. As evidenced by traditional fit statistics (difference in χ^2, RMSEA, CFI, and NNFI), the two-dimensional model demonstrates superior fit (see Table 3).

Structural Model

Testing the proposed model (Figure 1) using LISREL 8.8 demonstrates acceptable fit of the structural model as evidenced by the traditional fit indices (NNFI = 0.95, GFI = 0.91, CFI = 0.96, IFI = 0.96). The explained variance in the outcome variable urge to buy is 16 percent. In addition, the model's RMSEA is 0.056 with a chi-square statistic of 335.75 (158 df, $p < 0.001$), which provides an acceptable chi-square/df ratio of 2.12 (Tate 1998). Given the high correlation between positive and negative affect, the error terms were freed as a modification.

Hypothesis Testing

The measured structural model provides evidence that the predicted mediating roles of negative affect and positive affect exist between IBT and CBT, respectively. IBT is positively associated with positive affect ($\beta = 0.15$, $t = 3.20$, $p < 0.05$) while also associated with urge to buy ($\beta = 0.22$, $t = 3.46$, $p < 0.001$). In addition, positive affect and urge to buy are positively associated ($\beta = 0.20$, $t = 2.17$, $p < 0.05$). Likewise, hypothesized relationships between CBT, negative affect, and urge to buy are supported. CBT is positively associated with negative affect ($\beta = 0.30$, $t = 3.40$, $p < 0.001$) and urge to buy ($\beta = 0.28$, $t = 3.20$, $p < 0.001$), while negative affect is positively associated with urge to buy, but only marginally ($\beta = 0.15$, $t = 1.66$, $p < 0.10$).

Table 2
Measurement Scale Statistics and Interscale Correlations

	Mean	Standard Deviation	Number of Items	IBT	CBT	Urge to Buy	Positive Affect
IBT	2.88	0.92	4				
CBT	1.72	0.70	6	0.35**			
Urge to Buy	3.17	0.10	3	0.23**	0.23**		
Positive Affect	4.03	0.76	3	0.08	0.01	0.14*	
Negative Affect	1.45	0.63	5	0.01	0.18*	0.04	−0.52**

* $p < 0.01$; ** $p < 0.001$.

Table 3
Comparison of Single Versus Multidimensional Models of IBT and CBT

	Chi-Square	df	RMSEA	CFI	NNFI	Chi-Square Difference Test with Base Model ($p < 0.01$)
IBT and CBT Two-Factor Model	39.64 ($p = 0.17$)	32	0.07	0.97	0.96	20.26 with 1 df ($p < 0.001$)
IBT and CBT One-Factor Model	59.90 ($p = 0.003$)	33	0.13	0.91	0.88	

Note: df = degrees of freedom; RMSEA = root mean square error of approximation; CFI = comparative fit index; NNFI = nonnormed fit index.

In addition, the links between IBT and negative affect and CBT and positive affect (H3) are tested. In doing so, IBT is not associated with negative affect ($\beta = 0.00$, $t = 0.01$, $p = 0.992$) and CBT is not associated with positive affect ($\beta = 0.04$, $t = 0.51$, $p = 0.612$), in concert with our expectations, supporting H3. See Figure 2 for a summary of the beta loadings.

Additional Assessment

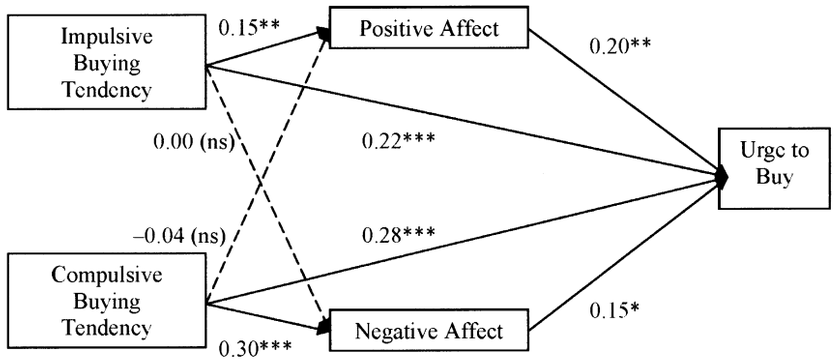
Following Baron and Kenny (1986) and Iacobucci, Saldanha, and Deng (2007, p. 141), the weak relationship between negative affect and urge to buy is of concern. Since this path is significant at only the $p < 0.10$ level, an alternative model is also tested. In this model, the elimination of the direct path between CBT and urge to buy allows for a model of full (versus partial) mediation in regard to CBT and urge. The resulting model was worse in overall fit than the proposed model with 12 percent of the variance accounted for in the outcome variable *urge to buy* (NNFI = 0.95, GFI = 0.91, CFI = 0.95, IFI = 0.95, RMSEA = 0.058 with a χ^2 statistic of 350.66/161 df, $p < 0.001$, difference in χ^2/df =11.94/1, $p < 0.001$). This finding indicates that a model allowing for full mediation of negative affect on the CBT–urge to buy relationship is not superior to one allowing for the partial mediation of negative affect on this relationship (i.e., the hypothesized model).

DISCUSSION

There were two primary objectives of this research. The first objective was to investigate the distinctiveness of IBT and CBT. The second objective was to ascertain whether IBT and CBT relate differentially to positive affect versus negative affect. The analysis supports the contentions of the researchers that although IBT and CBT correlate ($r = 0.35$), they are distinguishable both statistically and conceptually. Using EFA loadings and CFA variance extractions indicates discrimination between the constructs. In addition, formal tests of both one-dimensional and multidimensional measurement models find a superior fit, favoring the distinctiveness of the two constructs. Further reinforcing the conclusion is evidence that each tendency is differentially associated with positive and negative affect, as predicted. Thus, the evidence here suggests that CBT is not simply an exaggerated version of IBT, but that it is a distinctly different (albeit related) psychological phenomenon.

Also affirmed is the notion that trait variables, such as IBT and CBT, contribute to enhanced affect in the setting, with both affects and tendencies associated with an urge to

Figure 2
Structural Equation Modeling Loadings of Model



* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$; ns = nonsignificant.

buy. Consistent with the current understanding of IBT, the findings suggest that when individuals are in a setting where affect-arousing stimuli may be present (e.g., in the retail store), positive sentiments and feelings may be enhanced by one's IBT levels. Conversely, negative feelings appear to be similarly enhanced by the presence of the compulsive buying trait. Accordingly, both tendencies and their associated affects are associated with urges to buy in the store.

An interesting and unexpected result is the weak relationship between negative affect and an individual's urge to buy. However, this finding is consistent with Beatty and Ferrell's (1998) finding that while positive affect influenced urge to buy, negative affect did not directly influence urge to buy. In their discussion, Beatty and Ferrell indicate that although both affects may be associated with urge to buy, positive affect is likely to have a stronger influence.

THEORETICAL AND MANAGERIAL IMPLICATIONS

Researchers of impulsive and compulsive buying tendencies have often disagreed on the true nature of each construct, providing a variety of theoretical foundations from which buying tendency research is conducted. The results presented here are consistent to a point with Ridgway, Kukar-Kinney, and Monroe's (2008) two-dimensional view of compulsive buying (derived from psychiatric perspectives), in which one dimension is obsessive-compulsive buying and the other is impulsive buying (derived from impulse control disorder). However, we disagree with Ridgway, Kukar-Kinney, and Monroe's perspective that these two types of buying are subcomponents of the construct of compulsive buying. Instead, our research results suggest that it is more accurate to make a distinction between the two. Our goal in this paper was to ascertain whether the two buying tendencies could be differentiated, and we find that they were. To combine them into one scale or concept of compulsive buying does not conform with past findings in marketing, as well as our current findings, as to their differential relationships with affect and other consequences (as noted in the literature reviewed here) and may add to further confusion of the constructs in the future.

Further theoretical and managerial implications also stem from the use of trait activation theory to describe the interaction between the traits of impulsive and compulsive buying and the situational cues tied to each. Knowing that all consumers contain the potential for both traits, and that trait-specific cues in the environment can arouse one or the other, suggests potential marketing strategies both online and in the brick-and-mortar store. It is easy to imagine how positive situational cues are more strongly linked to impulsive behaviors that are immediate and unintended. Stores and Web sites can therefore benefit from maintaining and enhancing displays and programming that produce positive affect. But negatively laden situational cues, for example, elements in the environment that might cause the individual to focus on negative feelings (i.e., low self-esteem, anxiety, or life stressors), may bring out more uncontrolled and excessive patterns associated with compulsive buying tendencies. However, the identification of negative cues in the environment is more difficult. Could it be that displaying credit card insignias close to the checkout arouses a compulsive consumer's uncontrolled nature? Or perhaps having dark or messy store environments, like those often found at thrift or discount outlets, encourage excessive purchases by identifying with CBT? Further, crowded environments or environments where sales help are hard to find or are surly may trigger these negative reactions. Some cues may

be difficult to evaluate on the positive/negative scale; however, managers are cautioned to pay close attention to the potential perceptions of stores because of the unwanted negative consequences that may follow.

From the retailer's perspective, the resulting sale (and subsequent profit realized) that comes from elevated positive affect is indistinguishable from the profit that comes from a sale that was motivated by negative affect. Yet the psychological effects contrast strongly. Managers can contribute to the denial, remorse, and guilt (O'Guinn and Faber 1989) associated with CBT or feelings of elation and guilt-free gratification associated with IBT, but may have little control over which occurs.

In this research area, the most obvious advice for managers would be to make a conscious effort to stop manipulating environments to trigger impulsive/compulsive behaviors. Workman and Paper (2010) refer to managers as consumer enablers, pointing out that marketer's aggressive selling tactics purposefully and strongly influence the occurrence of buying. Companies consistently use ads that portray IBT and CBT as normal, positive and even funny—allowing for the development of socially acceptable buying terms such as "retail therapy" or "shopaholic." Global innovations such as the Internet and smart devices such as iPads used in stores to expedite transactions all encourage faster, easier purchasing.

However, the behaviors of impulsive and compulsive buyers in the marketplace all look the same on the surface, thus advising corporations to train staff to recognize and distinguish between IBT and CBT and to act on this information is impossible. Further, convincing a company to utilize softer techniques instead of the hard aggressive sell in order to help consumers avoid negative outcomes in the future goes against the very principles the company holds at its foundation. But managers should consider corporate social responsibility issues. Marketing managers should be brought into a conversation regarding their contribution to a global financial issue that is in part created by affectively laden, aggressive, retail marketing behaviors at the point of purchase, including online (e.g., the 1-click ordering on Amazon.com is often just "too easy").

LIMITATIONS AND FUTURE RESEARCH

Although the findings presented in this study are statistically strong and useful, there are some limitations. The first limitation is the use of a student sample. Peterson (2001) found in a large meta-analytical study that the use of college students may produce slightly more homogeneous findings than would result from a more general population. He argues for replications of data prior to full-scale generalizations. However, in research such as that conducted here, homogeneity is not a predominant concern and the benefits of using a relative, albeit convenient, sample tended to outweigh the potential problems.

A second limitation is the use of urge to buy, which is a psychological variable linked to buying. Future studies need to incorporate actual behavioral measures in addition to psychological traits since the issue of how well individuals resist their urges once experienced is not addressed with this data.

Future research should replicate this research in other consumer groups. Besides nonstudents, it would be useful to focus on a variety of age groups to see if the findings hold for various demographic groups such as baby boomers versus generations X and Y, Caucasians versus African Americans, or even males versus females.

This research extends both compulsive and impulsive buying literatures, illustrating their distinctiveness and their relationships with other important constructs. Future research should continue to identify outcomes beyond urge to buy that could distinguish the two behavioral traits (e.g., regret or buying remorse). In addition, it would be interesting to investigate additional mediating factors, such as social cues (shopping partners, salesperson interaction, or congruence with other shoppers), situational events (holidays or sales), or atmospherics. Additional internal factors, such as personality variables (e.g., variety seeking, introversion, vanity), would also be useful to examine, as would alternative shopping venues.

The research presented here focuses on brick-and-mortar retail shopping environments; however, online and other direct sales methods should be explored as well. Finally, future research could also include the identification of control strategies used by consumers to minimize the effects of their impulsive and compulsive buying tendencies. Such strategies can either increase their willpower or decrease their desire to buy, as outlined by Hoch and Loewenstein (1991).

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