



# External and internal trigger cues of impulse buying online

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## Abstract

**Purpose** – The purpose of this paper is to investigate the internal and external factors of impulse buying in online shopping.

**Design/methodology/approach** – Two pretests were conducted; Pretest 1 to identify external impulse trigger cues on web sites and Pretest 2 to evaluate the content validity of the findings from Pretest 1. Based on the pretests, a web experiment and survey were conducted to explore the effect of different external impulse trigger cues on impulse-buying behavior online and also to examine how internal factors of impulse buying (impulse-buying tendency (IBT), affective and cognitive state, normative evaluation) are related to online impulse-buying behaviors.

**Findings** – No significant differences were found among the types of external impulse trigger cues, however a positive correlation was found between a person's IBT and online impulse-buying behavior, and between a person's affective state and online impulse-buying behavior. A negative correlation was found between a person's cognitive state and actual online impulse-buying behavior. And last, a significant positive correlation was found between a person's normative evaluation and actual online impulse-buying behavior.

**Research limitations/implications** – This study extends the Consumption Impulse Formation Enactment model into an online shopping context. Marketers can use this information to assess their own web sites in terms of what external stimuli to present on their web sites to trigger impulse buying.

**Originality/value** – Given the prevalence of impulse buying in online shopping and the importance of impulse purchases to a retailer's profit, this study provides useful insights into impulse-buying behavior in an online setting.

**Keywords** Buying behaviour, Internet shopping

**Paper type** Research paper

## Introduction

In the USA, impulse-buying sales account for \$4 billion annually and make up 80 percent of all purchases from certain product categories (Abrahams, 1997). With the growing acceptance of the internet among the general public and the rapid growth of multi-channel retailing, consumers are constantly exposed to marketing stimuli that promote impulse buying. For example, the internet is an alternative impulse channel serving as a convenient shopping channel that allows the consumer to shop at their leisure, offering 24 hour/seven days a week shopping, and shopping in the comfort of their own home (Phau and Lo, 2004). While the increased convenience of online shopping compared to traditional brick and mortar shopping is advantageous to many shoppers, such convenience may also encourage impulse buying.

Most shoppers occasionally engage in impulse buying (Welles, 1986). More than half of mall shoppers were found to purchase on impulse (Nichols *et al.*, 2001), and over one third of all department store purchases have been made on impulse (Bellenger *et al.*, 1978), indicating that impulse purchases are critical to a retailer's profit. US consumers



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have been found to engage in impulse buying more than British (Bayley and Nancarrow, 1998) or South African (Abratt and Goodey, 1990) consumers. According to *The Economist* (2000), almost a quarter of Amazon.com's sales were made by encouraging impulse purchases through product recommendations. Given the globalization of the internet and an increasing number of shoppers from all over the world accessing international retail web sites like Amazon.com, impulse buying online is not confined to a specific country, but is a global phenomenon. One contributing factor to the growth of international shopping is the current weak US dollar. Foreign consumers can take advantage of buying US brands at a much lower price than before according to Pricerunner, an online comparison site. Visits to US retail web sites by British shoppers increased by 92 percent in 2007 due to the looming dollar (Crosby, 2007).

Impulse buying is also linked to retailers' up- and cross-selling strategies. Up-selling is referred to as a retailer's effort to upgrade an existing customer's purchase; selling a better product to the customer than already intended to purchase. Cross-selling refers to a retailer's efforts in selling additional and often times related products to the product the customer is going to purchase, or already has purchased (Levy and Weitz, 2007). Up- and cross-selling are key to successful customer relationship management because they are effective ways to develop and extend a relationship with a firm's existing customers (Blattberg *et al.*, 2001; Bolton *et al.*, 2004). Especially, given the high-customer acquisition costs in online retailing compared to store-based retailing (\$82 vs \$31) according to Shop.org survey (Hamblen, 2000), up- and cross-selling can increase customer value to online retailers, and in turn financial profitability.

In an online context, online marketers frequently implement promotional strategies promoting up- and cross-selling through product recommendations, suggested coordinated (and un-coordinated) items, featured items, sale items, and other promotional offers. Since the added on and upgraded items are often purchased on impulse, impulse buying online is an important phenomenon to both online marketers and consumers. Evidence from the industry also supports the importance of up- and cross-selling to online retailer's business success. According to *Internet Retailer* (2002), over 75 percent of the online retailers surveyed used cross- and up-selling tactics on their web sites, and many experienced increases in order size as a result. Additionally, after implementing promotional offers such as cross-selling between product categories and free shipping on orders over \$25, Amazon.com's net sales grew 25 percent from the year before (Malester, 2006).

The internet is becoming an important shopping channel, with growth rates exceeding all other forms of shopping (Brohan, 2007). In the USA alone, Shop.org reported online retail sales in 2007 rose 21.8 percent to \$165.9 billion from 2006 (*Internet Retailer*, 2008). For overall global e-commerce sales, Forrester Research (2004) forecasted sales to reach US\$6.8 trillion by 2004; North America accounting for 50.9 percent, Asia/Pacific (24.3 percent), Europe (22.6 percent) and Latin America (1.2 percent). Given the rapid growth and the characteristics of online shopping that promote impulse buying (e.g., open 24/7), impulse buying is likely to be prevalent in online shopping. In particular, impulse buying is even more likely for online apparel shopping because apparel is frequently purchased on impulse (Bellenger *et al.*, 1978) and is also one of the most popular product categories sold online (DesMarteau, 2004). With the growing number of online shoppers that are purchasing apparel online (Lebo, 2003), many shoppers are likely to engage in an impulse buying situation.

Although impulse purchases are likely to be prevalent in online shopping, marketing scholars have not paid much attention to impulse buying in an online context yet. Much of previous research has focused on impulse-buying behavior in traditional brick and mortar shopping (Bayley and Nancarrow, 1998; Dholakia, 2000; Rook and Fisher, 1995) and television shopping (Park and Lennon, 2004). With the tremendous growth potential of online shopping and the prevalence of impulse buying today, more research is needed to understand consumer impulse-buying behavior online.

Therefore, the purpose of this study was to investigate impulse-buying behavior in an online setting. The research objectives were two-fold to:

- (1) examine how external impulse trigger cues of a web site affect consumer impulse-buying behavior; and
- (2) investigate how internal factors of impulse buying are related to impulse-buying behavior in online shopping.

The findings of the study are expected to add to existing literature by providing insight into consumers' impulse-buying behavior in online shopping. Also, the findings of this study will provide useful information for online retailers to help develop an effective marketing strategy to promote impulse buying and ultimately increase profitability. Consumers are also expected to benefit from the findings of this study by being more aware of factors affecting their own impulse-buying behaviors.

## **Research framework and hypotheses**

### *Impulse buying*

Rook (1987, p. 191) redefined impulse buying: "Impulse buying occurs when a consumer experiences a sudden, often powerful and persistent urge to buy something immediately." Many researchers have associated unplanned or unintended purchasing with impulsive purchasing, and an unplanned purchase is necessary for categorizing a purchase as impulsive (Rook, 1987; Rook and Fisher, 1995). According to Stern (1962), unplanned buying refers to purchases that were not planned in advance, and includes impulse buying. The two are distinguished by how fast the impulsive purchase decision was made (Hausman, 2000). Impulse buying occurs in a shorter time span than unplanned purchases (Dholakia, 2000). The decision to purchase occurs after exposure to the product (Hoch and Loewenstein, 1991) and the decision to purchase is made quickly and hastily for impulse buying (Rook, 1987).

A consumer's impulse to buy may occur once or recur more than once for the same consumer (Dholakia, 2000). Impulse buyers are less likely to consider the consequences of buying on impulse (Rook, 1987) and less likely to thoroughly evaluate their purchase decisions than a typical informed shopper (Jones *et al.*, 2003). They are more willing to accept spontaneous buying ideas (Hoch and Loewenstein, 1991), and are more focused on the immediate gratification of purchasing the product. Impulse buyers are often drawn to a mysterious attraction of the product which motivates the buyer to purchase the item. (Rook, 1987).

Consumers are affected by both internal and external factors of impulse buying (Wansink, 1994). Since impulse-buying behavior is often stimulus driven (Rook and Fisher, 1995), increased exposure to certain external stimuli increases the likelihood of impulsively buying (Iyer, 1989). Such external factors decipher which consumers engage in impulse-buying behavior, and how retailers play a part in encouraging

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impulse-buying behavior. Also, certain internal characteristics of the individual make them engage in impulse-buying behavior.

#### *External factors of impulse buying*

External factors of impulse buying refer to marketing cues or stimuli that are placed and controlled by the marketer in attempt to lure consumers into purchase behavior (Youn and Faber, 2000). Consumers can experience an urge to impulsively buy when visually encountering cues such as promotional incentives (Dholakia, 2000; Rook, 1987). External marketing cues not only attract new customers into a retail web site, but promote up- and cross-selling to existing (and new) customers by encouraging impulse purchases of complimentary items or better items. A study conducted by Shop.org/Biz rate in 2005 found a 30 percent increase in online sales after implementing aggressive marketing programs such as direct e-mail promotions, free shipping, gift idea centers, suggested items, and featured sales item pages.

According to Chicago's E-tailing Group Inc., a growing number of online retailers are implementing cross- and up-selling product recommendations as external marketing cues encouraging impulse buying online. Many of the top 100 retail sites ranked by *Internet Retailer* (2002) implemented automated cross- and up-selling features on their sites. Increases in such marketing strategies were related to increases in online sales (Shop.org, 2005). For example, Eve.com, a San Francisco-based online beauty store experienced a 20 percent increase in sales by implementing an integrated database system that automatically provides suggested coordination items to the product being viewed, as well as related items that the customer might also want (Brohan, 1999). FigLeaves.com, a UK-based apparel retailer also saw increased conversion rates as well as increased sales after offering suggested coordination and/or related items displayed with the particular product being viewed (*Internet Retailer*, 2003). To note, FigLeaves.com is among the top 99 online apparel retailers (*Internet Retailer*, 2005). Perfumia Inc., a Miami-based specialty fragrance store, experienced a significant increase in impulse purchases after offering frequent sale specials, free gifts with purchase, free samples, and featured items on their web site; impulse purchases accounting for one-third of its annual sales of \$175 million (Brohan, 1999).

#### *Internal factors of impulse buying*

Internal factors of impulse buying focus directly on the individual, examining the internal cues and characteristics of the individual that make them engage in impulse-buying behavior. Such factors involve a consumer's personality traits which determine the degree of their impulse-buying tendency (IBT), internal cues such as emotional states, the consumer's normative evaluation of impulse buying engagement, and demographic factors (Kacen and Lee, 2002).

*Impulse-buying tendency.* IBT is defined as the "degree to which an individual is likely to make unintended, immediate, and unreflective purchases" (Jones *et al.*, 2003, p. 506).

Several researchers have suggested that consumer personality traits can exemplify impulsive behavior more than other traits (Beatty and Ferrell, 1998; Rook and Fisher, 1995; Weun *et al.*, 1998). Research contends that these personality traits can help determine the degree of a person's IBT (Beatty and Ferrell, 1998; Rook and Fisher, 1995).

Youn and Faber (2000) found that IBT was linked to a personality trait "lack of control" where impulse buyers lack the cognitive control of not purchasing on impulse.

They also found that consumers with a higher IBT were more likely to be affected by marketing stimuli such as advertisements, visual elements, or promotional gifts and thus engage in in-store browsing and tend to respond more frequently on urges to buy impulsively.

*Internal cues of impulse buying.* Internal cues of impulse buying include a person's affective and cognitive state. A person's emotional state, mood, and self-feelings can be recognized as a person's affective state (Youn, 2000). Internal stimuli are processed by the consumer affectively and/or cognitively resulting in impulsive or non-impulsive behavior. In result, feelings might include an "irresistible urge to buy, positive buying emotions, and mood management" (Coley and Burgess, 2003, p. 283). When a consumer experiences an "irresistible urge to buy", he/she feels compelled to make an impulse purchase.

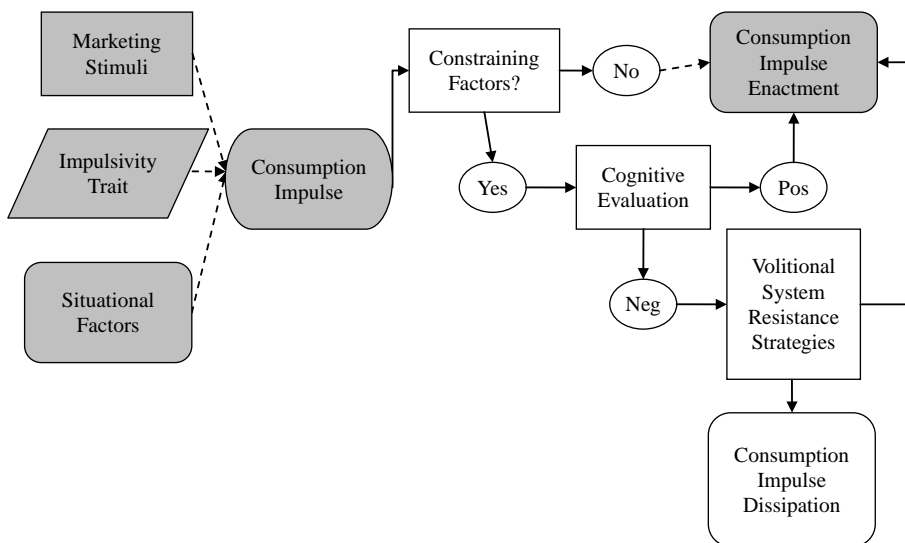
Cognitive aspects refer to how one understands, thinks and interprets information, and can result in unplanned buying tendencies, little cognitive deliberation, and disregard for the future (Youn, 2000). Consumers who are more responsive to their affective state and less responsive to their cognitive state have been found to experience a strong urge to buy and are more likely to engage in impulsive buying behavior (Dholakia, 2000; Rook, 1987; Youn and Faber, 2000).

*Normative evaluation of impulse buying.* Rook and Fisher (1995, p. 306) define normative evaluations as "consumers' judgments about the appropriateness of making an impulsive purchase in a particular buying situation". Negative views tend to arise about impulse buying in general such as viewing impulsive behavior as "irrational, immature, wasteful, and risky" (Rook and Fisher, 1995, p. 306). Consumers might feel regretful emotions or guilt after an impulse purchase, concerning unnecessarily spent money (Dittmar and Drury, 2000). Yet, in fact, the majority of consumers did not find that their impulse buying was inappropriate behavior and did not judge it to be wrong (Rook, 1987; Hausman, 2000). Rook and Fisher discovered that consumers engage in impulse buying only when they feel it appropriate. Consumers's impulse tendencies were thwarted when they believe impulse buying is socially inappropriate.

#### *Theoretical framework*

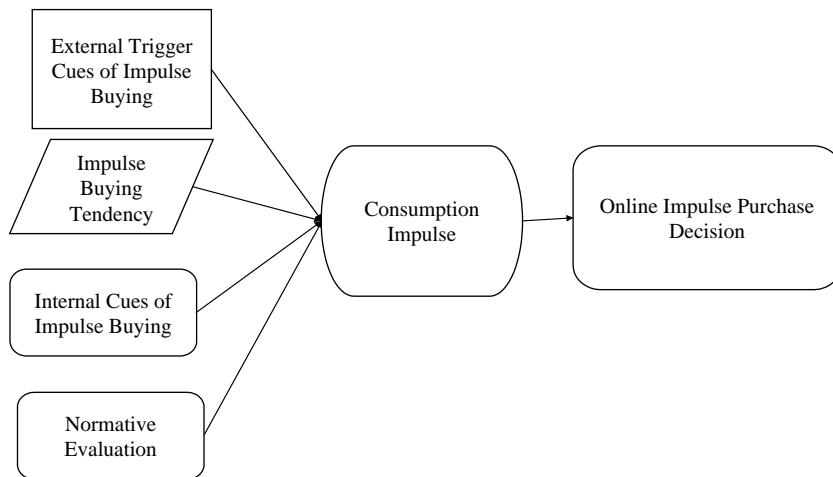
The consumption impulse formation enactment (CIFE) model (Dholakia, 2000) is used to understand consumers's impulse-buying behaviors in online shopping. The model begins with the impulse-formation process: developing the "consumption impulse" defined as the "irresistible urge to consume" (p. 960). The three antecedents in the model include marketing stimuli, situational factors, and impulsivity trait. When one or more of these three antecedents are present to an adequate level, the consumption impulse is formed (an irresistible urge to consume). Once the consumption impulse is formed, possible constraints to enactment are automatically evaluated (Loewenstein, 1990). If the consumer is not aware of any constraining factors during their evaluation, the consumption impulse then enacts his/her impulse consumption. Marketing stimuli are external factors of impulse buying, whereas impulsivity trait and situational factors are internal factors affecting impulse-buying behaviors from the model (Figures 1 and 2).

Applied to an online shopping context, Figure 2 shows a revised CIFE model in online shopping. Marketing stimuli in the CIFE model refer to the external stimuli that are present on the web site to trigger impulse-buying behavior. The first factor in the revised model thus is labeled "external trigger cues of impulse buying" to refer to marketing stimuli present on a web site.



**Note:** Shaded boxes and dashed lines represent items investigated in current study  
**Source:** Dholakia (2000)

**Figure 1.**  
Original CIFE model



**Figure 2.**  
Revised CIFE model for impulse buying online

Both impulsivity traits and situational factors from the CIFE model serve as internal factors of impulse buying. A person's IBT provides a good measure of a person's impulsivity trait whether in brick and mortar or online shopping; thus being the second factor in the new model (Rook and Fisher, 1995). According to the original CIFE model, situational factors refer to a person's emotional state or mood, which is consistent with internal cues of impulse buying. Situational factors were broken up into two different parts to be measured separately. Thus, the first part of situational factors is labeled "internal cues of impulse buying" including a consumer's mood or emotional state while shopping online. The second part of situational factors refers to a consumer's



normative evaluation of making impulse purchases online. A person's normative evaluation was found to be an important influencer of impulse buying by previous research, and thus was added to the revised CIFE model (Rook and Fisher, 1995). Normative evaluations most appropriately fit under situational factors. The current study did not focus on how constraining factors of impulse buying from the original CIFE model affect a person's impulse purchase decision. Important to note the original CIFE model measures cognitive evaluations only when constraining factors are present, whereas the revised CIFE model considers cognitive evaluations much earlier in the decision-making process. This is consistent with previous research that has linked a person's cognitive evaluations as a direct influencer of their impulse-buying behavior (Dholakia, 2000; Rook, 1987; Youn and Faber, 2000). The current study focused on the antecedents that lead a consumer to make an impulse purchase in online shopping.

To address Research Objective 1, the effects of different external impulse trigger cues on a web site were explored. Since there is no prior literature or theory to suggest which strategy would work better in triggering impulse buying, the approach is exploratory in nature. To address Research Objective 2, hypotheses predicting the relationships between internal factors of impulse buying and actual impulse purchases made were developed based on a review of existing literature on impulse buying and the CIFE model:

- RQ1.* How do the different external cues present on a web site affect impulse-buying behavior online?
- H1.* IBT as an internal factor of impulse buying is positively related to impulse buying in online shopping.
- H2.* Internal cues of impulse buying as an internal factor of impulse buying is related to impulse buying in online shopping.
- H2a.* Positively to affective state.
- H2b.* Negatively to cognitive state.
- H3.* Normative evaluation as an internal factor of impulse buying is positively related to impulse buying in online shopping.

## **Methodology**

### *Research design*

This study utilized a web experiment and survey to study impulse-buying behavior in online shopping. The purpose of the experimental study was to explore the effects of different types of external impulse trigger cues on a web site and the respondent's level of impulse purchase. The purpose of the web survey was to measure how a person's internal factors of impulse buying including IBT, affective and cognitive state, and normative evaluation are related to their impulse purchase behavior in online shopping.

### *Stimulus development*

Prior to a web experiment, two pretests were first conducted to develop the mock web sites for the main study. Pretest 1 consisted of focus group interviews to identify external cues on apparel web sites that promote impulse buying. Pretest 2 consisted of

a content analysis of apparel web sites to establish the content validity of the findings from the focus group interviews. From the focus group interviews, four external categories of web sites including 20 external impulse trigger cues were identified: promotions, ideas, sales, and suggestions. For example, online coupons and free shipping were examples of the promotions category, while customer reviews and recommendations on the web sites were examples of the suggestions category. A content analysis of apparel web sites provided support for the content validity of the four external impulse trigger cue categories (Table I).

The design of the study was a between-subjects experimental design with one factor (five levels). Based on the findings from the two pretests, the mock web sites were developed to reflect one of the four external impulse trigger cues and one control web site with no impulse trigger cues. For example, the first condition focused on the “sales” category of external impulse trigger cues and contained features that exemplified “on sale” cues of a web site, whereas the second condition focused on the “promotions” category of external cues and contained cues pertaining to sales promotions and special offers available. All four experimental conditions included all external cues identified from pretests whereas the control condition did not include any external impulse trigger cues on a web site. Additionally, for stimulus sample purposes (Fontenelle *et al.*, 1985), two different outfits were used. Thus, there were ten webpages total.

The mock web sites simulated an apparel web site targeted to young women and used a fictitious name to avoid any effects due to brand name. Feedback on the mock web sites was sought and minor revisions were made accordingly.

*Participants and procedure*

For the study, a convenience sample of female undergraduate students 18 years and older from a large US Northwestern University was recruited. All participants

*External impulse trigger cues*

Sales	On sale (clearance, sales, and markdowns)
Promotions	Bold sale price on product Addit. purch percent off (ex. buy 1 get 1..) Coupon Percent off when spend certain limit Gift with purchase Free shipping or shipping discount Return purchase in store Constests/sweepstakes Membership discount
Ideas	Shop outfit New styles/fashions Featured items Top picks/favorites Gift ideas
Suggestions	Price point items (ex. items under \$30) Suggested coordination items Suggested non-coordination items Customer favs/reviews/recommendations Last thing you looked at

**Table I.**  
External impulse trigger  
cues on apparel web sites



recruited were young college students which is a good representative sample of online shoppers, and impulse-buying behavior has been found to be prominent in younger adults (Retail World, 2002).

When participants logged onto the mock web site, they were randomly assigned to one of ten experimental web pages (five different web pages  $\times$  two conditions of outfits to be purchased). Participants were presented with a hypothetical buying scenario giving them purchase alternatives which will determine whether an impulse purchase was made. Rook and Fisher (1995) used a similar buying scenario in their study measuring impulsive purchase decisions in a brick and mortar shopping context. For this study, the buying scenario was revised to fit an online setting. After viewing simulated apparel retailer webpage, participants were given the following situation, and were asked what the consumer in the imaginary shopping situation would do:

Mary is a 21-year old college student with a part-time job. It is two days before Mary gets her next paycheck and she has only \$75 left for necessities. In addition to food, Mary needs to buy a cocktail dress for a cocktail party this weekend. After work, Mary goes online to purchase the cocktail dress she had in mind for \$55. After browsing through ApparelVenue.com, Mary sees other items that would go great with her new dress.

Participants were then instructed to choose one of five purchase decision alternatives for Mary. The decision alternatives represent varying levels of impulse buying. The use of this "imaginary stimulus situation assumes that participants will project themselves into the shopping scenario presented" (Rook and Fisher, 1995, p. 308). Then, respondents participated in a web survey measuring three internal factors that affect impulse-buying behavior (internal cues of impulse buying, IBT, and normative evaluation).

#### *Measures*

*Impulse-buying tendency.* To measure the degree of IBT, Rook and Fisher's (1995) Buying Impulsiveness Scale was used. This scale included nine items using a seven-point Likert type scale with a Cronbach's  $\alpha$  of 0.88.

*Internal cues (affective and cognitive state).* To measure internal cues of impulse buying such as a person's affective and cognitive state, the IBT Scale by Verplanken and Herabadi (2001) was used. This scale contains two parts. The first part measures cognitive aspects of impulse buying using ten items and the second part measures affective aspects of impulse buying using ten items. All items used a seven-point Likert type scale. This internal cue scale proved as a reliable instrument with a Cronbach's  $\alpha = 0.86$  for the complete 20-item scale.

*Normative evaluation.* To measure a participant's normative evaluation of impulse buying, this study used the same process as Rook and Fisher (1995). This normative evaluation measure assumes that consumers will assess the appropriateness of making an impulse purchase. Research participant's normative evaluations of Mary's decision was measured on a semantic differential scale including ten bipolar adjective pairs: good-bad, rational-crazy, wasteful-productive, attractive-unattractive, smart-stupid, acceptable-unacceptable, generous-selfish, sober-silly, mature-childish, and right-wrong. This normative scale proved as a reliable instrument in measuring normative evaluations, with a Cronbach's  $\alpha = 0.91$ .

**Results**

*Manipulation check*

ANOVA was first conducted to determine whether there were any differences between the two outfits. No significant differences were found between the two outfit conditions, thus concluding that the outfit conditions did not contribute to the test results.

*Preliminary analysis*

For all scales, dimensionality was assessed using an exploratory analysis and found to be unidimensional. Then, inter-item reliability was checked for all scales, and acceptable reliability was found for all three scales (Cronbach’s  $\alpha > 0.80$ ). Thus, the scores for each scale were averaged, to produce one score for each scale.

*Sample characteristics*

A total of 400 female college students were recruited from a US Northwestern University and 300 of them participated (75 percent response rate); totaling 30 female students for each webpage. Participants ranged from 18 to 48 years of age, with an average age of 22-years old. A majority of the participants were aged 20-24 years old. Close to half the participants have made an online purchase(s) last year and a majority of them made impulse purchases in online shopping (Table II).

*RQ1: the effects of external impulse trigger cues of a web site on impulse buying decision.* To explore differences between the types of external impulse trigger cues and the level of impulse purchase made, a univariate analysis of variance was performed. The results showed that there is no significant difference among the types of external

Characteristics	Mean (SD)	Samples Frequency	Percentage
<i>Age</i>	22 (3.13)		
Under 20		13	4.3
20-24		261	86.7
25-30		22	7.3
Over 30		6	2.0
<i>Annual salary</i>			
Less than 14,999-29,999		269	89.08
30,000-49,999		29	9.6
50,000 and higher		4	1.32
<i>In last year, how often made purchases online</i>			
0 times		35	11.59
Once in last six months		134	44.37
About once every other month		92	30.46
About once a month		34	11.26
About once a week		4	1.32
More than once a week		3	0.99
<i>How many of these purchases were bought on impulse</i>			
Not applicable		57	18.87
None		72	23.84
Few of them		110	36.42
Almost all of them		49	16.23
All of them		14	4.64

**Table II.**  
Demographic profile and  
online shopping behavior  
of participants

impulse trigger cues in terms of their impulse buying decision;  $F(299) = 1.59, p > 0.177$ . Results suggested that different types of external impulse trigger cues (sales, promotions, ideas and suggestion cues) do not affect the level of impulse purchases made.

### *Hypothesis testing*

*H1.* The relationship between IBT and impulse buying online.

To test *H1* predicting, the positive relationship between IBT and impulse buying online, a simple correlation was performed. Results showed that buying tendency scores and online impulse-buying behavior were positively correlated,  $r = 0.394, n = 300, p < 0.0001$ ; thus supporting *H1*. The higher the IBT score, the more frequently products were purchased on impulse:

*H2.* The relationship between internal cues and impulse buying online.

*H2a.* Affective.

*H2b.* Cognitive.

A simple correlation was performed to test the relationship between cognitive and affective states and past online impulse-buying behavior. For the relationship between a person's affective state and their online impulse-buying behavior, a significant positive relationship was found,  $r = 0.154, n = 300, p < 0.001$ ; supporting *H2a*. This relationship suggests that when a person is more responsive to their affective state, they are more likely to engage in impulse-buying behavior online.

For the relationship between a person's cognitive state and their online impulse-buying behavior, a significant negative relationship was found,  $r = -0.169, n = 300, p < 0.001$ ; supporting *H2b*. This relationship suggests that when a person is more responsive to their cognitive state, they are less likely to engage in impulse-buying behavior online:

*H3.* The relationship between normative evaluation and impulse buying online.

A simple correlation indicated a positive correlation between normative evaluation and online impulse-buying behavior,  $r = 0.14, n = 300, p < 0.05$ . The higher the normative evaluation of an impulse purchase, the greater the likelihood of impulsively buying.

### **Dicussions and implications**

The purpose of this study was to examine the internal and external factors of impulse buying in online shopping; internally looking at what triggers the consumer to buy impulsively, and externally looking at how external impulse trigger cues on a web site influence impulse buying online. Unexpectedly, this study found no significant differences for the effects of different types of external impulse trigger cues on the level of impulse purchase made. Perhaps, the artificiality of a hypothetical buying scenario may have contributed to such findings. Participants were asked to make a purchase decision in a hypothetical buying scenario for a female named Mary. While Rook and Fisher (1995) successfully used a similar scenario for their investigation, participants for the current study may have not been highly involved with the buying scenario and thus not very motivated to make an informed purchase decision for Mary (Petty and Wegener, 1999). With low involvement, consumers are not motivated to submit

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themselves into the presented shopping scenario (Rook and Fisher, 1995). Therefore, participants may not have given an honest response as to what they might do in the same buying situation. Alternatively, participants may have taken a more objective, rational approach to the scenario and made a more rational decision for Mary.

Results from the web survey showed internal factors of impulse buying were related to online impulse-buying behaviors. A person's IBT score and their online impulse-buying behavior was positively related. This is consistent with Rook and Fisher's (1995) research that found that those with higher IBT scores were more likely to make impulse purchases and made impulse purchases more frequently than others in a traditional shopping context. A significant amount of impulse buying research has linked impulse buying to a personality trait (Beatty and Ferrell, 1998; Rook, 1987; Rook and Fisher, 1995; Weun *et al.*, 1998). Research contends that these personality traits can help determine the degree of a person's IBT, and that a person's IBT is a reliable indicator of impulse-buying behavior (Beatty and Ferrell, 1998; Rook and Fisher, 1995).

The current study also found a significant relationship between a person's affective and cognitive state and their online impulse-buying behavior. This relationship suggests that when a person is more responsive to their affective state, they are more likely to engage in impulse buying online. However, when they are more responsive to their cognitive state, they are less likely to engage in impulse-buying behavior online. Both of these results are consistent with previous research that has linked both affective and cognitive aspects to impulse buying in traditional shopping (Dholakia, 2000; Rook, 1987; Youn and Faber, 2000). Impulsive consumers are more likely to be sensitive to their emotions and feelings, than non-impulsive consumers and this affective state can act as internal triggers to buy impulsively (Dholakia, 2000; Youn and Faber, 2000).

This study further found a positive relationship between a person's normative evaluation and the level of impulse purchase made. As a person's normative evaluation of an impulse purchase moves positively towards favoring the impulse purchase, they are more likely to make a higher level of impulse purchase. This finding is also consistent with previous research that explores normative evaluations of impulse-buying behavior. Rook and Fisher's (1995) study looked at the moderating role of normative evaluations in a traditional shopping context. They found similar results such as a positive relationship with a person's normative evaluation and the degree of impulsive purchase made.

Despite potential prevalence of impulse buying in online shopping, research examining online impulse-buying behavior is largely lacking. The findings of the current study contribute to this field of research and provide useful insight into consumers' impulse-buying behavior in online shopping. Although this study failed to show the effects of different external impulse cues on a web site, the findings from a web survey provide partial support for the CIFE model.

This study further provides useful insights for both marketers and consumers globally. The findings of the study will be useful to marketers in recognizing potential external impulse trigger cues included on their web sites that encourage impulse purchases as well as impulsive add-on and/or upgraded purchases. While this study failed to show the effects of those cues on impulse-buying behaviors, anecdotal evidence suggests otherwise. Further research is warranted. This research also provides information to global consumers in terms of what marketers may include on

their web sites to encourage consumers to impulsively buy. With this knowledge, consumers are better apt to make more informed purchase decisions without being swayed by external stimuli such as up- and cross-selling ploys present on retailers' web sites. Furthermore, this study suggests that certain types of consumers are more likely to engage in impulse buying regardless of shopping channels. Thus, consumers who have engaged in impulse buying in one shopping channel are also likely to make impulse purchases in other channels because of their internal factors affecting their decision.

### Limitations and suggestions for future research

Unexpectedly, this study found no significant difference among the types of external impulse trigger cues. Perhaps, future research can examine different types of external impulse trigger cues using a different scenario that provides a more realistic situation and foster high involvement with the decision-making process. The findings of this study need to be interpreted with caution. Research participants were US college women, so do not represent a diverse population of online shoppers. Future research is needed with more diverse representation of global online shoppers. Also, the findings are limited to an online apparel shopping context. Future researchers can further include other consumer products to expand the findings of the study.

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