Incorporating attitudes into a new framework for impulse buying behavior

by

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Abstract

Given that consumers often make spontaneous purchases without conscious deliberation, it is not surprising that researchers have been investigating impulse buying for over 65 years. The current approach is to explore the antecedents of impulse buying behavior, and although this approach has been extremely fruitful, it is short of being complete in that it does not answer many important theoretical issues. We believe these theoretical issues can be resolved by considering the insights of attitude models that explicate the contributions of implicit and explicit attitudes to consumer behavior. Consequently, we propose a new framework for impulse buying that takes attitudes into consideration. Based on this framework, I ran four experiments testing the role of affect in impulse buying behavior. Experiment 1 examined the role of positive affect, with Experiment 1A.

Essay 1

Impulse buying is an important part of both consumer behavior and marketing management (Rook 1987). Up to 80% of sales by value are made impulsively (Abrahams 1997), and almost any product can be bought impulsively (Rook and Hoch 1985). Furthermore, online shopping has made impulse buying even more ubiquitous, and firms are making it increasingly easier to do (Madhavaram and Laverie 2004). Put simply, impulse buying is a pervasive phenomenon that requires careful inspection. Consequently, researchers have been investigating impulse buying behavior for over 65 years (e.g., Clover 1950), albeit with some difficulty (Beatty and Ferrell 1998).

Impulse buying is a sudden and immediate purchase that a) occurs after experiencing an urge to buy, and b) is made without pre-shopping intentions to acquire the specific product category or to fulfill a specific buying task (Beatty and Ferrell 1998). While initial investigations emphasized a taxonomical approach (e.g., Stern 1962), Rook (1987) shifted focus to a psychological process approach. Drawing on this perspective, researchers have discovered a variety of factors that influence the likelihood of impulse buying. While these investigations have been extremely fruitful, they leave unanswered many important theoretical questions. For example, what products are the targets of impulsive purchases? What are the emotional consequences of impulse buying? What is the relationship between the urge to make an impulsive buy and actually making an impulsive buy? The answers to these questions have important practical implications, yet they cannot be explained by current models of impulse buying. In this article, we will propose a framework based on contemporary attitude models to help answer these unresolved issues and broaden the domain of impulse buying research.

Attitudes have long been considered important predictors of consumer behavior (e.g., Fishbein 1963; Petty, Cacioppo and Schumann 1983). The rise of dual process models of consumer cognition has provided a foundation for understanding how both thoughtful and spontaneous behaviors are influenced by attitudinal processes. In other words, not only are attitudes effective at predicting both thoughtful, deliberative behavior as well as spontaneous, uncontrollable behaviors. More specifically, automatic attitudes, defined as evaluations made immediately after exposure to a market offering, are predictive of impulsive behaviors, whereas deliberative attitudes, or evaluations made after some degree of conscious deliberation, are predictive of more controlled behavior (Friese, Hofmann, and Schmitt 2009). Accordingly, this article will propose a framework that incorporates both automatic and deliberative attitudes in order to fully explicate impulse buying behavior. Considering impulse buying is characterized by a lack of careful deliberation about a purchase, more controlled attitudinal processing is not a good candidate to predict these behaviors. Additionally, research has shown that a lack of central executive processing strengthens the predictive validity of implicit measures. That is, automatic attitudes predict behavior when one lacks the ability and/or motivation to control his/her behavior, as is necessarily the case with impulse buying behavior. Therefore, understanding how consumers utilize automatic and deliberative attitudes provides unique insight into impulse buying.

We begin by outlining the impulse buying literature, including contemporary models of impulsive buying. Next, we propose an attitudes-based framework for investigating impulse buying and argue that it addresses many important theoretical issues unanswered by current models that focus on the antecedents of impulse buying.

Finally, we describe the implications of the framework for current and future impulse buying research.

Impulse Buying Behavior

American consumers spend billions of dollars each year on purchases made on pure impulse (Beatty and Ferrell 1998; Kacen and Lee 2002; Rook 1987). Across a variety of populations and product categories, over 60% of all consumer purchases are the result of impulse buying (Bellenger, Robertson, and Hirschman 1978), resulting in a substantial amount of impulse purchases every year (Hausman 2000). Market innovations, such as shopping online or through phone applications, have made impulse buying easier, so consumers can even be more impulsive than in a traditional shopping setting (Donthu and Garcia 1999). Impulse buying behavior is clearly a prevalent consumption activity and, as such, deserves theoretical scrutiny.

At its core, impulse buying is characterized by a struggle between desire and willpower (Hoch and Loewenstein 1991). On one hand, when a consumer impulsively buys, he/she is often succumbing to hedonic desires. On the other hand, if he/she resisted making an impulsive purchase, then he/she resisted those desires by exerting his/her willpower. Many impulsive buying situations involve the interplay between impulsive urges and more reasoned attempts to restrain behavior (see Hofmann, Friese, and Wiers 2008 for a similar argument in the health-related behavior domain).

Weinberg and Gottwald (1982) characterize impulse buying behavior as high in emotional activation, low in cognitive control, and a largely reactive. Rook (1987) defines impulse buying as “a sudden, often powerful and persistent urge to buy something immediately. The impulse to buy is hedonically complex and may stimulate

emotional conflict. Also, impulse buying is prone to occur with diminished regard for its consequences" (p. 191). Beatty and Ferrell (1998) extend this definition by arguing that an impulsive purchase occurs with no pre-shopping intentions and after experiencing the urge to buy (i.e., impulsive buying is independent but closely related to the urge to impulsively buy). Impulse buying is thus distinct and not encompassed by constructs such as unplanned buying, habitual purchasing (e.g., automatically buying commonly used but out-of-stock products), instinctual behavior (e.g., responding to an emergency), and task-driven purchasing (e.g., gift buying). Current definitions of the impulse buying concept reflect substantial refinements since Stern (1962) proposed that any purchase made without prior intention could constitute impulse buying behavior.

The taxonomical approach that characterized early impulse buying research sought to determine the products most likely to be purchased "impulsively" (i.e., without prior planning) and the retail settings under which these purchases are likely to occur (e.g., Clover 1950). This work was used to build classifications of different kinds of unplanned purchases. Stern (1962) argued that there are four types of impulse purchases: pure, reminder, suggested, and planned. *Pure impulse purchases* are when a consumer experiences the spontaneous, sudden, and hedonically complex urge to buy a market offering after encountering it in the store. For example, a consumer walking down an aisle at the grocery store and puts a candy bar in his/her cart as soon as he/she saw it. Since he/she automatically had the urge to purchase the candy bar and did so without much, if any, conscious thought, the behavior is classified as a pure impulsive purchase. If seeing the candy bar reminded the consumer that they needed to buy it for a daughter's birthday, the purchase would constitute a reminder impulsive purchase. That is, *reminder*

impulse buying occurs when a consumer uses prior knowledge about a market offering as a reminder that it is needed. Suggestion buying is similar to reminder impulse buying, but occurs when the consumer does not have prior knowledge about the offering. A consumer makes a *suggestion impulsive purchase* when he/she perceives a need for a market offering after encountering it for the first time. For example, a consumer would make a suggestion buy if he/she sees a new type of frozen dessert that he/she thinks would be great for her daughter's birthday and purchases it for that reason. The final type of impulse buy is *planned impulse purchase*, which occurs when a consumer has plans to buy certain market offerings, but also has the intention to buy other market offerings depending on other factors, such as sale pricing. For example, a consumer who intends to buy ice cream and other frozen desserts for her daughter's birthday, and she also buys popsicles because they are half price. In this scenario, purchasing the popsicles is a planned impulse buy because although she didn't initially plan on buying popsicles specifically, she did plan on buying a frozen dessert in addition to the ice cream.

However, the taxonomical approach ignores how the consumer experiences the impulse buying process (Rook 1987). Indeed, Beatty and Ferrell (1998) concede that, "it is surprising how little we really know about the process of impulse buying and the variables affecting its enactment" (p.170). Therefore, the focus of recent impulse buying research has emphasized the variables involved in impulse buying behavior. Consequently, more recent work has largely taken an antecedent approach to understanding impulse buying behavior by focusing on factors that influence the likelihood a consumer will make an impulsive purchase.

Current Models of Impulse Buying Behavior

Current investigations of impulse buying seek to map out various antecedents of impulse buying (e.g., Youn & Faber 2000), and these endeavors have been extremely fruitful in that they have clearly modeled the factors that cause consumers to make an impulsive purchase. Most models have organized these factors into internal (dispositional) factors and external (situational) factors (e.g., Beatty & Ferrell 1998). That is, factors that influence the likelihood of impulse buying behavior have generally been classified as relating to the consumers or to the environment in which the impulsive purchase is made.

Internal factors include aspects of the buyer that increase the likelihood of impulse buying. Relatively stable dispositional tendencies such as impulse buying tendency (Rook 1987), need for touch (Peck and Childers 2006), depressive states (Sneath, Lacey, and Kennett-Hensel 2009), self-esteem (O'Guinn and Faber 1989), lack of control (Youn and Faber 2000), stress reactivity (Youn and Faber 2000), absorption (Youn and Faber 2000), enjoyment of shopping (Beatty and Ferrell 1998), cultural orientation (Kacen and Lee 2002), prior knowledge of store layout (Iyer and Ahlawat 1987), or ability to delay gratification (Wood 1998) have all been shown to influence the likelihood of an impulse purchase. In other words, all else being equal, some consumers simply have a higher innate propensity to engage in impulse buying than others.

Additionally, more transient internal factors can also affect the likelihood of impulse buying. Recent research suggests money available (Beatty and Ferrell 1998), self-discrepancy (i.e., the difference between one's actual self and ideal self; Dittmar, Beattie, and Friese 1996), amount of self-regulatory resources (Vohs and Faber 2007), and time browsing (Beatty and Ferrell 1998) can play an important role in impulse

purchasing. Furthermore, both positive and negative affective processes can influence impulse buying behavior. Consumers with positive moods strive to maintain that mood and use impulsive purchases to do so while experiencing negative affect tends to decrease the likelihood of impulse buying (Rook and Gardner 1993), though it can increase the likelihood of impulse buying behavior in some situations (Beatty and Ferrell 1998).

There are also external factors that affect the frequency of impulse buying. Specifically, the presence of others (Luo 2005; Rook and Fisher 1995) and aspects related to atmospherics (e.g., music, store layout; Mohan, Sivakumaran, and Sharma 2013) all influence the likelihood that one will engage in impulse buying behavior. Thus, both environmental and internal factors can influence the likelihood that a consumer makes an impulsive purchase.

The current impulse buying literature has been extremely fruitful in determining and classifying the internal and external factors that influence the likelihood of impulse buying behavior. However, the antecedent-focused approach does not speak to other important theoretical issues related to impulse buying. First, there is a lack of a complete understanding of the link between the urge to impulsively buy and actual impulsive purchases. Beatty and Ferrell (1998) argue that "there has been little effort put forth to describe or model urges or desires" (p. 184), and provide evidence that the urge to make an impulsive purchase is strongly correlated with actually making an impulsive purchase, suggesting that "felt urge appears to be an important intervening variable" (p.184). However, their model represents the full extent to which the relationship between the urge to impulse buy and impulse buying itself has been investigated. As such, both

theoretical and empirical work is needed to further explicate the conditions under which a consumer that feels the urge to impulsively buy will actually make an impulse purchase.

Second, research focusing on what factors lead consumers to make more impulsive purchases has largely ignored the question of which purchases are more or less likely to be the target of the urge to impulsively buy. That is, although we know that having limited self-regulatory resources, for instance, will lead to more impulsive purchases, it is unclear what offerings the consumer will actually purchase. For example, a consumer with low self-regulatory resources may make an impulsive purchase as he/she is checking out at the grocery store, but the current literature does not address the attributes that will make a candy bar or gummy bears a more likely target offering. In order to more fully explain impulse buying behavior, it is necessary to develop a framework that can also predict the targets of impulsive purchases.

Third, the emotional consequences of impulse buying remain under-investigated (Beatty and Ferrell 1998). Although research has shown that consumers can feel both positive and negative emotions after making an impulsive purchase (Gardner and Rook 1988), it is unclear when a consumer will feel good or bad about his/her purchase, despite evidence that post-purchase emotions can influence future consumption behaviors (Cohen, Pham, and Andrade 2008). In sum, although researchers have outlined many variables affecting impulse buying behavior, key questions remain unaddressed. Next, we present an attitudes-based framework that aims to answer these questions and provide future directions for impulse buying research.

[Insert Figure 1 about here]

Incorporating attitudes into a framework of impulse buying behavior

In order to develop such a framework, it is necessary to adopt a broader perspective that incorporates psychological processes, and this proposed framework does so by integrating attitudes. The current framework advances impulse buying research by adopting a psychological process approach that draws on the developing attitudes literature in psychology and consumer behavior. Attitudes are a "distinctive and indispensable concept" (Allport 1935, 198), and a "bedrock and a pervasive concept throughout the social sciences" (Petty, Briñol, and DeMarree 2007). Attitudes are crucial in our understanding of the social sciences largely due to their close relationship to behavior. Recent research has shown that attitudes predict brand preference, brand recognition, and product usage (e.g., Maison, Greenwald, and Bruin 2004), as well as more spontaneous, impulsive behaviors (Friese et al. 2009). Therefore, emphasizing attitudes could provide a generative foundation for more fully explaining impulse buying behavior.

Although attitudes have been defined in a variety of ways, a common element between all proposed definitions is that an attitude consists of a relatively enduring evaluation towards an entity, issue, or person (i.e., an attitude object Eagly and Chaiken 1993; Fazio 1990; Petty et al. 2007). More specifically, attitudes are defined to be a stored link in memory between an attitude object and an evaluation (i.e., evaluative associations). These evaluations can vary in strength, such that strong attitudes tend to be stable, to be resistant to attitude change attempts, and to guide behavior (Olson and Fazio 2008). Furthermore, evaluations can be positive, negative, or ambivalent, (i.e., a combination of both positive and negative evaluations of a single attitude object). Whether the positive or negative element of an ambivalent attitude guides behavior will

depend on the number of positive and negative experiences a consumer has, the recency of those experiences, and the context in which those experiences took place (Petty et al. 2007). A consumer with an indifferent attitude has neither positive nor negative evaluations associated with an attitude object.

Many contemporary attitude theories also propose a meta-cognitive validity process that operates during attitude retrieval and can interact with the primary evaluation (Cohen and Reed 2006; Gawronski and Bodenhausen 2007; Petty 2006; Petty et al. 2007). For example, a consumer may see a candy bar at checkout and have a positive immediate reaction because they like the taste of candy, but that initial evaluation may be invalidated by a negative validity tag associated with the unhealthiness of the candy. The validity tag, like the attitude itself, can vary in strength, such that stronger (in)validity tags are more likely to be retrieved along with the initial evaluation. However, "there are many circumstances where validity tags will not be as strongly linked to the evaluation as the evaluation is to the attitude object" (Petty et al. 2007, 667). That is, as the validity tag is associated with the evaluation and not the attitude object directly, it is likely that in most situations the validity tag will need additional resources, such as motivation or ability, to retrieve.

Attitudes can be further categorized as automatic attitudes, or the evaluations that predict spontaneous behaviors, and deliberative attitudes, or the evaluations that predict more controlled behaviors (Petty et al. 2007). Next, we will 1) define and describe automatic attitudes and how they influence impulse buying, 2) define and describe deliberative attitudes and how they influence impulse buying, 3) explain how the automatic/deliberative distinction and metacognitive validation process can help answer

unresolved issues in the impulse buying literature, and 4) outline how other factors identified in the literature (i.e., antecedents of impulsive purchases) influence the impact of automatic and deliberative attitudes on impulse buying behavior.

[Insert Figure 2 here]

Automatic Attitudes

Automatic attitudes are evaluations automatically activated by exposure to an attitude object, and are more likely to influence impulse buying when the consumer does not have the ability or motivation to retrieve associated metacognitive validity tags. Automatic attitudes operate based on processes similar to a simple memory system in that they reflect simple evaluative associations that are not necessarily explicitly endorsed by the consumer. That is, automatic attitudes reflect the extent to which an attitude object is associated with varying degrees of positivity and negativity independently of the consumer's conscious belief that they association reflected by the attitude is true or valid.

Although these attitudes have been postulated since the seminal days of persuasion research (see Hovland, Janis, and Kelley 1953), appropriate measurement techniques have only recently been developed (e.g., Fazio et al. 1995; Greenwald, McGhee, and Schwartz 1998). Measures such as the Implicit Association Test (IAT; Greenwald and Banaji 1995) assess the link between an attitude object and some degree of positivity or negativity. Because automatic attitudes are, by definition, activated without deliberative thought, they cannot be consciously controlled. Therefore, in the present framework, automatic attitudes are positively associated with impulse buying behavior. That is, to the extent that a consumer has a positive automatic attitude about a

market offering and lacks the motivation or ability to engage a deliberate attitude, the consumer will be more likely to impulsively buy that offering.

A recent meta-analysis demonstrated that automatic attitudes predict certain classes of behaviors more effectively than deliberative attitudes (e.g., Neumann, Hülsenbeck, and Seibt 2004). Specifically, automatic evaluations tend to predict behaviors that do not require motivation and/or ability to control (i.e., spontaneous behaviors that are enacted without conscious deliberation or control). Friese et al. (2009) found that automatic attitudes are more likely to predict spontaneous behaviors such as impulse buying behavior when a consumer's motivation and/or ability to mentally process information is impaired.

Specifically, automatic attitudes predict behaviors well when one has limited time to process information (Friese, Wänke, and Plessner 2006), limited cognitive capacity (Friese, Hofmann, and Wänke 2008), limited self-regulatory resources (Friese et al. 2008), limited resources due to the influence of alcohol (Hofmann and Friese 2008), limited trait self-control (Friese and Hofmann 2009), and under conditions of high mortality salience (Friese and Hofmann 2008).Thus, automatic attitudes predict behavior better than deliberative attitudes when mental processing is impaired because consumers lack the opportunity and/or motivation to control behavior (Friese et al. 2009).

Although the current literature suggests that there is a direct link between automatic attitudes and impulsive purchases, we posit that this relationship is mediated by the urge to impulsively buy. It is plausible that consumers can have a positive automatic attitude towards a market offering but will not make an impulsive purchase. We argue that this is due to automatic attitudes actually leading to the urge to impulsively

buy, and actual impulsive purchases will only occur when consumers have such an urge. Our proposal is supported by evidence that the urge to impulsively buy mediates the relationship between many antecedents and impulse buying behavior (Beatty and Ferrell 1998).

P1: Automatic attitudes are positively associated with the urge to impulsively buy, such that positive automatic attitudes will lead to an urge to impulsively buy.

Urge to impulsively buy. The urge to make an impulsive purchase is defined to be a state of desire that is experienced immediately upon encountering an object in the environment (Beatty & Ferrell 1998). Rook (1987) first suggested that consumers experience a spontaneous and sudden impulse to buy a marketing offering, but researchers paid little attention to the construct until relatively recently (but see Hoch and Loewenstein, 1991). Beatty and Ferrell (1998) note that "there (had) been little effort put forth to describe or model urges or desires" and that "felt urge appears to be an important intervening variable" (p.184) when including it in their framework of impulse buying behavior. They found that the urge to make an impulsive purchase and actually making an impulsive purchase are closely related but distinct constructs, in that a consumer may show restraint and not always act upon the urge. However, there is still scant research on the processes linking a felt urge to buy impulsively and an actual impulse purchase. That is, it is unclear why and how a consumer will actually make an impulse purchase after feeling the desire to do so.

In the current framework, similar to Beatty and Ferrell (1998), the urge to buy impulsively mediates the relationship between automatic attitudes and impulse buying.

That is, there is a difference between wanting to make an impulsive purchase and actually making an impulsive purchase. A consumer may wish to overcome an impulsive urge and use a variety of strategies to do so (Hoch and Loewenstein 1991). To the extent that a consumer has a positive automatic attitude about a market offering, then he/she will, in turn, likely have an urge to impulsively buy. Although this relationship is moderated by various boundary conditions, which will be described below, there is a positive relationship between automatic attitudes and the urge to buy impulsively.

Considering impulse buying is characterized by a lack of careful deliberation about a purchase, deliberative attitudes cannot predict these behaviors well. Additionally, extant research has shown that a lack of central executive processing strengthens the predictive validity of implicit measures. That is, automatic attitudes predict behavior when one is unable or unwilling to control his/her behavior, as is the case with impulse buying behavior.

P2: The urge to buy impulsively is positively associated with impulse buying behavior, such that the stronger the urge to buy, the more likely a consumer will be to make an impulsive purchase.

Deliberative Attitudes

Deliberative attitudes are defined as consciously considered evaluations about an attitude object, or those that are reported after some degree of conscious elaboration. A consumer's deliberative attitude refers to the attitude expressed given the consumer has the motivation and/or ability to retrieve the validity tag associated with an evaluative association (Petty et al. 2007). Deliberative attitudes have traditionally been observed by simply asking consumers to report their evaluation of an attitude object (e.g., Thurstone

and Chave 1929). Thus, when a consumer provides a written or verbal evaluation of an attitude object, such as a marketing offering, they report a deliberative attitude. Due to the self-report nature of deliberative attitudes, a consumer needs the motivation and/or ability to retrieve it (Fazio 1990). That is, in order to for a consumer to retrieve a deliberative attitude, he/she must have the desire as well as the capability to do so.

In the current framework, deliberative attitudes are negatively associated with impulse buying behavior. To the extent that a consumer has the ability and/or motivation to retrieve a deliberate attitude prior to purchase, that purchase will be less impulsive. When a consumer has the motivation and ability to control behavior, deliberative attitudes will exert more influence on that behavior.

P3: Positive deliberative attitudes are negatively associated with impulse buying behavior, such that the more a deliberative attitude influences behavior, the less impulsive buying behavior a consumer will engage in.

Attitude Structure

There are often times where consumers will report having a deliberative attitude that conflicts with an automatic attitude about the same object. For example, a consumer who is worried about their weight may report a negative attitude towards chocolate cake ("It isn't healthy"), but still report a positive automatic attitude ("But it is delicious!"). Importantly, this discrepancy is likely to lead to situations in which a consumer may feel tempted to make an impulsive decision (e.g., Shiv and Fedorikhin 1999). Impulse buying situations can often be categorized as temptation scenarios (Hofmann et al. 2008).

Many contemporary attitude theories suggest that the relationship between automatic and deliberative attitudes is determined by a metacognitive validation process

(e.g., Cohen and Reed 2006; Gawronski and Bodenhausen 2011; Petty et al. 2007). Automatic evaluations need to be consciously endorsed or validated for congruence between automatic attitudes and deliberative attitudes. If an automatic attitude is not endorsed, it will be treated as invalid and therefore not used to guide deliberative behavior. Conversely, if an automatic evaluation is validated, it will be more likely to guide deliberative behavior. Applying this validation process to impulse buying behavior offers unique predictions and helps to address unresolved issues in the literature.

Without this validation process, attitudes are mere evaluative associations and less useful for behavioral prediction, "but just because certain objects are associated with something does not mean that the object is that something" (Petty 2006, p 23). Associations can develop through a variety of mechanisms, such as through cultural norms (e.g., "cake is bad") or repeated expression of an attitude (i.e., it is endorsed and acted upon often). Although these evaluative associations may not be perceived as valid, they still influence behavior under certain circumstances, namely when a consumer does not have the motivation and/or ability to control his/her behavior.

As stated previously, automatic attitudes are better predictors of behavior than deliberative attitudes to the extent that a consumer's motivation and/or opportunity to control behavior are limited. These conditions are likely when a decision is not very important, when one does not expect to be held accountable for a decision, when the decision is based on habits, when there is a compatibility with motivational orientation, or when one is in a state of homeostatic dysregulation (Strack and Deutsch 2006). The metacognitive validation process suggests that under such conditions, consumers' deliberative system will be impaired and the impulsive system will guide behavior. In

attitudinal terms, consumers will rely on their automatic attitudes to guide behavior since they are unable to retrieve their deliberative attitudes.

For example, when a consumer is presented with the chance to purchase a piece of chocolate cake, they may hold both a positive attitude (because it is delicious) and a negative attitude (because it is not good for you). To the extent that the link between the chocolate cake and the positive attitude is stronger than the link between the chocolate cake and the negative attitude, consumers lacking motivation and/or ability will be more likely to make an impulsive purchase (see Figure 3a). Importantly, this is true regardless of whether the consumer perceives the positive evaluation to be a valid representation of their deliberate attitude. That is, in the above scenario, a consumer will impulsively buy the chocolate cake even if they would not consciously endorse their positive evaluation (e.g., if they are watching their diets; see Figure 3b). If a consumer is motivated and able to control behavior, however, they will recognize they do not endorse their positive automatic evaluation, and will not eat the chocolate cake. In other words, if a consumer can retrieve the invalidity tag associated with their positive evaluation, they will not use that positive evaluation to guide behavior. However, if a negative evaluation is more closely associated with the chocolate cake than a positive evaluation, the consumer will not make an impulsive purchase (see Figure 3c).

[Figure 3a, 3b, 3c] about here

P4: Automatic and deliberative attitudes will correspond to the extent that a consumer has the motivation and/or ability to retrieve and validate his/her evaluative association.

Boundary Conditions of Framework

A key aspect of the current framework is that both automatic and deliberative attitudes need to be considered when studying impulse buying behavior. The differential influences of automatic and deliberative attitudes is explained by a metacognitive validation process that suggests automatic attitudes will predict behavior unless a consumer has the motivation and ability to retrieve validity tags associated with automatic evaluations and, thus, refers to deliberate rather than automatic attitudes. Given that the use of deliberate attitudes is negatively associated with the impulsiveness of a behavior, it follows that factors influencing a consumer's motivation and/or ability to control behavior will moderate the impact of automatic and deliberative attitudes on impulse buying behavior. In particular, factors affecting a consumer's ability and motivation to control behavior can moderate the relationship between automatic attitudes and the urge to buy impulsively, as well as between the urge to buy impulsive and actual impulsive purchases. That is, as a consumer's ability and motivation to control behavior increases, the likelihood that they have and act upon an urge to make an impulsive purchase will decrease.

Motivation to control purchase behavior

When a consumer lacks the motivation to control his/her behavior, he/she lacks the desire to overcome her impulses. Researchers have investigated many factors that decrease a consumer's ability to control her impulsive tendencies. First, emotion regulation, which refers to the processes by which individuals attempt to control the experience, expression, and intensity of their emotions (Gross 1998), has been shown to increase the likelihood of impulse buying. As such, consumers may desire to escape negative affect or maintain positive affect, which reduces motivation to control their

behavior. Importantly, this emotional regulation can occur automatically (Mauss, Bunge, and Gross 2007). For example, consumers who experience a large self-discrepancy (i.e., a large difference between one's actual self and ideal self; Dittmar et al 1996), low self-esteem (O'Guinn and Faber 2000), depression (Sneath, Lacey, & Kennett-Hensel 2009), and who are high in stress reactivity (i.e., how consumers respond to stress; Youn & Faber 2000) engage in impulse buying in order to reduce their experience of negative affect. That is, impulsive purchases can serve as "self-gifts" used to alleviate negative affect (Mick and DeMoss 1990) which leads to a decreased desire to control one's purchasing behavior.

Consumers also may lose the motivation to fully control their behavior in order to maintain positive affect. Positive affect is positively associated with an approach motivation, and with a likelihood of overspending (Donovan and Rossiter 1982). For example, consumers who have a greater enjoyment of shopping and browse for pleasure tend to make more impulsive purchases than those who enjoy shopping less (Beatty and Ferrell 1998; Park et al. 2012). As consumers who enjoy shopping feel more positivity, they may be less motivated to control their behavior. Put simply, consumers who enjoy shopping make more impulsive purchases because they find pleasure in the activity. The store environment, including variables such as music and lighting, can also induce positive mood in consumers, which in turn increases impulse buying behavior (Mohan et al. 2013).

Second, amount of money available likely influences a consumer's motivation to control his/her behavior. To the extent that a consumer has a lot of discretionary money to spend, he/she may not be very motivated to control his/her spending behavior, as there

is little risk to overspending. However, if consumer do not have a lot of money available to freely spend, then their purchases are much more risky he/she may be much more concerned with what they spend their money on, and is consequently more motivated to control his/her behavior. In turn, those with money available make more impulsive purchases relative to those with less money available (Beatty and Ferrell 1998).

A third factor that has been shown in the literature to influence impulse buying through a change in a consumer's motivation to control purchase behaviors is social norms. That is, the extent to which social norms dictate the appropriateness of impulse buying will, in part, determine the extent to which a consumer will make an impulsive purchase (Rook and Fisher 1995). For example, Kacen and Lee (2002) found that although consumers from collectivistic cultures have the same impulsive tendencies, they engage in less impulsive buying behavior because of the negative perceptions associated with making impulsive purchases. Additionally, when a consumer is in the presence of others who view impulsive buying behaviors to be inappropriate, he/she is more likely to overcome her impulsive urges (Luo 2004). Therefore, when a consumer perceives that peers do not approve of impulse buying behavior, he/she will be more motivated to overcome the urge by controlling purchase behavior, which, in turn, decreases the likelihood of her making an impulsive purchase.

Finally, a consumer's dispositional tendency to behave impulsively, not surprisingly, also influences impulse buying behavior (Rook 1987; Youn & Faber 2000). More specifically, those consumers who have a high impulse buying tendency engage in more impulse buying behavior potentially due to a decrease in willpower (Youn & Faber

2000). In other words, those consumers make more impulse purchases because they do not have the dispositional motivation to control their behavior.

P5: Lower motivation to control behavior will lead to more impulse buying behavior

Ability to control behavior

To the extent that a consumer's ability to control behavior increases, he/she will make less impulse purchases. In general, a consumer's ability to control behavior is related to the extent to which he/she has available mental resources (i.e., less resources equates to less ability to control) and the means to apply those resources. A major factor that influences a consumer's ability to control behavior is self-regulatory resources. Specifically, consumers with limited self-regulatory resources are less able to control their behavior (Vohs and Faber 2007), which leads to an increase in impulse purchases (i.e., less influence from deliberative attitudes on behavior). Relatedly, a consumer's capacity to delay gratification is another factor that can increase a consumer's ability to control her behavior (Hoch & Loewenstein 1991, Wood 1998). A consumer is able to delay gratification to the extent that a consumer is able to postpone a reward in the immediate for a more desirable reward in the future. Considering impulse buying is related to the temptation of purchasing an immediate, hedonically gratifying offering (e.g., a candy bar) at the expense of a greater long-term reward (e.g., being healthy), it follows that a consumer who is able to delay gratification will avoid consuming the intrinsically rewarding offering for the long-term reward, and therefore make fewer impulsive purchases.

Researchers have also found that consumers who spend more time browsing exhibit more impulse buying behavior (Beatty & Ferrell 1998). Consumers necessarily make more purchase decisions the more time they spend browsing (e.g., "Should I buy this?") and each of these decisions reduces a consumer's self-regulatory resources (Baumeister 2002). To the extent a consumer has fewer self-regulatory resources at his/her disposal, and therefore less ability to control behavior, he/she will, in turn, make more impulsive purchases. Similarly, a consumer who is high in need for touch also makes more impulsive buys, presumably because he/she lacks mental resources and is relying on affective motivations to guide behavior (Peck and Childers 2006).

Absorption, which is defined to be the tendency to become immersed in self-involving experiences triggered by engaging external and imaginal stimuli (Tellegen and Waller 2008), is another internal factor that influence impulse buying behavior (Youn & Faber 2000). When a consumer becomes immersed in vivid and compelling stimuli, he/she necessarily has less mental resources to allocate to a purchase decision. That is, he/she has less ability to control her behavior because he/she is immersed in irrelevant stimuli.

A consumer will also make more impulsive purchases to the extent that he/she has limited prior knowledge of a store's layout (Iyer and Ahlawat 1987). That is, if a consumer does not know where things are and must search the store for the offerings he/she planned to buy, then he/she will make more impulsive purchases. Similar to time browsing, a consumer will have less mental resources available to control behavior the longer he/she spends searching for market offering. Due to limited mental resources, the consumer will consequently make more impulsive purchases.

There are also external factors that influence impulse buying behavior, in that there are factors in the environment that when changed, can influence impulse buying behavior. First, a stimulating environment can cause an increase in impulse buying behavior (Chang, Eckman, and Yan 2011; Mattila and Wirtz 2008). For example, fast tempo and high volume music being played in a store (Holbrook and Anand 1990), ambient scents (Mattila and Wirtz 2001), and even some colors (Valdez and Mehrabian 1994) can all increase impulse buying behavior due to the stimulating environment depleting the consumer's mental resources.

P6: Lower ability to control behavior will lead to more impulse buying behavior.

Feedback Loops

Finally, there are feedback loops whereby consumer evaluations can change as a result of making an impulsive purchase. Past behavior often guides and predicts future behavior, and this occurs due to both automatic and deliberative processes (e.g., Ouellette and Wood 1998). Therefore, it follows that making an impulsive purchase may influence both automatic and deliberative attitudes, and consequently influence subsequent purchasing. After making an impulsive purchase and after using the purchased offering, a consumer's evaluation of the offering may change. For example, if a consumer impulsively purchases a new candy bar when checking out at the grocery store but does not find the candy bar pleasing, their automatic evaluation of the candy bar may change. The consumer's deliberative attitude would also change as a result of not liking the market offering. That is, when asked about his/her evaluation of the candy bar, he/she would report a more negative, less positive, or more ambivalent evaluation. If the

consumer has the motivation and ability to control his/her behavior, then he/she would be less likely to purchase the candy bar in the future.

Additionally, whereas the consumer initially had a positive automatic attitude about the candy bar (e.g., because of effective marketing promotions), that evaluation would likely change over time. Specifically, that positive automatic attitude would become invalidated when the candy bar is found to be less pleasing an expected, and would be automatically retrieved to the extent that the validity tag for that evaluation is strongly associated with the candy bar. In these situations, the consumer would not buy the candy bar in the future, even when he/she did not have the motivation and/or ability to control behavior. Although this process would occur much more slowly than a change in deliberative attitudes, making an impulsive purchase can still change automatic attitudes.

P7a: Making an impulsive purchase can lead to a change in automatic attitudes

P7b: Making an impulsive purchase can lead to a change in deliberative attitudes.

Implications of Current Framework

Under conditions of limited motivation and/or opportunity to control behavior, automatic attitudes are likely to guide behavior (e.g., Friese et al. 2009), as the metacognitive (in)validity tag associated with an evaluation link may not be retrieved. That is, under such conditions, it is likely that only the automatic evaluation associated with an attitude object will be retrieved unless there is a sufficiently strong link between the (in)validity tag and the evaluation. Consequently, if an attitude object has both a positive and negative evaluation associated with an attitude object, whichever object-

evaluation link is stronger will guide behavior. For example, it is likely that a consumer will have stronger positive associations than negative associations (i.e., stronger positive automatic attitudes than negative automatic attitudes) about buying a candy bar, even if they are on a diet. If they are on a diet, however, they likely have an invalidity tag associated with that positive evaluation (i.e., do not endorse their positive attitude because it is counter to their goals). If this is the case, under conditions of limited motivation and/or opportunity to control behavior, they may not be able to retrieve the invalidity tag and will therefore use the positive association to guide their behavior and thus buy the candy bar. However, if the invalidity tag associated with the positive association is strong enough, due to constant rehearsal for example, then it will also be automatically retrieved and will not be used to guide behavior. Thus, the metacognitive validation process can better explain the boundary conditions under which one will or will not use automatic attitudes to guide behavior.

Moderating the link between urge to buy and actual buying behavior.

This framework also provides insight into the relationship between an impulsive urge to buy and actual impulse buying behavior. Impulsive urges are caused by positive automatic attitudes, whereas impulsive behavior is the extent to which those urges are acted upon. According to these attitude theories, impulse buying will occur under conditions where an individual has a positive automatic attitude about a market offering, and he or he/she is also unable to access a discrepant deliberative attitude. Put simply, when an individual does not have the ability or motivation to retrieve her consciously endorsed attitude, then he/she will rely on her automatic evaluation to guide behavior. A consumer will not have the ability or motivation to retrieve her deliberative attitude when

he/she has limited cognitive resources, such as a lack of self-control resources (Vohs and Faber 2007). Under these conditions, then the individual will be more likely to purchase the offering to the extent that the automatic evaluation for a market offering is sufficiently positive. However, if the consumer is able to retrieve a negative deliberative attitude, then he/she is less likely to act upon the urge to buy. Additionally, Rook (1987) argued that the consumer is most likely to act upon immediately following exposure to a market offering. Attitude theory would suggest that as time passes following an impulsive urge, consumers gain resources that make them less likely to then actually make an impulsive purchase.

Target of Impulsive Purchase.

Automatic attitudes can also serve to predict the target of impulse purchases, which is an area that has, to this point, been under-investigated. As automatic attitudes predict spontaneous behavior, they will be able to predict what the consumer will impulsively purchase under conditions of low cognitive resources. More specifically, a person will purchase whichever market offering has the strongest automatic attitude (i.e., strongest association with a positive evaluation; Hoffman et al. 2008). For example, imagine a person watching their diet is presented with a fruit salad, cookies, and a piece of chocolate cake. Although it is likely that the cookies and the piece of cake have stronger positive automatic attitudes than the fruit salad and consequently may be chosen over the fruit salad, traditional impulse buying research cannot predict whether the person will choose the cookies or the cake. However, attitudinal models suggest that the person will choose the dessert with the strongest impulse. That is, whichever dessert the consumer holds the strongest positive automatic attitude will be consumed.

It is essential to take context into consideration when using automatic attitudes to predict impulse buying, as attitudes are dependent on the current situation, however. For example, a consumer might have an extremely negative attitude towards fast food regularly, but an extremely positive attitude towards it if he/she is very hungry and doesn't have any other options. Understanding the consumer situation is necessary in order to accurately use automatic attitudes to predict impulse buying behavior. Therefore, after context is taken into account, automatic attitudes can provide a foundation for predicting the target of impulsive purchases.

Consequences of Impulse Buying

There has been relatively little research investigating the consequences of impulse buying. Rook (1987) found that up to 80% of consumers experience negative consequences after making an impulsive purchase. For example, 56% of consumers reported financial hardship due to making excessive impulsive purchases and 19% reported disappointing another person. However, Rook also found that many consumers do not experience negative consequences after impulsive purchases. Therefore, it is important to understand these negative consequences as they can have important implications for firms. Fortunately, the metacognitive validation process can also help explain some of these consequences of impulse buying behavior.

One important theoretical issue relates to the emotional consequences of impulse buying behaviors. For example, when do consumers feel positive or negative emotions after making an impulsive purchase? Gardner and Rook (1988) conducted an exploratory study investigating the effects of impulsive purchases on affective states, and found that although consumers generally reported feeling positive emotions after making an

impulsive purchase, they also felt negative emotions a considerable amount as well. The specific emotions consumers felt included pleasurable, excitement, anxiety/guilt, and mischievous. Given the wide range of emotions consumers experience after making an impulse buy, it is important to understand the processes by which consumer experience these emotions.

However, there has been surprisingly little research done on the emotional consequences of impulse buying since Gardner and Rook (1988). In particular, the conditions under which a consumer is likely to experience positive or negative affect after an impulsive purchase are unclear, even though they have important implications. When a consumer experiences negative affect after making an impulse purchase, it could negatively influence subsequent buying behavior, such as by reducing the positive automatic attitude or invalidating that positive automatic attitude. Contemporary attitude theories can help explain this process, however. That is, if a consumer has a positive automatic attitude but does not consciously endorse it (i.e., there is an associated invalidity tag), any impulse purchase should lead to negative emotions (see Figure 3b). Although the consumer's automatic positive attitude will cause her to purchase the product, he/she will regret it once he/she has the resources to retrieve her deliberative negative attitude. Under these circumstances, it would be important for firms to attempt to change her deliberative attitude or reassure her post-purchase to increase the likelihood he/she will be satisfied with her purchase. Alternatively, a consumer with a positive automatic attitude and a positive deliberative attitude about a market offering should feel positive emotions after impulsively buying that offering (see Figure 4). Just as in the case above, a consumer's positive automatic attitude about a market offering, given a lack of

interference, will lead her to make an impulsive purchase. However, when he/she has the ability and/or motivation to retrieve her positive deliberative attitude, then he/she will experience positive emotions.

[Insert Figure 4 about here]

Limitations and Future Research

One of the benefits of the proposed framework is that it offers many avenues for future research. First, it will be important to test the implications of the framework. Although the implications for framework are explicated theoretically, the link between the urge to impulsively buy and actual impulsive buys, the emotional consequences of impulse buying, and determining the target of impulsive purchases also need to be tested empirically.

Second, future research should also test the proposed boundary conditions impulse buying behavior. The framework suggests that any factor that decreases (increases) a consumer's ability and/or motivation to control her behavior will increase (decrease) the likelihood of impulse buying. For example, working memory capacity refers to the ability to focus on a task and ignore distractions (Baddeley 1992), and as such influences a consumer's ability to control behavior (Hoffman et al. 2008). Whereas consumer with high working memory capacity may be able to resist impulsive tendencies, a consumer with low working memory capacity may not be able to and consequently make more impulsive purchases.

Third, future research should investigate the impact of varying strengths and types of attitudes. As strong attitudes best predict behavior, this model does not speak to the impact of weak attitudes. For example, it is unclear to what extent weak automatic

attitudes will predict impulsive purchasing. It is also an open question as to what impact indifferent attitudes (i.e., having neither positive nor negative evaluations about an attitude object) will have on impulse buying.

Finally, although this framework seemingly speaks to whether a consumer will feel positive or negative emotions following an impulsive purchase, it is silent as to what specific emotions consumers will experience. For example, it is unclear whether consumers will experience shame or guilt based on the current framework (Yi and Baumgartner 2011). Therefore, further research should be conducted to determine what factors could determine the specific emotions consumers will experience after an impulsive purchase.

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List of Figures

Figure 1.

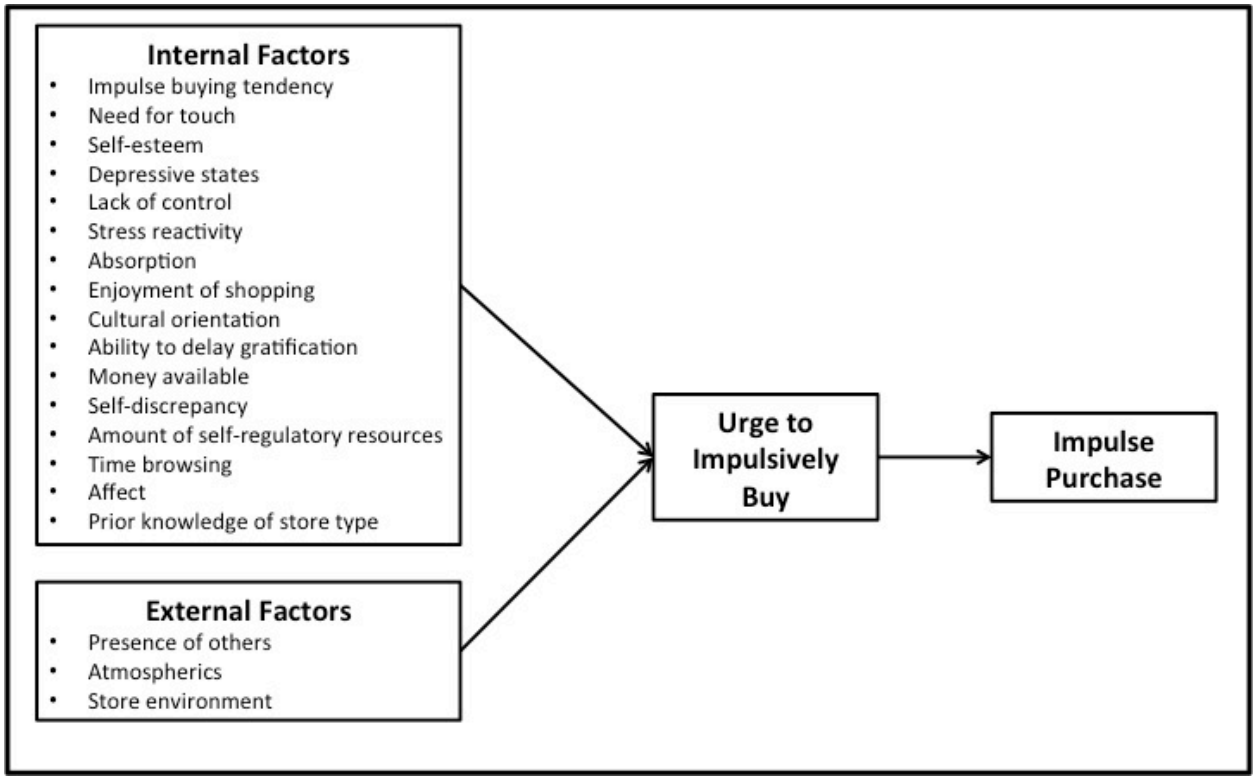


Figure 2.

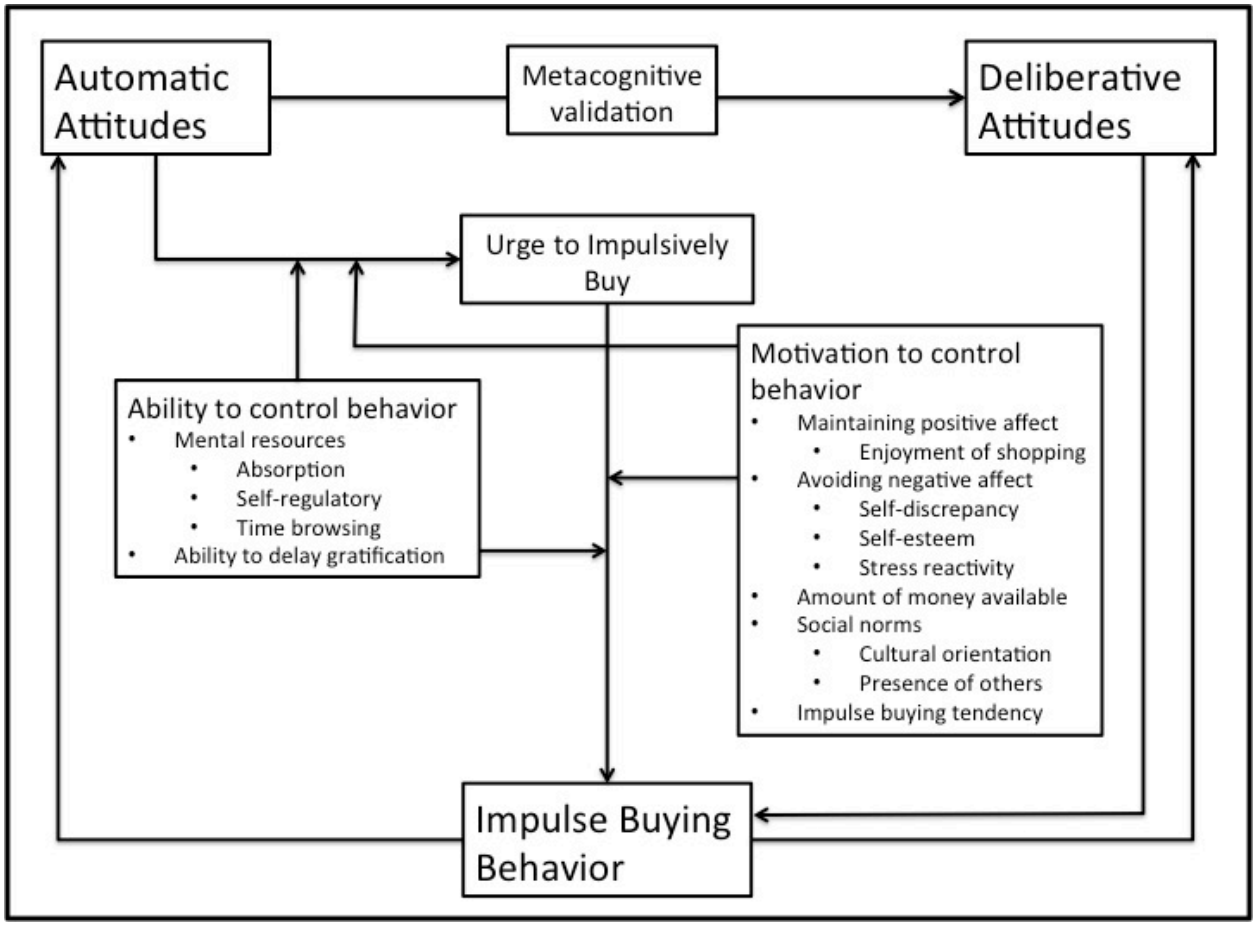

Automatic Attitudes
Metacognitive validation
Deliberative Attitudes
Urge to Impulsively Buy
Motivation to control behavior
• Maintaining positive affect
• Enjoyment of shopping
• Avoiding negative affect
• Self-discrepancy
• Self-esteem
• Stress reactivity
• Amount of money available
• Social norms
• Cultural orientation
• Presence of others
• Impulse buying tendency
Ability to control behavior
• Mental resources
• Absorption
• Self-regulatory
• Time browsing
• Ability to delay gratification
Impulse Buying Behavior

Figure 3a.

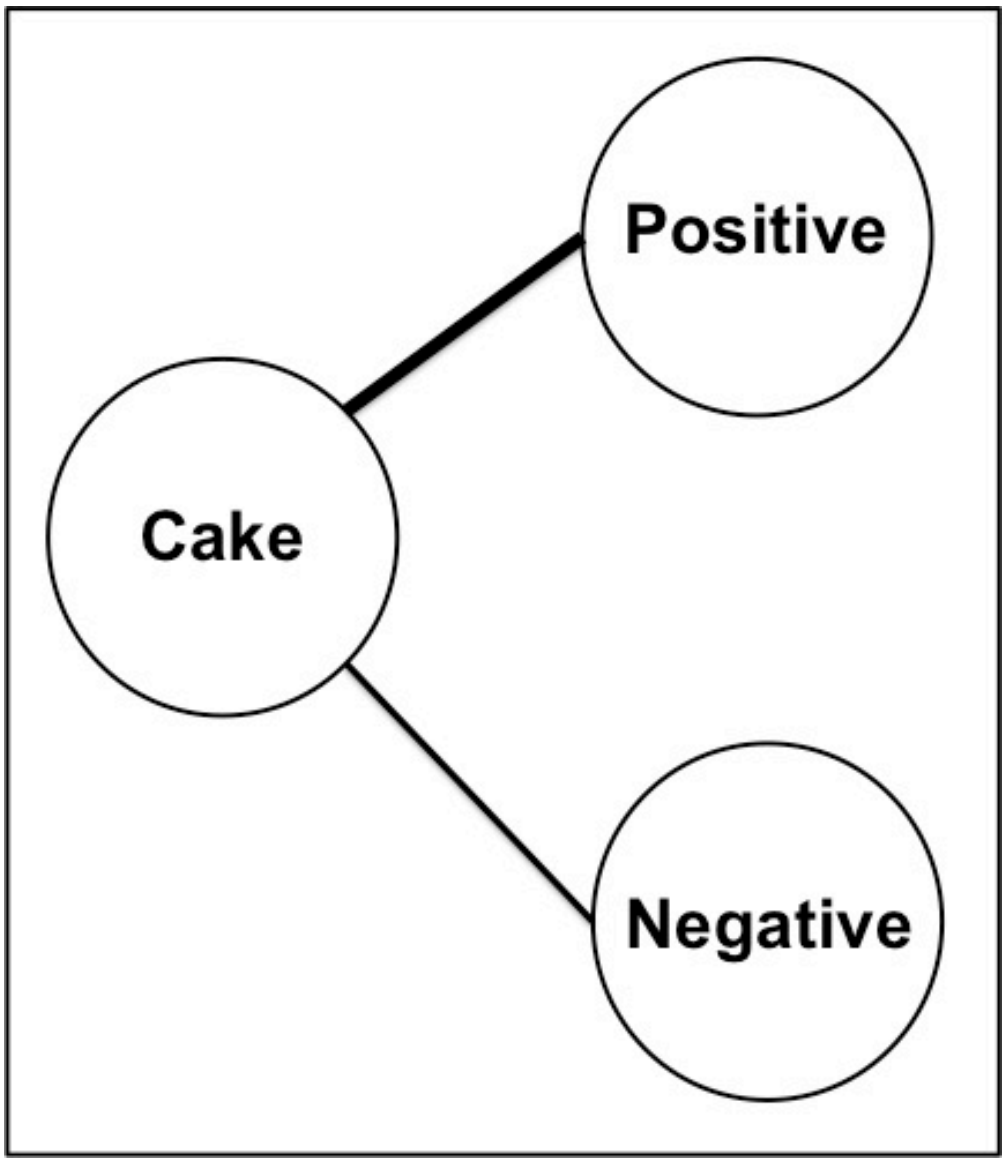
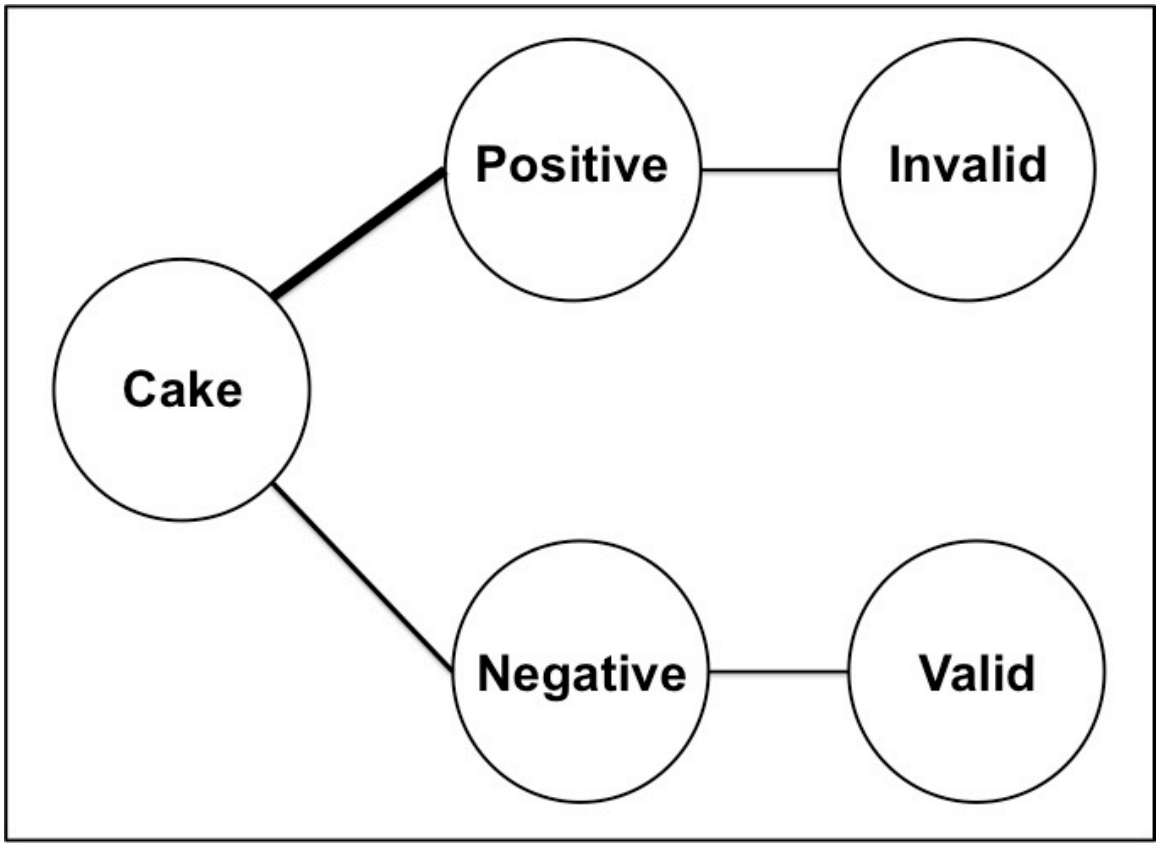


Figure 3b.



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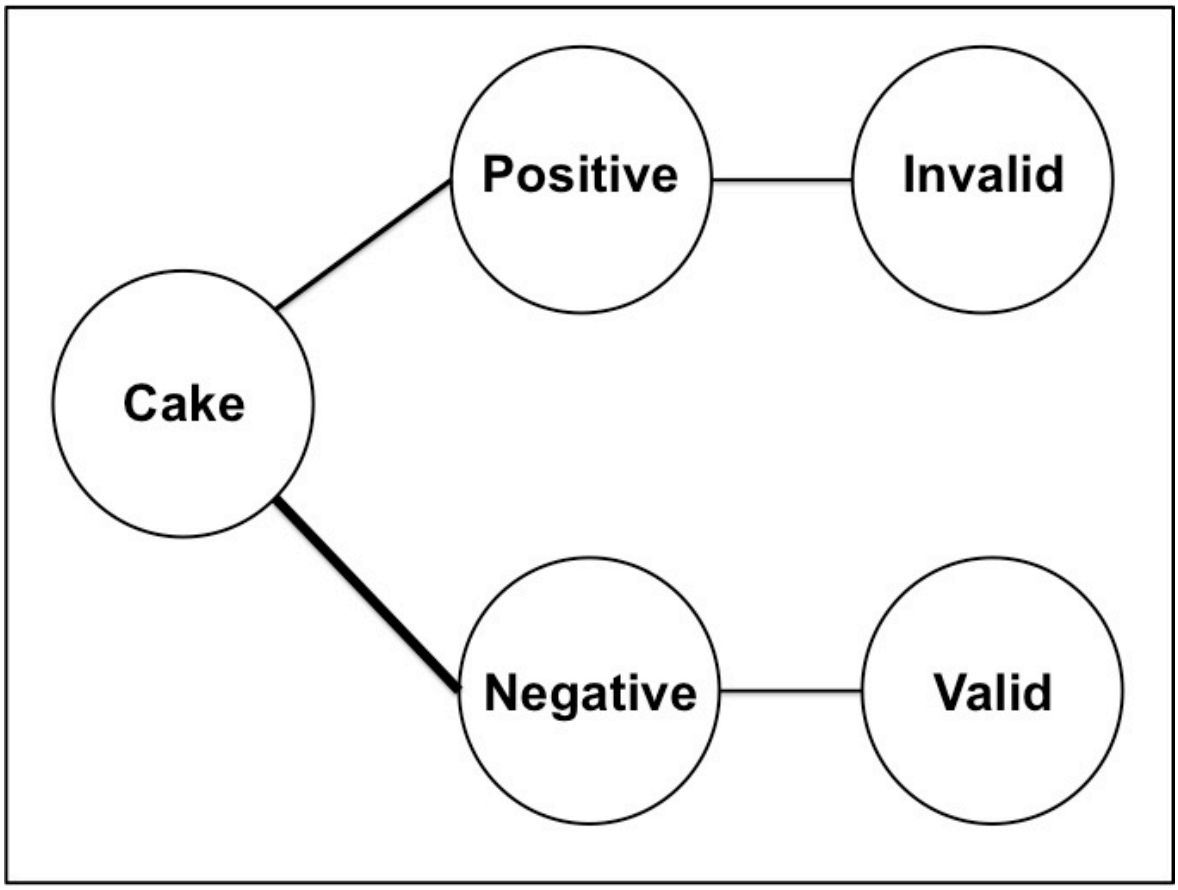
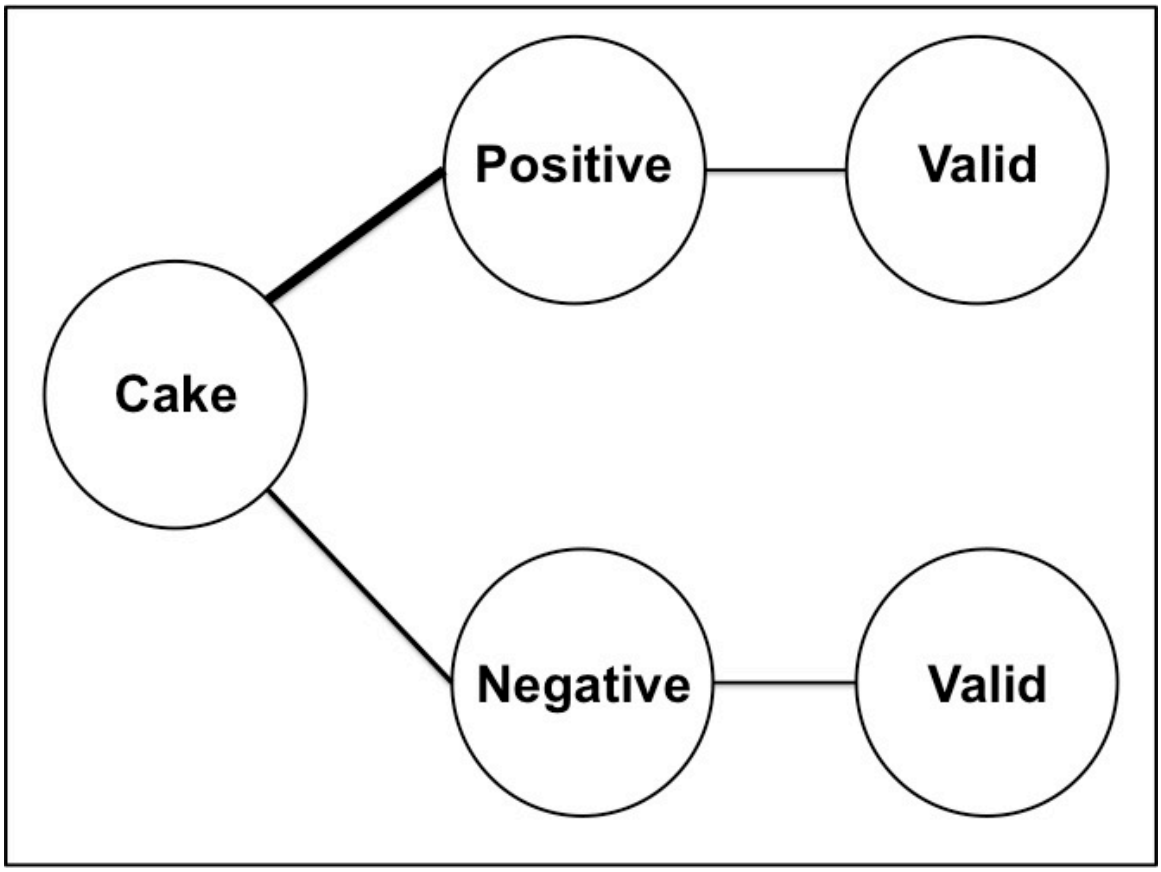


Figure 4.



Essay 2

Impulse buying is an important component of consumer behavior. While marketing and consumer researchers have long adopted a view of the rational consumer who makes logical step-by-step decisions before a purchase, practitioners are well aware that consumers often make impulse purchases. Impulse buying is characterized by a spontaneous purchase made without pre-existing intentions and after an urge to do so (Beatty and Ferrell 1998). Consumers often make purchase decisions without much conscious deliberation, in reality up to 80% of purchases made impulsively in some product categories (Strack and Deutsch 2006). Additionally, many people consider themselves to be impulsive buyers (Rook and Gardner 1993). Considering the importance of impulse buying behavior, it is no surprise researchers have focused on uncovering the factors that influence this pervasive phenomenon.

The antecedents to impulse buying behavior are often dichotomized as external or internal. External factors are situational and include variables such as store environment, the presence of others, and normative influences (Luo 2005; Mohan, Sivakumaran, and Sharman 2013; Rook and Fisher 1995). Internal factors reflect within-consumer variables including self-esteem (O'Guinn and Faber 1989), impulse buying tendency (Rook 1987), and time or money available (Beatty and Ferrell 1998).

Affect is another variable that has played a major role in impulse buying literature (Beatty and Ferrell 1998) and in the consumer behavior literature more generally (Bagozzi, Gopinath, and Nyer 1999; Gardner 1985), as consumer decisions are not only guided by long-term rational processes but also by less rational, emotional processes (Hoch and Loewenstein 1991). The purpose of this essay is to further investigate affect,

which is often cited as a key antecedent of impulse buying behavior. Past research has shown that positive affect is associated with an increased urge to impulsively buy, likely due to an increase in approach motivation (Beatty and Ferrell 1998). Although survey-based methods suggest that positive affect may lead to impulsive buying, the relationship remains to be tested experimentally. Therefore, this research seeks to fill this gap by exploring how positive affect can guide impulse buying behavior. In Experiment 1, the influence of positive affect on impulse buying is explored.

Further, Experiment 2 explores the role of negative affect on impulse buying behavior. Compared to positive affect, there is more ambiguity as to the relationship between negative affect and impulsive buying. There is evidence that negative affect increases impulse buying behavior (Verhagen and van Dolen 2011), decreases impulse buying behavior (Verplanken and Sato 2011), and does not influence impulse buying behavior (Beatty and Ferrell 1998; Mohan et al. 2013). Given the broad nature of negative affect, it is unsurprising that its effects may vary by context and specificity (Clark and Isen 1982). The study will investigate whether the source of the negative affect moderates the relationship between negative affect and impulse buying behavior. Specifically, I will test attributing negative affect to the self will increase impulse buying behavior, while attributing it to the buying environment will decrease impulse buying behavior.

Impulse Buying Behavior

A large portion of consumer purchase decisions are made impulsively (Rook 1987). Almost any product can be made purchased spontaneously, and many consumers consider themselves to be impulse buyers (Rook 1987; Rook and Hoch 1985). For some

product lines, up to 80% of all sales by volume are driven by impulsive buying behavior, including up to 60% of sales by volume for grocery stores (Strack and Deutsch 2006). This prevalence explains why impulse buying has been examined in marketing for over 65 years (Clover 1950).

Impulse buying is defined as a sudden and immediate purchase with no pre-shopping intentions to either buy the specific product category or to fulfill a specific buying task. The behavior occurs after experiencing an urge to buy and tends to be spontaneous and lacking conscious reflection (Beatty and Ferrell 1998). That is, impulse buying behavior occurs after a spontaneous urge to do so and without conscious deliberation. Therefore, habitual purchasing (e.g., automatically buying commonly used but out-of-stock products), instinctual behavior (e.g., responding to an emergency), and task-driven purchasing (e.g., gift buying) are excluded.

Initially, impulse buying research took a taxonomical approach by categorizing the products most likely to be purchased impulsively, the settings in which impulse buying behavior was most likely to occur and the degree to which a purchase decision is impulsive (Clover 1950; Stern 1962). However, Rook (1987) argued that this approach did not consider the psychological processes consumers experience while engaging in impulse buying behavior. Consequently, researchers have begun to focus on the various antecedents that predict impulse buying behavior.

Most models of impulse buying behavior categorize antecedents as being internal or external to the consumer (e.g., Beatty and Ferrell 1998). External factors refer to situational or environmental variables that influence impulse buying behavior. Store environment, which includes situational ambient factors (lighting, scent, music), design

factors (layout and assortment), and social factors (presence of others; Baker et al. 2002; Luo 2005; Mohan, G., Sivakumaran, B. and Sharman 2013) are categorized as external influences of impulse buying behavior. Normative factors such as perceived social appropriateness can affect impulse purchase behavior likelihood (Rook and Fisher 1995).

Internal factors are individual differences within consumers that influence impulse buying behavior. Impulse buying tendency (IBT; Rook 1987), defined to include both the predispositions "1) to experience spontaneous and sudden urges to make on-the-spot purchases and 2) to act on these felt urges with little deliberation or evaluation of consequence" has been examined extensively (Beatty and Ferrell 1998, 174). Not surprisingly, consumers high in IBT tend to make more impulsive purchases than consumers low in IBT. The amount of self-regulatory resources a consumer has is another internal factor that influences impulse buying behavior, such that consumers lacking self-regulatory resources have less control over their behavior and consequently make more impulsive purchases (Vohs and Faber 2007). Additionally, limited prior knowledge of store layout increases impulse buying behavior, presumably because this situation is more mentally taxing than when a consumer has prior knowledge of the store layout (Iyer and Ahlawat 1987). Though many internal factors have been found to influence impulse buying behavior, none have received as much attention as affect.

The Role of Affect

Affect has long been recognized as an influential factor in consumer decision-making (Gardner 1985) and in impulse buying behavior more specifically (Beatty and Ferrell 1998; Gardner and Rook 1988; Rook and Gardner 1993). One recent model posits that more proximal decisions, such as an impulsive purchase, are more likely to be driven

by affect than distal purchasing decisions (Chang and Pham 2013). An important consideration of the role of affect in impulse buying behavior is a consumer's desire to manage their mood (Gardner 1985; Knobloch-Westerwick 2006; Koopmann-Holm and Tsai 2014). Specifically, consumers generally prefer positive affect and will attempt to maintain such states, and will also attempt to alleviate negative affect (Zillmann 1988). Supporting this notion, research has shown that consumers prefer to increase positive and/or decrease negative emotions between 70-92% of the time (Gross, Richards, and John 2006; Kämpfe and Mitte 2009; Riediger et al. 2009). Furthermore, Tsai, Levenson, and McCoy (2006) found that consumers in both Eastern (e.g., China) and Western cultures report that they would higher ideal levels of positive emotions than negative emotions. Thus, consumers use consumption experiences to deal with their emotion, both positive and negative.

In a classic experiment, Shiv and Fedorikhin (1999) found that when cognitive resources were low, consumers sought out foods that increased positive affect over those that were less pleasing but healthier. Similarly, college students were more likely to engage in behaviors that would lead to the experience of positive affect compared to those that were viewed as socially positive behaviors (Richard, van der Pligt, and de Vries 1996). In line with the notion that product use and choice are related to affect, consumers in a positive mood were more likely to try a product than those in a negative mood (Andrade 2005). Intriguingly, when consumers believed the product itself would lead to an increase in positive affect, both consumers in a positive and negative mood were equally likely to try the product, suggesting that the ability of the product to regulate experienced affect influences decision-making.

Affect is a fundamental aspect of experience that varies along arousal and valence dimensions (Barrett 2006). Furthermore, affect undergirds emotional experience, such that emotions can be defined as relatively intense and enduring instances of affect with consistent levels of valence and arousal that often have similar antecedents and consequences (Bagozzi et al. 1999; Cohen, Pham, and Andrade 2008; Russell 1979). Thus, positive emotions such as enthusiasm, happiness, or relaxation are consciously experienced instances of positive affect and variable arousal and are often associated with an approach motivation (Beatty and Ferrell 1998; Russell and Barrett 1999).

In addition, consumers experiencing positive affect tend to behave more generously and seek to maintain a positive mood state (Clark and Isen 1982; Isen 1984). Considering many consumers experience positive affect following an impulsive purchase (Rook and Gardner 1993), an increase in the urge to impulsively buy may be driven by the desire to maintain or increase positive affect. Indeed, research suggests that anticipated positive affect can drive consumer decision-making, and this relationship has been shown within the impulse buying literature as well (Beatty and Ferrell 1998).

Negative affect involves the experience of negativity and some level of arousal (Cacioppo and Berntson 1994; Russell and Barrett 1999). Generally, consumers do not like experiencing negative affect and will act to reduce negative or increase positive affect (Knobloch-Westerwick 2006; Tamir 2016). Put simply, consumers quite often prefer to feel good and avoid feeling bad (Andrade 2005; Clark and Isen 1982; Knobloch-Westerwick 2006; Koopmann-Holm and Tsai 2014; Zillmann 1988), a claim supported by neurological evidence (Kuhnen and Knutson 2011). According to the process model of emotion regulation, consumers seeking to reduce negativity could engage in situation

selection strategies such as leaving a buying situation without making a purchase or situation modification strategies such as impulsively purchasing an offering expected to improve hedonic experience (Gross 1998; Verplanken and Sato 2011). Indeed, evidence suggests that negative affect can both increase and decrease impulse buying behavior (Beatty and Ferrell 1998; Rook and Gardner 1993; Verplanken and Sato 2011). For example, many investigations do not find a clear relationship between negative affect and an urge to impulsively buy, likely because there are situations when negative affect increases and situations where negative affect decreases impulse buying behavior (Beatty and Ferrell 1998; Mohan et al. 2013). That is to say, the conditions under which negative affect will cause an increase or a decrease in impulse buying behavior have yet to be fully explicated.

Experiment 1

The purpose of Experiment 1 is to test the hypothesis that positive affect causes an increase in impulse buying behavior. Previous research indicates a positive relationship between positive affect and impulse buying behavior, however that work has not sought to determine causality through an experimental paradigm. Accordingly, I will manipulate affective experience, and measure its effects on impulse buying behavior. I hypothesize that experiencing greater positive affect will lead to increased impulse buying behavior.

Experiment 1A

Method. Participants were 63 undergraduate students from the Texas Tech Rawls Student Research Participation program, and offered partial course credit in exchange for participation. Participants were told that the primary purpose of the study was to judge

the usability of a new e-commerce website for the Rawls College of Business. Each participant then received a shopping list with 12 items from the website, and they were tasked with finding the items and adding them to the cart. Participants were not given real money and did not keep any products. Participants were also told that they should add any products they saw on the website that they liked even if the products were not on the original shopping list. Ostensibly, participants were allowed to select additional items in order to determine the desirability of various products on the website. Items added to the cart that were not on the original shopping list (i.e., off-list items) were considered impulsive purchases.

Before participants searched the website for products, affect was manipulated using a consumer intelligence scale that ostensibly measured an individual's quality as a consumer relative to their peers. Participants responded to each question on the 14-item measure (e.g., "To what extent have you bought items because your friends also owned it?") using a 5-point Likert-type scale. Regardless of their responses on the consumer intelligence scale, participants in the positive affect condition received positive feedback intended to elicit positive affect (e.g., "You're a way above average consumer"), while those in the neutral affect condition were informed that they were fairly average as a consumer.

After completing the intelligence measure and receiving positive or neutral feedback, participants began adding on- and off-list items from the website to their cart. I hypothesized that those who received positive feedback would add more off-list items to their shopping cart than those who received neutral feedback. After completing the shopping task, participants responded to questions about the usability of the website and

completed the impulse buying tendency scale (Rook and Fisher 1995) and two mood manipulation checks (see Appendix A). Participants were then probed for suspicion, debriefed, and thanked for their participation.

Results. First, I compared conditions on the mood measures to determine if the positive affect manipulation was successful. However, participants who received positive feedback on the consumer intelligence survey did not report feeling significantly more positive (M = 12.4, SD = 1.53) than those who received neutral feedback (M = 11.90, SD = 2.01) on the first mood measure, $t(52) = -1.02$, $p = .031$. Similarly, those in the positive feedback condition did not report feeling significantly more positive (M = 16.56, SD = 3.00) than those in the neutral feedback condition on the second mood measure as well (M = 16.83, SD = 2.32), $t(52) = 0.289$, $p = 0.713$. Thus, the manipulation was unsuccessful.

Second, I tested the primary hypothesis with a t-test comparing impulse buying behavior between participants in the positive affect condition and participants in the neutral affect condition. Specifically, items that were in the participants' shopping carts that were not on the original list (i.e., off-list items) were considered impulsive purchases. One participant was removed prior to analysis for being three deviations higher than the mean on number of impulsive purchases. Participants in the positive mood condition did not add significantly more off-list items to their cart (M = 2.44, SD = 2.58) than those in the neutral mood condition (M = 1.90, SD = 1.47), $t(52) = -0.966$, $p = .338$. Additionally, participants in the positive mood condition did not spend more money (M = 1026.08, SD = 269.32) than those in the neutral mood condition (M = 960.68, SD = 51.40), $t(47) = -1.237$, $p = 0.222$. Therefore, the primary hypothesis was not supported by these data.

Discussion. Since the affect manipulation failed, Experiment 1A did not actually test the hypothesis, and so it was not supported statistically. The mood manipulation was unsuccessful in that participants in the positive affect condition did not report experiencing more positivity than those in the neutral condition. It is possible that positive feedback on the consumer intelligence survey did not influence affect because participants held strong beliefs that they were above average consumers (e.g., Williams and Gilovich 2008). It is also possible that the manipulation was weak, and the influence it had on participants' affective states was too fleeting to last through the shopping task. Finally, participants may simply not place a high value on consumer intelligence and, accordingly, may not have experienced strong affective reactions to positive feedback on the consumer intelligence measure.

Given the failed manipulation, it is not surprising that no significant differences emerged between conditions. However, the pattern of results was in the predicted direction, so I changed the mood manipulation for Experiment 1B from false feedback to a potentially stronger affective stimulus: a humorous video. Another potential contributing factor to the non-significant findings could be the limited number of items available on the website. The website had a total of 47 items across all product categories in Experiment 1A. In contrast, Experiment 1B utilized a live grocery store's website in order to measure impulse buying in a highly ecologically valid context (Peck and Childers 2006).

Experiment 1B

Method. Participants were 83 undergraduate students from Texas Tech University, who completed the experiment individually in exchange for partial course credit in the RSRP

program. I used a very similar procedure to Experiment 1A with two slight departures. First, a humorous video clip was used to induce positive affect and a neutral video clip was used for the control condition (Gross and Levenson 1997). These videos had identical visual content and were approximately equal in length, but the humorous video featured amusing commentary over the video while the non-humorous video merely describes the visual content as it unfolded. I told participants that they would be evaluating the effectiveness of the videos as marketing promotions. Accordingly, participants were asked to report their emotions after they watched the video. Emotion measures were selected from Richins' (1997) Consumer Emotion Set, and participants measured the extent to which they felt each emotion on a 5-point Likert scale. While participants watched the video, I recorded whether they laughed at any point throughout the duration of the video on a dichotomous (yes/no) measure. After they answered questions about the video, participants began an ostensibly unrelated shopping task.

Second, participants completed the experiment on an e-commerce website instead of the website with limited item choices that was created for previous experiments. To do so, each participant created a shopping list made up of typical items they buy at the grocery store. They were told to imagine they were going to the grocery store later in the day and needed to make a shopping list, and were given as much time as they needed to create the list. After creating their shopping list, they browsed the grocery store's website and added the items from their list to their online shopping cart. Additionally, as in Experiment 1A, any items participants found desirable that were not included on their original shopping list could be added to the cart. These additional items are categorized as impulsive purchases. Before leaving, participants answered the impulse buying

tendency scale (Rook and Fisher 1995) and demographic questions and then were probed for suspicion, debriefed, and thanked for their participation. Similar to Experiment 1A, I hypothesized that experiencing greater positive affect would lead to more impulsive purchasing compared to a control condition featuring a neutral affective stimulus.

Results. I first conducted a t-test comparing the positive affect of consumers in each condition to check the effectiveness of the positive affect manipulation. To do so, I took an aggregate of all positive emotions measured (Positive, Peaceful, Content, Optimistic). The results suggest that those who saw the humorous video felt more positive ($M = 3.31$, $SD = 0.75$) than those who saw the non-humorous video ($M = 2.91$, $SD = 0.98$), $t(76) = 2.039$, $p = 0.045$. Additionally, the results of a chi-square test of goodness of fit showed that those in the positive affect condition laughed significantly more often than those in the neutral affect condition, χ^2 (1, N=80) = 27.860, $p < 0.001$. These results suggest the affect manipulation was successful, as those in the positive affect condition felt significantly more positive than those in the neutral affect condition. Therefore, the manipulation was successful.

In order to determine the number of impulsive purchases made by participants, I compared items listed on participants' shopping lists with items in their online shopping carts, with any items in the cart but not on the original list considered impulsive purchases. Since participants included both individual items and more general product categories on their shopping lists, the lists were coded by two people blind to condition. If a participant wrote "cheese" on their shopping list, for example, any form of cheese (e.g., sliced, shredded, cottage) placed into the online shopping cart was not considered an impulse purchase. Close substitutes also did not count as impulsive purchases. For

example, if the participant wrote deli turkey on their list but added deli chicken to their cart, the deli chicken was considered a close substitute and not counted as an impulsive purchase.

I conducted a t-test comparing the number of off-list items added to the shopping cart by participants who watched the amusing video clip versus those who watched the neutral clip. Three participants were removed from analysis because they were more than three standard deviations away from the mean on number of impulsive purchases. After removing these outliers, results showed that participants who saw the humorous video added significantly more off-list items to their cart ($M = 1.30$, $SD = 1.65$) than those who saw the non-humorous video ($M = 0.5$, $SD = 1.09$), $t(78) = 2.560$, $p = 0.012$. Additionally, the total cost of the impulsive purchases made by participants in the positive mood condition was significantly more expensive ($M = 5.37$, $SD = 7.63$) than those in the neutral mood condition ($M = 2.40$, $SD = 5.23$), $t(78) = 2.029$, $p = 0.046$. Finally, I ran a t-test examining the shopping list length of participants in the positive affect and neutral conditions. No significant difference emerged between those in the positive affect condition ($M = 10.22$, $SD = 4.57$) and those in the neutral affect condition ($M = 9.52$, $SD = 3.06$), $t(69.70) = .817$, $p = 0.419$. This suggests that initial shopping list length cannot account for the differences in impulse purchasing between the positive affect and neutral conditions.

Discussion. This experiment showed that participants who experienced greater positive affect engaged in more impulse purchasing as measured by both number of items impulsively purchased and total cost of impulse purchases. These results support and extend previous correlational research (e.g., Beatty and Ferrell 1998) that found a

relationship between positive affect and increased impulse buying behavior. The current research provides experimental evidence that positive affect can lead to an increase in impulse buying behavior.

Experiment 2

The purpose of Experiment 2 is to clarify the relationship between negative affect and impulse buying behavior. Discrepant findings in the literature may be explained by understanding how consumers attribute the negative affect they experience. If consumers attribute negative affect to the self (e.g., low self-esteem, high self-discrepancy), then they will likely try to alleviate that negative affect by making impulsive purchases (e.g., Verplanken 2011). However, if consumers attribute negative affect to a source in the shopping situation, they will alleviate that negative affect by fleeing the environment, consequently leading to less impulse buying behavior (e.g., Verhagen and van Dolen 2011). That is, I hypothesize that when negative affect is internally attributed, a consumer will be more likely to make an impulsive purchase that may alleviate the unpleasant experience. However, when negative affect is attributed to contextual sources, impulse buying behavior will be reduced since consumers will seek to abandon the shopping situation. Two experiments in multiple consumption contexts tested these hypotheses.

Experiment 2A

Method. Participants were 66 undergraduate students from Texas Tech University who completed the experiment individually in exchange for partial course credit in the RSRP program. I used a similar procedure as Experiment 1A, in that I gave participants a shopping list with 10 items, and I told them that the purpose of the study was to test the usability of an e-commerce website related to Rawls College of Business. I also told

participants that they were free to add any products to their shopping cart even if the products were not on their original shopping list.

Participants were randomly assigned to either a self-attributed negative affect condition or a situation-attributed negative affect condition. Negative affect was attributed to the self or to the buying environment through the use of pop-up tasks on the website. Participants in the self-attributed negative affect condition were given a consumer intelligence survey similar to the survey used in Experiment 1A, however in the current experiment participants received feedback informing them that they were a below average consumer. The feedback was given before website browsing began, and it was made clear that the feedback was based on participant responses to the survey to ensure that any negative affect was attributed to the self. Participants in the environment-focused negative affect condition were given the same consumer intelligence survey, but were given each question individually in a manner that mimicked pop up advertisements. That is, they had to answer the questions during the impulse buying task, with the intention that having to continuously answer questions would create negative affect towards the website. The participants were exposed to the questions every 45-60 seconds on average until all questions on the survey had been presented or until the participant had finished the shopping task. Additionally, participants did not receive any feedback on the survey until after they checked out to ensure they did not attribute any negative affect to the self.

After completing the survey and adding all items from their shopping list and any additional desirable items they discovered while browsing to the cart, participants answered questions about the usability of the website and reported their affective

experience. For example, they answered questions about how negative they felt, as well as their perceptions of interacting with the website (e.g., "Using the website was annoying", "Navigating the website was upsetting"). They then answered demographic information and completed the impulse buying tendency scale. Participants were then probed for suspicion, fully debriefed, and thanked for their participation.

Results. First, I conducted a t-test comparing reported affective experience between conditions. The results showed that there was no significant difference in reported negative affect between those in the self-attributed negative affect condition (M = 4.17, SD = 0.79) and those in the situation-attributed negative affect condition (M = 4.16, SD = 0.73), $t(63) = -.055$, $p = .956$. Additionally, participants in the situation-attributed negative affect condition were not significantly more bothered by the website (M = 3.84, SD = 1.18) than those in the self-attributed negative affect condition (M = 4.04, SD = 1.35), $t(63) = 0.639$, $p = .525$.

Second, I conducted a t-test comparing the number of impulsive purchases that were made across conditions. The results show that those in the situation-attributed negative affect condition (M = 0.94, SD = 1.52) added significantly fewer off-list items to their cart than those in the self-attributed negative affect condition (M = 1.67, SD = 1.36), $t(63) = 2.037$, $p = .046$. Additionally, total market basket cost was significantly less in the situation-attributed negative affect condition (M = 629.66, SD = 49.32) than those in the self-attributed negative affect condition (M = 691.53, SD = 108.28), $t(45.03) = 2.979$, $p = .005$.

Discussion. The results of the negative affect manipulation check showed that both the self-attributed and the situation-attributed negative affect conditions both experienced

negative affect after the shopping task. That is, it seems that both of the manipulation checks were successful in that participants in both negative affect conditions felt negative affect. However, the manipulation check was not sensitive enough to be able to detect the source of the perceived negative affect. It is unclear from these data that participants in the self-attributed negative affect condition attributed the negative affect to themselves, or that participants in the situation-attributed negative affect condition attributed the negative affect to the website. To gain insight into the attribution of negative affect, a control condition was added to Experiment 2B.

The measures of pop up intrusiveness were also non-significant, as participants in the situation-attributed negative affect condition did not perceive the website to be more annoying or upsetting than those in the self-attributed negative affect condition. One possibility for this is that the non-significant differences are due to the experiment not having enough power to detect any differences between conditions. Another possible reason for this is that the pop-ups were survey questions, and not typical of a pop-up advertisement. Thus, it may have been difficult for participants to attribute their negative experiences to the website (i.e., it did not readily seem that the pop-ups were part of the website). For these reasons, it is possible that participants did not attribute the pop ups to the website, and so their answers about how upsetting and annoying the website were unaffected by the pop ups. Due to this possibility, I changed the pop up experience for Experiment 2B, in that they more clearly indicative of being an advertisement.

Despite the limited number of total products available (i.e., there were only 47 total products), the primary hypothesis was confirmed, as participants who felt bad about themselves engaged in more impulsive buying behavior than those who's negative affect

was attributed to the website (i.e., the situation). I hypothesized that those who were upset with the website potentially wanted to leave the website as soon as possible, and consequently engaged in less impulsive purchasing, whereas those who were upset with themselves engaged in more impulsive purchasing, possibly because they wanted to alleviate negative affect by buying things that made them feel good (Ramanathan and Williams 2007). However, this mechanism is unsubstantiated in this study, as the mood manipulation checks were not significantly different between conditions.

An alternative explanation could be that the negative feedback those in the self-attributed negative affect condition received on the consumer intelligence survey changed their impulse buying behavior. That is, participants believing they were inferior consumers to their peers could have perhaps caused them to try to be better consumers, and consequently engaged in less impulse buying behavior. Since those in the situation-attributed negative affect condition did not receive any feedback during the impulse buying task, the survey would not have affected their consumer behavior in the same way. Therefore, in Experiment 2B, I changed the negative affect manipulation to be unrelated to consumption behavior.

Additionally, it is unclear whether the significant differences in impulse buying behavior are due to negative affect attributed to the self increasing impulse buying behavior, negative affect towards the situation decreasing impulse buying behavior, or both. That is, as there is no control condition, it is impossible to tell whether these results are due to the self-attributed condition increasing impulse buying, the situation-attributed condition decreasing impulse buying, or if both of these conditions have independent

effects. Therefore, for Experiment 2B, I included a control condition to be able to test this assertion.

Experiment 2B

Method. Participants were 56 undergraduate students from Texas Tech University who received partial course credit for their participation. Participants were randomly assigned to one of three experimental conditions: a self-attributed negative affect condition, a situation-attributed negative affect condition, and a control condition.

All participants responded to two potential interview questions. In the self-attributed negative affect condition, participants responded to: "Describe a situation where you found yourself dealing with someone who didn't like you. How did it make you feel and how did you handle it?" and "Tell me about a recent time where you were unable to solve a problem." Participants in the control condition and situation-attributed negative affect condition responded to: "Describe a situation where you found yourself dealing with someone new. How did you handle it?" and "Give me an example of when someone brought you a new idea that was odd or unusual. What did you do?" I hypothesized that participants in the self-attributed negative affect condition would feel significantly more negative than those in the other conditions due to answering questions that made salient the negative aspects of the self. After answering these questions, participants evaluated them on their appropriateness to be used in actual interviews and answered the same questions as in Experiment 2A about their experienced affect that serve as a manipulation check.

After completing the manipulation check, participants went through a similar procedure to Experiment 1B. That is, they made a shopping list and browsed the live e-

commerce website of a local grocery store to add the items on their list to their shopping cart. As in previous experiments, participants were also told to add any items that they found desirable to their cart even if the items were not on their original list, and these items acted as a proxy for impulsive purchases. Additionally, all participants were told that they would be exposed to pop-up advertisements that read, "This is a pop up advertisement." In the situation-attributed negative affect condition, participants were exposed to a pop-up advertisement every 60 seconds on average. Pop-up advertisements in this condition were intended to be intrusive enough to elicit negative affect and encourage participants to attribute that affect to the website. However, the ads were not so intrusive as to prevent completion of the shopping task. Participants in the control and the self-attributed negative affect conditions were only exposed to one pop-up advertisement, and it occurred at the beginning of their shopping experience. I hypothesized that those in the situation-attributed negative affect condition would attribute experienced negative affect to the website and seek to leave the website. Consequently, they would engage in less impulsive purchasing behavior compared to those in the other two conditions.

After adding all on- and off-list items to their cart, participants answered questions about the usability of the website, including four items capturing the unpleasantness induced by the pop-up advertisements (i.e., "The pop up questions were upsetting", "The pop up questions made finding the items on the shopping list less enjoyable", "The pop up questions were annoying", and "I did not like the pop up advertisements"). Participants then answered individual difference measures, were probed for suspicion, debriefed, and thanked for their participation.

Results. First, I eliminated two participants who added more than three standard deviations to the mean on the number of impulsive purchases made. Since the negative emotion measures were strongly positively correlated, I aggregated them into an index of negativity. I then ran a one-way ANOVA examining differences in negativity between all conditions. The results suggest that there were significant differences in experienced negativity after answering the interview questions, $F(2, 52) = 11.24$, $p < 0.001$. Planned contrasts showed that there was no significant difference between the situation-attributed negative affect condition ($M = 1.46$, $SD = 0.59$) and the control condition on experienced negativity ($M = 1.18$, $SD = 0.23$), $t(52) = -1.29$, $p = 0.204$. There was a significant difference between the control condition and the self-attributed condition ($M = 2.29$, $SD = 1.12$), $t(52) = -4.56$, $p < 0.001$.

I then ran a one-way ANOVA to test the differences in how participants perceived the pop-up advertisements. Participants across conditions perceived the pop-up advertisements to be differentially intrusive, $F(3, 73) = 3.61$, $p = 0.034$. Planned contrasts showed that those in the situation-attributed negative affect condition ($M = 3.58$, $SD = 1.02$) viewed the pop-up advertisements as significantly less favorable than those in the control condition ($M = 2.64$, $SD = 1.16$, $t(53) = 2.66$, $p = 0.010$. There was no difference in pop-up ad ratings between the self-attributed negative affect condition ($M = 3.01$, SD = 1.07) and the control condition, $t(53) = 1.038$, $p = 0.304$. Additionally, there were no significant differences between conditions on the total number of items added to the initial shopping list, $F(2, 53) = 0.089$, $p = 0.915$, or to the cart, $F(2, 53) = 0.300$, $p = 0.742$.

To test the main hypotheses, I ran two one-way ANOVAs examining number of impulsive purchases and cost of impulsive purchases across all three conditions. Data was coded in the same manner as in Experiment 1B above. Significant differences were found for number of impulsive purchases made, $F(2, 53) = 3.83$, $p = 0.028$, but not for cost of impulsive purchases $F(2, 52) = 1.50$, $p = 0.232$. Planned contrasts suggested that there was a significant difference between the number of impulsive purchases for those in the situation-attributed negative affect condition ($M = 0.25$, $SD = 0.55$) compared to the control condition ($M = 1.53$, $SD = 2.53$), $t(21.02) = 2.14$, $p = .045$, and those in the self-attributed negative affect condition ($M = 1.90$, $SD = 2.22$), $t(20.39) = -2.79$, $p = .011$[1]. There was no difference in impulse buying behavior between those in the self-attributed negative affect condition and those in the control condition, $t(33.75) = -0.632$, $p = 0.532$.

Discussion. The results of the manipulation check suggested that the interview questions successfully manipulate participants' affect, in that those in the self-attributed negative affect condition felt significantly more negative than the control condition. Additionally, there was no significant difference between the situation-attributed negative affect condition and the control condition, which was expected given they answered the same interview questions. The results also showed that participants in the situation-attributed negative affect condition perceived the pop-up ads to be significantly more unpleasant than those in the control condition. That is, the pop-up ads successfully made participants attribute negativity to the consumption situation (i.e., browsing the website).

Unsurprisingly then, although there was a significant difference in the number of impulsive purchases between conditions, this effect was driven by the situation-attributed

[1] The conditions did not pass Levene's test for equal variances for the number of impulsive purchases.

negative affect condition, as there was no significant difference in number of impulse purchases between the self-attributed negative affect condition and the control condition. It is possible that negative affect towards the self does not increase impulse buying behavior as hypothesized, although this conclusion could be premature given that the results were trending in the predicted direction and the low power of the current experiment.

These results suggest that consumers who attributed negativity to the website made significantly fewer impulsive purchases, however. Thus, it seems that consumers upset with the online buying experience (e.g., through the use of pop up advertisements) will make less impulsive purchases, likely due to the negative affect being attributed to the website. It is also worth noting that since the pop-ups only occurred every 60 seconds, participants were not so preoccupied with the pop ups that they were not able to engage in impulse buying behavior. That is, participants should have been able to engage in impulse buying behavior had they wanted to, but the pop-ups appear to have affected their motivation to do so.

General Discussion

These experiments lay the groundwork for explaining the role of affect in impulse buying behavior. The first set of experiments investigated the influence of positive affect, with one experiment being unsuccessful in that the manipulation check failed and the other experiment successfully provided evidence for the hypothesis. Specifically, Experiment 1A found no evidence that positive affect causes consumers to make more impulsive purchases, although this can be explained by the failed affect manipulation (i.e., the positive affect condition did not experience significantly more positive affect

than those in the neutral condition). However, when the affect manipulation was successful in Experiment 1B, the data supported the hypothesis in that those in the positive affect condition made more impulsive purchases. Interestingly, the affect manipulation was unrelated to the shopping experience. This suggests that incidental positive affect leads to greater impulse buying behavior, yet it leaves intriguing questions about the role of integral affect on impulse buying behavior unanswered (Cohen et al. 2008). Future research could ask consumers to shop for a list of more or less positively viewed products and examine whether integral positive affect has a different effect on impulse buying behavior compared to incidental positive affect."

The second set of experiments investigated the role of negative affect on impulse buying behavior and produced mixed evidence for the hypotheses. The first study found evidence that those who were in the self-attributed negative affect condition made more impulsive purchases than those in the situation-attributed negative affect condition, although it is unclear where participants attributed that negative affect. However, the finding was supported by the results of Experiment 2B, which found that participants who did not like the pop-up advertisements were less likely to engage in impulse buying behavior. Thus, it seems that consumers experiencing many pop-up advertisements over the course of the shopping experience were more likely to attribute the negativity they felt to the shopping experience and made less impulsive purchases as a result.

The results of Experiment 2 also suggest that negative affect attributed to the self can increase impulse buying behavior. Although Experiment 2A was unable to distinguish between where participants attributed their negative affect, but Experiment 2B provided evidence that consumers make more impulsive purchases when they felt bad

about themselves. It is likely that when people feel bad about themselves, they want to reduce that negative affect by increasing impulse buying behavior. By making these impulsive purchases, they might be able to alleviate their negative affect, although the results of negative affect manipulation check in Experiment 2A suggest that consumers might not actually feel better after making impulsive purchases. If it were, then those in the self-attributed negative affect would have reported less negative affect than those in the situation-attributed negative affect condition as the manipulation check occurred after the buying experience. Given that there was not a significant difference between the self-attributed and the situation-attributed condition, it is unlikely that making impulsive purchases will actually make consumers feel less negative affect about the self.

Taken with the finding that consumers upset with the website make less impulsive purchases, this set of experiments provides insight into the role of negative affect in impulse buying behavior. That is, the perceived source of the negative affect differentially influences the likelihood that consumers will make impulsive purchases. This finding can help explain previously conflicting findings that negative affect both increases and decreases impulse buying behavior. The results of the current study suggest that both previous findings are true, except it depends on the attribution of that negative affect.

There are many avenues for future research. First, future research should bolster the robustness of these findings by using a research design that more closely mimics real life shopping conditions. A situation where participants who already have shopping lists would be an ideal setting for a field study, with the participants' moods being manipulated through various means. Using a real shopping scenario would provide a

more accurate representation of consumers' impulse buying behavior, and would therefore add external validity to the findings. Finally, these hypotheses should be tested at brick and mortar stores in addition to online settings. It is likely that these findings will apply to all shopping settings, and so it is necessary to test them with in-person studies in order to add to the robustness of these findings.

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List of Tables

Table 1. Number of impulsive purchases and the cost of those impulsive purchases for Experiment 1A.

Condition	Impulse Buys	Cost of Market Basket
Positive	2.44	1026.08
Neutral	1.9	960.68

Table 2. Number of impulsive purchases and the cost of those impulsive purchases for Experiment 1B.

Condition	Impulse Buys	Cost of Impulse Buys
Positive	1.3	5.37
Neutral	0.5	2.4

Table 3. Number of impulsive purchases and the cost of those impulsive purchases for Experiment 2A.

Condition	Impulsive Purchases	Cost of Market Basket
Self attributed	0.94	691.53
Situation attributed	1.67	629.66

Table 4. Number of impulsive purchases and the cost of those impulsive purchases for Experiment 2B.

Condition	Impulse Buys	Cost of Impulse Buys
Self attributed	1.9	9.6
Situation attributed	0.25	2.21
Control	1.53	3.8

Appendix

Appendix A. Two measures of affect used in Experiment 1.

Affect measure 1

- To what extent do you agree with the following statements? (Strongly agree – Strongly disagree)
    - Currently, I am in a good mood
    - As I answer these questions, I feel cheerful
    - For some reason, I am not very comfortable right now
    - At this moment, I feel edgy or irritable

Affect measure 2

- To what extent do you feel:
    - Extremely happy – extremely unhappy
    - Extremely pleasant – Extremely unpleasant
    - Extremely positive – Extremely negative