Exploring hedonic purchase behaviors : essays on impulse buying behaviour

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2006

Piyush, S. (2006). Exploring hedonic purchase behaviors : essays on impulse buying behaviour. Doctoral thesis, Nanyang Technological University, Singapore.

<https://hdl.handle.net/10356/7717>

<https://doi.org/10.32657/10356/7717>

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Exploring Hedonic Purchase Behaviors: Essays on Impulse Buying Behavior

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Nanyang Business School

A thesis submitted to the Nanyang Technological University
in fulfilment of the requirement for the degree of
Doctor of Philosophy

2006

ACKNOWLEDGEMENT

I am extremely grateful to many people for their support and encouragement without which this thesis would not have been possible. First and foremost, I would like to thank my wife Alka for her wholehearted support, commitment and patience for the last three years. Without her encouragement I may not have had the courage to leave my business career and pursue my passion for academics full-time. Next I thank Prof Krishna Erramilli, the erstwhile head of the Marketing and International Business Division at Nanyang Business School for encouraging me to join the PhD program there and providing his invaluable support and guidance throughout my stint.

For my research, I owe a lot to my supervisor Prof Roger Marshall whose ability to strike a balance between the rigor of academic research and fun with family and friends, has been a useful lesson for me. I also thank Prof Bharadhwaj Sivakumaran for guiding me in the initial stages of my work and Profs Cindy Chung, Fu Ho Ying, Lam Shun Yin and Sharon Ng for sharing their comments and guidance at various stages of my research. Next, I thank Ms. Serene Chang, our divisional secretary and the entire team at our PhD office for their useful advice and support. Thank you very much, Carol, Gertrude, Nisha, Hui Teng, Bee Hua and Prof Viswanathan, for your help and guidance.

Finally, I thank all the new friends that I made among my fellow PhD students and colleagues in the MIB Division - Wu Zhan, Hilda, Gen, Wah Long, Lai Ying, Rajat, Inwoo, Changsu and many others. I would really cherish all the memories of those shared meals in the various NTU canteens, the Friday Pizza parties and the seminars that gave us the opportunity to engage in such lively discussions with guest speakers!

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ABSTRACT

A central question in consumer research is how consumers make purchase decisions. Prior research has highlighted a need to explore the relationships between scales representing different forms of purchase behavior, in order to yield insights into the structure of purchase-related personality traits, and help understand how these traits are organized within an individual consumer (Baumgartner 2002). An attempt is made in this thesis to unravel some of the complex psychological processes underlying hedonic purchase behaviors with three essays. Next, the motivation for each essay, the conceptual frameworks and methodologies adopted are introduced briefly.

Essay 1: Hedonic Purchase Behaviors

Hedonic purchase behaviors are defined as those which are influenced by feelings rather than logical thinking and which are motivated by psychosocial needs rather than functional benefits. Impulse buying (Rook and Hoch 1985; Rook 1987) and variety seeking (McAlister and Pessemier 1982; Givon 1984; Hoyer and Nancy 1984) are two of the most common hedonic purchase behaviors. However, despite their wide-spread prevalence and several striking similarities in their underlying motivations, there is almost no published empirical research investigating impulse buying in conjunction with variety seeking (Kacen and Lee 2002; Ratner and Kahn 2002). Prior researchers have suggested that such an investigation would help in understanding the psychological processes underlying these behaviors and may even pave the way towards a general theory of hedonic purchase behaviors (Baumgartner 2002).

This need is addressed in the first essay by first reviewing the literature in impulse buying and variety seeking fields to identify several relevant traits and situational factors.

Next, a comprehensive conceptual framework is developed incorporating several consumer traits (consumer impulsiveness, optimum stimulation level and self-monitoring) and situational factors (involvement, product type, time availability and mood) to highlight some important similarities and differences between these two behaviors. This is followed by a description of two empirical studies, one conducted with a sample of undergraduate students and another with retail shoppers.

Essay 2: Consumer Impulsiveness Trait

Most existing research in impulse buying and variety seeking behaviors has focused on consumers in the US and other Western countries; subsequently these phenomena have been considered largely universal in nature (Rook and Fisher 1995; Van Trijp et al. 1996; Beatty and Ferrell 1998; Inman 2001). Motivated by recent calls for exploring the cultural context of consumer behavior in a rapidly globalizing marketplace (Maheswaran and Shavitt 2000), researchers have begun investigating impulse buying behavior in the Asia-Pacific; Australia, Hong Kong, Singapore and Malaysia (Kacen and Lee 2002), Vietnam (Tuyet Mai et al. 2003) and China (Zhou and Wong 2003).

However, most of these cross-cultural studies into impulse buying have not addressed the issue of measurement equivalence, in spite of using scales developed in the US among their non-US subjects (Steenkamp and Baumgartner 1998; Sharma and Weathers 2003). Hence, there is still no conclusive evidence to support the assumption that impulse buying has the same meaning and implications across different cultures.

Moreover, there is no consensus on the operational definition and construct validity of the consumer trait underlying impulse buying behavior. Some researchers have considered it a simple single-dimension construct (Rook and Fisher 1995; Weun et

al. 1998) whereas others have used a two- (Puri 1996; Verplanken and Herabadi 2001) or three-dimensional (Youn and Faber 2002) conceptualization. The empirical findings about the dimensionality of this construct have been mixed too, even in studies conducted with only US consumers; hence, it is not even clear that “impulse buying” has the same meaning for different consumers within the same culture. There is clearly a need for a valid and reliable measure to operationalize this complex construct.

This gap is addressed in the second essay by first evaluating the measurement equivalence of several impulse buying trait scales in an Asian culture (Singapore). Based on these empirical findings and an extensive review of the literature on trait impulsivity in psychology area, a modified consumer impulsiveness scale is developed. Next this scale was refined using two more studies with Singaporean consumers resulting in a 12-item scale with three components. Finally, this new scale was tested for measurement equivalence with consumers in Singapore as well as the US.

Essay 3: Impulse buying and Services

Impulse buying is a common phenomenon in consumer behavior but researchers have explored it in the context of product purchases and not services (Rook and Fisher 1995; Beatty and Ferrell 1998; Omar and Kent 2001; Kacen and Lee 2002). However, most developed economies such as United States and Singapore and even emerging economies like India and China are dominated today by services (Guttek 1999). However, there is little research into impulse buying in services and specifically into its similarities or differences with that in products.

The third essay in this thesis addresses this important gap in existing research in impulse buying behavior. First the existing literature in both impulse buying and services

marketing fields is reviewed extensively to develop a conceptual framework to understand how impulse buying in services may be different from that in products. Next several hypotheses are developed based on this framework and tested in two studies, one with retail shoppers in a mall and another with undergraduate student respondents. Finally, the conceptual and managerial contribution is discussed along with some limitations and directions for future research.

INTRODUCTION

“Man Was Created Impulsive: Man certainly was created impulsive, overcome by despondence in misfortune and niggardly when blessed with good fortune.”

- *Qur'an, Al-Ma'arig, Surah 70:19-27*

“Moses is a compelling figure because he possessed human faults. He was passionate and impulsive. God seemed to value this passionate quality in Moses, yet his passion was his weakness. A simple act of negligence barred him from entering the very promised land to which he had guided the Israelites for almost half a century.”

- *Deuteronomy, 1:37; 3:27; 4:21*

“Human body is like a chariot and the soul is its lord. The intuition (*buddhi*) is the chariot-driver, the mind the reins, the senses the horses, and the objects of the senses the paths. Those, whose minds are undisciplined with senses out of control, are like the wild horses of a chariot that never reaches its goals.”

- *Katha Upanishad, one of the several ancient Hindu texts*

From the above quotes it is clear that man has always been seen as an imperfect, impulsive creature, prone to losing his self-control frequently. Clinical and educational psychologists have attributed this to what they call trait Impulsivity – a tendency to act without adequate thought, action of instinct without recourse to ego restraint and swift action of mind without forethought of conscious judgment (Cloninger et al. 1991; Barratt 1993; Eysenck 1993; Dickman 2000; Zuckerman 2000; Whiteside and Lynam 2001). Most of the research on trait impulsivity has explored its association with a wide range of maladaptive behaviors ranging from binge eating and rash driving to drug and alcohol abuse, gambling and unsafe sex.

On the other hand, consumer researchers have also conceptualized a consumer trait to explain the tendency of some consumers to indulge in impulse buying behavior i.e., buy spontaneously, kinetically, unreflectively and with little or no cognitive processing (Rook 1987). This trait has been operationalized differently over the last twenty years or so, ranging from “buying impulsiveness”, a simple unidimensional construct (Rook and Fisher 1995) to “consumer buying impulsivity”, a more complex three-dimensional construct (Youn and Faber 2002).

Marketing text-books have frequently categorized impulse buying and variety seeking as examples of low-effort feeling-based decision making strategies (Hoyer and Macinnis 2001). According to them these behaviors are simply consumer-choice tactics or heuristics that the consumers resort to under low involvement situations. They also suggest that affect plays a very important role in these purchase situations. Both these behaviors are also shown to constitute a large proportion of consumer spending today, making it important for marketers to understand the complex psycho-social processes underlying these. Marketing innovations such as the ATMs, credit cards, tele-shopping, online shopping and 24-hour retailing are shown to have encouraged more and more consumers to buy impulsively. Similarly, foods and consumer products companies have launched a wide variety of their products in terms of colors, flavors and fragrances, in order to retain their variety seeking consumers. Notwithstanding all this attention from marketers and consumer researchers there are several areas in the study of these behaviors that remain largely unaddressed. Some of these important research gaps are discussed next as these constitute the motivation for the three essays in this thesis.

First, both impulse buying and variety seeking have prospered as two independent fields of study for the last several decades, despite many similarities between these two. As a result, there has been hardly any effort to develop a common conceptual framework to explain these hedonic purchase behaviors in general. Baumgartner (2002) has attempted to address this gap in a recent article but he has also exhorted for a detailed analyses of the relationships between scales representing different forms of purchase behavior to yield insights into the structure of purchase-related traits and help understand how these traits are organized within each individual consumer. This need is addressed in the first essay in this thesis by combining learnings from both impulse buying and variety seeking fields, to develop a common conceptual framework and test it empirically in two survey-based studies, one with undergraduate students in a lab setting and the other with retail shoppers in a mall setting.

Second, impulse buying has been studied mostly in the Western countries but there is hardly any consensus on the structure of consumer impulsiveness trait associated with this behavior. Moreover, researchers have begun exploring this phenomenon in Asian and other Non-Western countries using scales developed in the US and other Western countries (Kacen and Lee 2002; Tuyet Mai et al. 2003; Zhou and Wong 2003) and not surprisingly they have faced issues of construct validity, measurement equivalence and nomological validity with these scales. In fact, Kacen and Lee (2002) have put it very aptly saying their research uncovers yet another area where scales developed in the United States are not valid for use in other countries, highlighting the difficulty of cross-cultural research. They also plead for more research to study the various scales used to measure the impulsiveness trait and provide evidence of their

construct and nomological validity. This need is addressed in the second essay of this thesis, wherein all the existing impulsiveness trait scales are first tested using Non-Western samples. Using these findings and an extensive literature review, a modified 12-item three-dimensional consumer impulsiveness scale is developed and tested, with the help of three studies. All the studies were conducted with undergraduate students, the first two in Singapore and the third in Singapore as well as United States.

Finally, almost all the research in impulse buying area has focused on product purchases and that too in conventional retail formats such as supermarkets and malls (Rook and Fisher 1995; Beatty and Ferrell 1998; Omar and Kent 2001). There is very little research on whether and how consumers buy impulsively in the context of services (Agrawal and Schmidt 2003). This gap is addressed in the third essay of this dissertation by first reviewing the existing literature in both impulse buying and services marketing fields to develop a conceptual framework to understand how impulse buying in services may be different from that in products. Next several hypotheses are developed based on this framework and tested in two studies, one with retail shoppers in a mall and another with undergraduate student respondents.

Overall, all the three essays in this thesis represent attempts to understand hedonic purchase behaviors in general and impulse buying in particular, through a rigorous theory-based empirical investigation in a series of studies using different methods. This line of research provides several useful insights into the association of these behaviors with relevant consumer traits, cross-cultural differences in the consumer impulsiveness trait and the impulse buying phenomenon in the services context. This research area also presents some interesting opportunities for future research such as the application of self-

regulation theories, investigation in on-line shopping environment and cross-cultural studies of hedonic consumer behaviors.

CHAPTER 1 – HEDONIC PURCHASE BEHAVIORS

1.1 INTRODUCTION

Impulse buying and variety seeking have both been major research issues among consumer behavior researchers. Impulse buying is acknowledged as an area of great interest not only because of its complexities but also its wide-spread prevalence across a broad range of product categories despite its negative normative associations in general (Rook 1987; Rook and Fisher 1995; Beatty and Ferrell 1998; Baumeister and Mick 2002; Kacen and Lee 2002). Similarly, variety seeking is recognized as an important determinant of consumer choice and has received much attention in consumer behavior literature (McAlister and Pessemier 1982; Baumgartner and Steenkamp 1996; Van Trijp et al. 1996; Inman 2001; Ratner and Kahn 2002)

Both these behaviors are shown to be quite similar to each other. For example, Baumgartner (2002) classifies both these as hedonic purchase behaviors associated with feelings and psychosocial motivations rather than thinking and functional benefits. These are also used as examples of low-effort feeling-based decision-making, associated more with feelings rather than cognitive processing and with a strong affective component (Hoyer and Macinnis 2001, p. 265-269). Similarly, Engel, Blackwell, and Miniard (2001) use these as examples of limited problem-solving with little or no information search, pre-purchase evaluation or deliberation in case of impulse buying and a change for the sake of change in the presence of several familiar and similar alternatives in variety seeking. Impulse buying and variety seeking are also shown to have a similar inherent

uncertainty in the choice sets evident in consumers choice of decision strategies from one occasion to another (Siddarth et al. 1995).

Moreover, research in the field of shopping motivations also shows that both these behaviors are associated with hedonic rather than utilitarian motivations (Dhar and Wertenbroch 2000; Arnold and Reynolds 2003). In fact, some recent researchers have also argued that impulse purchase behavior varies with individual personality traits such as variety seeking and that high variety seekers may be more prone to impulse purchases (Arnould et al. 2004, chap. 16). Similarly, it is shown that impulse buying is associated with sensation seeking and exploratory tendencies, characteristics generally associated with variety seeking behavior (Hoyer and Macinnis 2001). Hence, it is quite apparent that the socio-psychological origins of both these behaviors are considered to be quite similar.

Impulse buying has been associated with trait impulsiveness based on a general tendency of consumers to indulge in impulsive behaviors (Rook and Fisher 1995), whereas variety seeking has been associated with optimum stimulation level based on a tendency to indulge in exploratory and risky behaviors (Baumgartner and Steenkamp 1996). The origins of these two traits can be traced back to the psychology literature wherein there is extensive research on the relationship of personality traits such as impulsivity (Eysenck and Eysenck 1985), sensation seeking (Zuckerman 2000) and novelty seeking (Cloninger et al. 1991) among themselves and with risky and seemingly non-rational behaviors such as gambling and over-spending. In fact, Zuckerman et al. (1993) have even conceptualized a personality measure called impulsive sensation seeking that seems to consist of elements of both impulsive as well as change-seeking behaviors and is expected to reflect the tendency to indulge in risky behaviors for the

sake of having novel, varied, and intense experiences. This line of research also seems to suggest a definitive linkage between impulsive and exploratory tendencies at trait as well as behavior level.

Therefore, there seems to be reasonable prima-facie evidence of many motivational and behavioral similarities between these two important purchase behaviors and hence it would be useful to develop a general theory of hedonic purchase behaviors to explain the common psycho-sociological processes underlying both. However, there is neither a common conceptual framework incorporating both these behaviors nor any published empirical research investigating these two behaviors together. In the absence of such a general theory or a common framework, researchers exploring these behaviors continue to work independently of each other and there is hardly any exchange of valuable concepts, constructs or methodologies.

This essay addresses the above gap in the literature and paves the way towards a general theory of hedonic purchase behaviors. First a common parsimonious conceptual framework is developed incorporating three consumer traits, which have been used to study these behaviors - Consumer Impulsiveness (CI), Optimum Stimulation Level (OSL) and Self-Monitoring (SM). Based on this framework, specific hypotheses are developed about the similarities and differences in the association of these consumer traits with both the behaviors. Next, two empirical studies are described – one with a student and another with a retail customer sample – and the results of these studies are discussed along with a description of the various data analyses undertaken. Finally, the implications of this line of research are discussed along with some limitations and directions for future research.

1.2 LITERATURE REVIEW AND MOTIVATION

1.2.1 Trait Aspects of Impulse Buying and Variety Seeking

By definition, personality should make consumers provide consistent responses to environment stimuli based on their enduring psychological characteristics (Kassarjian 1971). Hence, it is surprising that, in a review of over 300 personality studies, the impact of personality on consumer behavior was described as ambiguous at best (Kassarjian and Sheffet 1991). On the other hand, Personality traits are shown to be important tools in the study of consumer behavior because these are common to many individuals and relatively stable and consistent in the long run (Blackwell et al. 2001). Therefore, personality trait theory may become a viable variable to understand, explain and predict consumer behavior by linking individual personality traits to identifiable consumer characteristics and behaviors because of their stable and encompassing nature (Haugtvedt et al. 1992; Sojka and Giese 2001; Baumgartner 2002).

Individual differences can be useful when the traits have direct relevance to the specific buying behavior being investigated or when they can be closely linked to theoretical frameworks. Consequently, personality research and trait variables in particular have experienced a resurgence of interest among consumer researchers (Wiggins 1996). In fact, in the context of purchase behaviors it has been specifically suggested that analyses of the relationships among scales representing different forms of purchase behavior would yield valuable insights into how these purchase-related traits are organized within individual consumers (Baumgartner 2002).

Many studies have investigated the individual association of both impulse buying and variety seeking with several relevant consumer traits; for example impulse buying is associated with buying impulsiveness (Rook and Fisher 1995), consumer impulsiveness (Puri 1996), shopping enjoyment (Beatty and Ferrell 1998), impulse buying tendency (Beatty and Ferrell 1998) and lack of self-control (Youn and Faber 2000). Variety seeking is associated with attribute satiation (McAlister 1982), need for stimulation (Raju 1980) and optimum stimulation level (Baumgartner and Steenkamp 1996).

1.2.2 Similarities between Impulse Buying and Variety Seeking Behaviors

All the traits used in studies on impulse buying and variety seeking have their origin in the Psychology literature and most of these can be traced back – in one form or the other – to a single personality measure called trait impulsivity. Schweizer (2002) provides a good overview of various models of the structure of personality to highlight these different aspects of impulsivity. First, Eysenck and Eysenck's (1977) model of personality includes four specific dimensions of impulsivity; narrow impulsiveness, risk-taking, non-planning, and liveliness. While narrow impulsiveness was associated with neuroticism, the latter three were associated with extraversion. Moreover, it was found that the two concepts – impulsiveness and sensation seeking (venturesomeness) had a significant overlap (Eysenck and Eysenck 1978). Other researchers have considered impulsivity as an aspect of novelty seeking and they have called it a biological tendency to respond fast to novel stimuli (Cloninger et al. 1991; Cloninger et al. 1993).

In a similar vein, Zuckerman (1994) argues that sensation seeking is integrated within a broad trait called Impulsive-Sensation Seeking (ImpSS), defined as the seeking

of varied novel, complex and intense sensations or experiences combined with a willingness to take physical, social, legal and financial risks for the sake of such experiences (Zuckerman et al. 1978; Zuckerman et al. 1993; Zuckerman 1994). ImpSS has been associated with various so-called non-rational behaviors such as gambling (McDaniel and Zuckerman 2003), promotional games (McDaniel 2002), binge eating and alcohol abuse (Kane et al. 2004), adventure sports (Jack and Ronan 1998), lottery and scratch-card buying (Balabanis 2002), drug abuse (Robbins and Bryan 2004), irresponsible sexual behavior and reckless driving (Zuckerman 2000). Finally, Whiteside and Lynam (2001) attempt to consolidate all these findings and demonstrate that trait impulsivity, as it is known popularly, consists of four factors - lack of premeditation, lack of urgency, lack of perseverance and sensation-seeking.

From the above discussion, it is clear that psychologists have long considered impulsiveness and sensation or change seeking behaviors to be associated with each other at various levels – as stable personality traits, behavioral motivations and even emotional states. However, consumer researchers have been exploring the two very common behavioral manifestations of these traits, impulse buying and variety seeking completely in isolation of each other. As a result there is a distinct body of knowledge concerning each area with hardly any sharing across their operational boundaries. In this essay an attempt is made to break this barrier and propose a General Theory of Hedonic Behaviors in which the commonalities and differences of these two behaviors are explained based on a sound theoretical basis and a common, comprehensive, conceptual framework.

There are several complementary models of purchase behavior employed in consumer research such as utility-maximization, decision-making, behavioral-influence, hedonic, and meaning-transfer perspectives and often purchase behavior is best explained by a combination of perspectives (Arnould et al. 2004). However, impulse buying and variety seeking do not seem to conform to the so-called rational, economic or decision-making perspectives in consumer behavior. Instead, these behaviors seem to be associated with complex hedonic psycho-social motivations and low-effort, feeling-based decision-making (Holbrook and Hirschman 1982; Hoyer and Macinnis 2001).

1.2.3 Differences between Impulse Buying and Variety Seeking Behaviors

Impulse buying has been described as a sudden, compelling, hedonically complex purchase behavior in which the rapidity of the impulse purchase decision precludes any thoughtful, deliberate consideration of alternatives or future implications (Rook 1987). Hence, it is typically characterized by high emotional activation, low cognitive control, and spontaneous behavior in the proximity of an appealing object of attraction. On the other hand, variety seeking is defined as a means of obtaining stimulation in purchase behavior by alternating between familiar choice objects such as brands or stores simply for the sake of change (Steenkamp and Baumgartner 1992). It has been shown to be primarily a result of boredom and attribute satiation (McAlister 1982), and a means for seeking one's optimum sensation level (Baumgartner and Steenkamp 1996). Hence, variety seeking does not display the high emotional turmoil or rapid loss of self-control typically associated with impulse buying.

1.2.4 Hedonic Purchase Behaviors

Baumgartner (2002) introduces a new three-dimensional typology of purchase behaviors in which purchase behaviors are categorized into eight forms based on three underlying dimensions: “thinking” versus “feeling” purchases (based on whether the purchase motive is functional or psycho-social), “low” versus “high purchase involvement” (based on the degree of care required by a purchase or the amount of effort expended on the purchase), and “spontaneous” versus “deliberate” purchase behavior. In this framework, impulse buying is categorized as a feeling-based, low purchase involvement and spontaneous purchase behavior and variety seeking as an exploratory behavior classified as feeling-based, high involvement and spontaneous.

However, this classification may not be universally applicable. First, although impulse buying is indeed a feeling-based spontaneous behavior as shown by several researchers, its association with purchase involvement has been ambiguous at best. While early researchers believed that impulse buying occurred only in low-value low-involvement product categories such as candies and magazines (Kollat and Willett 1969), recent studies have demonstrated that it may indeed be associated with high involvement purchase situations as well (Jones et al. 2003). Similarly, past researchers have clearly shown variety seeking to be associated with low involvement purchase situations (McAlister and Pessemier 1982; Van Trijp et al. 1996) and it is also not necessary for variety seeking to be spontaneous; it may well be a deliberate behavior (McAlister and Pessemier 1982). Hence, there is a clear need for a more theory-based conceptualization of the traits associated with these behaviors, which would allow their juxtaposition in a common conceptual framework.

1.3 CONCEPTUAL FRAMEWORK

1.3.1 Influence of Impulsiveness and Optimal Stimulation Level on Hedonic Purchase Behaviors

Impulsive-Sensation Seeking (ImpSS) is defined as a broad personality trait consisting of two dimensions, impulsiveness and sensation-seeking; it has been associated with a wide variety of so-called non-rational behaviors such as adventure sports, drug and alcohol abuse, binge eating and irresponsible financial behavior like impulse buying, gambling and betting. Eysenck (1993) proposed in his General Arousal Theory that level of impulsiveness is inversely proportional to level of arousal, which means that high impulsives are chronically lower in arousal compared to low impulsives. Likewise, individuals with high optimum stimulation level (OSL) are also known to be chronically lower in their arousal level making them indulge in sensation seeking activities to achieve their desired (optimum) stimulation level (Raju 1980; Steenkamp and Baumgartner 1992). Therefore, OSL is also expected to be positively associated with level of impulsiveness.

Moreover, as explained earlier, there are several similarities in motivational and behavioral components of impulse buying and variety seeking behaviors. Hence, these behaviors are likely to significantly overlap. For example, there could be a certain level of impulsiveness or spontaneity associated with variety seeking and a level of exploration such as risk-taking or novelty-seeking involved in impulse buying. In fact, individuals with low arousal levels are shown to be more careless, impatient, risk-taking, sensation-seeking and pleasure seeking (Dickman 2000). Therefore, it is expected that individuals

with low (high) arousal levels are also more (less) likely to indulge in impulse buying and variety seeking behaviors. This is because indulging in these behaviors would provide the extra stimulation that high OSL individuals need in order to reach their optimum stimulation level. On the other hand, the low OSL individuals would not be able to tolerate any increase in their already high arousal levels.

However, the influence of the two components of ImpSS is likely to be different on both these behaviors. Specifically, impulsiveness is likely to be a greater driver of impulse buying compared to variety seeking because impulsiveness is usually associated with loss of self-control, premeditation and perseverance which are all integral elements of impulse buying behavior. Similarly, OSL is expected to have a greater impact on variety seeking compared to impulse buying, because it is usually associated with change seeking, risk taking and novelty seeking behaviors which are all essential elements of variety seeking. Therefore, the following relationships are hypothesized:

- H1:** Impulsiveness is positively associated with both impulse buying and variety seeking but this association is stronger for impulse buying than for variety seeking.
- H2:** Optimum Stimulation Level is positively associated with both impulse buying and variety seeking but this association is stronger for variety seeking than for impulse buying.

FIGURE 1A: IMPULSE BUYING

FIGURE 1B: VARIETY SEEKING

Note: The (+) and (-) signs indicate the direction of association between two constructs connected by the arrow i.e. (+) for positive and (-) for negative association.

1.3.2 Influence of Self-Monitoring on Hedonic Purchase Behaviors

Self-monitoring is defined as the tendency to modify or adapt one's behavior in response to others' presence or behavior (Becherer and Richard 1978). Several researchers have demonstrated that self-monitoring is one of the important variables that moderate the relative influence of traits and/or situations (Bearden et al. 1989; Darley and Lim 1992; Hogg et al. 2000). High self-monitors are willing to adapt their behavior to enact clearly defined roles appropriate to different situations. Low self-monitors are less willing to put on a show to please those around them, preferring instead to be true to their own attitudes and values across different situations. These different orientations lead low and high self-monitors to show different behaviors in various consumer behavior contexts. For example, high self-monitors have been shown to seek more variety in public to depict themselves as more interesting and creative people (Ratner and Kahn 2002). Therefore, it is hypothesized that self-monitoring is associated positively with variety seeking, in general.

However, other researchers have found high self-monitors to have a greater desire to appear rational when they feel that their decisions may come under scrutiny by others because they may consider themselves as more accountable for their decision under such circumstances (Lerner and Tetlock 1999). Impulse buying is often perceived as being normatively incorrect and is often associated with post-purchase negative affect, guilt and unfavorable evaluation of purchase decision (Rook 1987; Dittmar and Drury 2000; Trocchia and Janda 2002). In other words, consumers who are highly concerned about their self-image are less likely to give in to their impulses and therefore they may be able to develop effective impulse resistance strategies over a period of time (Dholakia 2000).

Thus, high self-monitors are expected to be more motivated to control their impulses due to their desire to appear rational and prudent. Hence, a further research hypothesis:

H3: Self-Monitoring is negatively associated with impulse buying and positively with variety seeking.

1.3.3 Moderating Role of Self-Monitoring on Hedonic Purchase Behaviors

Prior investigations into the role of self-monitoring as a moderating variable have shown that among low self-monitors consumer traits influence behavior whereas among high self-monitors situational factors may be more likely to be associated with behavior (Becherer and Richard 1978; Ratner and Kahn 2002). This may be even more pertinent in the case of impulse buying because of its negative normative associations (Rook 1987). Hence, a high self-monitor is more likely to adapt or regulate impulsive buying behavior compared to a low self-monitor. In other words, the trait-behavior association is expected to be stronger for high self-monitors compared to low self-monitors. Therefore,

H4: The association of Impulsiveness and Optimum Stimulation Level with level of impulse buying in purchase decisions is stronger for high versus low self-monitors.

On the other hand, previous research in variety seeking has demonstrated that high and low self-monitors behave differently when confronted with a decision about how much variety to seek in public. Whereas the high self-monitors may seek more variety to indicate to others that they are interesting and creative people, this is unlikely to matter to low self-monitors (Ratner and Kahn 2002). This desire to appear interesting was shown to be stronger than the desire to make a justifiable or rational decision (Lerner

and Tetlock 1999). Although a desire to appear rational may impact some behaviors of high self-monitors such as impulse buying because of its strong negative normative association, it may not influence their other behaviors such as variety seeking because the normative associations for such behaviors may not be so negative or may not even be very clear. In fact, choosing more variety seems to send out a clear signal to others that the individual has diverse tastes. Therefore, the trait-behavior association in case of variety seeking is expected to be exactly opposite to that for impulse buying. Hence, the following hypotheses:

- H5:** The association of Impulsiveness and Optimum Stimulation Level with level of variety seeking in purchase decisions is stronger for low versus high self-monitors.

1.4 METHODOLOGY – STUDY 1

1.4.1 Sample and Procedure

This study used a convenience sample of 160 undergraduate business students, who participated in the study in exchange for a 5% course credit. The sample had more females (73%) than males (27%) and the average age was 21.9 years (21.4 for females and 23.2 for males). The median age of respondents was 21 years with 55.7% participants below 21 years and 44.3% above.

First, all the respondents completed a battery of scales at the beginning of a fresh semester as part of the registration process for a research methods course. The order of scale items was counterbalanced to eliminate any response-set bias and these scales were administered several weeks before the experiments to minimize demand effects. The experiments were conducted in a very large classroom with about 15-20 participants at a time. They were seated apart from each other to participate independently.

Each participant was randomly assigned to two different scenarios, one for impulse buying and the other for variety seeking in a counterbalanced order. They were asked to select one of a set of purchase alternatives in a hypothetical purchase scenario (adapted from Rook and Fisher 1995). A booklet was prepared for the study wherein the first page explained that the study was concerned with how people evaluate different products. This was followed by the purchase scenario and a scale to measure the level of impulsiveness or variety seeking in each purchase decision. Overall, only the parsimonious model shown in Figures 1A and 1B was operationalized in this study.

1.4.2 Measurement of Independent Variables

This study had the three consumer traits as independent variables - Consumer impulsiveness (CI), Optimum stimulation level (OSL) and Self-monitoring (SM). Consumer impulsiveness was measured using the 12-item Consumer Impulsiveness Scale – CIS (Puri 1996). OSL was measured using the seven-item, Change-Seeking Index – CSI, short form (Steenkamp and Baumgartner 1995) and Self-monitoring with the seven-item “Ability to Modify Self-Presentation” sub-scale of the Self-Monitoring scale, revised form (Lennox and Wolfe 1984; O’Cass 2000). For both these scales, participants were asked to respond to each statement on a seven-point likert-type scale – anchored by “1” (strongly agree), “4” (neither agree nor disagree) and “7” (strongly disagree).

1.4.3 Purchase Scenarios

The purchase scenario approach used in this study was developed by Rook and Fisher (1995) and has been used successfully by several other researchers to study impulse buying behavior (Puri 1996; Dholakia 2000; Omar and Kent 2001). In this approach, participants are asked to imagine themselves in a hypothetical purchase situation described in the form of a scenario. Next the participants are asked to respond to several questions based on how they would feel and think in the given situation. Prior research has shown that the participants do project themselves into the shopping scenarios presented to them and that the impulsive buyers among them are more likely to choose a more impulsive purchase decision (Rook and Fisher 1995; Omar and Kent 2001). In this study, two different scenarios were developed, one for impulse buying and the other for variety seeking.

The impulse buying scenario described a typical purchase situation involving products that university undergraduate students could easily identify with. Various versions were pre-tested with a smaller sample from the same population; with participants different from the main study. The scenario that most participants could identify with and comprehend without any problems was picked. The products included in the scenario (shoes and jacket) were chosen because of their universal relevance for impulse buying situations among target participants in the pre-test, irrespective of age or gender. The exact text for the impulse buying scenario is as follows:

“You are a student at the Nanyang Technological University and have a part-time job to help you meet your expenses. It is almost one full week before you get your next paycheck and you have only \$25 left for necessities. In addition to food, toiletries and bus fare, you also need to buy a new pair of shoes as your old shoes are falling apart. After college, you go to the mall to purchase the shoes. As you walk in the mall, you see a great looking jacket with a price tag of \$75. You think it would be just the thing to wear for your job interviews after you graduate next month”

A fresh scenario was developed for variety seeking using a similar approach and it also described a typical buying situation and product that the participants could identify with. Various versions were pre-tested with a smaller sample from the same population; with participants different from the main study. Ice cream was chosen as the product for this scenario because it was found to have most universal relevance and appeal for variety seeking among target participants in the pre-test, irrespective of age or gender. The exact text for the variety seeking scenario is as follows:

“You are a student at (Nanyang Technological University) and regularly go shopping at a nearby mall for household items on your way back home. On one such shopping trip, after buying regular items like milk, bread and fruit you also wanted to buy some ice cream, which happens to be your favorite dessert. As you open the ice cream freezer, you see many brands and flavors”.

1.4.4 Measurement of Dependent Variables

This study had two dependent variables, level of impulsiveness and level of variety seeking in purchase decisions. These were measured using two different single-item 5-point scales which were adapted from Rook and Fisher (1995) after pre-testing with independent samples of undergraduate students similar in profile to those in the main study. They rated the level of impulsiveness (and variety seeking) of each purchase alternative using seven-point scales and the final scales contained responses in an increasing order of impulsiveness and variety seeking (Table 1).

TABLE 1
DEPENDENT VARIABLE SCALES

Level of Impulsiveness in a Purchase Decision	Level of Variety Seeking in a Purchase Decision
1. Buy only the shoes, not even think about the jacket	1. Buy your regular brand and flavor, not think of any new brands or flavors
2. Buy only the shoes, want the jacket but not buy it	2. Buy your regular brand and flavor, and another flavor of your regular brand
3. Decide not to buy the shoes and buy the jacket	3. Not buy your regular brand, only buy a new brand with your regular flavor
4. Buy both, the shoes and the jacket	4. Not buy your regular brand, only buy a new brand with a new flavor
5. Buy shoes, jacket and matching trousers and shirt	5. Not buy your regular brand, buy a new brand with many new flavors

After reading each purchase scenario, the participants were asked to indicate their purchase intention on the relevant scale in which the responses were in increasing order of impulsiveness or variety seeking. Prior research in impulse buying has shown that each of the responses represents an increasing order of impulsiveness; hence the scale can reasonably be used as an ordinal scale to measure the level of impulsiveness of purchase decisions in this context (Rook and Fisher 1995; Omar and Kent 2001).

1.4.5 Results

All the three traits scales used in this study showed high reliability with Cronbach's alpha ranging from 0.78 (Consumer impulsiveness) and 0.82 (Self-monitoring) to 0.89 (Optimum stimulation level). Multiple regression analysis was used to test the hypotheses for the main effects of the three consumer traits and moderated regression analysis to test the moderation hypotheses for the self-monitoring trait, as advised by Baron and Kenny (1986). A multiple regression model was fitted using the participants' scores on the three consumer traits along with the two interaction product terms (Consumer Impulsiveness * Self-monitoring and OSL * Self-monitoring) as independent variables. The level of impulsiveness in a purchase decision was used as the dependent variable for impulse buying and level of variety seeking for variety seeking. The standardized beta coefficients, t-values, R^2_{adj} and F-values are shown in Table 2.

For both the behaviors, the regression models represent a good fit with significant R^2_{adj} values for both, impulse buying ($R^2_{adj} = 0.279$, $F(5, 155) = 20.563$, $p < 0.001$) and variety seeking ($R^2_{adj} = 0.215$, $F(5, 155) = 12.397$, $p < 0.001$). All the hypotheses were

supported for both the behaviors, with significant beta-coefficients for all the independent variables as well as the interaction terms. Consumer impulsiveness was found positively associated with both impulse buying ($\beta = +0.445$, $p < 0.001$) and variety seeking ($\beta = +0.214$, $p < 0.01$).

TABLE 2
MULTIPLE REGRESSION MODELS: STUDY 1 (N = 160)

Dependent Variable	Independent Variables	Std. Beta Coefficients	t-values	Adjusted R²	F-values
Level of impulsiveness in a purchase decision	Consumer Impulsiveness	+ 0.445***	6.303	0.279	20.563***
	OSL	+ 0.246**	3.211		
	Self-monitoring	- 0.218**	- 2.831		
	Consumer Impulsiveness * Self-monitoring	- 0.219**	- 2.957		
	OSL * Self-monitoring	- 0.448***	- 6.320		
Level of variety-seeking in a purchase decision	Consumer Impulsiveness	+ 0.214 **	2.332	0.215	12.397***
	OSL	+ 0.390***	5.332		
	Self-monitoring	+ 0.223**	3.013		
	Consumer Impulsiveness * Self-monitoring	+ 0.185*	2.224		
	OSL * Self-monitoring	+ 0.234**	3.145		

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, all two-tailed

To test the hypothesis H1, a dummy-variable (Behavior type) was created with values as “0” for impulse buying and “1” for variety seeking (as suggested by Aiken and West 1991). Next, the Consumer Impulsiveness scores were multiplied with this dummy variable to create an interaction term (Consumer Impulsiveness * Behavior type) and a fresh regression model was tested with Consumer Impulsiveness, Behavior type and the interaction term as predictors. As expected, the interaction term was found significant ($\beta = +0.621$, $p < 0.001$), supporting the hypothesis H1 that the association of consumer impulsiveness was stronger for impulse buying compared to variety seeking.

Next, OSL was found to be positively associated with both impulse buying ($\beta = +0.246$, $p < 0.01$) and variety seeking ($\beta = +0.390$, $p < 0.001$). To test the hypothesis H2, another regression model was tested with an interaction term included (OSL * Behavior type). Once again, as expected, the interaction term was found significant ($\beta = -0.437$, $p < 0.001$), supporting the hypothesis H2 that the association between OSL and variety seeking was stronger compared to that with impulse buying.

Self-monitoring was found negatively associated with impulse buying ($\beta = -0.218$, $p < 0.01$) and positively with variety seeking ($\beta = +0.223$, $p < 0.01$), providing support for H3. Next, the moderating effects of self-monitoring were tested. First, the standardized beta coefficients for both consumer impulsiveness ($\beta = -0.219$, $p < 0.01$) and OSL ($\beta = -0.448$, $p < 0.001$) are significant for impulse buying, providing support to H4 by showing that consumer impulsiveness and OSL were more strongly associated with impulse buying for high versus low self-monitors. Finally, both Consumer Impulsiveness ($\beta = +0.185$, $p < 0.05$) and OSL ($\beta = +0.234$, $p < 0.01$) were found more strongly associated with variety seeking, for high versus low self-monitors, thus supporting H5.

1.4.6 Discussion

These results suggest that consumers with high scores on Consumer Impulsiveness and Optimum Stimulation Level are likely to indulge in a greater degree of impulse buying as well as variety seeking compared to those with low scores on these two traits. This is as expected because both the traits driving these behaviors (Impulsiveness and sensation-seeking) are positively associated with each other and conceptualized as the two components of trait impulsivity. Moreover, consumers may indulge in impulse buying to seek variety or seek variety in an impulsive manner. In other words, each consumer purchase may have an impulsive aspect and a variety-seeking aspect wherein OSL may account for the variety-seeking aspect of any purchase behavior and the impulsive aspects may be explained by the impulsiveness component.

The results also support the moderating role of self-monitoring on both these behaviors as shown by the significant consumer impulsiveness*self-monitoring and OSL*self-monitoring interactions. While the finding of positive moderating role of self-monitoring on variety seeking confirms previous findings (Ratner and Kahn 2002), in a stark contrast to this it was found that for high self-monitors, Consumer Impulsiveness does not cause as much impulse buying as for low self-monitors. Similarly, it was found that for high self-monitors, OSL does not cause as much impulse buying as for low self-monitors. This finding provides strong support to the conceptualization in this study based on negative normative associations of impulse buying reported in prior research (Rook and Fisher 1995).

In fact, self-monitoring is one of the trait variables that could explain why some consumers are able to resist their impulsive urges while others cannot. Prior research in

this area has suggested the role of cognitive evaluation and resistance strategies in controlling the impulsive urges (Dholakia 2000). However, this study suggests the possible motivations behind this process by showing how some consumers (high self-monitors) may be more motivated than others (low self-monitors) to engage in these evaluations and could possibly employ resistance strategies frequently and probably more effectively. A high self-monitor is a person highly concerned about what others may think about his or her behavior and is likely to alter his/her own behavior based on other's expectations or likely reactions in order to create a favorable impression on these others (impression management). On the other hand, a low self-monitor is less concerned about impression management and this difference is reflected in their behaviors.

In this study it is shown that when faced with an impulsive urge (due to high OSL or consumer impulsiveness), high self-monitors probably employ learned strategies to resist such urges more than low self-monitors. Some of these resistance strategies include formulation and learning of explicit rules, selective attention or distraction, exposure control, encoding control (distancing), parsimonious information processing, emotion control and motivation control (Dholakia 2000). For instance, a high self-monitor may use a shopping-list as an explicit rule to control impulse buying and then throughout a shopping trip she may keep reminding herself to stick to the items on her list and not buy anything else despite having impulsive urges to do so. Similarly, some high self-monitors may deliberately avoid repeated visual contact with the source of their impulsive urge to distract themselves and, in the process, dilute their impulsive urge (Hoch and Loewenstein 1991).

Hence, Study 1 offers some useful insights into these two behaviors and helps in validating the conceptual framework with the three consumer traits. However, it also has some limitations. First, it uses student participants in a lab setting and hence, its findings may not be generalized to the wider consumer population. Second, it uses single-item measures for the dependent variable adapted from prior studies, resulting in categorical rather than continuous data. This may also have affected some of the results. Finally, this study uses purchase scenarios for each behavior and relies on the purchase intentions as surrogates for purchase decisions. However, real-life purchase decisions may vary from these significantly. To address all these limitations, study 2 was undertaken with the following objectives:

1. Replicate the findings with a more diverse sample of non-student participants.
2. Provide a more realistic environment and allow exploration of behaviors soon after they occur by conducting it in a real-life retail setting with actual customers in a shopping environment.
3. Investigate actual purchase decisions made by customers, unlike the first study which included only hypothetical scenarios and purchase intentions.

1.5 STUDY 2

1.5.1 Sample and Procedure

Mall-intercept approach was used in this study, to survey shoppers during a four-week period as they came out after shopping at a large shopping mall. 760 initial contacts were made and 321 (42%) shoppers agreed to participate. This response rate is within the range of 37-48% reported by prior researchers using a similar approach (Rook and Fisher 1995; Beatty and Ferrell 1998). Cleaning of the data and elimination of responses with excessive missing values resulted in a final sample of 309 (39%), with more females (63%) than males (37%) and the average age at 31.1 years (30.3 for females and 32.2 for males). The median age for the sample was 30 years with 53% participants below 26 years and 47% above. Overall, this sample is similar to the first study in terms of the gender profile but somewhat older. Hence, it is likely to help in generalizing the findings from the first study to an older consumer population.

In this study, as a part of their final year project a group of three undergraduate students intercepted and interviewed actual shoppers about their recent purchases and the extent of impulse buying and variety seeking in their purchase decisions. This was quite different from the first study which used imaginary purchase scenarios with student respondents. Hence, a new questionnaire was developed with the three trait-scales on the first two pages, followed by questions to classify the purchases as “unplanned”, “reminder” or “pure impulse”. This questionnaire was pre-tested for two days in the designated mall one week in advance with the researchers acting as supervisors and

graduate students as surveyors. No major problems were faced and minor queries by the surveyors were addressed on-the-spot.

A large shopping mall was chosen for this study because of its high traffic, wide assortment of product categories sold and high degree of in-store browsing (Beatty and Ferrell 1998). The data was collected over a four-week period (from mid-November to mid-December, 2004). The locations of the interviews, the times of day and the days of the week were rotated to make the final sample fairly representative of the population of shoppers at this mall during this time-period (Bush and Hair 1985). Shoppers were approached as they came out after completing their shopping and were asked whether they would participate in a shopping study. Respondents were promised an entry in a lucky draw with sizable gift certificates to be redeemed at stores in the same mall.

1.5.2 Measurement of independent variables

The three consumer traits (consumer impulsiveness, OSL and self-monitoring) were measured using the same scales as in the first study, and were included on the first two pages of the questionnaire with seven-point Likert-type response format.

1.5.3 Measurement of dependent variables

Similar to the first study, two dependent variables were measured in this study as well (Level of impulsiveness and variety seeking in purchase decisions). However, this study included the actual purchases made by the shoppers; hence a different measurement method was used. Specifically, the level of impulsiveness and variety seeking were measured at an individual shopper's level and not at a purchase decision level. This was

because many shoppers had experienced impulse buying or variety seeking for more than one item whereas some had not experienced these at all. Hence, shoppers who did not buy anything on impulse got a score of one; those buying at least one item on impulse got a score of two and so on, with the score being capped at five for anyone buying four items or more on impulse. A similar scoring scheme was used for variety seeking.

First all the purchases made by each shopper were recorded. A wide range of product categories was discovered including personal care, household products, dairy and beverages, cooking ingredients, bakery and confectionary, stationery, electronic appliances, pet products, medications, snack foods and ready-to-eat items. Next, the shoppers were asked whether each of these purchases was planned or unplanned. Out of all the unplanned purchases, the reminder-type items were eliminated by the following question: “When you saw this item, were you reminded that you were out of this item and needed it?” Only purchases that were clearly unplanned and could not be classified as reminder items were recorded as impulse purchases. The number of such impulse purchases was counted for each shopper.

Next, for each purchase the shoppers were asked if they had switched from their regular brand or flavor. For all the instances of such a switching, they were asked if they switched because of any specific reason such as a discount or without any reason (just for a change). Only those purchases which had no specific reason for switching were recorded as variety seeking purchases. The number of such variety seeking purchases was counted for each shopper.

1.5.4 Results

Similar to the first study, the three traits scales showed reasonably high reliability with Cronbach's alpha ranging from 0.82 (Consumer impulsiveness) to 0.84 (Self-monitoring) and 0.85 (Optimum stimulation level). Multiple regression analysis was used to test the hypotheses for the main effects of the three consumer traits and moderated regression analysis to test the moderation hypotheses for self-monitoring trait. A multiple regression model was fitted using the participants' scores on the three consumer traits along with the two interaction product terms (Consumer Impulsiveness * Self-monitoring and OSL * Self-monitoring) as independent variables. The no. of items purchased on impulsive and for variety seeking were used as dependent variables. The estimated regression models with standardized beta coefficients, t-values, R^2_{adj} and F-values are shown in Table 3.

For both the behaviors, the regression models represents a good fit with significant R^2_{adj} values for both, impulse buying ($R^2_{adj} = 0.244$, $F(5,304) = 16.316$, $p < 0.001$) as well as variety seeking ($R^2_{adj} = 0.215$, $F(5,304) = 14.132$, $p < 0.001$). All the hypotheses are supported for both the behaviors, with significant beta-coefficients for all the independent variables as well as the interaction terms, as in the first study. Specifically, consumer impulsiveness is positively associated with both impulse buying ($\beta = +0.322$, $p < 0.001$) and variety seeking ($\beta = +0.176$, $p < 0.05$), but more strongly with impulse buying compared to variety seeking. Hence, H1 was supported. Next, OSL is positively associated with both impulse buying ($\beta = +0.198$, $p < 0.05$) and variety seeking ($\beta = +0.314$, $p < 0.001$), but more strongly with variety seeking compared to impulse buying. Thus, H2 was also supported. Next, Self-monitoring is negatively

associated with impulse buying ($\beta = -0.241$, $p < 0.01$) and positively with variety seeking ($\beta = +0.184$, $p < 0.05$), providing support for H3.

TABLE 3
MULTIPLE REGRESSION MODELS: STUDY 2 (N = 309)

Dependent Variable	Independent Variables	Std. Beta Coefficients	t-values	Adjusted R²	F-values
Level of impulsiveness	Consumer Impulsiveness	+ 0.322***	5.462	0.244	16.316***
	OSL	+ 0.198*	2.365		
	Self-monitoring	- 0.241**	- 2.907		
	Consumer Impulsiveness * Self-monitoring	- 0.189*	- 2.320		
	OSL * Self-monitoring	- 0.178*	- 2.133		
Level of variety-seeking	Consumer Impulsiveness	+ 0.176 *	2.011	0.221	14.132***
	OSL	+ 0.314***	5.147		
	Self-monitoring	+ 0.184*	2.401		
	Consumer Impulsiveness * Self-monitoring	+ 0.291**	4.073		
	OSL * Self-monitoring	+ 0.252**	3.178		

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, all two-tailed

Next, the moderating effects of self-monitoring were tested. First, the standardized beta coefficients for both consumer impulsiveness ($\beta = -0.189$, $p < 0.05$) and OSL ($\beta = -0.178$, $p < 0.05$) were significant for IB, providing support to H4 by showing

that consumer impulsiveness and OSL were more negatively associated with IB, for high versus low self-monitors. Finally, both consumer impulsiveness ($\beta = +0.291$, $p < 0.01$) and OSL ($\beta = +0.252$, $p < 0.01$) were found more positively associated with IB, for high versus low self-monitors, thus supporting H5. Hence, the results of the first study were successfully replicated in the second study.

1.6 DISCUSSION AND CONTRIBUTION

The results from both the studies provide a strong support to the basic premise underlying this research; that both impulse buying and variety seeking are simply two different types of hedonic purchase behaviors, and that these are indeed closely related at a socio-psychological level. Specifically, the traits driving these behaviors (impulsiveness and change-seeking) are positively associated with each other and already established as the two components of trait impulsivity or impulsive sensation seeking in psychology literature (Zuckerman 1979, 2000). Moreover, it is also demonstrated that some consumers may indulge in impulse buying to seek variety whereas others may seek variety in an impulsive manner. Hence, each hedonic purchase may have an impulsive and a change-seeking aspect, with OSL accounting for the change-seeking aspect and the impulsive aspects partially explained by the impulsiveness component.

This research also provides the first evidence of the moderating role of self-monitoring on both these behaviors; high self-monitors are less likely to buy impulsively but more likely to seek variety. Thus self-monitoring is shown to be one of the trait variables that explain why some consumers are able to resist their impulsive urges while others are not, providing an insight into the psychological process underlying the role of

cognitive evaluation and resistance strategies in controlling the impulsive urges reported in prior research (Dholakia 2000).

This research makes several important contributions to the literature. First, it empirically shows that impulse buying and variety seeking are indeed similar to each other, by demonstrating their association with the traits of consumer impulsiveness and optimum stimulation level. Second, the understanding of these behaviors is enhanced by highlighting some key differences. It is shown that the direct – as well as the moderating – influence of self-monitoring on these two behaviors is exactly the opposite of each other, such that high self-monitors indulge in less impulse buying but more variety seeking. Moreover, the association of the other two traits, consumer impulsiveness and OSL, with variety seeking is moderated positively by self-monitoring but negatively for impulse buying.

The conceptual framework used in this research helps to pave the way for a greater understanding of these two common, but complex, consumer behaviors by showing that although they do share some traits in common, they are also different in many respects. Thus, this research integrates information from both fields of research to gain a better understanding of the psychological processes underlying the general category of hedonic consumer behaviors.

1.7 LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

This research also has a few limitations. First, it used only one scenario for each behavior in the first study (jacket and ice-cream purchase). However, there could be a significant difference between the involvement levels in the two scenarios used in this

research. For example the price difference between the jacket (used in the impulse buying scenario) and the ice-cream (used in variety seeking) may make it difficult to compare the results across these two situations. Future research may use different scenarios to study these behaviors. Researchers could also develop and test new scales to measure variety seeking and impulse buying tendencies by including items to measure various possible components of these behaviors such as impulsivity, extravagance, imprudence, exploration, risk-taking and lack of self-control. In fact, some observers have even noted a need for developing scales useful for cross-cultural studies (Kacen and Lee, 2002).

Moreover, this research included only the relevant consumer traits as antecedents of these two behaviors in this study and studied their main and interaction effects but, given the complex psychological processes underlying both these behaviors, future researchers could include some possible mediators such as browsing, impulsive urge, attitude towards impulse purchase, cognitive evaluation and resistance strategy employed by the consumer. Finally, prior research shows that trait variables may explain only a small proportion of the total variance in the data, so that the inclusion of situational variables such as money and time availability, involvement level and mood may help in explaining greater variance in impulse buying behavior (Beatty and Ferrell 1998; Van Trijp et al. 1996).

CHAPTER 2 – CONSUMER IMPULSIVENESS TRAIT

2.1 INTRODUCTION

Impulse buying is considered an important and widespread phenomenon in Western countries and it continues to attract significant attention from consumer researchers (Baumeister and Mick 2002; Coley and Burgess 2003; Crawford and Melewar 2003; Jones et al. 2003; Vohs and Faber 2003). It is reported that 90% of consumers in the US buy on impulse at one time or another (Welles 1986), impulse buying accounts for up to 80% of all purchases in many product categories (Smith 1996; Abrahams 1997), and it accounts for approximately 40% of all department store purchases (Bellenger et al. 1978). However, in spite of its managerial importance and a long research tradition, there is much to be learnt about its complex psychological, motivational and behavioral aspects.

Impulse buying is associated with a relatively stable consumer trait and extant literature is replete with conceptualizations including buying impulsiveness (Rook and Fisher 1995), consumer impulsiveness (Puri 1996), impulse buying tendency (Weun et al. 1998; Verplanken and Herabadi 2001) and consumer buying impulsivity (Youn and Faber 2002). Early researchers conceptualized it simply as a uni-dimensional construct (buying impulsiveness) or two-dimensional (consumer impulsiveness), whereas recent researchers have pointed out that these one- and two- dimensional structures may not adequately capture all the facets of this complex construct and have developed a more complex three-dimensional structure (Youn and Faber 2000, 2002). However, the empirical findings about the dimensionality of this construct have been mixed;

consequently there is still no consensus on the exact structure or nature of this complex psychological construct.

Of late, researchers have also begun investigating impulse buying in countries outside the US and Europe, such as China (Zhou and Wong 2003), Vietnam (Tuyet Mai et al. 2003), Australia, Hong Kong, Singapore and Malaysia (Kacen and Lee 2002). However, most of them used scales developed with the US consumers and, as a result, either had a problem establishing measurement equivalence across different cultures (Kacen and Lee 2002) or did not account for it at all (Tuyet Mai et al. 2003). Hence, it is as yet unclear as to whether impulse buying has the same meaning and implications across different cultures or even among individuals within the same culture since even Youn and Faber (2002) did not find empirical support for their three-dimensional conceptualization of the same trait among their American respondents. Moreover, the existing scales developed with consumers in Western cultures do not appear to be appropriate or adequate to measure the impulse buying trait in other cultures.

In this research, first the variation in the meaning of impulse buying is explored across different cultures and among different consumers within a single culture. Next, all the existing scales to measure the impulse buying trait are evaluated and finally a new, more robust scale is developed that can be used across different cultures.

2.2 LITERATURE REVIEW AND MOTIVATION

“Impulsiveness” (also referred to as “Impulsivity” sometimes) is a consumer trait which has been studied quite extensively. All of these conceptualizations and scales are described next and their strengths and weaknesses discussed.

2.2.1 Buying Impulsiveness Scale (BIS)

Buying impulsiveness is one of the first conceptualizations of this construct and is defined as a consumer's tendency to buy spontaneously, unreflectively, immediately, and kinetically (Rook and Fisher 1995). It is hypothesized to be a unidimensional construct that embodies consumers' tendencies both to think and act in identifiable and distinctive ways. Highly impulsive buyers are more likely to experience spontaneous buying stimuli; their shopping lists are more "open" and receptive to sudden, unexpected buying ideas. Also, their thinking is likely to be relatively less reflective, prompted by physical proximity to a desired product, dominated by emotional attraction towards it and overwhelmed by the promise of instant gratification (Thompson et al. 1990; Hoch and Loewenstein 1991).

To develop this scale, Rook and Fisher (1995) first generated thirty five items from a review of prior research of impulse buying phenomenology (Rook 1987) and general measures of impulsiveness (Eysenck et al. 1985). These items were pre-tested on a convenience sample of 281 undergraduate business students, then purified with another similar sample of 212 students in their first study and finally, their nine-item scale was tested again with 104 shoppers in a regional mall in the US. They found good overall psychometric properties i.e. all factor loadings higher than 0.60 and a high reliability coefficient (Cronbach's $\alpha = 0.88$). This scale is shown in Table 1 along with other scales discussed in this section.

TABLE 1
CONSUMER IMPULSIVENESS SCALES

Scales/Items	Description
Buying Impulsiveness (Rook and Fisher 1995)	
1. I often buy things impulsively	5-point Likert-type, with 1 = strongly disagree, and 5 = strongly agree
2. “Just do it” describes the way I buy things	
3. I often buy things without thinking	
4. “I see it, I buy it” describes me	
5. “Buy now, think about it later” describes me	
6. Sometimes I feel like buying things on the spur-of-the-moment	
7. I buy things according to how I feel at the moment	
8. I carefully plan most of my purchases *	
9. Sometimes I am a bit reckless about what I buy	
Impulse Buying Tendency (Weun et al. 1998)	
1. When I go shopping, I buy things that I had not intended to purchase	7-point Likert-type, with 1 = Very Rarely, 4 = Sometimes and 7 = Very Often
2. I am a person who makes unplanned purchases	7-point Likert-type, with 1 = Strongly Disagree, 4 = Neither and 7 = Strongly Agree
3. When I see something that really interests me, I buy it without considering the consequences	
4. It is fun to buy spontaneously	
5. I avoid buying things that are not on my shopping list *	
Consumer Impulsiveness (Puri 1996)	
1. Impulsive	7-point Likert-type, with 1 = usually would describe me, 4 = sometimes, and 7 = seldom would describe me
2. Careless	
3. Self-controlled *	
4. Extravagant	
5. Farsighted *	
6. Responsible	
7. Restrained *	
8. Easily tempted	Sub-scales Prudence: Items 3, 5, 6, 7, 9, 10, and 12 Hedonism: Items 1, 2, 4, 8, and 11
9. Rational *	
10. Methodical *	
11. Enjoy spending	
12. A planner *	

* Reverse-coded items

2.2.2 Consumer Impulsiveness Scale (CIS)

Consumer impulsiveness is conceptualized as a two-dimensional construct i.e. combination of two components – prudence (cognitive) and hedonism (affective), which seeks to provide a cognitive explanation of impulse buying behavior (Puri 1996). The two components of consumer impulsiveness conceptually represent two conflicting tendencies, prudence makes the consumer act rationally and in a normatively correct manner, whereas hedonism makes the consumer act in a time-inconsistent manner (Hoch and Loewenstein 1991; Puri 1996). These two components of consumer impulsiveness are expected to be independent of each other and opposite in terms of their association with impulse buying behavior i.e. negative for prudence and positive for hedonism.

Puri (1996) pre-tested two versions of this scale and administered the final version with twelve adjectives measured on a 7-point scale ranging from one (usually would describe me) to seven (seldom would describe me) in three phases to 310 masters students from the US and India. Using confirmatory factor analysis she showed a good fit for the two-factor model although her exploratory factor analysis revealed three factors with eigenvalues greater than or equal to one accounting for 62% of the variance. These three factors seemed to represent three different dimensions, cognitive (self-control or prudence) with seven items, affective (hedonism or temptation) with four items and behavioral (carelessness) with a single item. However, she chose to continue with her two-dimensional conceptualization and demonstrated reasonable evidence of its construct, predictive and nomological validity.

2.2.3 Impulse Buying Tendency (IBT)

Impulse buying tendency (IBT) is yet another unidimensional construct used to capture the consumer impulsiveness trait and is defined as a combination of tendencies to experience spontaneous and sudden urges to make on-the-spot purchases and to act on these felt urges with little deliberation or evaluation of consequence (Weun et al. 1998). They generated a pool of items using extensive literature review and self-reported experiences of impulse buying from 63 undergraduate students, reducing these to ten items with the help of ten PhD students and four faculty members as expert judges for the face validity of each item. Next they report four studies conducted to test the scale and assess its psychometric properties with 212 students in their first study, 152 nonstudent volunteer respondents in the second, 124 students in the third and finally with 550 shoppers in a large regional shopping mall in their fourth study. The final outcome was a uni-dimensional five-item scale, which is shown along with other scales in Table 1.

2.2.4 Impulse Buying Tendency (IBT2)

Verplanken and Herabadi (2001) developed and validated a 20-item scale similar to Puri's (1996) consumer impulsiveness scale and they called it the Impulse Buying tendency scale (like Weun et al. 1998). They conducted two studies, first with 106 university students in the Netherlands and second with 144 consumers in Norway. An initial pool of 52 items was refined into the final version which included ten items each reflecting cognitive (lack of planning and deliberation) and affective aspects (feelings of pleasure, excitement, compulsion, lack of control, regret). The scale showed good psychometric properties in both the studies, with high reliabilities and factor loadings on

the relevant factors. However, there were several items with high cross factor loadings suggesting the presence of a third factor or high correlation among the two factors. All the scale items are shown in Table 2.

TABLE 2
IMPULSE BUYING TENDENCY SCALE – IBT2

Scales/Items	Description
Cognitive items	
1. I usually think carefully before I buy anything *	
2. I usually only buy things that I intended to buy *	
3. If I buy something, I usually do that spontaneously	
4. Most of my purchases are planned in advance *	
5. I only buy things that I really need *	
6. It is not my style to just buy things *	
7. I like to compared brands before I buy one *	
8. Before I buy something I always carefully consider whether I need it *	
9. I am used to buying things ‘On-the-spot’	
10. I often buy things without thinking	
Affective items	
11. It is a struggle to leave nice things I see in a shop	
12. I sometimes can not suppress the feeling of wanting to buy something	
13. I sometimes feel guilty after having bought something	
14. I’m not the kind of person who ‘falls in love at first sight’ with things I see in shops *	
15. I can become very excited if I see something I would like to buy	
16. I always see something nice whenever I pass by shops	
17. I find it difficult to pass up a bargain	
18. If I see something new, I want to buy it	
19. I am a bit reckless in buying things	
20. I sometimes buy things because I like buying things rather than because I need them	

7-point Likert-type, with
1 = strongly disagree, and
7 = strongly agree

* Reverse-coded items

The scores on this scale correlated significantly with reported purchase frequencies of typical impulse products and number of recent impulse purchases. Moreover, this scale and its two sub-scales were found significantly correlated with several personality-based individual differences measures. Specifically, the cognitive and affective facets were both related to extraversion; the cognitive facet was inversely related to conscientiousness, personal need for structure, and need to evaluate. Finally, the affective facet was related to lack of autonomy and action orientation.

2.2.5 Consumer Buying Impulsivity (CBI)

Impulsivity has always been an important psychological construct and it appears in one form or another in every major system of personality research. All major personality researchers have explored this complex psychological construct including Barratt et al. (1987; 1992; Barratt 1993; 1995), Cloninger et al. (1991; 1993), Eysenck et al. (1977; 1978; 1985; 1993) and Zuckerman et al. (1978; 1979; 1991; 1993; 2000). The consensus seems to be that trait impulsivity is indeed a complex multi-dimensional psychological construct. Drawing on this rich body of work on trait impulsivity by psychology researchers, Youn and Faber (2002) conceptualized consumer impulsiveness as a multi-dimensional construct named Consumer Buying Impulsivity (CBI) with three higher order dimensions and eight separate components as shown in Table 3.

TABLE 3
CONSUMER BUYING IMPULSIVITY SCALE (YOUN AND FABER 2002)

Items
<p>Urge to Buy</p> <ol style="list-style-type: none"> 1. When walking through stores, I can't help but buy an attractive item that catches my eye. 2. I feel the desire to buy an item as quickly as possible, so as to terminate the pain of not buying. 3. I have difficulty getting control over my buying impulses. 4. The urge to buy something just comes over me all at once and I am overwhelmed. 5. I experience a helpless feeling when I see something attractive in a store. <p>Positive Buying Emotions</p> <ol style="list-style-type: none"> 1. Buying things on impulse gives me a sense of joy. 2. When making impulse purchases, I find myself delighted, amused, and enthusiastic. 3. I feel a sense of thrill when I buying something impulsively. 4. I enjoy the sensation of buying products impulsively. <p>Mood Management</p> <ol style="list-style-type: none"> 1. I buy a product to change my mood. 2. Buying is a way of reducing the stress my daily life. 3. I buy things on impulse when I am upset. 4. Sometimes, I buy something in order to make myself feel better. 5. When I'm feeling down, I go out and buy something impulsively. <p>Cognitive Deliberation</p> <ol style="list-style-type: none"> 1. I tend to think about alternatives a great deal before I buy things. * 2. When I buy things, I am more likely to be slow and reflective than to be quick and careless. * 3. I am a very cautious shopper. * 4. When faced with a purchase decision, I usually take time to consider and weigh all aspects. * 5. Even when I see something attractive, I usually think about the consequences before I buy it. * <p>Unplanned Buying</p> <ol style="list-style-type: none"> 1. When I go shopping, I buy things that I had not intended to purchase. 2. I am a person who makes unplanned purchases. <p>Disregard the Future</p> <ol style="list-style-type: none"> 1. I buy things even though I can't afford them. 2. I tend to spend money as soon as I earn it. 3. I often buy a product that I don't need, while knowing that I have very little money left

* Reverse-coded items

These researchers originally conceptualized this construct's behavioral dimension with two components, rapidity and reactivity. The affective dimension has three components; irresistible urge to buy, susceptibility to emotional states and emotional conflict. The cognitive dimension was composed of three sub-components as well; little cognitive deliberation, unplanned buying and disregard of the future.

Using a series of empirical studies with undergraduate students, they purified this scale from 140 to 24 items. However, in the process they also had some unexpected findings. First, the behavioral (rapidity and reactivity) component did not emerge as a separate component for the US respondents used in their study (Youn and Faber 2002). Instead it was merged with the affective (irresistible urge to buy) component. Hence, their measurement model was reduced to two higher order factors with six lower order sub-factors instead of the originally hypothesized three higher order dimensions with eight lower order components.

The second-order factors consisted of affective and cognitive components with irresistible urge to buy, positive buying emotions and mood management as sub-factors for the affective component and low cognitive deliberation, disregard of the future and unplanned buying under the cognitive component. The factor structure, measurement properties, and structural parameters were validated across two independent samples, first with 258 undergraduate students at a large Midwestern university and then with 215 adult shoppers at a regional shopping mall in a large Midwestern city.

2.2.6 Performance of Impulse Buying Trait Scales in Western Countries

Several researchers have used these different scales in their studies of impulse buying behavior albeit with mixed results. Beatty and Ferrell (1998) used the Weun et al.'s (1998) impulse buying tendency (IBT) scale in their study with 533 shoppers in a large regional mall in the US but, during data analysis, they had to delete two out of the original five items to get a good fit for their measurement model. Similarly, Hausman (2000) had to modify two of the original nine items in Rook and Fisher's (1995) buying impulsiveness scale (BIS) based on her semi-structured interviews with a convenience sample of 60 consumers in the US. Moreover, in her study with 212 consumers also in the US, she had to remove one of these items along with another item from the original BIS from the analysis based on low item-total correlations. This resulted in a seven-item scale to be used eventually for final data analysis.

Shiv and Fedorikhin (1999) used an abridged version of the hedonism sub-scale of Puri's (1996) CIS in their experimental study with 69 student subjects, calling it impulsivity and found it to be reasonably reliable ($\alpha = 0.77$). Similarly, Omar and Kent (2001) use a modified version of Rook and Fisher's (1995) BIS in their study of 252 airport users in UK and found it to be uni-dimensional and highly reliable ($\alpha = 0.89$). Similar results are reported by Youn and Faber (2000) based on their study with 135 undergraduate students at a large Midwestern university in the US ($\alpha = 0.89$). Dholakia (2000) also used the original nine-item BIS (Rook and Fisher 1995) and found it highly reliable ($\alpha = 0.89$) in both his studies, first with 101 undergraduate students and second with 218 web-surfers both in the US.

From the above discussion, it is seen that the empirical findings about the dimensionality of this construct have been quite mixed. First, most of the unidimensional conceptualizations of consumer impulsiveness were found to be reliable, it was not clear if these represented this complex psychological construct adequately. On the other hand, the more complex two and three-dimensional structures were not found consistent across different studies. Therefore, there is still little or no consensus on the exact structure or nature of this complex psychological construct.

2.2.7 Performance of Impulse Buying Trait Scales in Other Countries

In recent years, researchers have also begun using some of these scales in countries outside the US and Europe. Kacen and Lee (2002) used the nine-item BIS (Rook and Fisher 1995) in their preliminary study with 706 students in four countries, two individualistic (Australia and United States) and two collectivistic (Singapore and Malaysia). Although they observed high reliability ($\alpha = 0.79$ to 0.92) for this scale in the four countries in their sample, the factor structures across different countries were not consistent. Specifically, they found a single factor for their sample from the individualist countries (as reported in prior studies) but two factors for the collectivistic countries. Moreover, factor analysis across the four sub-groups led to the reduction of the original scale into a four-item sub-scale that was most consistent across the four countries.

Interestingly, when Kacen and Lee (2002) used Weun et al.'s (1998) five-item IBT scale in their main study, despite finding a single factor structure and reasonably high reliability ($\alpha = 0.68$ to 0.88) in each country sample, they had to modify even this scale by dropping one item, to achieve equivalence across cultures. Moreover, they found

the scale reliabilities to be significantly lower for the collectivistic countries compared to the individualistic countries. Based on these findings, these researchers highlight the possibility of this being another area in which scales developed in the United States may not be valid for use in other countries. They also suggest that buying impulsiveness trait may have a different meaning and hence, significantly different dimensions across different cultures.

On the other hand, Tuyet Mai et al. simply used a seven-item modified version (translated into Vietnamese) of Rook and Fisher's (1995) original nine-item buying impulsiveness scale and found it highly reliable ($\alpha = 0.86$) in their study with 358 Vietnamese consumers. Unlike Kacen and Lee (2002) these researchers did not even take measurement equivalence into account and simply assumed their scale to be a valid measure of buying impulsiveness trait in their Vietnamese participants. Hence, to the best of the knowledge neither the existing scales for buying or consumer impulsiveness have been properly validated in other cultures nor many efforts made to understand and conceptualize this trait in a more comprehensive manner in the extant literature.

2.2.8 Research Gaps and Motivation

From the above discussion, two important knowledge gaps emerge clearly. First, the mixed findings on factor structures of the impulse buying trait in various studies with consumers in the US and Europe suggest that impulse buying may not have the same meaning for different consumers within the same culture. In other words, the existing scales may not have captured the different aspects of this complex construct adequately or appropriately. This confusion may have been further aggravated by the different

nomenclature used by researchers so far for this construct such as buying impulsiveness, consumer impulsiveness, impulse buying trait and consumer buying impulsivity.

Second, the mixed findings on factor structures in studies using these scales outside US and Europe suggest that impulse buying may have a different meaning across different cultures as well. Hence, there is a clear need to understand the reasons behind these mixed findings and to develop a more robust scale to measure the impulse buying trait within and across different cultures with high reliability and validity. Next a conceptual framework is described that incorporates culture into the conceptualization and operationalization of this complex psychological construct.

2.3 CONCEPTUAL FRAMEWORK

2.3.1 Impulse Buying Trait and Culture

A review of Youn and Faber's (2002) and Kacen and Lee's (2002) empirical findings suggests a significant influence of culture on the impulse buying trait construct. First, Youn and Faber (2002) found the rapidity and reactivity factors of the hypothesized behavioral component not emerging as separate sub-factors and instead merged into the irresistible urge to buy factor of the affective component. This unexpected finding made them re-specify their model into two higher-order factors (cognitive and affective) and six lower order sub-factors. This is quite similar to Puri (1996) who developed a two component model for her US respondents as well - prudence (cognitive) and hedonism (affective). Youn and Faber (2002) explained this finding by suggesting that buying urge, by nature, accompanies the physiological aspect of the action-oriented or kinetic

characteristics and hence, its behavioral and affective elements could not be considered separately from each other.

However, it is argued that this may be due to cross-cultural differences in the meanings attached to a complex hedonic consumer behavior such as impulse buying (Kacen and Lee 2002; Tuyet Mai et al. 2003). Specifically, in line with the above researchers, it is suggested that consumers in collectivistic cultures such as in China are able to control their impulses and emotions because of their focus on their social goals whereas consumers in individualistic cultures like in the US are more likely to take impulsive decisions because they believe in their individual rights to define their goals and make their decisions independently. Therefore, the American respondents in Youn and Faber (2002) may not have discriminated between the behavioral and affective elements because of their individualistic values.

Kacen and Lee (2002) also had some unexpected findings in their research when they observed an extra factor for their sample drawn from collectivistic countries whereas a single factor was extracted for the individualist sample. In this research it is suggested that the respondents from collectivistic cultures in Kacen and Lee (2002) probably distinguished between the “involuntary loss of self-control” and “deliberate self-indulgence” aspects of impulse buying because they were more collectivistic and hence, more likely to be concerned about how their behavior may be perceived by others. For these respondents it seems as if – besides a common cognitive component – impulse buying has two more facets; one consisting of items which are within their control (extravagance, enjoyment and pleasure) and another with those which are not (impulsivity, carelessness and temptation).

On the other hand, for the individualists there was no such distinction and they seemed to club both these forms of behavior under a common hedonism component, as shown in Puri (1996) as well. This line of thinking is also reflected in recent research contrasting self-control with a precommitment to indulgence (Kivetz and Simonson 2002) and justification effects on consumer choice between hedonic and utilitarian goods (Okada 2005). These researchers also suggest that consumers sometimes exercise the opposite form of self-control, forcing themselves to indulge in an avoidance of default forms of spending on necessities and savings. Hence, it can be argued that some consumers may consider deliberate self-indulgence as distinctly different and normatively more negative compared to something like an involuntary loss of self-control, whereas others may not make this distinction.

2.3.2 Revisiting Consumer Impulsiveness

In this research, the term “Consumer Impulsiveness” (Puri 1996) is used to describe this trait rather than the terms used by other researchers such as buying impulsiveness (Rook and Fisher 1995), impulse buying tendency (Weun et al. 1998; Verplanken and Herabadi 2001) or consumer buying impulsivity (Youn and Faber 2002). This is because most of these other conceptualizations focus primarily on the behavioral (buying) aspect of impulse buying and not so much on its affective and cognitive aspects. On the other hand, consumer impulsiveness seems to capture the broadness of this construct and it may even be useful in exploring impulsive consumer behaviors in general and not just in the restricted context of impulse buying.

Moreover, in line with recent research in this area it is conceptualized to be a multi-dimensional construct with distinct cognitive, affective and behavioral elements. In the process, its two-dimensional conceptualization by Puri (1996) is extended and made more useful. Specifically, her prudence component (cognitive) is retained as such but the hedonism component is divided into self-indulgence (affective) and self-control (behavioral) to capture the subtle difference between these two aspects. It is then proposed that collectivistic consumers are able to distinguish between deliberate self-indulgence and involuntary loss of self-control but not the individualists. In other words, a three-factor structure is expected for the consumer impulsiveness trait (prudence, self-indulgence and self-control) for collectivists but a two-factor structure (prudence and hedonism) for individualists.

Next a series of preliminary studies are described followed by three main studies conducted to develop and test a modified scale to measure consumer impulsiveness. In the preliminary studies several existing consumer impulsiveness scales developed in the US were tested with samples of undergraduate students in a large Singapore university. Singapore was chosen because, despite being a consumerist society, it is classified as a collectivistic culture and used in several prior cross-cultural studies (Kacen and Lee 2002; O'Cass and Lim 2003). Next a pool of items were developed for a new scale and samples of undergraduate students in Singapore were used again in the next two studies to purify this initial pool of items, develop the new scale and assess its discriminant, convergent and nomological validity. Finally data collected from one more study conducted in both Singapore and the United States was used to validate the new scale using confirmatory analysis.

2.4 METHODOLOGY

2.4.1 PRELIMINARY STUDIES

In a series of studies with undergraduate students in a large Singapore university, several existing scales were tested including the buying impulsiveness scale (Rook and Fisher 1995), consumer impulsiveness scale (Puri 1996), impulse buying tendency scale (Weun et al. 1998), impulse buying tendency scale II (Verplanken and Herabadi 2001) and consumer buying impulsivity scale (Youn and Faber 2002). All the results are summarized in Table 4A-4E and discussed briefly in this section.

2.4.2 Performance of Existing Consumer Impulsiveness Scales in Singapore

First, Rook and Fisher's (1995) 9-item buying impulsiveness scale (BIS) was administered to 80 undergraduate students and exploratory factor analysis (EFA) was performed on the data with a Varimax rotation because a single factor was expected as hypothesized. However, using Kaiser Criterion (eigenvalues greater than one) two distinct factors were found, which accounted for 62.7% of the variance in data. The first factor consisted of the first five items and explained 50.4% variance and the second factor with the remaining four items explained 12.3%, as shown in Table 4A.

Interestingly, this is quite similar to Kacen and Lee's (2002) finding of two factors for the same scale with their sample from collectivistic countries which, incidentally, also included Singapore. The items that loaded on the first factor seemed to be a combination of affective (just do it) and behavioral (buying things impulsively)

aspects of the impulse buying trait whereas the second factor consisted to mostly cognitive elements (prior planning).

TABLE 4A
BUYING IMPULSIVENESS SCALE - BIS (N=80)

Scale Items	Factor Loadings	
	1	2
1. I often buy things impulsively	0.718	0.231
2. “Just do it” describes the way I buy things	0.683	0.289
3. I often buy things without thinking	0.316	0.722
4. “I see it, I buy it” describes me	0.597	0.312
5. “Buy now, think about it later” describes me	0.277	0.754
6. Sometimes I feel like buying things on the spur-of-the-moment	0.666	0.233
7. I buy things according to how I feel at the moment	0.691	0.176
8. I carefully plan most of my purchases *	0.219	0.805
9. Sometimes I am a bit reckless about what I buy	0.358	0.737
Variance explained (Overall = 62.7%)	50.4%	12.3%
Reliability - Cronbach’s α (Overall = 0.830)	0.885	0.722

All the nine items in this scale were expected to represent different aspects of buying impulsiveness trait and hence the two factors were expected to be correlated with each other. To test this Promax rotation was used next and again a similar factor structure was found with a high correlation among the two factors ($r = 0.477$). Finally, the reliability of the full scale and its two sub-scales was tested. All were found reasonably reliable with Cronbach’s α values of 0.880, 0.885 and 0.722 respectively. This provided some support to the hypothesized differences between the structure of this construct between collectivistic and individualistic cultures.

Next, a similar analysis was performed on Puri’s (1996) 12-item consumer impulsiveness scale (CIS) with a sample of 200 undergraduate students with a similar profile to the first sample but as part of a different study. Once again, an extra factor for the Singaporean sample was found compared to the two factors observed in prior studies

with US samples. Specifically, three factors were extracted contributing to 51.7% variance. The first factor corresponded with the prudence sub-scale reported by Puri (1996) except for item 7 (restrained) explaining 26.3% variance in the data, as shown in Table 4B. More interestingly, her hedonism sub-scale split into two distinct factors, one of which seemed to represent what may be referred to as self-indulgence (extravagant and enjoy spending) and the other lack of self-control (careless, easily tempted, impulsive).

TABLE 4B
CONSUMER IMPULSIVENESS SCALE - CIS (N=200)

Scale Items	Factor Loadings		
	1	2	3
1. Impulsive	-0.089	0.116	0.624
2. Careless	0.121	0.143	0.669
3. Self-controlled *	0.686	0.218	0.233
4. Extravagant	0.154	0.812	0.194
5. Farsighted *	0.549	-0.091	0.265
6. Responsible	0.740	0.246	0.132
7. Restrained *	0.338	0.522	0.045
8. Easily tempted	0.190	0.289	0.712
9. Rational *	0.751	0.211	0.169
10. Methodical *	0.608	0.185	0.211
11. Enjoy spending	0.234	0.793	0.344
12. A planner *	0.674	0.067	0.177
Variance explained (Overall = 51.7%)	26.3%	15.9%	9.5%
Reliability - Cronbach's α (Overall = 0.705)	0.757	0.726	0.591

Expecting a high correlation among the three factors, Promax rotation was used and a similar three-factor structure was found with a significant positive correlation ($r = 0.236$) between factors 2 (self-indulgence) and 3 (lack of self-control). A significant but small negative correlation was also found between factor 1 (prudence) and the other two factors ($r = -0.189$ and -0.085). Finally, the reliability of the full scale and its three sub-scales was tested and some mixed results were found. Specifically, the full scale and the

first sub-scale (prudence) appeared to be reasonably reliable ($\alpha = 0.705$ and 0.757) but the other two sub-scales turned out to be less reliable ($\alpha = 0.562$ and 0.518). However, it was found that item 7 loaded significantly on the first two factors and hence removing it from the second sub-scale led to a significant improvement in its reliability to 0.726 . These findings provide further evidence of the complex psychological structure of the impulse buying trait in a cross-cultural context.

Next Weun et al.'s (1998) 5-item impulse buying tendency scale (IBT) was used with a similar sample of 160 undergraduate students in yet another study and a single factor was extracted accounting for 68% variance in the data. Moreover, the scale also proved to be highly reliable ($\alpha = 0.770$), as shown in Table 4C. Hence, this scale seems better in psychometric terms but it does not cover all aspects of the consumer impulsiveness construct. In fact, all its five items seem to cover only the cognitive and not the affective or behavioral aspects of this complex psychological construct.

TABLE 4C
IMPULSE BUYING TENDENCY - IBT (N=160)

Scale Items	Factor Loadings
1. When I go shopping, I buy things that I had not intended to purchase	0.811
2. I am a person who makes unplanned purchases	0.725
3. When I see something that really interests me, I buy it without considering the consequences	0.743
4. It is fun to buy spontaneously	0.689
5. I avoid buying things that are not on my shopping list *	0.706
Variance explained	68.0%
Reliability - Cronbach's α	0.770

Next a similar analysis was performed on Verplanken and Herabadi's (2001) 20-item impulse buying tendency scale, referred to as IBT2 to avoid any confusion with

Weun et al.'s (1998) IBT scale using data from yet another sample of 100 undergraduate students. Using EFA three factors were extracted instead of the hypothesized two, explaining 57.2% variance in the data as shown in Table 4D. The first factor contained many items from the cognitive sub-scale in the original scale explaining 32.8% variance and the second factor had some of the affective sub-scale items (15.2%).

TABLE 4D
IMPULSE BUYING TENDENCY - IBT2 (N=100)

Scale Items	Factor Loadings		
	1	2	3
1. I usually think carefully before I buy anything *	0.814	0.202	0.231
2. I usually only buy things that I intended to buy *	0.803	0.345	0.277
3. If I buy something, I usually do that spontaneously	0.287	0.235	0.745
4. Most of my purchases are planned in advance *	0.788	0.185	0.303
5. I only buy things that I really need *	0.767	0.223	0.240
6. It is not my style to just buy things *	0.173	-0.144	0.677
7. I like to compare brands before I buy one *	0.322	0.229	0.583
8. Before I buy something I always carefully consider whether I need it *	0.734	0.238	0.328
9. I am used to buying things 'On-the-spot'	0.249	0.181	0.705
10. I often buy things without thinking	0.238	0.263	0.622
11. It is a struggle to leave nice things I see in a shop	-0.084	0.169	0.597
12. I sometimes can not suppress the feeling of wanting to buy something	-0.110	0.798	0.333
13. I sometimes feel guilty after having bought something	0.247	0.755	0.271
14. I'm not the kind of person who 'falls in love at first sight' with things I see in shops *	0.338	0.729	-0.078
15. I can become very excited if I see something I would like to buy	0.119	0.687	0.214
16. I always see something nice whenever I pass by shops	0.158	0.641	0.289
17. I find it difficult to pass up a bargain	0.269	0.317	0.568
18. If I see something new, I want to buy it	-0.125	0.683	0.239
19. I am a bit reckless in buying things	0.208	0.189	0.691
20. I sometimes buy things because I like buying things rather than because I need them	0.167	0.735	0.301
Variance explained (Overall = 57.2%)	32.8%	15.2%	9.2%
Reliability - Cronbach's α (Overall = 0.705)	0.775	0.694	0.591

The third factor contained a combination of the original cognitive (3, 6, 7, 9, 10) and affective (11, 17, 19) items. Many of these items seemed to represent a third behavioral dimension such as item 3 – If I buy something, I usually do that spontaneously and item 17 – I find it difficult to pass up a bargain. Therefore, this third factor was treated as a sub-scale and the reliability of the full scale along with these three sub-scales was tested. The first sub-scale was found to be reasonably reliable ($\alpha = 0.775$) but the others were only moderately reliable (0.688 for the full scale; 0.694 and 0.591 for the other two sub-scales). These findings provide further support to a three-dimensional conceptualization of the consumer impulsiveness construct for the Singaporean sample.

Finally, Youn and Faber's (2002) 24-item modified consumer buying impulsivity scale (CBI) was used with a sample of 200 undergraduate students similar to the previous studies and using EFA with Varimax rotation a six-factor structure was found. The six factors explained 69.7% variance in the data and each item loaded significantly (> 0.600) on the relevant factor as in the original scale. However most of the items had high cross-factor loadings (> 0.400) suggesting a high correlation among the factors. Hence using Promax rotation six factors were extracted which were highly correlated with each other ($r = 0.219$ to 0.500). Moreover, the full scale and all the sub-scales proved to be highly reliable ($\alpha = 0.808$ to 0.917), as shown in Table 4E. However, there was no support for the two higher-order factor structure suggested by Youn and Faber (2002) and all the six lower-order factors emerged as a single higher-order factor explaining 53% variance.

TABLE 4E
CONSUMER BUYING IMPULSIVITY SCALE - CBI (N=200)

Scale Items	1	2	3	4	5	6
1. When walking through stores, I can't help but buy an attractive item that catches my eye.	0.573	-0.046	0.264	0.296	0.073	0.287
2. I feel the desire to buy an item as quickly as possible, so as to terminate the pain of not buying.	0.741	0.132	0.098	0.112	0.148	0.162
3. I have difficulty getting control over my buying impulses.	0.680	0.430	0.078	0.069	0.189	0.182
4. The urge to buy something just comes over me all at once and I am overwhelmed.	0.751	0.314	0.158	0.052	0.330	0.097
5. I experience a helpless feeling when I see something attractive in a store.	0.832	0.194	0.033	0.119	0.133	0.029
6. Buying things on impulse gives me a sense of joy.	0.390	0.083	0.711	-0.019	0.111	0.186
7. When making impulse purchases, I find myself delighted, amused, and enthusiastic.	0.074	0.205	0.880	-0.065	0.049	0.161
8. I feel a sense of thrill when I buying something impulsively.	0.051	0.222	0.832	0.116	-0.018	0.074
9. I enjoy the sensation of buying products impulsively.	0.034	0.072	0.869	0.248	0.080	0.012
10. I buy a product to change my mood.	0.188	0.096	0.057	0.758	-0.023	0.253
11. Buying is a way of reducing the stress my daily life.	0.170	-0.112	0.049	0.725	0.025	0.280
12. I buy things on impulse when I am upset.	0.233	-0.281	0.285	0.605	0.334	0.007
13. Sometimes, I buy something in order to make myself feel better.	0.087	-0.013	-0.076	0.818	0.302	-0.030
14. When I'm feeling down, I go out and buy something impulsively.	-0.028	0.178	0.270	0.725	0.023	-0.138
15. I tend to think about alternatives a great deal before I buy things. *	0.009	0.808	-0.153	-0.062	0.076	-0.226
16. When I buy things, I am more	-0.140	0.779	-0.133	-0.050	-0.246	-0.049

likely to be slow and reflective than to be quick and careless. *						
17. I am a very cautious shopper. *	0.276	0.687	0.098	-0.021	0.248	0.066
18. When faced with a purchase decision, I usually take time to consider and weigh all aspects. *	-0.375	0.717	-0.102	-0.083	-0.047	-0.080
19. Even when I see something attractive, I usually think about the consequences before I buy it. *	0.166	0.584	0.154	-0.047	0.267	-0.085
20. When I go shopping, I buy things that I had not intended to purchase.	0.244	0.085	0.151	0.173	0.285	0.831
21. I am a person who makes unplanned purchases.	0.230	0.211	0.222	0.116	0.177	0.809
22. I buy things even though I can't afford them.	0.438	0.282	0.028	0.086	0.630	0.133
23. I tend to spend money as soon as I earn it.	0.091	0.257	0.024	0.136	0.721	0.308
24. I often buy a product that I don't need, while knowing that I have very little money left	0.351	0.240	0.107	0.109	0.741	0.139
Variance explained (Overall = 70.8%)	33.9%	11.0%	10.0%	6.6%	5.1%	4.2%
Reliability - Cronbach's α (Overall = 0.825)	0.799	0.917	0.808	0.841	0.873	0.814

From these preliminary studies it was further established that the scales developed with consumers in the US did not work so well when applied in Singapore. Moreover, a more complex three-dimensional structure for the impulse buying trait was consistently found for the Singaporean samples, similar to the findings of Kacen and Lee (2002) with their sample of collectivistic countries (including Singapore). Hence, it was decided to develop a more robust consumer impulsiveness scale which could capture its various facets across different cultures and measure these with consistency and reliability.

2.5 STUDY 1

2.5.1 Item Generation and Scale Development

As a first step, consumer behavior and psychology literature was reviewed thoroughly to generate an initial pool of items. Next, four independent judges (Three PhD students and one faculty member) were asked to review all the items and rate each item using a 3-point scale (1 = Not at all representative, 2 = somewhat representative and 3 = completely representative) on the extent to which it represented at least one of the dimensions of consumer impulsiveness as defined earlier, i.e. prudence, self-indulgence and self-control. The scores assigned by all the judges to each item were added to arrive at a sum-score. As recommended by Hardesty and Bearden (2004) only the items with a sum-score of at least 8 were retained i.e. which were considered at least somewhat representative on an average across all the four judges. Thus, using well-established practices in the scale development process as suggested in prior research the scale was refined to 18 items with six items on each dimension (Churchill 1979; Anderson and Gerbing 1988; Nunnally and Bernstein 1994). Next, three more studies were conducted to further refine these 18 items in order to develop and assess the psychometric properties of a new consumer impulsiveness scale.

2.5.2 Sample and Procedure

A sample of undergraduate students (N=200) at a major Singaporean university similar to earlier preliminary studies was used to assess the initial pool of 18 items. The sample consisted of 114 females (57%) and 86 males (43%), most of them between the

age of 21 and 25 (92%). Using a 7-point Likert-type response format (1 = strongly disagree, 7 = strongly agree) the 18-item scale was administered to this sample at the beginning of a fresh semester.

TABLE 5
MODIFIED CONSUMER IMPULSIVENESS SCALE

Items	Factor Loadings	Variance Explained	Reliability (α)	Mean (SD)
Prudence (Cognitive)				
1. I am a careful thinker	0.829	40%	0.802	3.54 (1.01)
2. I plan everything in advance	0.827			
3. I am a methodical person	0.770			
4. I am a cautious shopper	0.730			
Self-indulgence (Affective)				
5. I enjoy spending money	0.793	16%	0.757	3.27 (0.99)
6. I like to indulge myself	0.715			
7. I buy things for pleasure	0.696			
8. I like good things in life	0.647			
Self-control (Behavioral)				
9. I am often restless *	0.754	9%	0.793	3.81 (1.30)
10. I get bored easily *	0.732			
11. I find it difficult to concentrate *	0.684			
12. I say things without thinking *	0.629			
Overall		65%	0.822	3.59 (1.13)

* Reverse-coded items

2.5.3 Data Analysis

Exploratory Factor Analysis and item-total correlation were used to assess these items, omitting items with factor loadings below 0.40 and /or item-total correlations below 0.50 as recommended by Nunnally (1978), resulting in elimination of six items, two from each dimension of the original 18-item scale. The remaining 12 items loaded on three factors as expected, explaining 65% variance in the data (40%, 16% and 9%) with

four items loading significantly on each of four factors, named Prudence, Self-indulgence and Self-control. Next each of these sets of four items was considered as sub-scales and reliability tests were performed on these as well as the full 12-item scale. All the scales showed reasonably high reliability (Cronbach's $\alpha = 0.757$ to 0.822). Moreover, average scores were calculated on each sub-scale and these were found to be normally distributed with adequate variance. Table 5 shows a summary of results including the items under each factor, variance explained, factor loadings and reliabilities.

2.6 STUDY 2

The purpose of this study was to confirm the three-dimensional structure of the new consumer impulsiveness scale and also to establish its discriminant, convergent and nomological validity. Therefore, in addition to the new scale several other relevant scales were administered including the Personal Uncertainty Scale (Clampitt et al. 2000), Self-monitoring: "Ability to modify self-presentation" sub-scale (Lennox and Wolfe 1984) and Change Seeking Index: CSI - Short form (Steenkamp and Baumgartner 1995), as shown in Table 6A. All the scales were administered with a seven-point likert-type response format in a single, counterbalanced questionnaire to avoid any order bias. For discriminant and convergent validity, the items pertaining to each of these scales and the three expected components of impulse buying trait were expected to load significantly on separate components (> 0.60), with no large cross-factor loadings (> 0.40).

In addition to this, the average scores on these constructs were expected to be correlated with each other in a pre-specified manner based on prior research. Specifically, consumer impulsiveness was expected to be positively correlated with change-seeking

and negatively with self-monitoring (Sharma and Sivakumaran 2004). Similarly, it has been shown people have different levels of tolerance for uncertainty and those with higher level of tolerance for uncertainty generally find it energizing, exciting and stimulating (Clampitt et al. 2000). Therefore, personal uncertainty was expected to be positively associated with consumer impulsiveness. A similar pattern of correlations was expected for the self-indulgence component of consumer impulsiveness (i.e. positive) and exactly opposite for prudence and self-control (i.e. negative).

TABLE 6A

TRAIT SCALES – STUDY 2

Personal Uncertainty Scale (Clampitt et al. 2000)

1. I'm comfortable making a decision on my gut instincts
2. I'm comfortable using my own intuition to make a decision
3. I'm willing to make a decision based on a hunch
4. I'm comfortable deciding on the spur-of-the-moment
5. When I start a project, I need to know exactly where I'll end up *
6. I need a definite sense of direction for a project *
7. I don't need a detailed plan when working on a project
8. I need to know the specific outcome before starting a task *
9. I actively try to look at situations from different perspectives
10. I'm always on the lookout for new ideas to address problems
11. I actively look for signs that the situation is changing

Self-monitoring (Lennox and Wolfe, 1984)

1. In social situations, I have the ability to alter my behavior if I feel that something else is called for
2. I have the ability to control the way I come across to people, depending on the impression I wish to give them
3. When I feel that the image I am portraying isn't working, I can readily change it to something that does
4. I have trouble changing my behavior to suit different people and different situations *
5. I have found that I can adjust my behavior to meet the requirements of any situations I find myself in
6. Even when it might be to my advantage, I have difficulty putting up a good front *
7. Once I know what the situation calls for, it's easy for me to regulate my actions accordingly

Contd...

Change Seeking Index (Steenkamp and Baumgartner 1995)

1. I like to continue doing the same old things rather than trying new and different things *
 2. I like to experience novelty and change in daily routine
 3. I like a job that offers change, variety and travel, even if it involves some danger
 4. I am continually seeking new ideas and experiences
 5. I like continually changing activities
 6. When things get boring, I like to find some new and unfamiliar experience
 7. I prefer a routine way of life to an unpredictable one, full of change *
-

*** Reverse-coded items**

2.6.1 Sample and Procedure

All the trait scales were administered to 300 undergraduate business students at a major university in Singapore in a single session at the beginning of a new semester as a part of the registration process for participating in some studies later in the semester. The actual purpose of this survey and objectives of various studies were not revealed at this stage to minimize any demand characteristics. This sample was similar in age and gender composition to the sample in the earlier studies.

2.6.2 Data Analysis and Results

First a confirmatory factor analysis was performed with maximum likelihood estimation procedure using LISREL 8.54 (Jöreskog and Sörbom 2003). To examine the dimensionality of the new scale, three alternative measurement models were established with one-, two- and three-factors. As expected, the three-factor model provided a superior fit, as shown in Table 6B.

TABLE 6B
MEASUREMENT MODELS – SINGAPOREAN SAMPLE (N=300)

Factors	Chi-sq	d.f.	SRMR	GFI	AGFI	NFI
One	380.59	54	0.151	0.67	0.53	0.65
Two	131.20	53	0.105	0.78	0.68	0.83
Three	73.39	51	0.043	0.88	0.80	0.97

2.6.3 Convergent and Discriminant Validity

As seen from Table 6, χ^2 fit index of the one- and two-factor models was significantly lower than that of three-factor model. This was also supported by the other fit indices such as standardized root mean square residual (SRMR = 0.043), goodness fit of index (GFI = 0.88), adjusted goodness of fit index (AGFI = 0.80) and normed fit index (NFI = 0.97). All the t-values were quite high with the smallest one being 8.95, showing the high significance of the factor loadings. The composite reliability estimates were also very high, ranging from 0.77 to 0.88 for the three sub-scales and the average variance extracted for each dimension was greater than the squared correlation between the dimension and any other dimension and 0.50, which indicates the independence of the dimensions, thus providing evidence of convergent validity (Fornell and Larker 1981). Hence, prudence, self-indulgence and self-control make three reliable and valid dimensions of consumer impulsiveness for the Singa Tween sample.

Next, Confirmatory Factor Analysis was performed on all the four scales used in the study to assess the construct validity of the new scale. As expected, a six-factor structure was found with all the items loaded highly (> 0.60) on their original scale as expected, with no major cross-factor loadings (> 0.40). All the t-values were very high

with the smallest value being 8.65, suggesting high significance of all the factor loadings. The composite reliability estimates were also very high ranging from 0.77 to 0.92 for all the scales including the three sub-scales of consumer impulsiveness. Moreover, none of the confidence interval of the correlation coefficients for each pair of scales (phi estimates) included 1.00. These findings provide adequate support for the convergent as well as discriminant validity of the new scale (Anderson and Gerbing 1988; Steenkamp and Van Trijp 1991).

2.6.4 Nomological Validity

Finally, the nomological validity of the new scale was assessed by examining the phi estimates and examining whether the scores on the new consumer impulsiveness scale and its three sub-scales behaved as expected in relation to the other measured constructs. As shown in Table 7, the pattern of all these correlations was exactly as expected. Consumer impulsiveness was found positively associated with change-seeking ($r = 0.20$, $p < 0.05$) and personal uncertainty ($r = 0.26$, $p < 0.01$) but negatively with self-monitoring ($r = -0.25$, $p < 0.01$). Interestingly, each of the three components of consumer impulsiveness were highly correlated with the overall consumer impulsiveness score ($r = 0.66$ to 0.78 , $p < 0.001$) but only moderately correlated with each other ($r = 0.29$ to 0.39 , $p < 0.01$). This further supports the primary premise in this research that consumer impulsiveness is a complex construct and it has three correlated but independent dimensions, which represent its different aspects for the Singaporean sample.

Finally, overall consumer impulsiveness and one of its three components, self-indulgence, were found to be positively correlated with change-seeking ($r = 0.20$ and

0.26, $p < 0.05$) and personal uncertainty ($r = 0.26$ and 0.38 , $p < 0.01$). The other two components (Self-control and Prudence) were both negatively correlated with Change-seeking ($r = -0.27$ and -0.10 , $p < 0.05$) and Personal Uncertainty ($r = -0.19$ and -0.26 , $p < 0.05$). Self-monitoring was found positively correlated with Self-control ($r = 0.37$, $p < 0.01$) and not significantly with Self-indulgence ($r = 0.01$, ns). The results from this study helped in the assessment of the psychometric properties of the modified consumer impulsiveness scale with the Singaporean sample.

TABLE 7
CORRELATION MATRIX (NOMOLOGICAL VALIDITY)

Consumer Trait	1	2	3	4	5	6	7
1. Consumer Impulsiveness	1.00						
2. Self-Control	-.71**	1.00					
3. Self-indulgence	.66**	-.29**	1.00				
4. Prudence	-.78**	.39**	-.38**	1.00			
5. Change-seeking	.20*	-.27**	.26**	-.10*	1.00		
6. Self-monitoring	-.25**	.37**	.01	-.25**	.29**	1.00	
7. Personal Uncertainty	.26**	-.19*	.38**	-.26**	.49**	.23**	1.00

** $p < 0.01$, * $p < 0.05$

2.7 STUDY 3

The purpose of this study was to test if a two-dimensional structure would be found with a sample from the US using the new scale, hence replicating the work by prior researchers and demonstrating the fundamental cross-cultural difference in the consumer impulsiveness construct; also, the findings in Study 2 were sought to be replicated with another sample. Therefore, in addition to Singapore it was decided to collect data from a similar undergraduate student population at a large Midwestern university in the US.

2.7.1 Sample and Procedure

320 undergraduate student respondents were surveyed, 160 each in Singapore and Chicago Metropolitan area (USA) with a similar age and gender profile as the previous two studies. Once again a trait questionnaire including consumer impulsiveness was administered in a separate session at the beginning of a semester. In this study, the influence of culture on impulse buying trait was to be explored and therefore, a modified 16-item version of the individualism/ collectivism scale from Lee and Brislin (1998) was also included with a seven-point likert-type response format. This scale has been used by several researchers to successfully operationalize cultural differences at an individual level (Kacen and Lee 2002; Tuyet Mai et al. 2003). The various scale items are shown in Table 8.

2.7.2 Data Analysis and Results

Confirmatory factor analysis was performed on the data with maximum likelihood estimation procedure using LISREL 8.54 and three-factor measurement model was found to be a better fit for the Singaporean sample whereas the two-factor model provided a better fit for the US sample. The three-factor model contained four items for each of the three hypothesized factors in the new consumer impulsiveness scale whereas the two-factor model consisted of a prudence factor with four items and a hedonism item with eight items. Some of the fit indices are shown in Table 9. The differences in χ^2 values for the three models for both the samples were also tested and found significant.

Next, the hypotheses about a similar pattern of factor structures among individualists (2 Factors) and collectivists (3 Factors) was also tested. For this the data

from both the samples were pooled and divided into individualists (N=171) and collectivists (N=149) based on their scores on the individualism/collectivism sub-scales (Lee and Brislin 1998). Specifically, the average score on the individualism sub-scale was significantly higher for individualists compared to collectivists (M=5.13 vs. 3.67, $p < 0.001$) and the average score on the collectivism sub-scale was significantly higher for collectivists compared to individualists (M=4.97 vs. 3.74, $p < 0.001$).

TABLE 8

INDIVIDUALISM/COLLECTIVISM SCALE – (TUYET MAI ET AL. 1998)

Individualism Items
1. When I am not happy with my family, I stay away from them
2. When members of a family are not happy with one another, they should stay away from each other
3. I stick to my own point of view even if my group members may not agree with me
4. It is alright for a group member to stick to his/her point of view even if the others may not agree with it
5. I do not rely on my family members for any help
6. Members of a family should not have to rely on others for help
7. I pursue goals that are important to my own personal achievement, independent of the goals that my family may have
8. Members of a family should pursue goals that are important to their own personal achievement, regardless of family goals
Collectivism Items
9. I will stick with my family if they need me even when I am not happy with them
10. Members of a family should stick together, even when they are not happy with each other
11. I behave in a manner that my family expects me to, even though I may not agree with their expectations
12. Members of a family should behave in a manner that their family expects them to, even though they may not agree with those expectations
13. I strive to make an important contribution to my group
14. Members of a group should try to make an important contribution to their group
15. I pursue goals that are important to my group, even if these are not consistent with my own personal goals
16. Members of a group should pursue goals that are important to their group, even if these are not consistent with their own personal goals

TABLE 9
MEASUREMENT MODELS – SINGAPORE AND US SAMPLES

Factors	Chi-sq	d.f.	SRMR	GFI	AGFI	NFI
Singaporean Sample (N=160)						
One	387.89	135	0.081	0.80	0.70	0.61
Two	131.20	134	0.070	0.83	0.75	0.67
Three	81.23	132	0.043	0.88	0.80	0.95
US Sample (N=160)						
One	391.29	135	0.073	0.75	0.71	0.57
Two	86.34	134	0.025	0.89	0.78	0.96
Three	189.27	132	0.042	0.81	0.74	0.71

TABLE 10
MEASUREMENT MODELS – COLLECTIVISTS AND INDIVIDUALISTS

Factors	Chi-sq	d.f.	SRMR	GFI	AGFI	NFI
Collectivists (N = 149)						
One	326.19	135	0.079	0.77	0.71	0.61
Two	145.23	134	0.062	0.81	0.76	0.71
Three	69.71	132	0.034	0.87	0.81	0.96
Individualists (N=171)						
One	307.94	135	0.077	0.72	0.72	0.59
Two	78.12	134	0.035	0.91	0.79	0.94
Three	138.73	132	0.059	0.83	0.75	0.73

Confirmatory factor analysis using LISREL 8.54 was performed again and as expected the three-factor measurement model was found to be a better fit for the collectivists and the two-factor model for the individualists. All the fit indices and the χ^2

differences were also found to be significant for these models as shown in Table 10 for the two samples. Therefore, significant differences were found in the factor structures of consumer impulsiveness trait under both the situations, as expected.

2.7.3 Convergent and Discriminant Validity

Anderson and Gerbing's (1988) approach was used to test the convergent and discriminant validity of the new scale with both the samples. Convergent validity was demonstrated by significant values of each indicator's loadings on its hypothesized factor (greater than twice its standard error). Similarly, discriminant validity for the three factors was demonstrated by constraining the estimated correlation parameter among them to 1.0 and then performing a chi-square difference test on the values obtained in the constrained and unconstrained models. The χ^2 value for the unconstrained model was found to be significantly lower than the constrained model, suggesting that the different factors were not perfectly correlated.

2.7.4 Predictive Validity

The predictive validity of the new scale was tested by running several experiments later in the semester with the same group of students. This was done to minimize the effect of demand characteristics on their behavior. Several purchase scenarios were used and a consistent pattern of correlations between the average scores on the overall consumer impulsiveness scale and its various sub-scales with level of impulsiveness in purchase decisions and behavioral intentions was found. As expected, across all the samples scores for consumer impulsiveness and self-indulgence were found

positively correlated with impulse buying behavior, whereas self-control and prudence were found negatively correlated with impulse buying.

2.7.5 Nomological Validity

Finally, the nomological validity of the new scale was assessed by examining the phi estimates and examining whether the scores on the new consumer impulsiveness scale and its three sub-scales behaved as expected in relation to the other measured constructs. Once again, the pattern of all these correlations was exactly as expected. Consumer impulsiveness was found positively associated with change-seeking and personal uncertainty but negatively with self-monitoring. All the three components of consumer impulsiveness were highly correlated with the overall consumer impulsiveness score but only moderately correlated with each other. Finally, self-indulgence was found to be positively correlated with change-seeking and personal uncertainty whereas, namely self-control and prudence, were both negatively correlated with change-seeking and personal uncertainty. Self-monitoring was found positively correlated with self-control and not with self-indulgence.

2.8 DISCUSSION AND CONTRIBUTION

This research makes a significant contribution by addressing many important gaps in study of impulsive behaviors in general and impulse buying in particular. It represents one of the first efforts to acknowledge and explore the cross-cultural differences in the consumer trait associated with impulse buying behavior. Using a series of studies among Singaporean and US respondents it was demonstrated that the consumer impulsiveness

trait does indeed have a different meaning for these two sets of respondents. Consumers from collectivistic cultures are able to differentiate between the deliberate and involuntary aspects of their impulsive behavior and tendencies. On the other hand, consumers from individualistic societies are unable or unwilling to make this distinction and for them both these elements are merged under a single hedonistic dimension.

These findings may help explain many unexpected findings and missing links in the existing research on cultural differences in impulse buying (Kacen and Lee 2002; Tuyet Mai et al. 2003), such as problems in using scales developed in the US with respondents in other countries in order to define and measure the consumer impulsiveness construct appropriately and adequately. Culture is shown to influence several other important aspects of consumer behavior such as complaint behavior (Liu and McClure 2001), materialism (Ger and Belk 1996), country-of-origin (Gurhan-Canli and Maheswaran 2000) and consumer ethnocentrism (Durvasula et al. 1997). This research extends the knowledge in this fast-growing area of cross-cultural consumer research by showing that culture does have an effect on the meaning of impulsive behaviors (e.g. impulse buying) and attracts further attention from consumer researchers especially in countries and cultures outside the United States.

Moreover, it was shown that these results are also applicable at a personal level, i.e. consumers with a more collectivistic self-concept are able to distinguish between their deliberate self-indulgence and involuntary loss of self-control whereas it does not seem to matter for the individualistic consumers. Hence, a theory-based explanation was provided for the different meanings assigned to impulsive behaviors (e.g. impulse buying) by consumers within the same culture. In other words, the cultural orientation of an

individual is shown to influence the psychological structure underlying their impulsive trait. Hence, the conceptualization may also explain why the American respondents in Youn and Faber (2002) did not distinguish between the affective and behavioral aspects of their impulsive tendencies and behavior.

Another long-standing gap in literature is addressed in this research, which is the absence of a robust and comprehensive scale to measure consumer impulsiveness trait. A thorough review and assessment of all the existing scales in this area revealed many areas for improvement such as unclear dimensionality and factor structures, and lack of measurement equivalence across different cultures. Hence, a new 12-item three-dimensional scale was developed to measure the different aspects of the consumer impulsiveness trait and it was tested among the Singaporean and US respondents.

Although the new scale draws heavily on the considerable efforts made by prior researchers, it also extends the current literature in this area in many ways. First, in a somewhat unique manner this scale shows a three-dimensional structure for collectivistic consumers and a two-dimensional structure for individualistic consumers. Hence, it significantly improves Puri's (1996) two-dimensional consumer impulsiveness scale by including the third-dimension (behavioral) observed by her empirically but not addressed adequately in her scale development efforts. Specifically, it is shown that collectivistic consumers draw a distinction between deliberate self-indulgence and involuntary loss of self-control, the two aspects of their hedonistic behavior whereas there is no such distinction for the individualistic consumers. This makes it easy to use this scale across these two different types of consumers without any problem of measurement equivalence.

Second, despite its more complex three-dimensional structure similar to Youn and Faber' (2002) consumer buying impulsivity scale, the new scale with only 12 items is relatively simpler compared to their 24-item scale with two higher- and six lower-order components. This should make it easy to validate with different samples in various types of studies into hedonistic or impulsive consumer behaviors. Hopefully, this research will pave the way towards consensus on the definition and operationalization of this complex construct across different cultures in future research and benefit the academic researchers as well as marketing practitioners in different countries and cultures outside the US.

2.9 LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

Kacen and Lee (2002) put it very aptly when they said “Our research uncovers another area where scales developed in the United States are not valid for use in other countries, highlighting the difficulty in cross-cultural research. The results indicate that there may in fact be more than one dimension to the buying impulsiveness trait. Moreover, the use of sub-scales could be problematic in capturing all the aspects of the impulsiveness trait. Hence, further research needs to be conducted to provide nomological validity of the trait impulsiveness sub-scales.”

This research is just one step in this direction. Hopefully, other researchers especially in countries outside the US will include the modified consumer impulsiveness scale in their studies and assess its suitability and validity in their cultures. It would be useful to test the scale with samples from different types of consumer populations using different research methodologies to test its generalizability. Researchers may also use different relevant constructs in their studies beyond the ones used in this research, along

with the scale to further examine its convergent, discriminant and nomological validity. Moreover, future researchers could improve upon the scale by broadening the conceptual scope of the impulse buying trait and adding its other possible aspects. One such aspect could be change-seeking or venturesomeness which is shown to be closely related to trait impulsivity on one hand and exploratory consumer behavior on the other (Baumgartner and Steenkamp 1996; Zuckerman 2000). In fact, consumer impulsiveness and its self-indulgence component were positively correlated with change-seeking even in this research, suggesting a strong association between these tendencies. This may well be another area worth exploring in future research.

CHAPTER 3 – IMPULSE BUYING IN SERVICES

3.1 INTRODUCTION

Impulse buying is a prevalent phenomenon in marketing and has been studied extensively by consumer behavior researchers but mostly in the context of product purchases, and that too mostly in conventional retail formats like shopping malls, airport shops or super-markets (Rook and Fisher 1995; Omar and Kent 2001). Therefore, there is almost no research into the impulse buying phenomenon in the buying or consumption of services (for exception, see Agrawal and Schmidt 2003). On the other hand, most consumers today spend more time and money buying and consuming services compared to shopping for products and according to DDB Needham Annual Lifestyle Survey (1974-1993), 38% of American Adults claim to be “Impulsive Buyers” and most people (~ 90%) buy on impulse occasionally (Welles 1986).

Moreover, most developed economies (led by the United States) are dominated by services today and not by manufactured goods, with the service sector comprises almost 80% of the US national and global economies with about 75% of employed Americans (more than 90 million people) working in the services sector (Guttek 1999). A wide variety of services touches every aspect of a modern consumer’s life and ranges from traditional services such as entertainment, health care, banking, insurance, real estate, travel and restaurants to more high-tech offerings such as mobile telephony and Internet. In this context, it is difficult to imagine why the same consumers who act impulsively when buying products would not behave similarly when buying services.

Therefore, it would be important to explore the relevance and incidence of impulse buying in the context of services. More specifically, a meaningful contribution can be made to the impulse buying as well as services marketing areas, by trying to find answers to the following questions:

1. Do consumers buy services impulsively? If yes, then what kinds of services are bought impulsively? Can all services be bought impulsively under different situations like in the case of products?
2. Are there any individual differences among consumers in impulse buying of services? Do traits impulsivity, sensation seeking and risk-taking influence this?
3. What trait or situational variables may moderate this influence? Does self-monitoring play this role like in case of product purchases?

In this essay, an attempt is made to address some of these questions by first developing a conceptual framework for impulse buying in the services context. Next several hypotheses are put forth that are then tested empirically in two studies, one with retail shoppers and another with undergraduate student participants. This is followed by a description of the methodology and data analysis, the various contributions of this line of research and finally its limitations and some directions for future research.

3.2 LITERATURE REVIEW

3.2.1 Impulse Buying and Services

Impulse buying is defined as a sudden, compelling, and hedonically complex purchase behavior in which the rapidity of the purchase decision process precludes

thoughtful, deliberate consideration of all information and choice alternatives, and it accounts for almost 40% of all department store purchases in the US and as high as 80% of all purchases in certain product categories such as candies and magazines (Rook and Fisher 1995; Beatty and Ferrell 1998; Omar and Kent 2001; Kacen and Lee 2002). As mentioned earlier, service sector comprises almost 80% of the US national and global economies with about 75% of employed Americans (more than 90 million people) working in the services sector (Guttek 1999). Therefore, it can be seen that both these fields are quite important in their own rights and this is quite evident from the interest shown by academic researchers as well as marketing practitioners.

However, despite this individual importance of these fields of research and an apparent association with each other, there is almost no research into the impulse buying phenomenon in the buying or consumption of services. Traditionally, services have been associated with smaller choice sets compared to goods and hence it has been argued that exploratory behavior such as brand switching is less likely in services compared to goods (Brand and Cronin 1997). Moreover, prior research has shown that services are likely to be associated with higher perceived risk and variability compared to products (Murray and Schlacter 1990). All this points towards a relatively lower likelihood of impulse buying in services compared to products. Therefore, past researchers in the services field may have considered this to be too insignificant a phenomenon to merit their attention.

However, notwithstanding this lack of theoretical or empirical exploration of impulse buying in the services context, reports in popular press suggest the importance of this phenomenon. For example, Roper Starch Worldwide showed that 51% of Americans made the decision to eat outside home at the last minute (Waldrop 1994). In this study it

was shown that, young (64%) adults from low-income households (65%) were likely to decide impulsively to eat outside home, especially when eating at Fast Food restaurants (75%). Based on this line of thinking a preliminary exploratory survey was conducted among university students, which revealed the following interesting behavioral patterns:

1. Consumers' buying of services is often hedonically motivated such as, going to a fancy hair-salon rather than the usual \$10 barber-shop or picking a luxury cruise instead of the usual holiday-resort.
2. In many situations, this may also be due to limited availability of useful information resulting in greater reliance on hedonic heuristic cues and hence, more chances of buying impulsively, for example ordering an unknown dish in a restaurant just because it has a fancy name and is expensive.
3. Many consumers act impulsively in their day-to-day routine purchase of services, for example take a taxi instead of bus or eat in a restaurant instead of the usual college canteen. Interestingly, this impulsive behavior is sometimes in the reverse direction also such that they may take a bus instead of a taxi and eat at canteen instead of a restaurant.

Conventionally, services were differentiated from goods in terms of characteristics such as perishability, inseparability, storability and transportability. However, recent developments in the technical, economic and scientific domains have undermined many of these differences. As a result, the only significant difference between goods and services appears to be that goods are entities that can exist independently of their producers and consumers while services can not (Gadrey 2000). In fact, the "molecular" model of goods and services puts both on the same continuum

suggesting that a market entity can be partly tangible and partly intangible, without diminishing the importance of either characteristic (Shostack 1977).

Researchers have also argued that psychological processes underlying consumer behaviors in several contexts may be quite similar, for example consumers associate brands in both products and services categories with certain social classes (Grønhaug and Trapp 1989). However, from the firm's perspective, it has been shown that the association between changes in customer satisfaction and productivity is positive for goods but negative for services. In addition, while both customer satisfaction and productivity are positively associated with profitability for goods as well as services, their interaction is highly positive for goods but significantly less for services (Anderson et al. 1997).

Therefore, despite some similarities it would be naive to treat goods and services in the same manner. There is an extensive body of knowledge in the area of services marketing that highlights many differences between them. Consumers are shown to seek information and rely more on information from personal sources for pre-purchase evaluation of services compared to products (Zeithaml 1991). Similarly, consumers engage in more post-purchase than pre-purchase evaluation, have a smaller evoked set and are likely to switch brands less frequently for services compared to products (Friedman and Smith 1993). Consumers are also twice as likely to rely on informal sources for purchase of services (85%) compared to products (40%) because of a greater need for customization with services (Williams and Windebank 2001).

3.3 CONCEPTUAL FRAMEWORK

3.3.1 Tangible vs. Intangible Attributes

A service has been defined as a "deed, act or performance" and a critical component of this definition is whether this act is tangible or intangible in nature (Lovelock 1983). Services involving tangible actions may be directed at the consumers themselves such as restaurants and personal care or directed at other entities such as laundry and car repair. However, all these generally involve highly visible and recognizable facilities and attributes such as a doctor's waiting room, a nurse's white dress and the food in restaurants. On the other hand, services with intangible actions such as education, entertainment and financial services may not involve such features. In fact, most of these services have become even more intangible and impersonal with the advent of new technologies such as Internet and E-Commerce.

Impulse buying is a spontaneous and unreflective response to hedonic stimuli in a purchase situation and is a result of the inability of the consumer to effectively resist the buying impulse (Rook 1987; Dholakia 2000). Therefore, a service with attractive tangible attributes is likely to appeal more to the hedonic senses of an impulsive consumer compared to a relatively more abstract service involving intangible attributes. Hence, impulse buying is more likely in services with tangible versus intangible attributes.

H1: Impulse buying is more likely in services with high tangible versus intangible attributes.

3.3.2 Search, Experience and Credence Services

Services have been broadly classified as search, experience and credence services, based on the pre and post-purchase evaluation of their attributes and it has been argued that the amount of pre-purchase knowledge available to the consumer is lower for credence and experience services compared to search services (Mitra et al. 1999). For example, a checking account is a search service because consumers would be aware of and can evaluate the attributes of a checking account such as costs, ease of use, interest rates and overdraft fees before opening the account. On the other hand, it is difficult to evaluate a haircut or a cruise before actually undergoing these services and hence, these can be evaluated only after these services have been performed or experienced by the consumer, hence these are called experience services. Finally, for consumers of credence services like psychotherapy and investment banking it is not only difficult to evaluate these services before consumption but even after undergoing these.

Therefore, the amount of pre-purchase knowledge available to the consumer appears to be the lowest for credence services, moderate for experience and highest for search services. As a result, the perceived risk increases along a continuum from search to experience to credence services. As argued earlier, consumers are more likely to resist their urges to buy impulsively in services with a higher perceived risk whereas they are likely to buy impulsively when the perceived risk associated with the service is low.

Hence, the following hypothesis:

H2: Impulse buying is more likely in search followed by experience and credence services respectively.

3.3.3 Influence of Trait Impulsivity

In psychology literature, trait impulsivity, a dimension of personality, is defined as the failure to resist an impulse, drive or temptation that may be harmful to oneself and/or others. It is conceptualized as a measurable feature of behavior, manifesting as impatience, carelessness, risk-taking, sensation and pleasure-seeking, extroversion and an underestimated sense of harm (Hollander et al. 2001). Impulsivity is a core symptom of a broad spectrum of psychiatric disorders including impulse control disorders such as impulse buying, pathological gambling, kleptomania, bulimia and compulsive shopping. All these impulse-control disorders are related to risk-taking or avoidance behaviors, with impulsive disorders being driven by pleasure or arousal, and compulsive disorders by reduction of anxiety.

Highly impulsive consumers are more impatient and careless compared to those who are low on impulsivity trait. Therefore, they are more likely to have a weaker impulse resistance mechanism and they may give in to their impulsive urges more often and more easily compared to low impulsive consumers. In other words, trait impulsivity may moderate the influence of service type on the level of impulsiveness in behavioral intentions (Shiv and Fedorikhin 1999). Hence, the following hypothesis:

H3: High Impulsivity is associated with greater level of impulsiveness in purchase decision in each service category.

3.3.4 Influence of Trait Self-monitoring

Self-monitoring is defined as the tendency to modify or adapt one's behavior in response to others' presence or behavior (Snyder 1987). Prior researchers have

demonstrated that self-monitoring is one of the important variables that moderate the relative influence of traits and/or situations (Snyder 1987; Bearden et al. 1989). High self-monitors are willing to adapt their behavior to enact clearly defined roles appropriate to different situations, low self-monitors are less willing to put on a show to please those around them, preferring instead to be true to their own attitudes and values across different situations (Snyder and Gangestad 1982; Snyder 1987).

These different orientations lead low and high self-monitors to show different behaviors in various consumer behavior contexts. For example, high self-monitors have been shown to seek more variety in public to depict themselves as more interesting and creative people (Ratner and Kahn 2002). However, other researchers have found high self-monitors to have a greater desire to appear rational when they feel that their decisions may come under scrutiny by others because they may consider themselves as more accountable for their decision under such circumstances (Lerner and Tetlock 1999).

As described earlier, impulse buying is commonly perceived as being normatively incorrect and is often associated with post-purchase negative affect, guilt and unfavorable evaluation of purchase decision (Rook 1987; Dittmar and Drury 2000; Hausman 2000; Trocchia and Janda 2002). Therefore, high self-monitors may be more motivated to control their impulses due to their desire to appear rational and prudent. Moreover, prior research has also shown that impulse buying plays a psychological role for consumers' self-concepts, including self-presentation and attempts to compensate for self-discrepancies which can be manifest in an ongoing concern with self-image or public self-image only (Dittmar and Drury 2000).

In other words, consumers who are highly concerned about their self-image are less likely to give in to their impulses and therefore they may be able to develop effective impulse resistance strategies over a period of time (Dholakia 2000). Therefore, it appears that at a behavioral level, self-monitoring may be influenced by several situational factors such as private vs. public buying context. Among low self-monitors consumer traits influence behavior whereas among high self-monitors situational factors are more likely to be associated with behavior (Becherer and Richard 1978; Ratner and Kahn 2002).

This may be even more pertinent in the case of impulse buying because of its negative normative associations (Rook 1987), wherein it is shown that high self-monitors may exercise greater control on their impulsive urges resulting in less impulse buying, compared to low self-monitors. The normative implications of impulse buying decisions is likely to be similar for both products and services, hence a similar effect is expected under different service encounter situations. In other words, level of self-monitoring of a consumer may interact with the service type and influence its relationship with the level of impulsiveness in the consumer's behavioral intention.

H4: High self-monitoring is associated with less impulse buying in each service category.

3.4 STUDY ONE

3.4.1 Sample and Procedure

352 consumers were recruited using mall-intercept approach, to participate in this study. The sample consisted of 166 males (47%) and 186 females (53%). There were 172

(49%) subjects below 24 years old, 120 (34%) between 25 and 40 years and the rest 60 (17%) above 40 years old. 208 (59%) subjects were married while the remaining 144 (41%) were single. Finally, there were 183 (52%) with income less than \$1500 per month, 113 (32%) between 1500 and 3000 and the rest 56 (16%) above \$3000 per month. There were no significant differences in any independent or dependent variables based on gender, age, income or marital status. Hence, all the results are reported in aggregate.

A booklet was prepared to administer the questionnaires to all the subjects. On the first page, scales for traits impulsivity and self-monitoring were included. This was followed by a list of 50 (fifty) different services and subjects were asked to rate the likelihood of their buying these services impulsively on a 5-point likert-type scale from strongly disagree - 1 to strongly agree – 5. Finally, data on their gender, age and household income was collected for use as covariates in data analysis. All the fifty services were short-listed in an earlier pilot study with similar subjects, based on relevance and comprehension for this target group, out of a list of 80 such services compiled through extensive literature review.

All the services were classified by the respondents in the pilot study as high tangible versus high intangible and among the search, experience and credence categories. Only those services were retained where the respondents' categorization matched with the original category for that service reported in prior literature. A few examples of different types of services included are as follows:

1. Search services: Open a bank account, making a hotel reservation, booking an airline ticket, signing up for a telecom/mobile service, booking an express delivery package

2. Experience services: Visiting a restaurant, getting a haircut, watching a movie, visiting a night-club, joining a weight-loss program
3. Credence services: Legal services, investment management, educational services, accounting services, financial planning, management consultancy, advertising
4. High tangibility: Food, transportation, entertainment, sports services
5. High intangibility: Education, healthcare, legal services

3.4.2 Scales and measurement

Scales were used to measure the independent trait variables i.e. impulsivity (Puri 1996; Shiv and Fedorikhin 1999) and self-monitoring (Snyder 1987; O’Cass 2000). Both the scales reported high reliabilities - impulsivity (0.80) and self-monitoring (0.76), and demonstrated high component loadings (> 0.55) on the expected components, thus suggesting adequate psychometric properties, as shown in Table 1.

TABLE 1
COMPONENT MATRIX – TRAIT VARIABLES

Item Description	Factor Loadings	
	1	2
Sometimes I buy things without thinking of consequences.	0.746	
I often find it difficult to exercise self-control while shopping	0.712	
I like the thrill and adventure of buying impulsively	0.708	
I carefully plan most of my purchases (reverse-coded)	0.584	
I have the ability to control the way I come across to people depending on the impression I wish to give them.		0.769
When I feel that the image I am portraying isn't working, I can readily change it to something that does.		0.706
In social situations, I have the ability to alter my behaviour if I feel that something else is called for.		0.586
I have found that I can adjust my behaviour to meet the requirements of any situations I find myself in.		0.555

3.4.3 Data Analysis

The impulsiveness scores for all the services were averaged across each of the service categories and these mean scores constituted the dependent variables in this study. First, all these mean scores were compared with each other to test the first two hypotheses as summarized in Table 2.

TABLE 2
PAIRED SAMPLES T-TEST

Types of Services	Diff in Mean Scores	t-values
Tangible vs. Intangible	+ 0.2103	+ 10.456***
Search vs. Experience	- 0.0810	- 4.206***
Experience vs. Credence	+ 0.4332	+ 21.039***
Search vs. Credence	+ 0.3522	+ 16.200***

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

As seen in Table 2, the first two hypotheses were both supported at 0.001 significance level i.e. there was indeed more impulse buying in services with greater tangible vs. intangible attributes (H_1) with a highly significant difference in the mean score (+ 0.210, $p < 0.001$). Similarly, there was more impulse buying in search and experience services compared to credence services (H_2) as seen in the significant differences (+ 0.433, $p < 0.001$) between experience and credence services as well as between search and credence services (+ 0.352, $p < 0.001$). On the other hand, the difference in impulse buying between search and experience services although significant was not very high (- 0.081, $p < 0.001$). To test the next two hypotheses about the moderating role of traits impulsivity and self-monitoring, average scores were calculated for each subject and these were reclassified as low and high based on a median split. Independent samples T-tests were used to compare the mean scores for these two levels for both the traits. The results are summarized in Tables 3A and 3B.

TABLE 3A
INDEPENDENT SAMPLES T-TESTS (LOW VS. HIGH IMPULSIVITY)

Type of Services	Low impulsivity	High impulsivity	Difference	t-values
High Tangibility	2.121	2.321	+ 0.200	3.204**
High Intangibility	1.885	2.013	+ 0.128	1.966*
Search	2.204	2.376	+ 0.172	2.435**
Experience	2.230	2.503	+ 0.273	4.302***
Credence	1.873	1.997	+ 0.124	1.987*

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

TABLE 3B
INDEPENDENT SAMPLES T-TESTS (LOW VS. HIGH SELF-MONITORING)

Type of Services	Low Self-monitoring	High Self-monitoring	Difference	t-values
High Tangibility	2.431	2.237	- 0.194	- 3.023**
High Intangibility	2.109	1.982	- 0.127	- 1.957*
Search	2.509	2.282	- 0.227	- 4.122***
Experience	2.345	2.121	- 0.224	- 3.997***
Credence	2.051	1.865	- 0.186	- 2.443**

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

As seen in Tables 3A and 3B, all the hypotheses were supported at $p < 0.05$ or better, in the expected directions. Hence, it was shown that consumers with high scores on trait impulsivity did indeed display greater impulse buying compared to low impulsivity consumers, in all the service categories included in this study i.e., services with high tangible and high intangible attributes on one hand and search, experience and credence services on the other. Similarly, consumers with high scores on trait self-monitoring showed less impulse buying compared to low self-monitors, in all these categories of services. However, to gain further insights into the impulse buying phenomenon in the services context, the conceptual framework developed in the first

essay was modified to incorporate both products and services. Next, this revised framework was tested using fresh vignettes with undergraduate students in Study 2.

3.5 STUDY TWO

3.5.1 REVISED CONCEPTUAL FRAMEWORK

Services are associated with smaller choice sets compared to products and hence it has been argued that exploratory behavior such as brand switching is less likely in services compared to goods (Brand and Cronin 1997). Moreover, prior research has shown that services are likely to be associated with higher perceived risk and variability compared to products (Murray and Schlacter 1990). Hence, consumers with a greater tendency to take risks and indulge in exploratory behaviors are more likely to buy services impulsively compared to those who are risk averse. High scores on optimum stimulation level (OSL) are associated with greater risk taking and exploratory behaviors. Therefore, a high OSL score is likely to be associated with greater level of impulse buying in the services context.

It was argued in the conceptual framework in the first essay of this thesis that the association between level of impulse buying in purchase decisions and consumer impulsiveness was stronger than that with optimum stimulation level. However, from the above discussion it appears this may not hold in the services context. In other words, the association between OSL and level of impulse buying may indeed be stronger than that between consumer impulsiveness and level of impulse buying in case of services.

H1: The association of impulse buying with Consumer Impulsiveness is stronger than that with OSL for products, and vice versa for services

Moreover, as hypothesized in the first essay, trait self-monitoring has a direct negative influence on level of impulse buying. Impulse buying in the services context is likely to be perceived even more negatively in normative terms because it may involve a greater level of risk. Hence, a similar negative effect is expected in services as well. Hence, a high self-monitor is more likely to adapt or regulate impulsive buying behavior compared to a low self-monitor. In other words, the trait-behavior association is expected to be stronger for low self-monitors compared to high self-monitors. Therefore, Hence, a high self-monitor is more likely to adapt or regulate impulsive buying behavior compared to a low self-monitor. In other words, the trait-behavior association is expected to be stronger for low self-monitors compared to high self-monitors. Therefore,

H2: Self-monitoring is negatively associated with level of impulse buying in both products as well as the services contexts.

In the first essay, it was also hypothesized that trait self-monitoring moderates the association of traits consumer impulsiveness and OSL with level of impulse buying in purchase decisions. Since, the normative influence on impulse buying in services context is also expected to be negative, a similar moderating influence is expected.

H3: The association of Consumer Impulsiveness and Optimum Stimulation Level with impulse buying is stronger for high versus low self-monitors, in both products as well as services contexts.

3.5.2 Sample and Procedure

This study used a convenience sample of 200 undergraduate business students, who participated in the study in exchange for a 5% course credit. First, all the respondents completed a battery of scales at the beginning of a fresh semester, as part of the registration process for a research methods course. The order of scale items was counterbalanced to eliminate any response-set bias and these scales were administered several weeks before the experiments to minimize demand effects. The experiments were conducted in a very large classroom with about 15-20 participants at a time. They were seated apart from each other to participate independently. Each participant was randomly assigned to one of the two hypothetical purchase scenarios (adapted from Rook and Fisher 1995). A booklet was prepared for the study wherein the first page explained that the study was concerned with how people evaluate different products and services. This was followed by the purchase scenario and a scale to measure the level of impulsiveness in the behavioral intentions for each purchase decision.

3.5.3 Measurement of Independent Variables

This study had the three consumer traits as independent variables - Consumer impulsiveness (CI), Optimum stimulation level (OSL) and Self-monitoring (SM). Consumer impulsiveness was measured using the 12-item Consumer Impulsiveness Scale – CIS (Puri 1996). OSL was measured using the seven-item, Change-Seeking Index – CSI, short form (Steenkamp and Baumgartner 1995) and Self-monitoring with the seven-item “Ability to Modify Self-Presentation” sub-scale of the Self-Monitoring scale, revised form (Lennox and Wolfe 1984; O'Cass 2000). For both these scales, participants

were asked to respond to each statement on a seven-point likert-type scale – anchored by “1” (strongly agree), “4” (neither agree nor disagree) and “7” (strongly disagree).

3.5.4 Purchase Scenarios

Two different purchase scenarios were developed that described typical purchase situations, one involving a product and the other a service. The product and service chosen were both such that university undergraduate students could easily identify with. Various versions were pre-tested with a smaller sample from the same population; with participants different from the main study. Only those scenarios were picked that most participants could identify with and comprehend without any problems. The services included in the scenario (hair styling and mobile phone) were chosen because of their universal relevance for the target participants in the pre-test, irrespective of age or gender. The exact text for the two impulse buying scenarios is as follows:

Hair Styling

“You are a student at the Nanyang Technological University and walking in the mall one day without planning to buy anything in particular. As you walk in the mall, you see a great looking display in front of a hair-salon. You really like one of the hair-styles and feel like trying it.”

Mobile Phone

“You are a student at Nanyang Technological University and walking in the mall one day without planning to buy anything in particular. As you walk in the mall, you see a great looking display in front of a mobile phone shop. You really like one of the models and feel like buying it.”

3.5.5 Measurement of Dependent Variables

This study had only one dependent variable, level of impulsiveness in the purchase decision and it was measured using five-item scales adapted from Rook and Fisher (1995) as shown in Table 4. After reading each purchase scenario, the participants were asked to indicate their purchase intention on the relevant scale in which the responses were in increasing order of impulsiveness. All these responses are shown to represent roughly equal intervals of an increasing order of impulsiveness in prior research; hence it is reasonable to use this as an interval scale to measure the level of impulsiveness of purchase decisions (Rook and Fisher 1995; Omar and Kent 2001).

TABLE 4
DEPENDENT VARIABLE SCALES

Hair Styling	Mobile Phone
1. I will not even think about trying a new hair-style	1. I will not even think about buying a new mobile phone
2. I may be tempted to get more details	2. I may be tempted to get more details
3. I will get more details but probably not try it anyway	3. I will get more details but probably not buy it anyway
4. I will think seriously about trying it	4. I will think seriously about buying it
5. I will try it as early as possible, before I can change my mind	5. I will buy it as early as possible, before I can change my mind

3.5.6 Results

All the three traits scales used in this study showed high reliability with Cronbach's alpha ranging from 0.77 (Consumer impulsiveness) and 0.85 (Self-monitoring) to 0.92 (Optimum stimulation level). Multiple regression analysis was used to test the hypotheses for the main effects of the three consumer traits and moderated

regression analysis to test the moderation hypotheses for the self-monitoring trait, as advised by Baron and Kenny (1986). A multiple regression model was fitted using the participants' scores on the three consumer traits along with the two interaction product terms (Consumer Impulsiveness * Self-monitoring and OSL * Self-monitoring) as independent variables. The level of impulsiveness in a purchase decision was the only dependent variable. The standardized beta coefficients, t-values, R^2_{adj} and F-values are shown in Table 5.

For both the scenarios, the regression models represent a good fit with significant R^2_{adj} values, hair-styling ($R^2_{adj} = 0.238$, $F(5, 95) = 14.123$, $p < 0.001$) and mobile phone ($R^2_{adj} = 0.301$, $F(5, 95) = 19.737$, $p < 0.001$). All the hypotheses were supported, with significant beta-coefficients for all the independent variables as well as the interaction terms. Specifically, the association between level of impulse buying and consumer impulsiveness was stronger ($\beta = 0.398$, $p < 0.001$) than that with OSL ($\beta = 0.288$, $p < 0.001$) in the products context. Contrastingly, the association with OSL ($\beta = 0.455$, $p < 0.001$) was stronger compared to that with consumer impulsiveness ($\beta = 0.231$, $p < 0.01$) in the services context. Hence, H1 was supported.

Self-monitoring was found negatively associated with impulse buying for both product ($\beta = -0.193$, $p < 0.01$) as well as service contexts ($\beta = -0.312$, $p < 0.001$) and it was significantly stronger in case of the service compared to the product. Thus, H2 was supported. Next, the moderating effects of self-monitoring were tested for both the scenarios. First, the standardized beta coefficients for the interaction terms with consumer impulsiveness ($\beta = -0.225$, $p < 0.01$) and OSL ($\beta = -0.371$, $p < 0.001$) were found significant for impulse buying in the product context. Next, the standardized beta

coefficients for the interaction terms with consumer impulsiveness ($\beta = -0.389$, $p < 0.001$) and OSL ($\beta = -0.276$, $p < 0.001$) were found significant for impulse buying in the service context as well. Hence, H3 was also supported. Therefore, it appears that high self-monitors are more likely to curb their impulsive and change-seeking tendencies compared to low self-monitors.

TABLE 5
MULTIPLE REGRESSION MODELS: STUDY 2 (N = 200)

Purchase Scenario	Independent Variables	Std. Beta Coefficients	t-values	Adjusted R²	F-values
Mobile Phone (N=100)	Consumer Impulsiveness	+ 0.398**	6.054	0.301	19.737***
	OSL	+ 0.288***	3.821		
	Self-monitoring	- 0.193**	2.540		
	Consumer Impulsiveness * Self-monitoring	- 0.225**	2.772		
	OSL * Self-monitoring	- 0.371***	4.949		
Hair Styling (N=100)	Consumer Impulsiveness	+ 0.231**	3.122	0.238	14.123***
	OSL	+ 0.455**	7.418		
	Self-monitoring	- 0.312***	- 3.911		
	Consumer Impulsiveness * Self-monitoring	- 0.389***	- 4.556		
	OSL * Self-monitoring	- 0.276***	- 3.820		

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, all two-tailed

As expected these results show that consumers with high scores on Consumer Impulsiveness and Optimum Stimulation Level are indeed likely to indulge in a greater degree of impulse buying compared to those with low scores on these two traits, in the product as well as service contexts. Moreover, as hypothesized consumer impulsiveness appears to be a stronger driver of impulse buying in the product purchase situation whereas OSL seems to have a stronger influence on impulse buying in the service context. This makes sense because impulse buying in services is perceived to be riskier compared to that in products context. Therefore, consumers with a higher optimum stimulation level and hence greater risk-taking and exploratory tendencies are more likely to indulge in impulse buying in services context.

On the other hand, consumer impulsiveness is an inherent driver of impulsive behaviors in general and hence, consumers with a high score on trait impulsiveness may indulge in impulse buying in products because of a greater lack of self-control or failure of self-regulation mechanism rather than a tendency to take risks deliberately. The results also support the negative association between self-monitoring and level of impulse buying in the product as well as service contexts. Moreover, self-monitoring is also shown to moderate the relationship between level of impulse buying and the two traits (consumer impulsiveness and OSL) in both the contexts. Hence, the conceptual framework developed in the first essay and modified in this essay to incorporate the services context, was supported empirically in this study. Specifically, it was shown that consumer impulsiveness as well as OSL is associated with level of impulsiveness in purchase decisions; however consumer impulsiveness is the primary driver of impulse buying in case of products whereas it is OSL in the services context.

3.6 DISCUSSION AND CONTRIBUTION

This research highlights some important differences and similarities between impulse buying in services and products. First, it shows that just like in the case of products, services that have greater tangible and hedonic attributes are associated with greater impulse buying (Rook and Hoch 1985; Rook 1987; Hausman 2000). However, unlike the usual low vs. high involvement classification of products, this research used the search, experience and credence categorization of services to investigate the incidence of impulse buying in the services context. As expected impulse buying was found to be associated the most with search and experience services compared to credence services, due to greater perceived risk (uncertainty) attached with credence services.

This research also explored the influence of several relevant traits on impulse buying phenomenon in services. These included consumer impulsiveness, optimum stimulation level and self-monitoring. As expected, in a manner quite similar to impulse buying in products, traits consumer impulsiveness and OSL were found to be positively associated with level of impulsiveness in purchase decisions whereas trait self-monitoring was shown to have a negative influence. This finding does suggest some similarities between the way consumers buy impulsively in services compared to products.

Moreover, it was also shown that there are also some important differences between impulse buying in products and services. For example, consumer impulsiveness was found to be a stronger driver of impulse buying in products and OSL for services. This finding supports the argument that impulse buying in services is perceived to involve greater risk and therefore, consumers with a higher score on sensation-taking and exploratory tendencies are more likely to indulge in this. This is one of the most

significant contributions of this line of research and it may pave the way for a better understanding of impulse buying behavior in a broader context, encompassing both products and services.

This line of research may also help marketing practitioners in many ways. First, a conceptual understanding of why impulse buying is more likely in some services compared to others, may trigger fresh thinking into how the various elements of marketing mix are deployed in the marketing of various services. Second, an exploration of the types of services which are more amenable to impulse buying would help the marketers of those services build adequate switching barriers especially if they are the dominant players in their category.

Third, investigation of some relevant situational factors such as the store atmospherics, time of day or the location of the service outlet may also help the managers of these service providers to better plan their facilities and logistics to optimize their utilization. For example, if it is found that many impulsive consumers prefer to have a shower and sauna after a hair-cut then the hair-salons may be well advised to either begin offering these services on their own premises or tie-up with providers of these services to be able to provide a full richer experience to their customers. In fact, self-service technology may also be used effectively to create and amplify these situational factors to encourage impulse buying of services, for example use of email brochures to announce special deals to potential airline ticket or holiday package buyers.

3.7 LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

This research makes several important conceptual and empirical contributions. First, it is one of the few attempts to empirically demonstrate the existence of impulse buying behavior in services context. Second, this is also one of the first attempts to develop a conceptual framework based on existing theory in impulse buying and services marketing fields, to explore and explain the phenomenon of impulse buying in services. However, there are also some weaknesses in this research such as reliance on surveys and purchase scenarios. Future researchers may address this by using other methods such as experiments or shopping simulations, to explore if the findings of this study can be generalized across different situations. This research is also limited by the way the different types of services were categorized into those with greater tangible vs. intangible attributes. Future research may help validate and improve the scales and procedure used in this study.

Moreover, prior research has investigated the influence of several situational factors such as time and money availability, in-store browsing, mood and involvement level (Beatty and Ferrell 1998). Future research could explore if there are any differences in their influence in the services context. Finally, future research could build a more comprehensive theoretical model for impulse buying in general, which can conceptually incorporate the relevant demographic (age, gender, education level, occupation and socio-economic category), psychographic (life-style, consumer impulsiveness, need for variety and self-monitoring) and situational factors (time and money availability, in-store browsing, shopping enjoyment, mood, involvement level) that may have a direct or indirect influence on impulse buying in both, products as well as services contexts.

GENERAL DISCUSSION AND CONTRIBUTION

Trait impulsivity and impulsive behaviors continue to be an area of great interest for clinical as well as educational psychologists and their research typically emphasizes the maladaptive aspects of impulsiveness, linking it to a wide variety of criminal, delinquent and risky behaviors such as gambling, reckless driving, binge eating, drug abuse, smoking, drinking and unsafe sex (Eysenck and Eysenck 1977, 1978; Zuckerman et al. 1978; Zuckerman 1979; Eysenck and Eysenck 1985; Eysenck et al. 1985; Dickman 1990; Cloninger et al. 1991; Zuckerman et al. 1991; Barratt 1993; Cloninger et al. 1993; Eysenck 1993; Zuckerman et al. 1993; Zuckerman 1994; Evenden 1999; Dickman 2000; Zuckerman 2000). All these behaviors are found to be associated with a personality trait called impulsive sensation seeking. However, high sensation seekers do not always indulge in risky behaviors but they also enjoy high-intensity rock music, view sex and horror movies, travel to exotic places or participate in active sports.

Researchers in other fields have also studied impulsive behavior by individuals. For example, economists have long observed people who sharply and foolishly discount the future and the psychological conflict that may arise from consumer's choices between saving and impulsive spending. Sociologists have also studied patterns of "deferred gratification", "impulse renunciation" and "instrumental orientation" that are supposed to be learned and developed in childhood in order to be able to resist these in adulthood. Social psychologists have studied "delayed gratification" and found it to be positively associated with age, intelligence and social responsibility. Even Freud claims that human civilization is based on individuals' development of internalized impulse controls. He interprets impulses as the product of two competing forces, the pleasure principle and the

reality principle. The pleasure principle encourages instant gratification whereas reality principle promotes rational deliberation.

Impulse buying has become a pervasive and distinctive aspect of our lifestyles and almost everyone seems to indulge in it at one time or another. Marketing innovations such as credit cards, ATMs, 24-hour retailing, home shopping networks, tele-shopping and on-line shopping have made it easier than ever for consumers to buy anything on impulse. However, in the modern marketplace spontaneous urges to buy and consume often compete with the practical necessity to delay the immediate gratification that buying may provide. Therefore, it is quite common to see both individual impulsive trait as well as situational factors to influence impulse buying behavior.

On the other hand, variety seeking (seeking change for the sake of change) has been classified as an exploratory behavior and associated with sensation-seeking trait as well. In fact, both impulse buying and variety seeking are considered low-effort feelings-based purchase behaviors with similar underlying psychological processes, yet there's no common conceptual framework to explain these behaviors. This research is an effort to develop such a framework and eventually a general theory of hedonic purchase behaviors. Towards that direction, the first essay highlights how trait impulsivity and its two components "impulsiveness" and "venturesomeness" drive impulse buying and variety seeking behaviors. It also incorporates the normative influences on these behaviors in the form of trait self-monitoring. Hence, a sound theoretical explanation is provided for the various similarities and differences between these two behaviors.

In the second essay, an important gap in the impulse buying research is addressed by developing a new scale to measure consumer impulsiveness trait across different

cultures by overcoming the problem of measurement equivalence. In the process, theoretical explanations are provided for several inconsistencies and mixed findings reported in prior studies. Specifically, it is demonstrated that collectivist consumers draw a distinction between deliberate acts of self-indulgence and involuntary loss of self-control whereas individualists do not make any such demarcation. This insight may help marketers understand why some consumers are able to resist their temptations when some others are not. Moreover, they may also develop customized promotions that highlight positive aspects of impulse buying and downplay its negative normative associations.

Finally in the third essay a hitherto uncharted area in impulse buying literature is explored namely impulse buying in the services. By drawing on the rich literature in both areas, it is shown that although impulse buying is less common in services compared to products, the incidence of impulse buying may vary significantly within different types of services. Some similarities between the two contexts are also demonstrated, in terms of the influence of traits consumer impulsiveness, OSL and self-monitoring in two empirical studies, one with retail shoppers in a mall and another with undergraduate students.

Overall, all these three essays add to our knowledge of hedonic purchase behaviors in general and impulse buying in particular, through a rigorous theory-based empirical investigation in a series of studies using different methods. In the process, several useful insights are obtained into the association of these behaviors with relevant consumer traits, cross-cultural differences in the consumer impulsiveness trait and impulse buying in the services context. This research area also presents some interesting opportunities for future research such as the application of self-regulation theories, investigation in on-line shopping environment and cross-cultural behavioral studies.

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