

## The post-purchase stage of impulse buying: The mediating role of cognitive appraisal

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## Abstract

This paper proposes a conceptual model to explain the post-purchase stage of the impulse-buying phenomenon. The model incorporates *cognitive appraisal theory* to explain the customer's psychological mechanisms after an impulse purchase was made. This paper also reviews both the impulse-buying literatures and the cognitive appraisal theory in furtherance of explaining the post-purchase stage of impulse buying. Impulse buying frequently triggers negative customer emotions and evaluations. This creates a negative impact on overall customer brand attitudes and, potentially, on a company's long-term revenue. In contrary, some previous studies found positive customer emotions and attitudes. Thus, this study starts with three research questions: How do customers feel after an impulse-buying decision is made? What is the cause of these specific emotions? How do these emotions potentially affect a particular brand? This paper investigates an unexplored area and contributes to the debate regarding impulse buying in terms of emotional consequences. Further, it studies the attitude toward brands resulting from the emotion of the customer in an impulse-buying context. This study finally proposes an integrated model of the post-purchase stage of impulse buying.

**Keywords :** The post-purchase stage, The mediating role, cognitive appraisal

## บทคัดย่อ

บทความนี้เสนอรูปแบบแนวคิดเพื่ออธิบายกระบวนการหลังการตัดสินใจซื้อของแบบฉับพลัน (impulse buying) รูปแบบดังกล่าวผสานทฤษฎีการประเมินความคิด (cognitive appraisal theory) เพื่อไขกลไกทางจิตวิทยาของผู้บริโภคหลังจากการตัดสินใจซื้อของไปแล้ว นอกจากนี้ บทความนี้ยังทบทวนงานวิจัยด้านการซื้อของแบบฉับพลันและทฤษฎีการประเมินความคิด เพื่อให้เข้าใจกระบวนการหลังการตัดสินใจซื้อของแบบฉับพลันมากยิ่งขึ้น การซื้อของแบบฉับพลันมักกระตุ้นให้เกิดอารมณ์และการประเมินตนเองในแง่ลบ ส่งผลกระทบต่อภาพลักษณ์โดยรวมของแบรนด์ในสายตาผู้บริโภค และอาจส่งผลต่อรายได้ระยะยาวของบริษัทในทางกลับกัน งานวิจัยบางชิ้นกลับพบผลกระทบในทางบวก ดังนั้น บทความนี้จึงตั้งคำถามวิจัย 3 ข้อ ดังนี้: ผู้บริโภครู้สึกอย่างไรหลังจากการตัดสินใจซื้อของแบบฉับพลัน? อะไรเป็นสาเหตุของความรู้สึกเหล่านี้? ความรู้สึกเหล่านี้ส่งผลต่อแบรนด์ที่เกี่ยวข้องอย่างไร? บทความนี้มุ่งศึกษาพื้นที่ที่ยังไม่ได้รับการสำรวจอย่างละเอียด และส่งเสริมการถกเถียงเกี่ยวกับผลกระทบทางอารมณ์ที่เกิดจากการซื้อของแบบฉับพลัน นอกจากนี้ ยังศึกษาถึงทัศนคติต่อแบรนด์ที่เกิดจากอารมณ์ของผู้บริโภคในบริบทของการซื้อของแบบฉับพลัน สุดท้าย บทความนี้เสนอร่างแบบบูรณาการของกระบวนการหลังการตัดสินใจซื้อของแบบฉับพลัน

**คำสำคัญ :** ขั้นตอนหลังการซื้อ, บทบาทคุณภาพ, การประเมินความรู้ความเข้าใจ

## Introduction

Impulse buying behavior is a widely recognized phenomenon (especially in the United States) ; approximately 40 percent of consumers consider themselves impulse buyers (Kacen & Lee, 2002). Impulse buying is the specific case of unplanned purchases with the condition of making an on-the-spot purchase decision (Piron, 1991, 1993). In a normal decision process, people will evaluate alternatives and consider which product to buy before finalizing their decision to satisfy a need (Laios & Moschuris, 2001; Puccinelli et al., 2009). However, customers may behave impulsively and buy things instantly, without thinking, planning, or even recognizing their need because of certain stimuli such as advertising (Abratt & Goodey, 1990) , point- of- purchase appearances ( Abratt & Goodey, 1990) , and sales promotions (Liao, Shen, & Chu, 2009; Narasimhan, Neslin, & Sen, 1996; Piron, 1991). According to their impulsive behavior, they consequently present different post- purchase emotions. Some previous studies have indicated that customers experience negative emotions, such as guilt, regret, or anger when they exhibited an impulsive behavior (Çelik, Eru, & Cop, 2019; Kumar, Chaudhuri, Bhardwaj, & Mishra, 2021; Rook & Hoch, 1985; Wood, 1998). However, many findings reported positive emotions, such as feeling good or pleased, after impulsive behavior (Cook & Yurchisin, 2017; Gardner & Rook, 1988; Piron, 1993; Youn & Faber, 2000). However, previous studies did not explain or distinguish the cause of post-purchase emotions and why they were diversely presented.

Both internal and external stimuli have been adopted in the business world to generate impulse purchases. To achieve company sales objectives, marketers increase sales by luring customers to make impulse purchases by using many marketing tools, such as sale promotions ( Narasimhan et al. , 1996; Piron, 1991) , point- of- purchase appearance (Abratt & Goodey, 1990) and many in-store stimuli (Abratt & Goodey, 1990; Zhou & Wong, 2004). However, many studies have reported negative post-purchase emotions after impulse buying experiences (Gardner & Rook, 1988; Rook, 1987; Wood, 1998). As a result, firms perform well in increasing sales, but negative post-purchase emotions may be evident afterward (Gardner & Rook, 1988; Wood, 1998). Emotions and brand attitude are two major outcomes, which are closely related and can be objectively measured as post- purchase outcomes (Hofmann, Strack, & Deutsch, 2008). Besides, brand attitude associates with earning, stock price, and stock return, and can lead to higher financial performance in the future (Aaker & Jacobson, 2001). Consequently, understanding the post-purchase stage of impulse buying can be informative for marketers in mitigating the negative side effects of impulse buying.

The post-purchase stage of impulse buying has not been studied conscientiously. This paper reviews the divergent findings regarding the consequences of impulse buying. In particular, both positive and negative emotions have been reported. To solve this debate, a specific theory which could explain and solve these conflicting results is needed. The cognitive

appraisal theory fundamentally emphasizes the personal evaluation, which depends on individual differences including personality, past experience, and attitude. The specific personal evaluation of the buying situation leads to specific emotions. The cognitive appraisal theory can clarify how different customers express different emotions.

This paper conceptualizes the post-purchase stage of impulse buying by using cognitive appraisal theory, and offers a framework for understanding cognitive states and the interlink with the affective states of impulse buyers in order to prevent negative effects on product branding. The model answers three research questions: 1) How do customers feel once the impulse buying decision is made? 2) What is the cause of these specific emotions? 3) How do these emotions affect the brand? This paper aims to explore and explain the post-purchase stage of impulse buying by using cognitive appraisal, and by introducing an integrated model of the emotional consequences of impulse buying on cognitive appraisal dimensions.

### Literature Review

**An Overview of the Impulse Buying Stage:** Impulse buying phenomena have been studied extensively for more than sixty years, since the pioneering studies of Clover (1950), Stern (1962), and Rook (1987). Research into impulse buying can be simply categorized by a sequential approach to the three stages of the activity, which are antecedents, the impulse-buying decision, and the post-purchase stage (Figure 1). Its antecedents and consequences in post-purchase stage have been extensively studied. The *antecedents* of impulse buying refer to the factors which can influence the impulse-buying decision. Muruganantham and Bhakat (2013) categorized antecedents into four groups-external stimuli, internal stimuli, situational and product-related factors, and demographics and socio-cultural factors. Examples of external stimuli include advertising (Abratt & Goodey, 1990), salespersons (J. Park & Lennon, 2006), and promotion (Dholakia, 2000; Liao et al., 2009; Narasimhan et al., 1996; Spears, 2006). Internal stimuli include personality traits (Komarraju & Karau, 2005; Mishra, Sinha, & Koul, 2014; Sharma, Sivakumaran, & Marshall, 2010; Verplanken & Herabadi, 2001), mood (Atalay & Meloy, 2011; Sneath, Lacey, & Kennett-Hensel, 2009; Verplanken & Herabadi, 2001), and shopping enjoyment and the impulse buying tendency (Beatty & Ferrell, 1998). Situational and product-related factors include store environment, perceived crowding, and employee friendliness (A. S. Mattila & Wirtz, 2008; Youn & Faber, 2000), loudness, color, and physical temperature (Steenkamp, Baumgartner, & Van der Wulp, 1996), point-of-purchase appearance (Abratt & Goodey, 1990), the amount of time and money available (Beatty & Ferrell, 1998), and the experience of touching the product (Peck & Childers, 2006). Examples of demographics and socio-cultural factors include cultural (Kacen & Lee, 2002) and demographic factors—gender, age, income, and education (Bashar, Ahmad, & Wasiq, 2013; Ekeng, Lifu, & Asinya, 2012; Ghani, Imran, & Ali Jan, 2011). However, some studies relied on a theoretical approach and suggested separating antecedents into two phases (Figure 1). The first phase of antecedents is limited to individual psychological characteristics. The second phase, the *trigger*

phase, includes person-environment transactions such as mood, emotion, product type, and store atmosphere (Kellett & Bolton, 2009; Xiao & Nicholson, 2013). Both phases of antecedents combine to cause which act of impulse buying will take place at a specific moment, and the turn to the post-purchase stage occurs immediately thereafter.

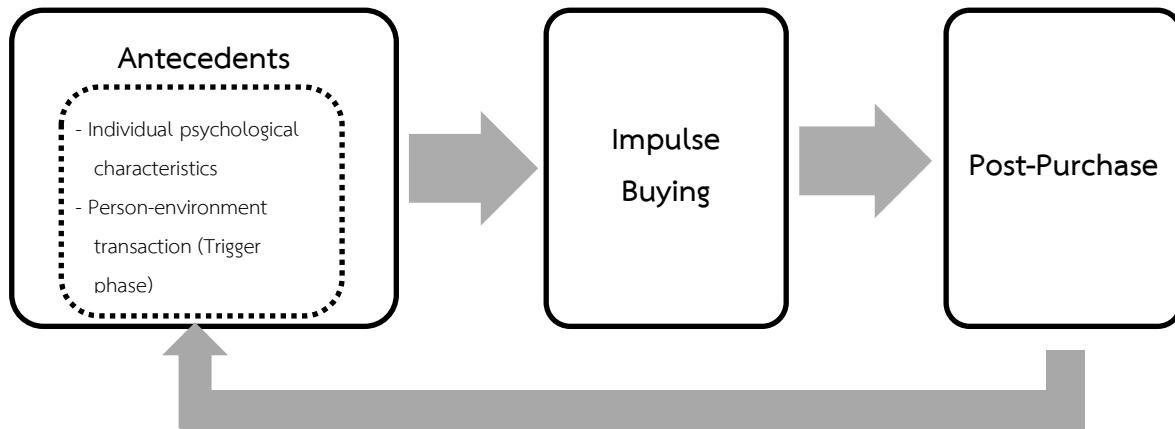


Figure 1 Impulse Buying Stage

The post-purchase stage starts immediately after an impulse purchase is made. However, research outcomes have been differently reported. For example, some customers feel guilty and depressed, or realize that they have purchased an unnecessary product (Bayley & Nancarrow, 1998; Gardner & Rook, 1988; Xiao & Nicholson, 2011). On the other hand, some findings indicated a positive mood state, feeling good, or feeling pleased after impulsive purchase behavior (Gardner & Rook, 1988; Piron, 1993; Youn & Faber, 2000). The post-purchase stage, in turn, could affect the antecedents and therefore impact the next cycle of impulse buying (Kellett & Bolton, 2009). However, not all antecedents can be changed; some, such as demographics, beliefs, attitudes, personality traits, and other sociocultural factors, are static (Xiao & Nicholson, 2013). The post-purchase stage also refers to the consequences of impulse buying and coping strategies for impulse behavior (Bayley & Nancarrow, 1998; Gardner & Rook, 1988; Xiao & Nicholson, 2011; Yi & Baumgartner, 2011). Many consequences have been reported; these can be grouped as cognitive, emotional, and behavioral (Kellett & Bolton, 2009; Xiao & Nicholson, 2013). Cognitive dissonance is one of the most common cognitive consequences (e.g., "I should not buy this item because I already have one, but it is so cheap because it is on sale") (George & Yaoyuneyong, 2010; Saleem, Ali, & Ahmad, 2012). Negative emotional consequences, such as guilt, regret, or anger, have also been reported (Gardner & Rook, 1988; Rook, 1987; Rook & Hoch, 1985; Wood, 1998). However, customers can cope with their negative emotions (e.g. guilt or shame) by moving further in the cognitive stage to explain their impulsive behavior by seeking and giving reasons, or *rationalizations*, for their purchase (Dholakia, 2000). Comparative expenditure is one such rationalization. For example, a person's friends spend their money on bikes, camera equipment, or travel; it is then acceptable if they themselves spend some money on similar impulsive purchases (Bayley & Nancarrow, 1998).

Other cognitive coping strategies have also been reported, such as *positive reinterpretation* (Yi & Baumgartner, 2004), *mental undoing*, and *mental disengagement* (Yi & Baumgartner, 2011). For example, a woman feels regret when she impulsively buys an expensive and gorgeous new dress without an occasion to wear it; her *positive reinterpretation* is that it would be good to have such a dress to use in a friend's wedding ceremony, perhaps, in the future. Many different post-purchase behaviors have been reported, such as planning to reduce impulse buying in the future, planning to make up for the monetary loss, seeking social support, or blaming others (Yi & Baumgartner, 2011). Buyers can cope with the loss of money from impulse buying by hiding their ownership of the new product from themselves, in order to feel subjectively that they didn't buy the product—for example, leaving the product in the carrier bag or hiding it in the wardrobe (Bayley & Nancarrow, 1998). One can conclude that any of these consequences can present at any time when impulse buying is made, depending on the situation.

Regarding the category of emotional consequences of impulse buying, it is one of the interesting issues which, in previous studies, triggered a variety of findings that haven't been resolved (Table 1). For example, some findings indicated positive mood states, feeling good or pleased after impulsive behavior (Gardner & Rook, 1988; Piron, 1993; Youn & Faber, 2000). Conversely, many findings reported negative consequences, such as feelings of guilt, regret, or anger (Gardner & Rook, 1988; Rook, 1987; Rook & Hoch, 1985; Wood, 1998). Nevertheless, some papers suggest *ambivalence*, in which both positive and negative feelings take place simultaneously (Gardner & Rook, 1988; Miao, 2011; Ramanathan & Williams, 2007). The literatures show that the emotional consequences of the post-purchase stage of impulse buying have not been adequately studied.

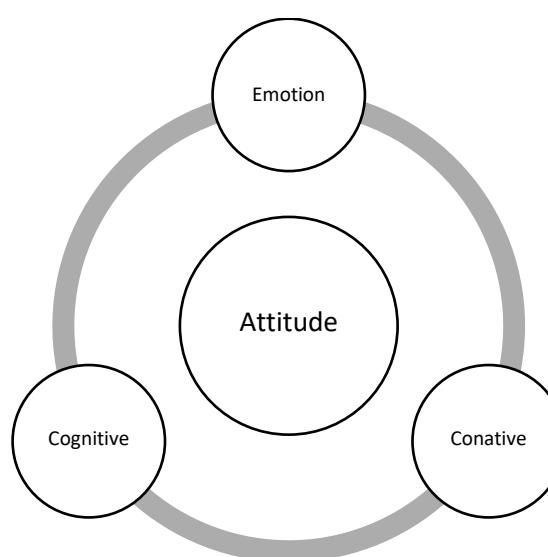
Table 1 Review of Affective Consequences of Impulse Behavior

	Positive Affective State	Negative Affective State	Both Affective States (concurrently within a person)
Rook and Hoch (1985)		✓	
Rook (1987)	✓	✓	
Gardner and Rook (1988)	✓	✓	✓
Piron (1991)	✓	✓	✓
Piron (1993)	✓		
Wood (1998)	✓	✓	
Dittmar and Drury (2000)	✓	✓	
Hausman (2000)	✓	✓	
Youn and Faber (2000)	✓		
Giner-Sorolla (2001)	✓	✓	
MacInnis and Patrick (2006)	✓	✓	✓

E. J. Park, Kim, and Forney (2006)	✓		
Ramanathan and Williams (2007)	✓	✓	✓
Silvera, Lavack, and Kropp (2008)	✓		
Miao (2011)	✓	✓	✓
Xiao and Nicholson (2013)	✓	✓	

Note: (✓) indicates the affective state which was reported in the indicated article.

**Attitude Components of the Post-Purchase Stage of Impulse Buying:** An attitude is an evaluative disposition of oneself toward any object (Breckler, 1984). To more fully understand this term, three aspects of attitude should be considered-those being *affective*, *conative* (behavior, action tendency), and *cognitive* components (Back & Parks, 2003; Dick & Basu, 1994; Martin, Watson, & Wan, 2000) (Figure 2)-since all three components represent the individual's experience (Breckler, 1984). The conative component includes behavioral intention and overt behavior (Eagly & Chaiken, 2007). For example, the cognitive-behavioral model of compulsive buying integrates cognition, emotion, and behavior in the study (Kellett & Bolton, 2009). Likewise, considering the post-purchase stage of impulse buying, the "attitude object" is the product which the consumer is contemplating. The conative component refers to the impulse-buying decision, while the affective component refers to emotions toward the product (as a result of the impulse-buying decision). The cognitive component refers to the consumers' thoughts about the product they have just bought. Therefore, all attitude components will be considered in an exploration of the post-purchase stage of impulse buying.



**Figure 2 Three Components of Attitude**

Regarding the post-purchase stage of impulse buying, emotional reactions have been studied (Gardner & Rook, 1988; Piron, 1993; Ramanathan & Williams, 2007) but without consideration of cognitive reactions. Conative components have been studied at the moment

the impulse-buying behavior takes place, as well as post-purchase coping strategies—for example, coping with negative emotions (George & Yaoyuneyong, 2010; Yi & Baumgartner, 2004, 2011) by positive reinterpretation (Yi & Baumgartner, 2004) or hiding the product (Bayley & Nancarrow, 1998). Piron (1991) concluded that emotional reactions must be studied together with cognitive reactions in order to provide a complete definition of impulse buying. However, the cognitive component hasn't been studied in the post-purchase stage of impulse buying. Therefore, this study will explore and integrate all the components in the model to provide a complete understanding of the post-purchase stage of impulse buying.

**Theories of Emotions:** Emotion is one of the important components involved in impulse buying. It has been well studied, so we need to explore and identify the approach which is most congruent with emotion and that provides the best potential explanation for impulse-buying phenomena. Many theories of emotion have evolved over the last 130 years. The James-Lange theory of emotion (James, 1884) proposed that emotion is the result of physiological arousal. Physiological arousal can be cutaneous shivering, heart swelling, or the lachrymal effusion which is provoked by stimulus. James (1884) offered an example: if a friend goes near the edge of a cliff, we feel “all-overishness” (an uncomfortable physical feeling) and shrink back, although we know that he will be safe and have no imagination that he will fall. The James-Lange theory assumed that the emotion arises from physiological arousal and stimulus without any cognitive involvement (see Table 2). However, Cannon (1927) provided perhaps the best criticism of the James-Lange theory, and the Cannon-Bard theory gradually replaced the James-Lange theory in most textbooks (Cannon, 1987). Cannon showed that if separation of the viscera from the central nervous system cannot alter emotional behavior, then it should not be the cause of emotion. Bard contributed to the theory by specifying that the thalamus discharges impulses and induces emotional activity, both muscular and visceral (Cannon, 1927).

Table 2 Theory of Emotions

	Stimulus	Appraisal (Cognitive)	Arousal	Emotion
James-Lange Theory				
Cannon-Bard Theory				
Two-Factor Theory (Schachter and Singer)				
Cognitive-Mediation Theory (Lazarus)				

**Emotions in the consumption context:** Another significant evolution of emotion-related theory incorporated cognitive components into consideration. Schachter and Singer's Two-

Factor Theory (1962) relies mainly on the subjective components, which are consciousness and inner experience (Reisenzein, 1983; Schachter & Singer, 1962). The model also depicted that, in the same cognitive circumstances, individuals will describe emotion only when physiological arousal is experienced; therefore, physiological arousal is necessary to emotion (Schachter & Singer, 1962). Depending on the individual and the cognitive aspects of the situation, exactly the same physiological arousal can be differently interpreted and can lead to different emotions (Schachter & Singer, 1962). However, Richard S Lazarus (1991) further elaborated on the concept of cognitive appraisal, using a cognitive- motivational-relational framework which suggested cognitive as mediator to explain and predict emotions. Unconscious appraising (or automatic appraising) refers to mental processes, from which mental contents-such as imagery, percepts, and ideas-are derived (Richard S. Lazarus, 1995). Appraisal, the cognitive activity which cannot be ignored for an emotion to occur, leads both to the arousal and to the emotion (Richard S Lazarus, 1991).

Consumer researchers have been interested in, and have done considerable studies on emotional aspects of consumer behavior and emotion-related issues in marketing (Havlena & Holbrook, 1986; Watson & Spence, 2007; Westbrook & Oliver, 1991). Within consumption activities, two competing typologies of emotion-dimension and category approaches-have been investigated in terms of comparative reliabilities and validities in order to determine which approach is more preferable in studies of consumption and emotion (Havlena & Holbrook, 1986).

Consumption emotions are defined by distinctive experiences and expressions. The “category” approach (Westbrook & Oliver, 1991) offered eight basic emotions-fear, anger, joy, sadness, acceptance, disgust, expectation, and surprise-which were identified by Plutchik (1980); the “dimensional” approach in Mehrabian-Russell (1974), on the other hand, posited dimensions of pleasure, arousal, and dominance (Havlena & Holbrook, 1986). Another attempt to propose dimensional categories resulted in the categories of pleasantness/unpleasantness, relaxation/action, or calmness/excitement (Russell, 1979). Besides these, the most widely accepted dimensions were valence, arousal (known as activation), and approach-avoidance (Mauss & Robinson, 2009). However, the dimensional approach offered more explanatory power and overcame statistical bias more effectively than the category approach (Havlena & Holbrook, 1986).

The category approach cannot explain why groups of emotions have different behavioral effects, while the dimensional approach cannot distinguish between behaviors (driven by emotions of similar valence) and arousal levels, such as anger or fear (Bagozzi, Gopinath, & Nyer, 1999; Watson & Spence, 2007). Although category (also known as *discrete*) and dimensional approaches have dominated emotion-related studies in the past, they could not encourage computational modeling (Sander, Grandjean, & Scherer, 2005). Regarding these

limitations, category and dimensional approaches demonstrate weaknesses and cannot fully explain emotion-related issues.

Besides the category and dimensions approaches, the *cognitive appraisal* approach has recently been determined to be potentially the best approach to explaining emotion as a phenomena congruent to a consumer-behavior context (Watson & Spence, 2007). Since the study of the roles of emotion in marketing (Bagozzi et al., 1999), more recent studies by Watson and Spence (2007) have also suggested that the cognitive appraisal approach performs very well in explaining the relation between consumer behavior and emotions. The advent of the cognitive appraisal theory of emotion shed light on emotion-related studies (Sander et al., 2005) and especially on impulse-buying phenomena, since the cognitive appraisal approach has been incorporated into the contexts of consumer buying behavior and marketing (Nyer, 1997; Yi & Baumgartner, 2004).

**Cognitive Appraisal Theory:** Cognitive appraisal can explain how various emotions occur. Many components of cognitive appraisal have been explored and studied. In the early period of the evolution of the theory, the various dimensions (or components) of appraisal—which overlapped and could be aligned to each other—had been proposed by four theorists (see Table 3). Although many different theories of the dimensions of appraisal have been proposed, the literature shows a surprisingly high degree of convergence between the nature of appraisal dimensions in these theories (Scherer, 1997).

Table 3 Comparative Overview of the Major Appraisal Dimensions (adapted from Ellsworth & Scherer, 2003)

Frijda (1986)	Roseman (1984)	Scherer (1984a,b)	Smith/Ellsworth (1985)
Change		Novelty suddenness familiarity	Attentional activity
Familiarity		Intrinsic pleasantness	Pleasantness
Valence		Goal significance concern relevance	Importance
Focality	Appetitive/aversive motives		
Certainty	Certainty	outcome probability	Certainty
Intent / Self-other	Agency	cause: agent cause: motive	Human agency
Value relevance		Compatibility with standards external internal	Legitimacy

Providentially, Watson and Spence (2007) had integrated relevant appraisal dimensions to consumer behavior, consumption emotions, post-purchase evaluations, behavioral intentions, and satisfaction. They further provided related dimensions for consumer-behavior

studies (see Table 4). Regarding appraisal dimensions, each dimension causes the specific emotions which derive from the subjective evaluations of individuals (Hosany, 2011; Scherer, 1997).

**Table 4 Summary of Some Relevant Cognitive Appraisals as Proposed by Various Theorists (adapted from Watson & Spence, 2007)**

	Outcome desirability		Agency		Certainty	Fairness
	Pleasantness	Goal consistency	Agency	Intention		
Frijda (1987)	Valence or pleasantness	Open/closed	Self/other intent			Value relevance
Johnson and Stewart (2005)		Direction and degree of goal congruence, goal importance	Agency		Certainty	Normative/moral compatibility
Nyer (1997)	Goal congruence	Goal relevance		Attribution		
Ortony et al. (1988)	Appealingness	Desirability		Agency	Likelihood prospect realization	Blameworthiness
Roseman (1991)	Appetitive/aversive	Motive consistency	Agency		Certainty	(Legitimacy)
Ruth et al. (2002)	Pleasantness	Perceived obstacle	Self/other agency	Situational control	Certainty	Fairness
Scherer (1988)	Intrinsic pleasantness	Goal-related valence, goal relevance, goal consistency	Agent cause	Motive cause	(Probability)	Compatibility standards
Smith and Ellsworth (1985)	Pleasantness	(Perceived obstacle or goal/path obstacle)	Self/other agency	Situation/human control	Certainty	(Legitimacy)
Note: Terms in parentheses represent appraisals that were presented conceptually but not substantiated empirically						

**Definitions and Empirical Terms of Cognitive Appraisal Dimensions:** According to various terminologies of cognitive appraisal (see Table 4), four relevant cognitive appraisal dimensions have been developed and categorized. First, *outcome desirability* determines if the outcome is consistent with expectation (Soscia, 2007). It is considered to be the most necessary appraisal dimension which defines the situation positively or negatively (Watson & Spence,

2007). Other terminologies, which seem to be empirically interchangeable with outcome desirability (Scherer 1984 cited in Hosany, 2011; Nyer, 1997; Soscia, 2007; Watson, 2006), are *pleasantness* (Roseman, Spindel, & Jose, 1990; Ruth, Brunel, & Otnes, 2002; Soscia, 2007; Watson, 2006), *goal consistency* (Roseman et al., 1990; Watson, 2006), *motive consistency* (Roseman et al., 1990) and *goal congruence* (Dalakas, 2006; Nyer, 1997; Soscia, 2007). This outcome desirability dimension is widely regarded as one of the most important appraisal dimensions in marketing (Nyer, 1997; Smith & Ellsworth, 1985; Soscia, 2007; Watson, 2006) and empirically contributed more than 90% to the variance explained in appraisals (Ruth et al., 2002).

Second, *agency* refers to the perceived causation of events (Soscia, 2007). Who or what influences the situation is the causal agent (Watson & Spence, 2007). It could be oneself (self-caused), an other (other-caused), or circumstance (circumstance-caused), according to the individual's perception (Smith & Ellsworth, 1985; Watson & Spence, 2007). Regarding the separate determination of the dimension of outcome desirability (desirability and undesirability), the evaluation of agency dominates and correctly distinguishes the experienced emotions (Smith & Ellsworth, 1985). Agency determines if the customers interpret their own involvement in the particular events as self-caused (Roseman, 1996; Ruth et al., 2002; Smith & Ellsworth, 1985; Watson & Spence, 2007), other-caused (Roseman et al., 1990; Ruth et al., 2002; Soscia, 2007; Watson & Spence, 2007), or circumstance-caused (Roseman, 1996; Smith & Ellsworth, 1985; Soscia, 2007; White, 2007) and hence influences specific emotions. Johnson and Stewart (2005) pointed out that agency involves not only the evaluation of the various entities (people, objects, or products) but also the situation and the role of each player that influences the outcome of the situation. The agency dimension helps to distinguish the emotions that present afterward.

Third, *certainty* reflects the perceived likelihood of the event's outcome (Watson & Spence, 2007). In other words, it represents the degree of belief that an anticipated event will occur (Ortony et al., 1988 cited in Watson & Spence, 2007). Certainty will impact the feeling of the appraiser (Smith & Ellsworth, 1985; Watson & Spence, 2007). For this dimension, Ortony (1990) used the term "likelihood prospect realization," while most studies use the term "certainty" (Johnson & Stewart, 2005; Roseman, 1991; Ruth et al., 2002; Smith & Ellsworth, 1985).

Fourth, *fairness* derives from legitimacy (Smith & Ellsworth, 1985) or the perceived moral appropriateness of the outcome (Watson & Spence, 2007). Fairness also determines whether an outcome is deserved or undeserved (Roseman, 1991 cited in Watson & Spence, 2007). Additionally, some studies employed different terms for the fairness dimension, such as "blameworthiness" (Ortony, 1990), or "normative or moral compatibility" (Johnson & Stewart, 2005).

***Cognitive Appraisal Theory in Explaining Post-Purchase Emotions in Impulse Buying:*** The cognitive appraisal theory states that an individual's emotions depend on personal interpretations and evaluations (appraisals or estimates) of the event that was experienced (Frijda, 2009; Scherer, 1999, 2001). For example, imagine two people going on a first date; if they appraise this event as positive, it might develop into a new relationship, and they will feel happy. On the other hand, if the date is perceived as negative, their emotions will be negative as well (Scherer, 2001). Cognitive appraisal implies that personal interpretations play a significant role in predicting emotions. Thus, this could be the key element in explaining why both positive (Gardner & Rook, 1988; Piron, 1993; Youn & Faber, 2000) and negative (Gardner & Rook, 1988; Rook, 1987; Wood, 1998) emotions have been reported in impulse-buying situations. Thus, to comprehensively investigate impulse-buying phenomena, both cognitive and affective components need to be integrated into the model of study (Piron, 1991).

To predict a wide range of consumption emotions, previous studies suggest four relevant appraisal dimensions: outcome desirability, agency, fairness, and certainty appraisal. The dimensions of outcome desirability and agency are capable of providing explanatory power (Ruth et al., 2002; Watson & Spence, 2007). The combination of outcome desirability and agency provides a more comprehensive explanation in the consumer-behavior context, such as the decision-making process (Watson, 2006). Ruth et al. (2002) found that the combination of outcome desirability (known as *pleasantness*) and agency provide, to a large extent, an explanation of consumption emotions; thus outcome desirability and agency are identified as primary and secondary characteristics of consumption emotions. Outcome desirability (including evaluative, motivational, and situational processes) and agency (including responsibility and controllability) dimensions have been identified as the overwhelming drivers of emotion (Ruth et al., 2002; Smith & Ellsworth, 1985). Previous research relating to consumer behavior and consumption emotion suggested to only investigate key appraisal dimensions, which were outcome desirability and agency (Soscia, 2007; Watson & Spence, 2007). Therefore, the irrelevant dimensions of cognitive appraisal-fairness and certainty, which are not related to the study-can be excluded (Dalakas, 2006; Hosany, 2011).

The dimension of outcome desirability and agency will be included and applied in the impulse-buying context. Although outcome desirability (known as goal congruence, goal consistency, or pleasantness) (Dalakas, 2006; Nyer, 1997; Soscia, 2007) and agency (Dalakas, 2006; Ruth et al., 2002; Soscia, 2007) have been acknowledged and studied in consumption emotion, consumer behavior and marketing contexts, empirical research focused specifically on the impulse-buying domain remains scant. Outcome desirability determines the consistency of the outcome with the expectation (Soscia, 2007). It is considered the most significant appraisal dimension defining the positive or negative result of the situation (Watson & Spence, 2007). It, then, helps predict positive or negative emotions. Agency refers to the perceived causation of events (Soscia, 2007). Who or what influences the situation is the

causal agent (Watson & Spence, 2007). It could be oneself (self-caused), other (other-caused), or circumstance (circumstance-caused) according to the individual perception (Smith & Ellsworth, 1985; Watson & Spence, 2007). Together with outcome desirability, agency helps to determine the specific emotion of the customer.

**Timing of Cognitive Appraisal and Emotion:** Emotions which happen at different time periods may be influenced by different causes. They are divided into at least two different periods of time-immediate emotions and delayed emotions (Ramanathan & Williams, 2007). Immediate emotion refers to emotion which presents at the moment of the impulse-buying decision. It is normally positive, as in the case of “retail therapy” (Atalay & Meloy, 2011) or mood management (Youn & Faber, 2000) which could be the cause of positive immediate emotions (Figure 3). This kind of emotional response occurs without any cognitive process. Immediate emotion does not last for a long time. It will fade out after the end of the caused event. Delayed emotion refers to the emotions that occur after the time of purchase is past. Then it would reflect the emotion caused by the “attitude object,” which in this case is the purchased product. Unlike immediate emotions, delayed emotions are steady if the attitude object does not change. Thus, delayed emotion is the real affective component of attitude. In the case of impulse-buying decisions, consumers can indicate negative emotions after the cognitive process; they find that they have obtained an undesirable, unnecessary, wasteful, or low-utility product (Wood, 1998), or that they will never use the product, or they should not have bought it (Hawkins and Miller 2003), because they are disappointed by their decision to make an impulse buy. This study is limited to the investigation of emotions that result from the cognitive stage of evaluating the buying decision which are the delayed emotions occurring at least 24 hours after the impulse-buying decision (Ramanathan & Williams, 2007).

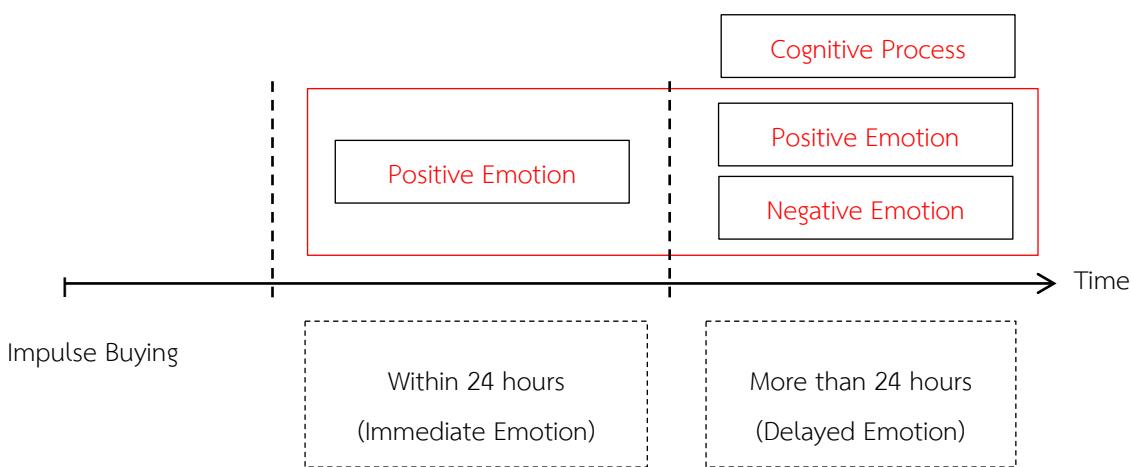


Figure 3 Moments of Cognitive and Affective Stages

#### Proposition Development

This paper explores the post-purchase stage of impulse buying. It conceptualizes a model employing cognitive appraisal theory to help explain impulse-buying phenomena. It finally offers a framework to comprehend cognitive states and the relationship between

impulse buying, cognitive appraisal, and affective states of impulse buyers (Figure 4). The model fundamentally bridges the cognitive appraisal theory to impulse buying domain as the mediator which explains the divergent emotions of customers. This study also further investigates post-purchase emotions, and suggests various emotions that could occur within several cognitive appraisal conditions. It ultimately helps to predict customers' emotions, which will benefit marketers in helping to prevent negative effects on their brand.

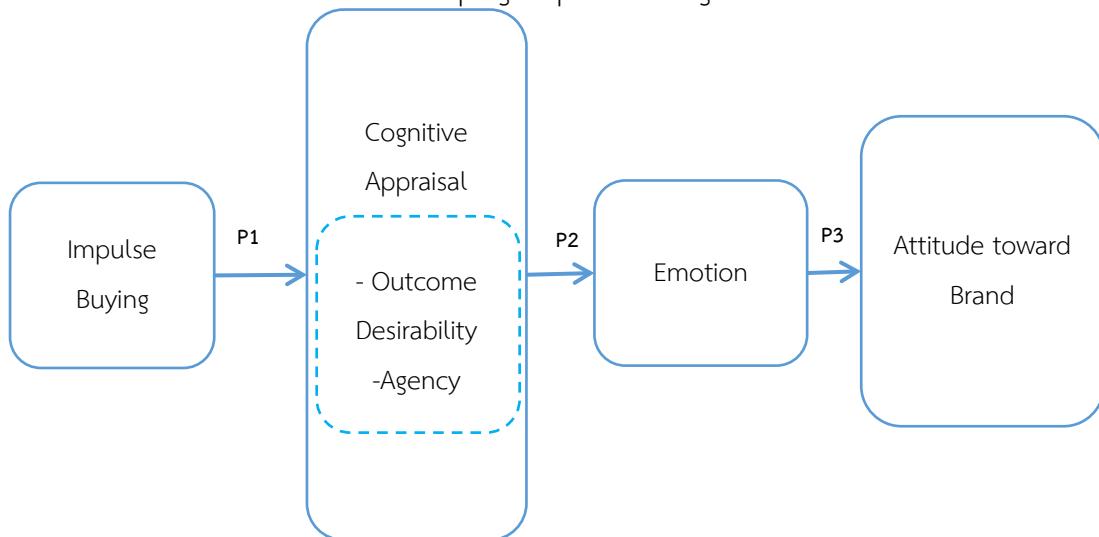


Figure 4 Conceptual Framework of the Post-Purchase Stage of Impulse Buying

**Effect of the Impulse-Buying Cognitive Appraisal:** Regardless of individual impulsiveness, which is an internal factor (Xiao & Nicholson, 2013), external factors such as media/advertising (Abratt & Goodey, 1990; Adelaar, Chang, Lancendorfer, Lee, & Morimoto, 2003; Liao et al., 2009) or promotion (Crawford & Melewar, 2003; Dholakia, 2000; Liao et al., 2009; Narasimhan et al., 1996) could influence impulse-buying behavior. Not only impulse customers, but also prudent customers can experience impulsive behavior, which could be more influenced by costs than the benefits that they could get from the product (Puri, 1996). Although prudent customers are rational shoppers, they are usually price-sensitive (Liao et al., 2009) and could switch to another brand that offers a lower price when the price reduction is not available (Hartley & Cross, 1988). Regarding customers' characteristic behaviors, impulse customers exhibit higher impulse-buying tendencies than prudent customers in a general situation. Hence, everyone (both impulse and prudent customers) can be motivated to make impulse decisions by specific external stimuli.

Many studies have investigated the situation (or external stimuli) that induces the consumer to purchase impulsively, including media and advertising (Abratt & Goodey, 1990; Adelaar et al., 2003; Liao et al., 2009), the specific salesperson (J. Park & Lennon, 2006; Pornpitakpan & Han, 2013; Yu & Bastin, 2010), sales promotions (Dholakia, 2000; Narasimhan et al., 1996; Piron, 1991; Spears, 2006), and the display environment in which purchasing occurs (Abratt & Goodey, 1990; Crawford & Melewar, 2003; A. S. Mattila & Wirtz, 2008; Steenkamp et al., 1996). Regarding the definition of impulse purchasing, Piron (1991) found two major

components, unplanned shopping and exposure to stimulus. Additionally, Youn and Faber (2000) examined large numbers of impulse-buying cues and found twenty-seven frequent cues (out of 207), such as items on sale, low price, being on vacation, free samples, being on holiday, having an upcoming date, and shopping for gifts, that trigger impulse-buying decisions. Consumers could be distracted by shifting their focus from buying a specific product for which they are searching, to the consideration of other attractions, and would tend to overlook the desired product itself. We then expect that when consumers shift their focus toward other attractions rather than the desired product per se, they may be more likely to obtain a product which they do not really need. Once people purchase impulsively, without planning to fulfill their pre-determined desire, they may acquire an undesirable product because of an impulse decision at the moment of purchasing (see Figure 4).

***Proposition 1a: Customers who make an impulse purchase are more likely to experience negative outcome undesirability.***

According to external stimuli such as media and advertising (Abratt & Goodey, 1990; Adelaar et al., 2003; Liao et al., 2009), the specific salesperson (J. Park & Lennon, 2006; Pornpitakpan & Han, 2013; Yu & Bastin, 2010), sales promotions (Dholakia, 2000; Narasimhan et al., 1996; Piron, 1991; Spears, 2006), and the display environment in which the purchase is made (Crawford & Melewar, 2003; A. S. Mattila & Wirtz, 2008; Peck & Childers, 2006; Steenkamp et al., 1996), customers could shift their focus toward unexpected stimuli and pay less attention to the previously desired product. For instance, some customers report that they bought a product impulsively because they got a good deal (Gardner & Rook, 1988). Their purchasing decision could be interpreted as *other-caused*, such as by their friends (Luo, 2005) or salespersons (Yu & Bastin, 2010); or *circumstance-caused*, such as by promotions or advertising.

No one can observe the agency interpretation except the customers themselves. Even if they buy the discounted product, they may interpret that they bought it because they wanted it regardless of the discount. Therefore, personal interpretation determines if the decision is caused by self, other, or circumstance, regardless of real behavior.

***Proposition 1b: Customers who experience an impulse-buying decision are less likely to interpret that they themselves are the cause of the decision (self-caused); on the contrary, they are more likely to interpret that others or circumstances are the cause of the decision (i.e. that the decision was other-caused or circumstance-caused).***

***Cognitive Appraisal Affect Emotions:*** Within the impulse-buying context, a consumer's emotions are a result of the individual's evaluation of the impulse-buying decision. The emotional experience normally starts with appraisals, followed by emotions; hence, the emotion will change if the appraisal changes (Ellsworth, 2013; Sander et al., 2005; Scherer, 2001). Conforming cognitive appraisal-related emotions (Hosany, 2011; Roseman et al., 1990;

Watson & Spence, 2007), which may present themselves in impulse-buying situations (Gardner & Rook, 1988; Ramanathan & Williams, 2007; Xiao & Nicholson, 2013), are summarized and mapped by the authors of this research. Regarding the dimensions of outcome desirability and agency,

Table 5 suggests the emotions that could occur in impulse-buying situations.

**Table 5 Proposed Emotions of Outcome Desirability and Agency that Could Occur in Impulse-Buying Situations**

	Desirable Outcome	Undesirable Outcome
Self-caused	pride, happiness	guilt, shame, regret,
Other-caused	Happiness	anger
Circumstance-caused	relief, happiness	disappointment, frustration, disgust, distress

**Effect of Outcome Desirability on Emotions:** After impulsively buying a product, customers normally make a post-purchase evaluation (Comegys, Hannula, & Väisänen, 2006; A. Mattila & Wirtz, 2000; Puccinelli et al., 2009). One of the most cogent issues of a post-purchase evaluation for impulse buying is whether the buyers determine if the product is what they truly want. When customers carefully consider and buy a product that they want, the need may very well be satisfied. Thus, the buyers would have positive emotions, such as happiness (Gagne, 2003; Howell, Chenot, Hill, & Howell, 2011; Sheldon & Elliot, 1999). On the other hand, they would have negative emotions if what they bought was undesirable, unnecessary, wasteful, or low-utility (Wood, 1998); they feel that they may never use it, or that they never should have bought it (Hawkins & Miller, 2003). Hence, they are disappointed by their purchasing decision. Thus, we present proposition.

*Proposition 2a: Customers acquiring desirable products (outcome desirability) are more likely to indicate positive emotions (which may include pride, happiness, and relief) because they are satisfied by the products that they bought.*

**Effect of Agency on Emotion:** The agency dimension of cognitive appraisal considers whether customers interpret the outcome of the event as self-caused, other-caused, or circumstance-caused (Roseman, 1996; Ruth et al., 2002; Watson & Spence, 2007). A review of the agency dimension of cognitive appraisal-related emotions (see Table 5) suggests the possible emotions which could happen in impulse-buying situations.

*Proposition 2b: Customers interpreting the impulse buying as self-caused are more likely to exhibit the emotions of pride, happiness, guilt, shame, and regret.*

*Proposition 2c: Customers interpreting the impulse buying as other-caused are more likely to exhibit the emotions of happiness and anger.*

*Proposition 2d: Customers interpreting the impulse buying as circumstance-caused are more likely to exhibit the emotions of relief, happiness, disappointment, frustration, disgust, and distress.*

**Effect of Post-Purchase Emotions on Attitude toward Brand:** The model is extended to examine the impact on brand attitude. Several papers have investigated whether emotional feelings regarding a product can influence and result in a specific attitude toward a brand (Derbaix, 1995; Machleit & Wilson, 1988; Yoo & MacInnis, 2005). Taylor and Hunter (2003) provide the evidence that post-purchase emotion is more closely related to brand attitude than it is to satisfaction.

Once people are exposed to a good/bad experience or a positive/negative emotion with a product, they could associate that feeling with the brand and further develop attitudes toward that brand (Hwang & Kandampully, 2012; Walla, Brenner, & Koller, 2011). Likewise, we predict that if customers acquire positive emotions regarding the product purchased, they will further develop positive attitudes toward the associated brand. Otherwise, if they develop negative feelings towards a certain product, negative attitudes toward the brand will result.

*Proposition 3: Customers experiencing positive (vs. negative) emotions are more likely to develop a positive (vs. negative) attitude toward the brand.*

## Conclusion

**Theoretical Contributions:** This paper proposes research model that construe the incongruent research findings regarding the post-purchase stage of impulse buying. Most of the impulse-buying literature studies the antecedences of impulse buying. No study has fully examined and comprehended the consequences of impulse buying in terms of emotions. Hence, it sheds light on the study of impulse-buying consequences. This paper proposes to use cognitive appraisal, i.e. outcome desirability and agency, as mediator, which will explain the affective consequences of impulse buying. It provides a knowledge foundation in the impulse-buying area and used it as a basis for further studies. In other words, this paper bridges two streams of research literature-impulse buying and cognitive appraisal to elucidate the post-purchase stage of impulse buying.

Specifically, this paper reviews impulse-buying literatures in terms of emotion consequences. It also reviews the evolution of the theory of cognitive appraisal and its relevant dimensions in consumer studies. Apart from the studies (Ruth et al., 2002; Soscia, 2007) that try to incorporate cognitive appraisal dimensions in a consumption context, this paper pioneers and applies relevant cognitive appraisal dimensions to the impulse-buying context. This paper also provides an explanation of different individual emotions in the impulse-buying context. Results from previous impulse-buying research studies regarding emotion are integrated with results from previous cognitive appraisal research studies

regarding outcome desirability and agency. This paper also suggests a complete mapping of possible discrete emotion consequences of impulse buying according to cognitive appraisal dimensions.

**Practical Implications:** Marketers can commonly increase short-term performance by introducing marketing campaigns to drive customers towards impulsive buying decisions, notwithstanding they may also cause negative emotions and attitudes toward a brand, which could impact the long-term performance of commercial firms. Understanding the customer's post-purchase stage of impulse buying will provide useful knowledge to marketers in designing marketing activities that benefit both short- and long-term performance. This paper helps marketers to predict customers' emotions. Marketers will be able to foresee the emotional impact associated with brand attitude, which is the outcome of impulsive buying. Hence, they can create specific marketing strategies to provide customers with good emotions and therefore satisfy them. This study will help firms to develop responsible impulse-buying marketing programs that will drive increased sales and enhanced positive brand attitudes by focusing on customers' unmet needs.

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