

Influential Factors for Online Impulse Buying in China: A Model and Its Empirical Analysis

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[Abstract] This study provides insights into online impulse buying behavior by exploring clear endogeneity relationships among factors that influence such a behavior. Drawing upon cognitive emotion theory and the existing literature, we develop a theoretical model that shows how personal impulse character, stimuli, psychosocial factors, and perceived risks are related to internal emotion and online impulse buying behavior. The influential path model is tested and modified on the basis of survey data obtained from 246 valid questionnaires. Data are analyzed with exploratory and confirmatory factor analyses to determine and confirm the identified factors. Structural equation modeling indicates the significant effects of the factors, as well as their indirect effects. Results aim to enhance our understanding of impulse online buying and improve online store operations from a management perspective.

[Keywords] online impulse buying; cognitive emotion theory; non-rational decision-making model; influential factor

Introduction

With the popularity of the Internet, online shopping has become pervasive in the day-to-day lives of the Chinese. Online impulse buying is further triggered by easy access to products, fast purchase process, lack of social pressure, and absence of the need to hand-carry products on the part of the consumer (S.A. Jeffrey, R. Hodge, 2007). An understanding of the consumer buying behavior is vital for e-commerce practitioners, so the nature of such an online buying behavior should be explored (Tibert Verhagen, Willemijn van Dolen, 2011). The online context is highly susceptible to non-rational purchases, such as impulse buying, unplanned purchases, compulsory purchases, and the herd phenomenon. All of these can be largely attributed to physiological limits, the deterministic environment, personal preferences, and background effects. While plenty of research indulged in traditional consumer purchase model that involves ideal buying conditions (rational, information completed) does not always occur in online stores. Surprisingly, research on the factors that influence impulse buying in an online context remains limited. Existing studies have not considered customers' non-rational behavior, which leads to their impulse buying.

The goal of our research consists in analyzing the relationship among the influential factors, internal states and buying behavior in the online context. After a survey of relevant research involved in impulse buying and influential factors to impulsive buying, this study summarizes the factors that influence online impulse purchases in relation to real-world online shopping processes. Based on the Cognition Emotion Theory, an online impulse buying model is constructed, and then research hypotheses are developed. Through empirical analysis, the study verifies and modifies the structural model, which shows the relationship among the identified factors, internal states and online impulse buying behavior. Finally, further discussions are made on the basis of the results.

Theoretical Background

Impulse buying

Traditional theories on consumer purchase decisions purport that consumers possess sufficient information to select and implement the best option. However, such a concept is limited in consideration of actual conditions. Prior to 1982, the definitions of impulse buying focused on the product rather than the consumer as the motivator of impulse purchases. Katona and Muller (1955) regard impulse buying as

an unplanned action that occurs after consumers have entered a shopping center. By contrast, Nesbitt (1959) regards impulse buying as a rational action because it is confirmed after consumers have entered a shopping center. Stern (1962) provides a basic definition of impulse buying behavior, which classifies the act as planned, unplanned, or based on impulse. According to this categorization, planned buying behavior involves a time-consuming search for information, followed by rational decision making (Piron, 1991; Stern, 1962). Unplanned buying refers to all purchases made without planning and includes impulse buying, which is characterized by the relative speed with which buying “decisions” occur. After 1982, when researchers began to re-focus their attention on impulse buying behavior, they started to investigate the behavioral dimensions of impulse buying. Researchers then agreed that impulse buying involves a hedonic or affective component (Cobb & Hoyer, 1986; Piron, 1991; Rook, 1987; Rook & Fisher, 1995; Weinberg & Gottwald, 1982). Rook (1987) reports accounts by consumers who felt that a product was “calling” them, almost demanding that they purchase it. These consumers indicated that a sudden, often powerful and persistent urge to buy something, immediately formed behavioral elements that led to their impulse buying.

A definite concept of impulse buying remains lacking because it involves complex mental processes and emotional states. However, relevant studies imply that impulse buying involves two principles. First, it lacks a clear, detailed purchase target, so it is an unplanned action. Second, it is a complex emotional reaction to an external stimulus. Therefore, online impulse buying is defined as an action without consideration or purchase intention and is a result of a mental reaction to an external stimulus from the online environment.

Factors That Influence Online Impulse Buying

Compared with traditional purchasing, online shopping involves the following four advantages. First, shopping through a network is not limited in terms of time and space. Second, the prices of online commodities are not significantly different from those in physical shops. Third, shopping online can save consumers’ time and effort in determining the commodity they want. Fourth, online products are diverse and rich in information, characteristics that significantly reduce information irregularities. In addition to these advantages, sophisticated online payment systems largely address the security issues of online payment; as a result, online buying generates a positive consumer demand (Qin Wu, 2009).

Research on online impulse buying has mainly focused on promotions. Peck and Childer (2006) examine how promotions influence consumers’ impulse buying behavior. Dholakia (2000) explores low price and advertising as a means of promotion that affects impulse buying. In recent years, researchers have recognized that certain factors are more influential than others in affecting online impulse buying. Using the actual purchasing behavior in a high school reunion web store, Jeffrey (2007) examines the factors that lead to the increased willingness of online consumers to impulsively purchase items. Verhagen (2011) develops a model and shows how beliefs on functional convenience (product attractiveness in the online store) and representation (enjoyment and website communication style) are related to online impulse buying. However, existing research lacks insights into consumer reaction on the factors that influence online impulse buying. In this study, we attempt to investigate such factors, which are summarized into the following four types: 1) Personal factors, 2) External stimuli, 3) Indirect stimuli, and 4) Restrained factors.

Personal factors. 1) Impulse character refers to the tendency to engage in impulsive behavior. In real life, people respond to external stimuli in varying degrees; some are sensitive to external stimuli, and these people are known to have a high-impulse character, whereas others just ignore stimuli, and these people are known to have a low-impulse character (Stern, Hawkins, 1962). 2) People who are easygoing and prefer to be highly similar to others, so that they can well integrate in their social circles are likely to engage in impulse buying (Winshie, 1977). 3) Demographic factors. Empirical research shows that factors, such as age, gender, and race, are related to impulse buying (Wolman, Benjamin, 1973). 4) Self-control ability. Some studies indicate that highly self-controlled consumers are less inclined to engage in impulse buying than those who are not, whereas consumers who lack self-control are vulnerable to non-rational purchasing; they form purchase decisions very quickly and have mood swings, which further

increase their likelihood to engage in impulse buying (Joann Peck, 2006).

External stimuli. External stimuli, including price promotions, advertising, product attributes, website design, and online reputation, are direct and obvious elements evident in online stores. 1) Price. Price is most likely to influence buying behavior compared with other external factors (Lai, 2008). 2) Online store design. A well-defined list of products, highlighted recommendations, aesthetic layout, and appropriate background music all contribute to establishing a favorable consumption environment that leads to impulse purchase behavior (Jeffrey, 2007)). 3) Online character of the commodity. Commodities cause impulse buying if they are innovative, original, distinctive, and bring enjoyment to consumers (Dholakia, 2000). 4) Social factors. With the development of society and corresponding lifestyle changes, people's purchasing power has increased. The new generation tends to impulsively buy without considering income limitations (Wu, 2009).

Indirect stimuli. 1) Online comment. Lisa and Hankin (2007) have found that buyers are very sensitive to negative comments. Similarly, Laros (2005) indicates that the role of comments on products decreases as the sales is extended. Therefore, incentives to encourage positive comments are unnecessary when sales have been stabilized. 2) Online service. The quality of online services affects consumers' emotion; poor service may lead to consumers cancelling a transaction (Lee, 2008). 3) Recommendation from others in the network. Someone knowledgeable in online shopping shares his or her shopping experience and recommends a commodity (Madhavaram, 2004).

Restrained factors. 1) Income. Online buying is directly influenced by income because it is hindered by the lack of disposable income (Dholakia, 2000). 2) Perceived risks. Consumer uncertainty on a commodity can cause negative consequences after buying. Peter and Ryan (1976) indicate that perceived risk comprises two elements. Stone and Winter (1987) emphasize risk as an expected loss, which is seemed to be recognized by consumers. Kaplan (1976) proposes five dimensions of perceived risk: economic, functional, physical, psychological, and social dimensions. Sweeney (1999) adds the "time risk" as the sixth dimension. These dimensions can explain most of the perceived risk. The perceived risk in online shopping is high and likely reduces purchasing behavior.

How do the aforementioned factors affect online impulse buying? The next section constructs an online impulse buying behavior model based on cognition emotion theory (CET) and develops the relevant hypotheses.

Model Construction And Hypothesis Development

Theoretical Model

This study discusses the superiority of the cognitive approach to emotions over the behavioral and physiological approaches. The cognitive approach assumes that the interpretations of events, rather than these events per se, determine the emotion involved. CET indicates that observing a stimulus and the consequent formation of evaluative perceptions causes emotions (Kaplan, Leon, 1974). Therefore, the factors that influence online shopping, especially those that are personal, external, and indirect, can be assumed to precede emotions of impulsive buying. We further propose an emotion–action link because we expect that a stimulus leads to impulse action tendencies that are adjusted under restrained factors. The outcome of the emotion, therefore, is to impulsively buy or not. This study does not focus on the process after impulse buying, so the delivery of the commodity is not considered. The time limitation for online shopping is inconspicuous, so time factors can be excluded. Fig. 1 shows our theoretical model, which is anchored on the literature on impulse buying and derives its theoretical structure from CET.

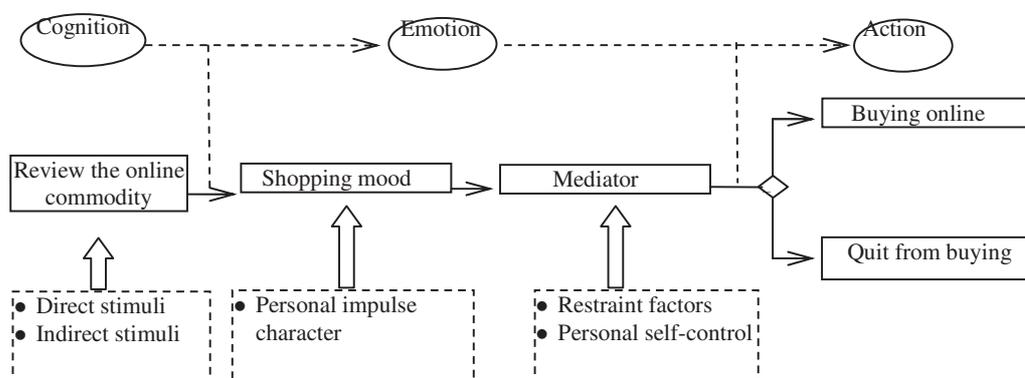


Figure 1. Cognition-Emotion-Action link: The theoretical model for measure the effects of influential factors on online impulse buying.

This structure has been shown to be robust in many consumer emotion studies and is empirically favored over other views. In the online context, shopping emotion has two internal states: online shopping mood which is revolved by (direct and indirect) stimuli, personal impulse character; the shopping mood is mediated by self-control which is determined by restraint factors, such as perceived risk and personal self-control traits. Final action is decided by personal emotion state. The effect between outside stimuli and internal state on online impulse buying behavior will be analyzed, as well as examining the influence of mediator variable between constructs. Related hypotheses are proposed as following sub-section.

Hypotheses

Online shopping moods and online impulse buying emotion. (Mohan, 2013) presented unplanned browsing brings direct and indirect stimuli, which can increase the will of impulse buying. This will accumulates as the browsing time increases. The issue in planned online buying is not involved in this study. The online shopping atmosphere working as external stimulus influences consumer mood, which in turn affects the buying behavior through the shopping emotion. Therefore, the following hypothesis is suggested: *H1. Online shopping pleasure moods and impulse buying emotion have a positive relationship.*

Stimulus and online impulse shopping emotion. In Section 2, we discussed the online shopping stimulus. The direct stimulus comes from the commodity and the online store. Indirect stimulus includes online comments, quality of service, and recommendations. The hypotheses are proposed as following:

H2. Commodity promotion and online impulse buying emotion have a positive relationship.

H3. The detailed information of a commodity and impulse buying emotion have a positive relationship.

H4. The commodity recommended in online stores and impulse buying emotion have a positive relationship.

H5. The number of online comments and impulse buying emotion has a positive relationship.

H6. The quality of comments and impulse buying emotion has a positive relationship.

H7. The quality of service and impulse buying emotion has a positive relationship.

H8. Others' recommendations and impulse buying emotion have a positive relationship.

Personal impulse character and online impulse buying emotion. A person with an impulsive character makes decisions without consideration. High-impulse characters tend to have an optimistic mood, are pleasure oriented, and neglect prior cognition and evaluation [6, 8], which all lead to impulse shopping emotion. Therefore, the following hypotheses are suggested:

H9. A high-impulse character has greater online impulse buying emotions than a low-impulse character.