

A NEW SHOPPING CHOICE PROPOSITION: “SHOPPING CONTINUUM THEORY” FOR ONLINE SHOPPING

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ABSTRACT

Considering a lack of theoretical research for online shopping in spite of its growth, this research theoretically proposes a new shopping choice model, “Shopping Continuum Theory (SCT)” for the online shopping context. In contrast with previous literature, SCT is based on a tripartite view for a theoretical perspective and put attention on affect as an equal attributor to cognition for consumers’ decision-making. Based on the Cognitive Continuum Theory, SCT provides depth understanding of shopping tasks (goal-oriented, experiential-oriented, and search-oriented shopping tasks) and interaction of cognitive and affective perceptions toward online stores. It explains how online consumers cognitively and affectively interact to information and shopping environments provided by online stores, depending on their shopping task orientations, and how the interaction influences shopping choice. SCT suggests that consumers have a heuristic decision-making process and tend to make a shopping choice, which is consistent with their shopping task orientations because decision-making tends to fall into a continuum.

KEYWORDS: shopping theory, cognitive continuum theory, online shopping, interaction between cognition and affect, decision-making

INTRODUCTION

With the emergence of e-commerce, there have been many studies, but theoretical electronic commerce research seems to still be in its infancy, particularly from a consumer behavior theoretical research perspective (Cowles, Kiecker, and Little, 2002). From a theoretical perspective, most of the recent online shopping studies seem to integrate salient attributes of online shopping, based on the Theory of Reasoned Action (Fishbein and Ajzen, 1975). However, as Fishbein and Ajzen (1975) acknowledged themselves, TRA has some limitations in that the TRA does not explicitly address the distinction between goals and behaviors and the consumer’s behaviors under multiple-choice situations (Sheppard, Hartwick, and Warshaw, 1988). On the other hand, from a theoretical orientation perspective, historically the formality of attitude has been controversial. Two major theoretical orientations have emerged in studying these attitudes: the unidimensionalist view and the tripartite view (e.g., Lutz, 1991). TRA is based on the unidimensionalist view, which posts a causal flow (with a hierarchy of effects) through components of attitude to account for consistency among notions of cognition (beliefs), affect (attitude), and conation (behaviors). The tripartite view incorporates the notion of consistency among three components (cognition, affect, and conation) for the formality of attitude. These three components are often not empirically

distinguishable as they are integral parts of attitude (Lutz, 1991). Furthermore, as many previous studies indicated, the consumer's choice processes go through heuristic decision-making processes under multiple goal situations because of the consumers bounded rationality and asymmetric features of information (e.g., Simonson and Tversky, 1992). Regarding this decision-heuristics, the tripartite view might provide a more reasonable theoretical explanation about consumer activities related to choice. Therefore, due to this lack of theoretical development for consumer choice under goal situations with tripartite aspect, my study focuses on developing a new shopping choice theory in order to explain consumers behaviors under shopping situations that they might face while they are shopping. To develop a new shopping choice theory, my study is based on Cognitive Continuum Theory (CCT) (Hammond, 1988), which is based on the tripartite view.

Even though the impact of affect on decision-making has been heavily reported in many previous studies, affect has been inappropriately regarded as a moderator for decision-making. It is meaningful to investigate the interaction between the cognitive factors and the affective factors on store environmental cues to understand how cognition and affect interact during the decision-making process, and also how the interaction influences shopping choice.

Therefore, this study's purpose is to provide a new theory, "Shopping Continuum Theory (SCT)" in order to understand the consumers choice for purchasing online; to examine relationships between online shopping environments and shopping tasks from both cognitive and affective aspects; and to provide meaningful managerial implications to online retailing.

LITERATURE REVIEW

Cognitive Continuum Theory (CCT)

This study is grounded in CCT, which analyzes a person's cognitive activity and its shift produced by task circumstances. It explains how people make decisions in complex, dynamic information environments (Hammond, 1988, 1990, 1996). CCT provides a theoretical understanding about people's cognition when they perform and make decisions, based on complicated information in dynamic tasks. Based on structure and function of the task, people operate in various task conditions and perform to achieve a task. There are four premises in CCT (Hammond, 2000):

- (1) Various modes of cognition can be placed on a continuum anchored at two poles. One is intuitive cognition and the other is analytical cognition;
- (2) There are three cognitive forms (activities): analysis, intuition, and quasi-rationality. These lie on a continuum with quasi-rationality between intuition and analysis. The quasi-rationality is a kind of bounded rationality on decision-making;
- (3) Cognition is dynamic over time. Cognitive activities move back and forth along the continuum between one pole and the other pole. In doing so, relative intuitive and analytical components to quasi-rationality will be changed by the dynamic cognition; and

- (4) There can be an order of tasks on the continuum, depending on whether they induce intuitive, quasi-rationality, or analysis. CCT views that inducing one of the three modes of cognitions is within an individuals' capability.

CCT emphasizes pattern-seeking behaviors by indirect. This has an advantage it allows us to predict movement of cognition and the interaction between cognition and task by measuring pattern behavior. CCT is a theory of dynamic task systems that is interested in the variety of tasks, which are reflected in depth properties and surface properties. The distinction between depth and surface in a cognitive task is very important because people use different approaches for obtaining information when presented with the same systems. Depth refers to "the covert relationships among the variables within the task, whereas surface refers to "the covert display of the task variables to the subjects" (Hammond, Grassia, and Person, 1987, p.756). The properties of intuitive cognition and analytic cognition are very distinctive. To determine the location of a judgment on the cognitive continuum, each property for surface and depth is aggregated by means of a simple sum.

Interaction Between Cognition and Affect

Cognitive psychology affirms the importance of affect in fully accounting for cognitive schemata of various concepts because positive affect induced by pleasant store environmental cues encourages customers to stay longer and to have more interactions with other sales people, to simplify their decision-making for purchase, to build positive store image, and to increase the merchandise's quality and value perceptions. Positive affect is found to promote cognitive flexibility and to generate more elaborate, organized thoughts, depending on situations or tasks, and is regular, predictable, and understandable (Isen, 1997). In the previous literature, the principle of cognitive-affective interaction was invoked as a moderator, which bothers the purge of mentalistic thinking. The affective system is less amendable to behavioral analysis and is acknowledged to have an interior apparatus, by pointing to the linkage between thought and feeling. Researchers believed that consumers use heuristic choice to minimize cognitive effort in their decision-making processing, but what these heuristics for store choice is largely unknown (Mitchell, 2001).

In terms of choice process, the previous literature seems to have been interested in heuristic processing in order to find the distinction between analytic processing (data-driven processing) and intuitive processing (overall evaluation-driven processing) (Fiske and Neuberg, 1990). In the electronic commerce literature, this heuristic evaluation, a flow experience in the evaluation of websites, has been variously labeled as a "cognitive engagement" and "cognitive absorption. " The heuristic evaluation procedure for examining the usability of a firm's Website is influenced by emotion and it is contingent on task and product characteristics (Agarwal and Viswanath, 2002). Thus, consumers might have heuristics choice by the interaction between cognition and affect toward shopping related activities in the Websites by different weighting about each attribute of online stores. Through the heuristic decision-making process, consumers might have a gestalt view obtained by the interaction between cognitive and affective perceptions toward online stores and shopping related activities from the Websites.

A NEW SHOPPING CHOICE THEORY PROPOSITION

This study proposes a new theory, the “Shopping Continuum Theory” (SCT), by adapting CCT, to explain consumers’ shopping choice in an online shopping context. This theory is defined as “a shopping task-behavior continuum theory, which integrates cognition and affect experienced when shopping on-line. This SCT explains how people make their decisions related to shopping choice as they interact with shopping environments cognitively and affectively. People are likely to anchor their shopping choices based on their shopping tasks, but the continuum is mediated by the degree to which people cognitively and affectively experience and interact with surface-depth properties of shopping environments.

Shopping Tasks in SCT

Channel choice theories emphasize evaluating shopping tasks because channel choice for a specific task varies, so many previous Internet studies have elaborated on the Internet’s appropriateness and attractions to the specific shopping tasks. Most of Internet studies have seen the online consumer as engaging in two tasks: experiential-oriented shopping and goal-oriented shopping (e.g., Hoffman and Novak, 1996). Differences exist in consumer behaviors between online consumer shopping (choice) and offline consumer shopping (choice). Bucklin, Lattin, Ansari, Gupta, Bell, Coupey, Little, Mela, Montgomery, and Steckel (2002) modeled consumer choice online by comparing the nature of Internet choice with supermarket choice. They classified Internet choice using two dimensions: (1) the objectives of the individual for accessing the Internet (browsing, search, or purchasing) and (2) the realm of the choice decision (within or across Websites). When comparing choice behaviors between online and offline, people seem to have unclear objectives when they visit online stores. The objectives can be divided into three: goal orientation (buy), hedonic orientation (browse), and search orientation (search). Therefore, my study conceptualizes dynamic online shopping tasks as three tasks: (1) a goal-oriented shopping task, (2) an experiential-oriented shopping task, and (3) a search-oriented shopping task. There are four premises in SCT:

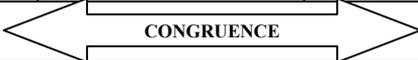
- (1) Modes of cognition and affect can be placed on a continuum anchored at two poles (intuition and analysis) in a heuristic manner.
- (2) There are three cognitive-affective interaction forms (activities): analysis, intuition, and quasi-rationality. The three forms of cognition lie on the continuum between intuition and analysis. The continuum includes elements of intuition, analysis, and quasi-rationality. Like the CCT’s definition about the quasi-rationality, SCT views that the quasi-rationality is a kind of bounded rationality on decision-making, relating with an intermediate level of a given task characteristic as well as an intuition level or an analysis level.
- (3) The interaction between cognition and affect is dynamic over time. The interactive activities move back and forth along the continuum between one pole and the other pole over time. As doing so, relative intuitive and analytical components to quasi-rationality will be changed by the dynamic interaction. The interaction having constancy with information related with shopping either cognitive movement or affective movement on the continuum is regarded a successful decision-making processing for online business because it means that

information (intuitive or analysis) provided by a Website is consistent to shopping task motivations; and

- (4) To form an attitude toward shopping, consumers have the ability to integrate cognition and affect formed (or influenced) by shopping related cues and to use the integration of cognition and affect for their related decision-making.
- (5) Value perceptions related with online purchase are formed by either cognitive or affective components. Overall value perceptions toward a certain Website are decided in a heuristic matter.

The brief key concepts of SCT are described in Table 1.

Table 1. Concepts of the “Shopping Continuum Theory”

	←----- Continuum -----→ Mediated by the interaction between cognition and affect			
	Pre-purchase intention	Surface shopping properties (required intuitive task)	Depth shopping properties (required analytic task)	Purchase Intention
Experiential-oriented Shopping task	No	High value perception	Low value perception	No
Goal-oriented Shopping task	Yes	Low value perception	High value perception	Yes
Search-oriented Shopping task	Neither	Neither high Nor low	Neither high nor low	?
				↑

Features of SCT

Ignoring affective influences, CCT focuses only on cognitive influences on decision-making mediated by task orientation. However, consumers might face decision-making situations considered by the interaction between cognition and affect from stores’ environments. Thus, this new theory pays attention to how consumers integrate cognitive and affective factors from retail environments and eventually, how consumers make their decisions for shopping. Based on Information Integration Theory, this theory views that consumers assign importance weights and values (utilities) to products and/or retailers’ attributes for which information is available at the decision time. After that, they combine these weights and values according to their own rules (adding, averaging, or eliminating) in order to have evaluations for the final decision. Consumers change value contents and evaluative criteria, so value is a dynamic construct (Woodruff, 1997). SCT views this dynamic task system as a flow system among tasks and the interaction between cognition and affect. The concept of the flow was initially proposed as “the state in which people are so involved in an activity that nothing else seems to matter” (Csikszentmihalyi, 1990, p. 4). Novak, Hoffman, and Yung (2000) defined flow related to the Internet as “creating a compelling online experience for cyber customers is critical to creating competitive advantage on the Internet” (p. 22). To explain exploratory behaviors in e-commerce, Sager (2002) examined five key aspects of the flow: (1) a match between skills and challenges, (2) concentration and focus, (3) control, (4) an altered sense of time, and (5) curiosity or playfulness. The factors making some activities conducive to flow and allow people to make optimal experience easier to achieve. People facilitate concentration and involvement by making the activities because such flow activities have a primary function providing enjoyable experiences (Csikszentmihalyi, 1990), so SCT views that online consumers might flow experience while interacting with online environment.

E-Tailing Properties: Surface Properties and Depth Properties

From the CCT perspective, the properties of stores providing retailing atmospherics are divided into two types: surface properties and depth properties. Surface properties of dynamic task systems are “those which the operator sees” (Hammond, 1988, p. 5) such as store physical environments. Intuitive surfaces are reflected by pictorial and simultaneous information presentation without task-relevant organization. Surface properties of online stores are “Webmospherics,” which is a virtual environment counterpart to the physical surroundings in a retailing context. It includes structural design attributes (frames, graphics, text, pop-up windows, search engine configuration), transaction attributes (one-click check-out, purchase procedures, and hyperlinks), media dimensions (graphics, text, audio, color, and streaming video), and site layout dimensions (organization and grouping of merchandising) (Childers, Carr, Peck, and Carson, 2001). The virtual experience indicates a movement toward more multi-sensory interactions by high quality visuals, stereo sound, and 3-D imagery. It is important to create a compelling online experience by using the virtual experience because consumers undergo psychological and emotional states while interacting with online stores incorporating 3-D visualization and the virtual experience eventually facilitates consumer learning by improving decision-making (Hoffman and Novak, 1996; Novak, et al., 2000). On the other hand, depth properties of dynamic task systems are permeated with both intuitive and analytic inducements, which lead people to place surface-depth combinations on the same dynamic task continuum (Hammond et al., 1987). Analytic surfaces are reflected by organizations of information in a sequential, simplified, and self-paced manner (e.g., text-based Websites). Previous online shopping studies have a view that online shopping involves a more analytic environment, compared to other conventional channels. For example, Shim, Eastlick, and Lotz (2000) believed that online shopping involves more search quality for cognitive information whereas offline shopping (traditional shopping) involves more experience quality for experiential information. Mathwick, Malhotra, and Rigdon (2002) found that online shoppers perceived online stores provide a greater significantly analytic environment than catalogs.

PROPOSITION

Goal-Oriented Shopping Task

Shopping behavior seems to arise for three fundamental reasons: to obtain a product, to obtain both a product and pursue satisfaction with non-product-related needs, and to have objectives not related to product acquisition, in that order. For my study, goal-oriented shopping is defined as a task orientation of Internet shoppers who have a purchase intention for particular products from online stores. Moye and Kincade (2002) reported an influence of consumer shopping orientations on responses toward retail store environments. There are differences in the importance ratings of sensory/layout environments in environmental dimensions among shopping task orientations of decisive, confident, bargain, and appearance consumer groups. Goal-directed shoppers have defined goals when comprehending products or services, and have deliberate decision-making processes using an analytic cognition. In doing so, they fall in the analytic task continuum.

Proposition 1: Goal-oriented shoppers will be associated with significantly higher perceptions of analytic depth properties of online stores than intuitive surface properties of online stores.

Experiential-Oriented Shopping Task

In my study, experiential-oriented shopping task focuses on motivations that are primarily hedonic and non-product-related needs in nature. Experiential shopping is defined as an intention of experiencing a recreational gratification over the Internet without specific purchase intention and objectives. People tend to be influenced by the level of pleasure and arousal elicited by the characteristics of products in their early Web browsing. Mathwick et al. (2002) found that experiential Internet shoppers fell on an intuitive task continuum. Without specific shopping goals, experiential-oriented shoppers seem to rely on judgments of aesthetics in online stores. Childers, et al. (2001) found that entertainment is a very strong predictor of attitude for online shopping for both a utilitarian environment and as an immersive/hedonic online shopping environment. Interestingly, their result indicated that entertainment, which is a hedonic motivation, affects technology adaptation related to online shopping as well. That is, the result implies that hedonic motivation influences utilitarian motivated behaviors as well as hedonic motivated behavior. To date, Internet sites have tried to provide personalized information, communities, and proactive interaction tools (highly interactive Websites in order to create competitive advantage in the online market. Due to these efforts, Internet shoppers may come to the Internet with an experiential shopping task. Highly interactive Websites might fall at an intuitive pole of the continuum whereas text-based Websites imposing explicit information displays fall at an analytic pole of the continuum at this end of the continuum. Consumers minimize dynamic qualities and decompose information. In doing so, their decision-making arrives at intuitive and spontaneous reactions rather than through elaborated analytic decision-making processes. Thus,

Proposition 2: Experiential shopping-oriented shoppers will be associated with significantly higher perceptions of intuitive surface properties of online stores than analytic depth properties of online stores.

Search-Oriented Shopping Task

As the Internet grows, one of the salient changes to the search process is that consumers are able to have richer information about products and retailers (Coupey, 2001). However, in the previous literature, search-oriented shopping task has not been well discussed. In my study, search-oriented shoppers are conceptualized as consumers who are looking for novel information for a good deal over the Internet with a general interest for certain products. This search-oriented task can be exchangeable with macro-level goals that are closely related with novel products or services, novel purchase situations, and novel contexts. In these macro-level goal situations, consideration set, which is a fundamental stage of pre-choice decision-making, is influenced by their goals (e.g., Chakravati and Janiszewski, 2003; Desai, Hoyer, and Wayne, 2000). Also, in this SCT, people who have searching tasks are assumed to use the Internet as a search tool for obtaining information about particular (or non-particular) products or services without actual transactions and purchase goals. For better trade-offs, they might try to find out better information related to products and

services provided by online shopping and different perceptions toward prosperities of online stores. This raises a research question of whether perceived values of search-oriented shoppers are different from the other task-oriented shoppers.

Research Question 1: Search-oriented shoppers have a different perception of surface-depth properties of online stores, comparing with experiential shopping-oriented shoppers and goal-oriented shoppers.

As many theoretical and empirical studies indicate, the congruence of surface–depth combinations with tasks facilitates task performance (e.g., Hammond et al., 1987; Mathwick et al., 2002). People tend to be influenced by the levels of pleasure and arousal made by the characteristics of products in their early Web browsing. Their later online shopping behaviors can be influenced by the previous arousal and pleasure experience by carry-over effects (Menon and Kahn, 2002). Goal shopping-oriented shoppers who prefer cognitive experience might look for more novel stimuli and exhibit curiosity about environments browsed in online stores, and then they are more willing to spend money or engage in unplanned purchases. Thus, goal shopping oriented shoppers will be more likely to engage in purchase due to the congruence between their shopping goal and values on analytic properties of online stores.

Proposition 3: Goal-oriented shoppers who experience a congruence between the task and analytic values of surface and depth properties of online stores will exhibit higher purchase intentions than when they experience incongruence between them.

With the same logic, experiential-oriented shoppers might engage in purchase in planned purchase situation due to the congruence between their experiential -oriented task and values on intuitive properties on online stores.

Proposition 4: Experiential shopping-oriented shoppers who experience a congruence between their task and intuitive values of surface and depth properties of online stores will exhibit higher purchase intentions than when they experience incongruence between them.

According to CCT, shopping tasks have a tendency to fall into a task continuum. Hence, online consumers having a goal-oriented shopping task might have higher purchase intention than experiential shopping-oriented shoppers and search-oriented shoppers.

Proposition 5: Goal-oriented shoppers will be associated with a higher purchase intention than experiential shopping-oriented shoppers and search-oriented shoppers.

Schwarz (1986) suggested that pre-existing pleasure emotions might increase favorable evaluation of novel stimuli more than familiar stimuli. In doing so, consumers tend to seek novel stimuli. He also suggested that positive emotions tend to fundamentally change peoples' psychological orientations, using the example that people make holistic references from positive emotions, so they are willing to take high risks and to approach more novel and stimulating targets that they encounter. Thus, the perceptions from the retail experience will influence their final choices whether to stay on-line for deeper information in particular online stores or whether to purchase from the online stores. High perceptions toward online store cues might moderate their own search task

orientation. Consequently, consumers having search-oriented tasks may fall at a different continuum pole from consumers having an experiential-oriented shopping task and a goal-oriented shopping task, but can fall at either the analytic or intuitive poles when they find trade-offs from the experience with online stores. That is, when they have high perception on surface and depth properties from online stores, even though they did not have a purchase intention initially, they may purchase in the online stores. Thus,

Proposition 6: When search-oriented shoppers perceive high surface-depth properties of online stores, they will be associated with a higher purchase intention than when they perceive low surface-depth properties.

The Interaction Between Affect and Cognition

As mentioned earlier, SCT views all choice as made by the interaction between cognition and affect responding to stimuli. As this interaction between affect and cognition toward online stores has a tendency of heuristics, people might differently perceive, depending on their shopping task continuums. Experiential-oriented shoppers might have higher affective values than cognitive values for not only surface properties but also depth properties of online stores because they are associated with more intuitive processes. On the other hand, goal-oriented shoppers might place a higher cognitive value on not only depth properties of online stores but also surface properties of online stores. Hence,

Proposition 7: Goal-oriented shoppers will be associated with significantly higher cognition from surface (intuitive) and depth (analytic) properties of online stores than affect from surface and depth properties of online stores.

Proposition 8: Experiential shopping-oriented shoppers will be associated with significantly higher affect from surface and depth properties of online stores than cognitive from surface (intuitive) and depth (analytic) properties of online stores.

The search-oriented shopping task has not been discussed in the literature, so we need an exploratory examination as to how search-oriented shoppers affectively and cognitively perceive online store environmental cues.

Research Question 2: The affect and cognition of search-oriented shoppers will be different from experiential-shoppers and goal-oriented shoppers when exposed to the same surface and depth properties of online stores.

CONCLUSION AND IMPLICATION

This exploratory study proposes a new shopping choice theory, SCT. SCT explains how online consumers cognitively and affectively interact with online shopping environments and information provided by online stores, depending on their shopping task orientations. Contributing to online shopping research, currently lacking theoretic development, this new shopping theory gives a deeper understanding of heuristic decision-making process of online consumers and their reactions to online stores environments in a continuum. Goal-oriented consumers are more likely to be related

with analytic decision-making process and to have higher cognitive reaction to online shopping environment, whereas experiential-oriented consumers are more likely to be related with intuitive decision-making process and to have a higher intuitive reaction to the online shopping environment. Even if search-oriented consumers do not have shopping intentions, they may have an intention to purchase if they experience high perceptions of the shopping environment cognitively and affectively.

As this study is grounded in CCT, it eventually expands the CCT with both affective and cognitive aspects into a shopping context. Contrasting with previous studies, this study investigates the impact of the interaction between cognitive perceptions and affective perceptions toward store environmental cues, so this study will provide understanding of how cognition and affect interact during decision-making processes in a heuristic matter and also how the interaction influences shopping choice. Lastly, based on the understanding of the consumers online shopping choices and the processes underlying them, this study may be used for developing managerial implications, such as marketing strategies for online store environments to online pure-play-retailers and brick-and-click retailers, by understanding online consumers features and their shopping choice processes. Therefore, this research is meaningful in that this research provides managerial implications as well as a theoretical contribution.

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