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The effect of consistency of price promotion cues on retailer credibility, product quality, value of a deal and purchase intentions

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THE EFFECT OF CONSISTENCY OF PRICE PROMOTION CUES ON RETAILER CREDIBILITY, PRODUCT QUALITY, VALUE OF A DEAL AND PURCHASE INTENTIONS

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DEDICATIONS

I wish to dedicate this dissertation to the honor and loving memory of my parents, Ivan Fedorovich Makienko and Vera Semenovna Makienko and to my aunt Taisiya Semenovna Emtseva. My parents and my aunt were and still are the closest people for me. Everything I have achieved by now I owe to them. They lived during hard times: they survived hunger in the 1930-s, served in the Red Army during World War II and were always under the pressure of the Soviet authoritarian regime.

My dad was a combat veteran of World War II: he was severely wounded in 1942 and received numerous awards for his military service. He never had long conversations with me, but he taught me by example. He showed me how to overcome obstacles, be strong and work hard. I am also very fortunate to inherit at least a part of his outstanding sense of humor – a thing that has kept me moving under all circumstances.

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ABSTRACT

Research on price promotions suggests that higher discounts often result in more favorable deal evaluations. However, consumers' reactions do not always follow a consistently linear path when evaluating the deal. Price promotions offering "too high" or "too low" value may result in adverse deal evaluations.

In this dissertation we investigate consumers' reactions and possible evaluations of price promotions when they are provided information on the two primary price promotion attributes - discount and time restrictions. If the price promotion attributes, acting as cues, are consistent with consumers' expectations (e.g., a high discount with a short time period, or vice versa), then the price promotion will be perceived as typical and consumers will evaluate it heuristically by using a small number of the cues. Typical price promotions are also likely to be processed automatically by using the default cause(s) for a retailers' price promotions. Consumers' evaluations of these deals can then be predicted by using simple linear models (Bettman, 1971) like the concept of perceived value (Monroe, 1982).

On the other hand, when a combination of price promotion attributes indicates that a retailer breaks the "common sense" rules of selling consumers will discount the default explanation and work to find a valid alternative explanation. In doing so, atypical price promotions induce attributional thinking and more complex information processing utilizing all relevant cues. The consumers' reactions in such situations may be best represented by more configural models like attribution theory (Kelley, 1972; Weiner, 1968).

The proposed conceptual model results in a set of hypotheses tested in two studies. The first study finds support for the hypotheses related to consumers' reactions to typical and atypical price promotions when a retailer is fully responsible for offering the price promotion. The second study also finds support for the role of attributions due to external circumstances. The results demonstrate that respondents' deal evaluations are dependent on whether the price promotion is typical or atypical and whether its inferred cause is internal or external. As a result the proposed conceptual model parsimoniously accounts for the prior mixed findings found in the research on price promotion.

CHAPTER 1. INTRODUCTION

Price promotion expenditures are growing exponentially as retailers vie to keep their current customers happy and to acquire new customers by adding value to their offerings. While price promotions are generally well accepted by consumers, there are examples of price promotion failures. Apart from the perceived value of the price promotion, consumers may make unfavorable attributions about the retailer's motivations that adversely affect perceptions of both the deal and the retailer. Therefore, it is impossible to overestimate the importance of carefully designing and implementing price promotion campaigns.

This dissertation advances the current level of understanding about how consumers process and react to price promotions using the two most common deal qualifications – discounts and time restrictions. Its purpose is threefold: (1) to develop a comprehensive conceptual framework applicable to the entire range of price promotions that consumers may observe in the marketplace, (2) to examine the situations in which various types of attributions are used by consumers in response to price promotions, and (3) evaluate how these attributions affect consumers' deal evaluations.

In this chapter, the first section details how consumers use simplified psychological mechanisms to analyze marketers' behavior and distinguish atypical marketer behavior that motivates them to expand their cognitive efforts to understand the motivation behind such behavior. This is then extended to a price promotion context (i.e., defining typical versus atypical price promotions) based on two key price promotion attributes – discount and time restrictions. The concept of consumer covariance beliefs is introduced as the mechanism used to evaluate the consistency/inconsistency of price promotion attributes or cues to determine whether the price promotion will be perceived as typical or atypical. When faced with atypical price promotions, the process of attributions is discussed as the method consumers use to attempt to understand atypical price promotions. The resulting general process model is then discussed as the basis for further elaboration in the following chapters.

1.1 CONSUMER INFORMATION PROCESSING STRATEGIES

Today's marketplace is an extremely complicated and diverse environment for consumers. In addition to the explosion of alternative shopping outlets both online and offline and the rising number of products and brands to chose from, they face an ever increasing number and diversity of persuasive appeals, particularly in terms of price promotions. As a result, the "typical" consumer attempts to efficiently utilize their cognitive resources by engaging in psychological mechanisms of information processing and decision making that allow them to be very selective in terms of the information they will actually process. Individuals cannot analyze in depth each situation they encounter (Cialdini, 1993). As a coping strategy, consumers rely on repeated causal analyses to develop "a repertoire of abstract ideas about the operation and interaction of causal factors," known as *schemata* (Kelley, 1972, p. 152). Schemata are used in forming consumers' expectations about typical marketplace outcomes (e.g., messages, objects, events and behaviors) while also providing a consumer with a logical explanation of reasons behind these marketplace activities. For a typical, frequently encountered situation in which individuals' expectations are not violated, ready-made schemata allow individuals to process observed information quickly and in an economical manner. In this case, information processing is done by a *heuristic* since schemata-congruent outcomes are not likely to generate elaboration

(Mandler, 1982). Moreover, information consistent with individuals' beliefs is "often accepted at face value" (Lord, Ross, and Lepper, 1979) because individuals rely on their preexisting causal beliefs, which were employed to form their expectations in the pre-exposure period (Smith and Hunt, 1987). Typical outcomes reinforce consumers' beliefs about a typical outcome's configuration (i.e., what attributes constitute it) and consumers' causal beliefs about the default reason behind the typical outcome.

When individuals are exposed, however, to an unexpected outcome in the form of a message, object, event, or behavior, it may "create[s] enough cognitive unrest" (Lichtenstein and Bearden, 1986, p. 295) that they will be motivated to devote some effort to resolving the puzzle. In such situations, individuals are not likely to change their stable schemata (Shweder, 1980, 1982). Instead, they try to understand the inconsistency by searching for an alternative, most plausible explanation in the situation under consideration, and their reactions to the outcome will be determined by their interpretations of the underlying cause or, in other words, by their attributions (Kelley and Michela, 1980). Differing attributions can have a profound effect on consumers' deal evaluations. For example, consumers may attribute a deep discount to a retailer's attempt increase current customers' loyalty, as a reaction to competitive pressure or as a means of selling off a defective or poor quality product. As a result consumers may have very strong and very different reactions: positive in the first scenario, neutral in the second and negative in the third.

1.2 PRICE PROMOTION AND ITS ATTRIBUTES

Price promotions are a well-established promotional tool for generating short-term sales. They offer consumers a discounted price if the purchase is made within a certain period of time. Price promotions may be viewed as an outcome with certain attributes including discount, time restrictions, brand name etc. From these attributes the consumers infer the reason(s) why the price promotion is offered.

One key attribute of a price promotion, as the name implies, is the discount. The discount presents a particularly unique appeal that requires consumers to evaluate two potentially inconsistent causes – the profit-seeking nature of companies versus the profit-sharing nature of price promotions. Given the prevalence of this "mixed" message, consumers treat price promotions as a typical way of conducting business and develop highly refined heuristics which limit the need for attributional thinking. Attributional thinking is activated, however, when consumers perceive that a given price promotion differs from their expectations for typical price-promotion practice.

For example, consumers may believe that the typical discount for a product category is 25% off the regular price, with a range of discounts above and below this discount. Sometimes retailers offer only 10% off; sometimes they offer up to 50% off. But if a retailer offers 95% off the regular price, this price promotion is likely to be noticed and evaluated because it is unexpected and distinctive. Consumers attempt to apply their knowledge of the marketplace to understand why a retailer is running such a promotion. Attributions will be generated because the default explanations typically used when they encounter price promotions (e.g., to reduce inventory of slow-selling merchandise, to acquire new customers, to respond to competitive pressure, and to improve loyalty among current customers) do not seem appropriate for the situation. Retailers cannot make a profit with a 95% discount. Unless additional information is provided that will justify the promotion (e.g., a substantial reduction in costs of materials and

supplies, or the introduction of a revolutionary saving technology), consumers are likely to assume the worst scenario: the retailer is trying to liquidate their holdings in inferior or poor quality products. Empirical research has upheld the assumption that, in the absence of a reasonable explanation, consumers are going to associate lower prices (higher discounts) with a lower quality of the promoted products (Bagwell and Riordan 1991; Gerstner, 1985; Milgrom and Roberts 1986; Wolinsky, 1983).

Though consumers and retailers primarily focus on the discount, it is only one of two key attributes of price promotions. Raghubir and Corfman (1999) define price promotions as temporary prices. When viewed from this perspective, it becomes apparent that time restrictions are the second essential attribute of any price promotion. Unlike other attributes that may or may not be present in a specific price promotion—brand name (e.g., nonbranded products), store reputation (e.g., new store), country of origin, and warranty, to name a few—time restrictions are always present, whether implicitly or explicitly. Consumers do not expect to get a discount every time they go on a shopping trip. Unless a retailer is using the manipulative strategy of offering a discount permanently, discounts are offered only during specific periods of time. Price promotions that run constantly will be perceived as permanent price drops rather than as discounts. For example, offering a permanent 5% discount for seniors is an example of discriminated pricing strategy but not price promotion practice.

Despite the fact that time restrictions always accompany discounts either explicitly or implicitly, this price-promotion attribute has received little attention from researchers (e.g. Lynn, 1992; Simonson, 1992; Inman et al., 1997; Howard and Kerin, 2006). Yet time restrictions can play a key role in determining which price promotions will be perceived as typical and which run counter to consumers' expectations. In the previous example where the discount of 25% could range from a low of 10% to as high as 50% and still be perceived as typical, consumers' expectations about time restrictions associated with these different typical discounts will be different. Therefore, when both key attributes are present the price promotion will be perceived as typical only if the discount is accompanied by expected time restrictions. Otherwise, consumers will perceive the price promotion as atypical. In other words, the consistency or inconsistency of price promotion attributes with consumers' expectations will determine whether the price promotion is perceived as typical (expected) or atypical (unexpected).

1.3 CONSUMERS' COVARIANCE BELIEFS ABOUT PRICE PROMOTION ATTRIBUTES

If a specific discount is accompanied by time restrictions not associated with a discount of this size, then consumers may recognize some discrepancy and try to explain it. For example, if a retailer offers a 50% discount for an unreasonably long time, consumers may be puzzled as to why the retailer is offering so much value. Similarly, if a retailer offers a 10% discount for an unreasonably short time, consumers may question why the retailer is offering so little value. Both offers are likely to be perceived as atypical (i.e., deviations from common price-promotion practice), even though separately the discounts (in the absence of time restrictions) and the time restrictions (in the absence of discounts) would not raise consumers' suspicions and would be perceived as typical. Whether a combination of discount and time restrictions will be perceived as typical or atypical is determined by consumers' covariance beliefs for these two attributes.

In a general sense, the ability to see covariance between events is "an important aspect of successful functioning in the world" (Baumgartner, 1995, p. 634). Usually, consumers form their

covariance beliefs by integrating many episodic encounters in the market in a systematic way (Bettman, John, and Scott, 1986). A set of such beliefs is called schemata (Kelley, 1972). People tend to associate concepts whenever they are experienced together (Anderson and Bower, 1973). Some values may be more frequently observed and, therefore, may be assigned a higher prior probability and serve as default values (Cohen and Murphy, 1984; Smith and Osherson, 1984).

In the context of price promotions, covariance beliefs define the appropriate or expected relationships between the discount and time restrictions. Marketplace practice repeatedly "teaches" consumers that bigger discounts are usually offered for shorter periods of time and vice versa. Therefore, consumers may infer a positive relationship between these two price promotion attributes and check to see whether this relationship holds when they encounter a particular price promotion. Discount and time restrictions allow consumers to make a guess about the overall value offered by a retailer during a specific price promotion and assess whether a retailer is offering value that is too high, too low, or typical, that is, similar to a deal the consumer has seen offered in other price promotions. Such an assessment helps to determine whether a marketer's price promotion is typical or atypical.

Causal beliefs about marketplace activities are also included in a consumer's schemata. Rummelhart (1979) suggested that schemata contain consumers' causal beliefs that can explain the reasons underlying observed behavior, events, or states. If-then inferential rules link evidence to conclusions (Kardes, Posavac and Cronley, 2004). Hence, people tend to associate not only different attributes of outcomes when they are experienced together but also outcomes with their causes. Such inferential causal beliefs provide "common sense" explanations about why a set of specific attributes or a particular outcome is observed.

Similar to default sets of the attributes of a particular outcome, causes that are frequently inferred for a particular outcome become default causes. Offering price promotions with expected combinations of price promotion attributes can be easily explained by a set of expected or default reasons. In such situations, consumers are likely to employ a heuristic information processing strategy and may indirectly analyze causation by a quick reference to their beliefs about why retailers generally price promote products. Thus, the evaluation of typical price promotions proceed almost automatically and are characterized by simple linear models like perceived value concept (Monroe, 1982).

Exposure to an atypical price promotion attribute, however, is likely to induce consumers' causal inferences (Bettman 1971) through more configural models like attribution theory (Kelley, 1972). Consumers will attempt to find a different explanation because the default explanation associated with typical price promotions no longer seems plausible. Consumers understand that retailers cannot maintain economic sustainability without profits. On the other hand, consumers may recognize attempts by retailers to manipulate consumers' attitudes by persuading them that a low discount is a great sale which is counter to consumers' interests. In such situations, consumers are likely to find some alternative explanation for the observed price promotion.

When a retailer offers too much value (i.e., the "too-good-to-be-true" situation), consumers may relate price promotion to inferior quality of the promoted product. On the other hand, when a retailer offers too little (i.e., the "too-little-to-be-good" situation), consumers may infer that a retailer is trying to improve the perception of a low discount by severely limiting it in time and, hence, sending a signal that a sale has value even though it does not.

The potentially negative outcomes from an inconsistency of price promotion attributes can be nullified if a "valid" explanation can be presented for the atypical promotion. For

example, if a retailer is going out of business, consumers will easily understand why they are offered an apparent windfall. On the other hand, a too-little-to-be-good price promotion may be justified by a company's financial troubles. Though a combination of price promotion attributes in situations such as these will still remain counter to the expectations that consumers hold for a typical business environment, the price promotion attributes can be perceived as consistent with consumers' expectations in atypical situations (e.g., going out of business, etc.).

It can then be seen that the consistency/inconsistency of the price promotion attributes coupled with additional information has two effects on a consumer's perception of a price promotion. First, they will categorize a price promotion as typical or atypical. Secondly, in situations with inconsistent price promotion attributes (i.e., an atypical price promotion), the attributes will also determine what attributions consumers will generate and how these attributions will affect consumers' deal evaluations. These evaluations may include the perception of a promoted product, the perception of the value of a deal, consumers' attitude toward a retailer offering a deal and consumers' purchase intentions.

Despite the fact that attributions play an important role in a price-promotion context (Dodson et al., 1978), few studies have used an attribution perspective (e.g., Inman, Peter, and Raghubir, 1997; Lichtenstein, Burton, and O'Hara, 1989; Raghubir, 2004; Raghubir and Corfman, 1995). Even fewer studies have investigated the role of consistency of discount and time restrictions (e.g. Inman et al.) although these two price promotion attributes are the most common deal qualifications (Sinha, Chandran and Srinivasan, 1999; Howard and Kerin, 2006). In addition, no research has systematically varied the levels of discount and time restrictions to examine how different combinations of these price-promotion attributes affect consumers' deal evaluations (Sinha, Chandran, and Srinivasan, 1999).

1.4 GENERAL PROCESS MODEL

Figure 1 presents a proposed general process model that depicts how consumers form deal evaluations based on the consistency/inconsistency of price promotion attributes. First, the price promotion is represented as an combination of all price promotion attributes. When faced with a particular price promotion, consumers compare it with their schemata and use its attributes to categorize it as typical when the attributes are consistent with their expectations or atypical when viewed as inconsistent with their expectations. Typical price promotions reinforce consumers' default causal "if-then" links and are likely to be processed heuristically. Atypical price promotions motivate consumers to find an alternative explanation because default causes are no longer supported by the observed attributes. Consumers may face two types of atypical situations: "too-good-to-be-true" and "too-little-to-be-good." Consumers then develop explanations uniquely for each situation, and this causal interpretation impact consumers' deal evaluations.

1.5 OBJECTIVES OF THE PRESENT RESEARCH

The goal of this dissertation is to (a) develop a comprehensive conceptual model explaining how consumers process and evaluate price promotions consisting of both time restrictions and a

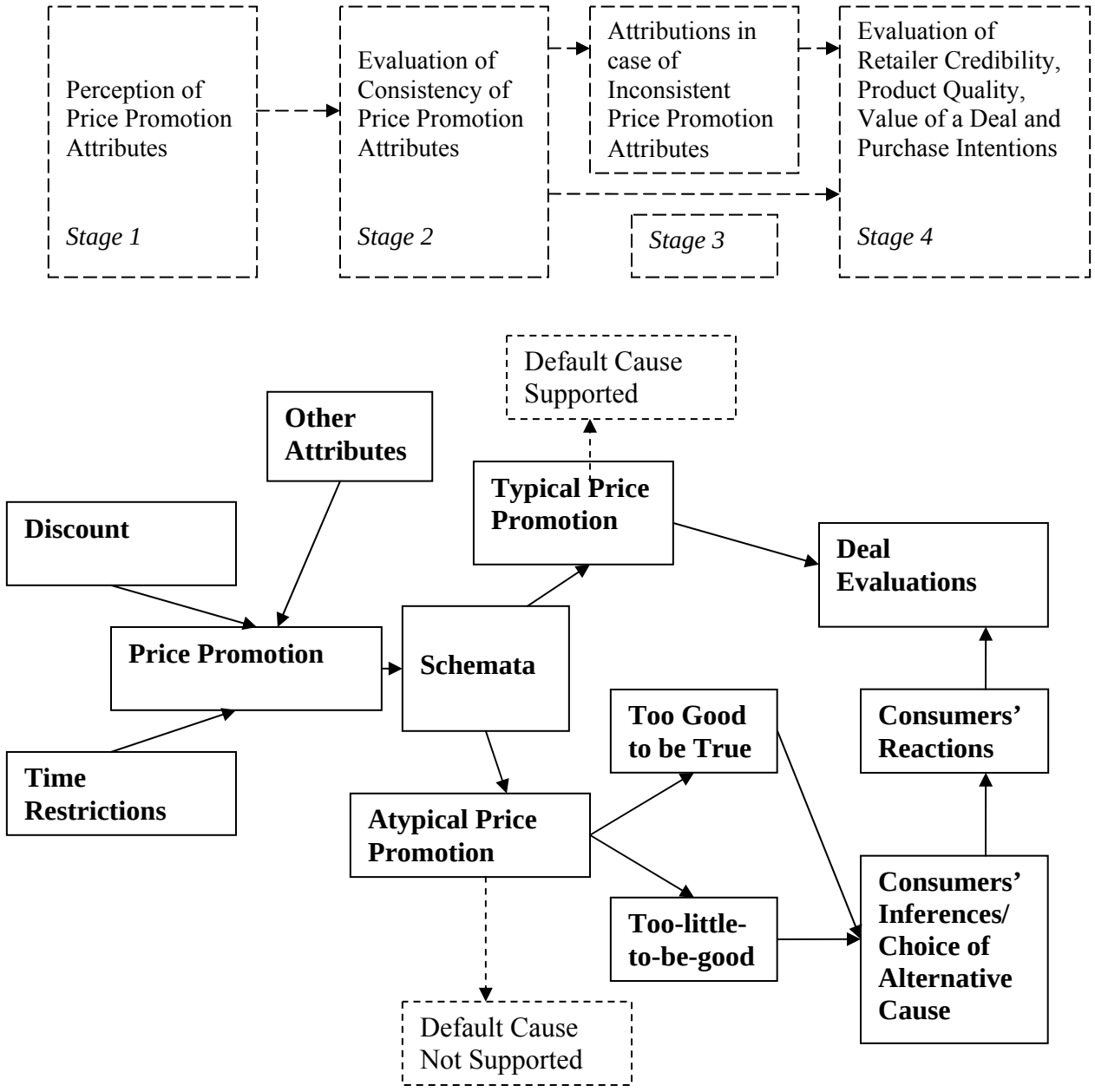

Figure 1. A General Process Model: Effects of Discount and Time Restrictions on Deal Evaluations

discount and then examine (b) when and what types of attributions consumers may generate when they are exposed to price promotions and (c) how consumers' attributions affect deal evaluations. The conceptual model is based on a cue-utilization framework incorporating an attribution perspective.

1.6 PLAN OF SUBSEQUENT CHAPTERS

Chapter Two reviews the foundational areas of price promotion literature. Chapter Three then presents the conceptual foundations of this dissertation – four theories that will be used to develop our comprehensive conceptual model and develop hypotheses based on this model applicable in price promotion context. Chapter Four introduces the operationalization of the conceptual model and examines two competing models -- a linear model that does not account for the impact of consumers' attributions and the proposed model. From these models a set of predicted behaviors are discussed leading to a set of hypotheses testing the proposed conceptual model.

The remaining chapters will be devoted to hypotheses testing and discussion of results. Chapter Five discusses the methodologies for the two empirical studies, while Chapter Six. presents the objectives, procedure and results of three pretests. Chapter Seven presents results of the first study examining the proposed model and Chapter Eight contains results of the second study testing for the impact of external attributional causes. Finally, Chapter Nine summarizes the results of the two studies and their contribution to the discipline. Limitations of the research are then discussed followed by directions for future research.

CHAPTER 2. LITERATURE REVIEW

In this chapter we review the foundational areas of price promotion research. Since a majority of the price promotion research focuses on just one attribute – discount, we start with findings on the effect of a discount on deal evaluations. Next we discuss the effect of time restrictions and the effect of consistency/inconsistency of price promotion attributes. Finally, we present findings about the role of consumers' attributions in the price promotion context.

2.1 EFFECT OF DISCOUNT ON DEAL EVALUATIONS

Prior research shows that the discount is one of the most important attributes of any price promotion, and in most situations serves as a strong heuristic cue for deal evaluations. Numerous studies demonstrate that as the size of a discount increases, consumers' deal evaluations also are likely to increase (Della Bitta, Monroe, and McGinnis, 1981; Mobley et al., 1988). A positive relationship between the size of the discount and consumers' deal evaluations is usually explained by the perceived value concept (Monroe, 1980), which states that, in exchange situations, consumers compare the perceived quality of a product with the perceived sacrifice or price to estimate the perceived value of the offer. When the price goes down, the perceived value of the offer goes up (all other things being equal). When applied in a price-promotion context, this concept predicts that deals with higher discounts are likely to be evaluated higher than those with lower discounts (all other things being equal).

However, this relationship does not always hold. It has been found that people may perceive very low discounts as trivial and even insulting (Darke and Freedman, 1991, 1993) and unexpectedly high discounts as suspicious (Darke, Freedman, and Chaiken, 1995; Gerstner, 1985). In both cases, consumers tend to react negatively. Bigger discounts may not always be associated with greater value because they may signal low quality (Bagwell and Riordan, 1991; Wolinsky, 1983). Consumers may estimate the lowest acceptable price and refuse to buy an item at a lower price, thinking that such an item is likely to be defective (Darke et al., 1995; Friestad and Wright, 1994). On the other hand, too low discounts may produce low deal evaluations by signaling the retailer manipulative intent—a desire to push consumers to purchase a product at a price that is not significantly different from the regular price (Darke et al., 1995).

It is important to note that in most price promotion studies, respondents were exposed to different discount sizes but not to time restrictions. Therefore, they could infer the temporal nature of the discount from their marketplace experiences. Correlated attributes allow "the simplifying consumer to ignore one of attributes while focusing on the other" (Huber and McCann, 1982, p.326). Thus, the concept of consistency or inconsistency of the discount is not addressed, but instead left to be resolved by the consumer.

In summary, research on the discount shows that consumers value deals with higher discounts more than those with lower discounts; however, this linearity in deal evaluations breaks when consumers are offered suspiciously high or offensively low discounts. Research also provides indirect evidence that consumers' inferences about why a retailer offers a price promotion may affect consumers' deal evaluations.

2.2 EFFECT OF TIME RESTRICTIONS ON DEAL EVALUATIONS

Time restrictions are a well-documented heuristic that serves as a "promoter" of promotions and signals "good value" in the absence of other information (Inman et al., 1997). The main findings

from the few studies that focused on time restrictions suggest that time restrictions can be evaluated both positively and negatively, depending on the set of contextual and individual factors.

Usually, the effect of time restrictions on deal evaluations is explained by the scarcity concept (Brock, 1968; Lynn, 1992). According to Brock's commodity theory, "any commodity will be valued to the extent that it is unavailable" (1968, p. 246). Framing a deal as available only for a short period of time creates a feeling of scarcity, and scarcity increases value (Lynn, 1991). Time restrictions may serve as a signal that the deal is good (Lynn, 1992; Verhallen and Robben, 1994). Additionally, time restrictions may induce consumers to feel anticipatory regret from missing the opportunity to take advantage of a good deal. Simonson (1992) investigated the role of anticipated regret in the context of purchase-timing decisions and found that respondents who were asked to think about missing an attractive deal were more likely to purchase it than those who did not elaborate on this issue.

In most cases prior research manipulated only presence/absence of time restrictions and usually did not provide any specific time frame (e.g. 'available only for a limited time'). However, several researchers investigated how differing levels of time restrictions affect deal evaluations. In general, it has been shown that the more restricted the deal, the better it is likely to be perceived. For example, Aggarwal and Vaidyanathan (2002) found that respondents exposed to time-limited semantic cues (e.g., "10-hours-only super sale") are less likely to search for a better price, have a more favorable attitude toward the deal, and are more willing to buy than those exposed to time-independent cues (e.g., "anniversary super sale"). However, the effect of time restrictions is not uniform across all levels of discounts. Amir (2001) observed that consumers' purchase intentions were the lowest for highly restricted promotion offers.

Compared to the discount, time restrictions have received relatively little attention from researchers and are mainly examined from the perspective of how their absence or presence affects deal evaluations. Research findings show that time restrictions may increase deal attractiveness in most cases only in the absence of strong quality indicators like brand name, actual features etc. Predictions based on scarcity theory have not been supported when temporal availability of a deal was severely restricted. As a result the exclusion of time restrictions from many studies on price promotion may be explained by the perception that time restrictions are a much weaker contributor to the perceived value of a deal.

2.3 EFFECT OF CONSISTENCY OF PRICE PROMOTION ATTRIBUTES ON DEAL EVALUATIONS

Only one study examined both price promotion attributes from the perspective of their consistency (Inman et al. 1997). They employ the concept of cue consistency and cue diagnosticity as their theoretical background and propose that consumers use time restrictions in combination with other information cues, such as the size of the discount or brand name, to determine the overall attractiveness of the promotional offer. The perceived diagnosticity of each information cue depends on its consistency with alternative sources of information. To signify the value of a deal, information sources should be consistent. Consumers will use time restrictions as a heuristic for a good deal as long as it is perceived to be diagnostic, or in other words, consistent with the size of the discount. When the information value of time restrictions is not consistent with the information value of the discount (e.g., when a deal is not adequately attractive for restrictions to signal scarcity), consumers are likely to base their judgments on

more diagnostic information cues, for example, the size of the discount (Inman et al., 1997). The researchers also found that relationships between time restrictions and purchase intentions are mediated by deal evaluation.

However, some issues not considered in this study warrant further examination. First, the study did not vary levels of time restrictions; instead, it used a single cue ('limited-time-only') and manipulated its presence/absence. Second, the authors' suggestion that, in cue-inconsistent situations, consumers switch to a more diagnostic cue (i.e., the size of the discount) was not supported experimentally. Respondents in a control group who were exposed only to a low discount had significantly higher deal evaluations than those who were exposed to both cues, despite the fact that both groups were exposed to the same size of discount. One plausible explanation of this finding is that deal evaluations in the latter case were adversely affected by respondents' attributions about the retailer manipulative intent (to make a low discount seem better by limiting its availability).

In terms of the types of combinations of price promotion attributes, the study investigated the situation in which a retailer was perceived as providing too little value and showed that consumers responded negatively, but did not explore another extreme situation, one in which a retailer offers too much value (e.g., a high discount and low time restrictions).

In summary, Inman et al. (1997) demonstrates that the two price promotion attributes interact and their consistency or inconsistency has a significant impact on deal evaluations. What remains unresolved are (1) consumers' attributions in situations when price promotion cues are not consistent with consumers' expectations and their effect on deal evaluations and (2) an examination of the full range of combinations of price promotion elements (size of a discount and time restrictions) in a systematic manner (Sinha et al., 1999).

2.4 ROLE OF ATTRIBUTIONS IN DEAL EVALUATIONS

In addition to examining the role of specific attributes of a price promotion, prior research has also provided strong evidence that attributions play an important role in the price-promotion context (Mason and Bequette, 1998; Kardes, Posavac, and Cronley, 2004). The findings indicate that consumers may generate attributions during the deal-evaluation process if observed values of time restrictions and discount are counter to consumers' expectations. In these cases the predictions of linear models like perceived value and scarcity concept are insufficient since consumers suspect alternative motives on the part of the retailer.

Dodson et al. (1978) showed that even though most price-promotions do not activate attributional thinking, consumers may in some situations generate attributions in response to price promotions. Hunt and Keaveney (1992) explored the locus of consumers' attributions and found that price promotions attributed to self and not to a lucky chance (i.e. unexpected price promotions) are perceived worse. They also propose that consumers generate attributions when some attributes of price promotion are not expected by consumers and show how these attributions influence brand image (Hunt and Keaveney, 1994). A study by Lichtenstein et al. (1989) showed that consumers might attribute price promotion to a product, a seller, and some external circumstances. Brand-specific attributions generated by a promotion resulted in unfavorable evaluations, whereas promotions attributed to some nonbrand-related causes like competition were either positive or neutral (Lichtenstein et al., 1989).

In the price-promotion context, retailers may use time restrictions strategically to create the perception of scarcity, thereby enhancing the perceived value of an offer (Inman et al., 1997;

Lynn, 1991), and consumers may recognize this and react accordingly. In support of the notion that consumers are sensitive to marketers' behavior, Devlin et al. (2007) found that time restrictions may be an effective strategy to increase the attractiveness of a deal only when consumers do not doubt that it is a genuine offer and not a mere marketing ploy. Another study by Bobinski, Cox, and Cox (1996) showed that consumers usually attend to marketing messages and perceive deals in the context of other cues. The authors found that significantly reduced prices that were not accompanied by appropriate explanations elicited consumers' skepticism toward a retailer.

In summary limited research on attributions in the price promotion domain confirms the notion that causal interpretations may dramatically affect consumers' deal evaluations. Consumers are sensitive to marketers' behavior and may recognize manipulative intents and react appropriately. When a price promotion motivates consumers to analyze its causes, unfavorable reactions may occur and predictions about deal evaluations based on linear models will fail.

2.5 SUMMARY

A review of the literature review demonstrates that the relationship between the size of discount and deal evaluations is not always positive and linear. Suspiciously large discounts may be associated with poor quality of the promoted products, while unusually low discounts may be perceived as manipulative attempts. Similar findings were reported in studies on the effect of time restrictions. While time restrictions generally signal 'good value', deals which are highly restrictive do not increase deal evaluations because consumers feel too much pressure and react accordingly. At the same time, unrestricted deals fail to increase deal evaluations because the 'good value' signal is too weak. These findings combine in a third research area focusing on the nonlinear effects invoked by introducing consumers' attributions. In unexpected situations consumers become very sensitive to marketers' behavior and may react negatively if they infer manipulative intentions on the part of the retailer.

CHAPTER 3. CONCEPTUAL FOUNDATIONS

In this chapter we first introduce a theoretical overview of the four concepts and theories that form the conceptual foundation for this research. We then demonstrate the applicability of these concepts to a price promotion context. Finally, an alternative explanation of the study by Inman et al. (1997) is presented. The study by Inman et al. (1997) serves as a starting point for this dissertation because it was the first and the only research that introduced the concept of cue consistency in price promotion context.

3.1 THEORETICAL OVERVIEW

The proposed theoretical model and hypotheses draws from four theories: the concept of schemata (consumers' covariance beliefs), attribution theory, the heuristic-systematic model of information processing and the cue-utilization framework. Each theory is integrated in a process model of deal evaluations which applies to both typical and atypical price promotions.

First, the concept of schemata (Kelley, 1972) provides the process by which consumers accumulate knowledge about marketplace offerings and about marketers' behavior. This knowledge is stored in the form of covariance beliefs. In a price promotion context consumers are likely to infer a positive relationship between discount and time restrictions and then relate typical price promotions to a set of default retailer motivations (causes). Consumers' covariance beliefs serve as a basis for forming consumers' expectations and act as a standard of comparison. Thus, schemata help consumers categorize observed outcomes as typical or atypical and infer the causes behind them.

Attribution theory (Heider, 1958; Kelley, 1973) is useful in examining atypical situations and illustrates the process of causal inferences. In a price promotion context, consumers can attribute price promotion to a product, to a retailer, and to some circumstances. While both 'product' and 'retailer' inferences assign responsibility for the price promotion to a retailer, inferences due to 'circumstances' shift this responsibility to external causes beyond the control of a retailer. Attribution theory helps to understand how consumers assess plausibility of different causes when the default cause is not supported.

The heuristic-systematic model (Maheswaran and Chaiken, 1991) identifies the type of information processing mode most likely to be employed by consumers facing typical vs. atypical price promotions. Cue consistent (typical) price promotions are likely to be processed superficially based on a heuristic cue, while cue inconsistent (atypical) price promotions are likely to be processed systematically, as consumers try to understand why their expectations are not confirmed and to infer the most plausible cause behind the price promotion.

Finally, the cue-utilization framework (Olsen, 1984; Skworonski and Carlston, 1989; Wilton and Myers, 1986) provides insight into which cues will be utilized in the evaluation process. In situations with typical price promotions consumers will base their evaluations on the cue(s) perceived as the most diagnostic. All other cues will be discounted as redundant. On the other hand, when faced with atypical price promotions consumers will process all relevant cues to resolve the issue and infer an alternative cause.

3.2 CONSUMERS' COVARIANCE BELIEFS

In general, consumers' covariance beliefs refer to associations between two or more events or concepts (Bettman et al., 1986). The ability to see covariance between events is "an important

aspect of successful functioning in the world" (Baumgartner, 1995, p. 634). The marketplace is an important part of this world and consumers' covariance beliefs help them better control their interaction with marketers. Through repeated causal analyses, an individual acquires "a repertoire of abstract ideas about the operation and interaction of causal factors," also known as schemata (Kelley, 1972, p. 152). Schemata are defined as the theoretical representation of a cognitive structure that contains an individual's knowledge and beliefs about different concepts and the interrelationships among them (Olson, 1977). Schemata are developed over time by integrating many episodic encounters in the market in a systematic way (Bettman, John and Scott, 1986). Abstractions and general evaluations contained in schemata may be retrieved more easily from memory than from specific information or episodes on which they were originally based (Feldman and Lynch, 1988). Schemata are instrumental during information processing by generating expectations about incoming information. Schemata are repeatedly reinforced and updated to reflect changes constantly occurring in the environment. Well-developed schemata accommodate high degree of variation within the particular schema (Park and Hastie, 1987).

Consumers' covariance beliefs are probabilistic by nature (Bronziarchyk and Alba, 1994). People tend to associate concepts whenever they are experienced together (Anderson and Bower, 1973) and attach probabilities to the causes of different outcomes (Einhort and Hogarth, 1986). At the same time covariance beliefs are subjective. People experience difficulties in learning probabilistic relationships among different factors (Brehmer and Kuylenstierna, 1980). Consumers may overestimate the diagnostic value of a cue and make a systematic bias in their judgments based on this particular heuristics (Herr, Kardes, and Kim, 1991). According to Nisbett and Wilson (1977), consumers' covariance beliefs reflect their understanding of causal relationships among attributes and need not be logically correct or empirically accurate. Usually consumers use such theories to explain facts of everyday life.

Fishbein and Ajzen (1975) suggested that consumers' covariance beliefs may be presented with three levels of details: beliefs about types and levels of product attributes, beliefs about product attributes and outcomes, and beliefs about marketers' motives. The first two types of beliefs can be referred to as belonging to a more general attribute-outcome domain, and the third type fits in the causal domain. In the attribute-outcome domain, consumers hold beliefs about covariations among different attributes and about covariations between sets of attributes and outcomes. Outcome here is defined as the result of a particular set of attributes. The "attribute-value structure" concept defines an attribute as a somewhat abstract feature that can accept more specific features, which are called *values* or *levels* (Cohen and Murphy, 1984; Smith and Osherson, 1984). Some values may be more frequently observed or more important than others and may serve as default values (higher prior probability values). On the other hand, in the causal domain, consumers hold beliefs about covariations between cause and effect (outcome), and the "attribute-value structure" concept is not applicable here. According to Rummelhart (1979), schemata include information about causal relationships that are also learned by consumers. Covariations of cause and effect are an important determinant of causal inferences. Consumers' causal beliefs explain the reasons underlying observed outcomes – behavior, events, states (Kardes, Posavac, and Cronley, 2004). The causal element of a schema provides consumers with quick "if-then" linkages between events/outcomes and their causes. Consumers relate outcomes to some causes, and causes that are inferred more frequently serve as default (or higher prior probability) causes.

3.2.1 Covariance Beliefs in the Attribute-Outcome Domain

Beliefs about types and levels of a product's attributes help consumers form their expectations and infer values about missing attributes. Consumers may impute a value to the missing attribute and treat the missing information in the same way they use available information (Johnson and Levin, 1985). For example, a belief that there is a positive relationship between the size of a car and its safety helps consumers to infer the value of one of these attributes if it's missing (Elliott and Roach, 1991). Mazis and Adkinson (1976) provided another example of attribute covariations. The authors found that corrective ads about the inability of a particular mouthwash to block colds and sore throats had a negative effect on the perceived ability of this mouthwash to kill germs in general. According to Olson (1977), such perceptions are formed through the covariation mechanism because the corrective ads did not state anything about the ability of the mouthwash to kill germs.

On the other hand, consumers' beliefs about relationships between product attributes and an outcome help them to infer the outcome based on its attributes. A classic example of this is the belief about the positive covariance between a product's price and its quality. Product quality, which is always missing, may be inferred based on one attribute or a set of attributes. It should be noted that quality is not an ordinary product attribute; rather, it is an outcome of product attributes. Similarly, a set of attributes may be associated with a particular product category (outcome). This is the focus of categorization research. In general, a set of attributes may result in either assigning an outcome to a particular category or to a particular quality category (e.g., low, medium, high).

Covariance beliefs in the attribute-outcome domain may be viewed as an attractive substitute for direct experience prior to purchase and consumption (Bronziarchyk and Alba, 1994). Expectation-driven beliefs quickly provide estimates of values of missing attributes and accurately assign a product to a product category or product quality category through the covariation mechanism (Rao and Monroe, 1988; Richardson et al., 1994; Yi and Gray, 1996; Herr, Kardes, and Kim, 1996).

3.2.2 Consumers' Covariance Beliefs in the Causal Domain

Covariance beliefs in the attribute-outcome domain are based on covariance beliefs in the causal domain. In turn, causal covariance beliefs, as mentioned earlier, are based on consumers' experiences and lay theories. For example, consumers' beliefs that a positive covariance between a product's price and its quality evolve from their experience/knowledge that higher-quality products cost more to produce than their low-quality counterparts and that competition limits firms' opportunities to charge high prices for low-quality products (Erickson and Johansson, 1985). Jain et al. (2007) provided another example of how causal beliefs dictate covariance among an outcome's attributes. They suggested that consumers may recognize that companies have limited resources and infer negative correlations among variables that carry financial implications (e.g., warranty redemption costs and product durability).

Chernev and Carpenter (2001) also provided an example of covariance among attributes that are based on causal beliefs. The authors suggested that under efficient market conditions, consumers are likely to infer that different brands in the same product category should deliver identical value if they are equally priced. If one brand has an observable attribute that is superior, consumers are going to infer that it's inferior on some unobservable attribute to compensate for

its superiority on the observed attribute and match the value it provides to the value of the other brands. It seems obvious from the example that consumers' causal beliefs that in efficient markets different but equally priced brands should provide identical value determine the covariance or relationships among product attributes, i.e., a higher level on one attribute will result in a lower level on the other attribute. Chernev and Carpenter (2001) proposed the theory that compensatory inferences are likely to be made when product attributes are not perceived as truly correlated. However, they admitted that there is a covariation of a different nature: "Market efficiency implies some perceived relationship between the total value and price" (p. 352).

In summary, covariance beliefs allow consumers to better control their interactions with marketers. Consumers' schemata contain two general types of covariance beliefs: covariance beliefs in the attribute-outcome domain and covariance beliefs in the causal domain. The first type of beliefs can be further divided into two subtypes: beliefs about the covariation among attributes of an outcome and beliefs about the covariation between attributes and an outcome. Covariance beliefs in the attribute-outcome domain help consumers to impute the missing values of an attribute or an outcome if some attributes/outcomes are missing and classify attributes/outcomes as typical or atypical when all attributes are present. Covariance beliefs in the attribute-outcome domain are based on consumers' covariance beliefs in the causal domain. Causal beliefs are formed based on the covariation of the cause and an outcome and provide "common sense" explanations for typical attributes/outcomes.

3.3 ATTRIBUTION THEORY

The attribution theory is a rich collection of theories dealing with "processes by which individuals perceive and explain causal relationships and give meaning to events in their environment" (Cheron and Zins, 1978). Kelley (1972) notes that "the most common experience the individual has with causation is that different causes produce the same effect" (p. 152). The problem an individual may face in such a situation is determining the true cause of the outcome. "People attribute inherent uncertainty to causal systems" (Kahneman and Varey, 1990, p. 1102).

According to the discounting principle of Kelly (1973), people are likely to discount the effect of a particular attribution on behavior when an alternative attribution could account for the behavior. "The role of a given cause in producing a given effect is discounted if other plausible causes are also present" (Kelley, 1973, p. 113). For example, there may be three motives (causes) for a celebrity to endorse a car (effect). A celebrity may believe in the car's merits, a celebrity may be doing it for a payment, or there may be a combination of both motives (Kelley, 1972). If no further information is provided, an individual may choose the second motive as the one fully accounting for the effect. In this particular case, marketplace experience provides evidence that payment motivation has a much greater probability than any other cause and this explanation may be set as default for all endorsed ads. This attribution, however, does not imply that other causes are impossible; it only implies that other causes are less probable in this particular situation (when no additional information cues are available). In this particular example an individual is not going to discount the default 'payment' cause. However, if, for example, an individual is provided with some additional information from a trusted source that that a celebrity refused to get paid because s/he really loves this car, an individual may discount typical 'payment' motivation and switch to a more plausible in this situation but lower prior probability (in general) cause.

Weiner (1985) suggested that outcomes are usually linked to broad categories of causes "with [the] single most common distinction being between internal and external locations" (Folkes, 1988, p. 556). Although a person controls internal causes, a person does not have direct control over external causes. Behavior caused by internal factors is usually attributed to a person, whereas the same behavior caused by external factors is attributed to circumstances.

In general, attributions about behavior caused by internal factors carry more information about the real actor's motivation than attributions made about behavior caused by external factors (Cheron and Zins, 1978). However, when consumers' expectations (high prior probability) are not contradicted by an outcome or behavior caused by internal factors, not much can be inferred about an actor's true dispositions. Neutral and positive behavior does not provide much information about an actor's true dispositions. For example, moral behavior is not highly diagnostic of a good character because "bad" people sometimes exhibit such behavior due to "conformity pressures and ingratiation attempts" (Skworonski and Carlston, 1987).

On the other hand, when actors depart from their expected behavior (low prior probability) in the absence of external causes, they manifest their true feelings, and an observer obtains much more meaningful information. For example, in an advertising context, high prior probability claims (e.g., claims about product superiority) are unlikely to generate dispositional attributions except the one that an advertiser, like most other advertisers, uses to promote and sell a product (Smith and Hunt, 1978). However, low prior probability claims (e.g., claims about the product's deficiency on some attribute in a two-sided advertisement that sounds contrary to sales goals) are more likely to be attributed to the actual dispositions of the advertiser. In the case of two-sided advertisements, the advertiser's behavior may be attributed to the advertiser's truthfulness or honesty (Smith and Hunt, 1978).

Kelley (1973) provided three general classes of causation: the stimulus, the person, and the circumstances, or a combination of the three. Though the author does not emphasize cause locus, it is apparent that a person is related to internal causes and circumstances are related to external causes, while the stimulus may be related either to internal or external causes, depending on the situation at hand.

In summary, people are able to infer causes behind outcomes and may discount the default cause and infer the most plausible alternative cause if an outcome is atypical one. People can also differentiate two loci of causation: internal and external. Atypical behavior in the absence of external causes reflects the true disposition of an actor, while typical behavior does not provide much information about an actor. When external causes are present, responsibility for an atypical outcome shifts from an actor to external circumstances.

3.4 HEURISTIC SYSTEMATIC MODEL OF INFORMATION PROCESSING

The heuristic-systematic model (Maheswaran and Chaiken, 1991; Maheswaran, Mackie, and Chaiken, 1992) posits that individuals must be motivated to expend their effort to process incoming information systematically, in other words, to elaborate on available information cues. Otherwise, they may use "shortcuts and simplifying strategies to make judgments and decisions quickly" (Kardes, Posavac, and Cronley, 2004, p. 237). Systematic processing may be defined as effortful information processing when individuals elaborate on all available information cues of an object (Maheswaran and Chaiken, 1991). On the other hand, heuristic processing is the superficial processing of some information cues of an object. Heuristic processing implies the

benefit of easy processing at the expense of accuracy (Chaiken, Liberman, and Eagly, 1989; Tversky and Kahneman, 1974).

A heuristic may also be defined as "if-then" linkages (Chen and Chaiken, 1999) connecting observed cues to individuals' beliefs, while systematic processing involves integration of "multiple if-then associations with other available, judgment-relevant information" (Chaiken, Duckworth, and Darke, 2000). A heuristic cue is defined as a "salient, easily processed piece of stimulus information that gives rise, automatically, to a particular perception (e.g., expert) and thus activates a stored decision rule (e.g., expert's statements can be trusted)" (Chaiken, Duckworth, et al., p. 119).

Kahneman and Frederick (2002) suggest that "consumers may always engage in heuristic processing and may simultaneously engage in effortful processing when initial impressions seem implausible" (cf. Kardes, Posavac, and Cronley, 2004). In other words, the subsequent processing of cues may activate systematic processing if the cues do not agree with the initially chosen heuristic cue (Aaker and Maheswaran, 1997). One of the main differences between heuristic and systematic processing is that heuristic processing is fairly automatic, and consumers are often unaware of the occurrence and the impact of heuristic processing (Chen and Chaiken, 1991). A minimal understanding may be enough for an individual to make an evaluation (Wilton and Myers, 1986).

In summary, heuristic-systematic model suggests that typical or expected outcomes are likely to be processed heuristically, while atypical outcomes – in a more thoughtful systematic manner. Systematic information processing will be activated if heuristic cue through a default 'if-then' linkage cannot explain the cause behind an observed outcome.

3.5 CUE-UTILIZATION PROCESS

The cue-utilization process involves making an inference about a product from the configuration of available cues (Burnkrant, 1995). An individual may confirm their prior covariance beliefs by checking to see whether the current level of one attribute is observed along with corresponding levels of the other attributes that are based on expected relationships among these attributes (Jennings, Amabile, and Ross, 1982). Each time expectations are met, consumers' causal beliefs (default cause) are reinforced as well. When the attribute configuration of an observed outcome is in line with consumers' expectations, the outcome can be easily linked to a default case, and only some of the observed cues, the most diagnostic ones, may be utilized in the evaluation process. When information cues are consistent with individuals' causal schemata, consumers do not perceive that expending their cognitive resources will be worthwhile (Olson, 1977), and they often attempt to simplify information processing and base their evaluations on the most important attributes (Tversky, Sattath, and Slovic, 1988). In such situations, only cues that are perceived to be diagnostic are used. Cues that successfully discriminate between alternatives have a higher diagnostic value than cues that do not. Diagnostic cues generally suggest one prudent interpretation over alternative interpretations (Herr et al., 1991).

In the cue-selection process, consumers look for information that "has the lowest correlation with information already processed" (Wilton and Myers, 1986, p. 474). Redundant cues and less diagnostic cues are not selected for further processing and are dropped from the cue-utilization process. According to van Osselaer and Alba (2003), the availability of both diagnostic (i.e., predictive in terms of quality) brand-name information and attribute information results in a "zero-sum game," in which each cue is redundant in the presence of another cue.

If a configuration of attributes closely resembles that of the prototype in a particular category, even limited evidence may result in a strong judgment (Sanbonmatsu, Kardes, and Houghton, 2003). Consumers are not motivated to analyze an in-depth typical outcome; instead, they may indirectly analyze causation through a quick reference to their belief that advertisers in general promote products to sell them (Smith and Hunt, 1978). On the other hand, when cues are inconsistent, inferences based on one cue "would be contradicted by the implications of another" (Slovic 1966, p. 428). To resolve the conflict, an individual is likely to look for additional information to either support or reject each attribution under consideration. An individual will try to use all relevant cues to reduce ambiguity (Wilton and Myers, 1986). Once a consumer recognizes an inconsistency, the process of deriving a plausible explanation for the observed price promotion behavior of a retailer is set in motion. This process requires more cognitive resources from consumers because the "number of alternative interpretations is greater when consumers are presented with unexpected information" (Jain et al., 2007, p. 72), and as the default cause is no longer valid, consumers need to choose an alternative from a variety of causes. Atypical behavior is processed in more depth than expected behavior (Hastie, 1984). According to Bettman (1979), an individual relies on multiple heuristics and utilizes all available cues along with her beliefs to form a judgment when faced with uncertainty.

In summary, people process incoming information by using cues. Typical outcomes consist of attributes that are in line with consumers' expectations and support the plausibility of default causes. Consumers process typical outcomes by utilizing a few diagnostic cues. When consumers face atypical outcomes, they are motivated to find a valid alternative explanation or cause for the observed outcome. In this case, any available cue may add to the meaning/cause of the outcome. Therefore, all cues are likely to be utilized to arrive at some evaluation/judgment.

3.6 APPLYING THE CONCEPTUAL FOUNDATIONS IN A PRICE PROMOTION CONTEXT

In this section we discuss consumers' attributions that may be generated and covariance beliefs that consumers hold in price promotion context. First we present causal agents that are usually inferred behind price promotions and divide them into two broad categories based on their locus of causation (internal vs. external). Next we show that consumers' perception of a typicality of a price promotion (typical vs. atypical) depends on consumers' perception of retailer's expenditures during a particular price promotion campaign and that consumers know about firms' financial constraints and are likely to infer positive relationship between the two price promotion attributes. Then we discuss two types of atypical price promotions – when a retailer offers too much or too low value, and argue that atypical price promotions are likely to activate attributional thinking. Finally, we discuss time restrictions - the 'weaker' price promotion attribute, and the role it plays in deal evaluations.

3.6.1 Consumers' Attributions in a Price Promotion Context

As noted earlier, people may attribute the cause of an outcome to one of three alternatives: the stimulus, the person, or the circumstances, or they may use a combination of the three (Kelley, 1973). In a price promotion context, the corresponding causal agents would be a promoted product, a seller offering a deal, and a situation (Lichtenstein et al., 1989). According to Weiner's (1985) classification, both the product and seller are categorized as internal causes, while situational factors

are as the external causes of price promotion. The retailer is the only internal factor "causing" a price promotion since the retailer has full control over products through ownership, has knowledge of product quality and determines the specific conditions of the price promotion.

However, consumers are able to discern a variety of factors impacting a retailer's decision to use a price promotion. Product quality is among such factors. While good quality is not generally a reason for a price promotion, inferior quality may serve as a strong motivation for an unethical retailer to use price promotions as a means of getting rid of inferior products. In such a situation, attributions about both the retailer's ulterior motives and about inferior product quality are plausible. However, the attribution about inferior product quality is most likely to be perceived as the "true" cause of the promotion.

Situational factors in the price promotion context represent a variety of external circumstances over which a retailer does not have control. For example, an increase in the cost of raw materials is going to shift responsibility for unusually low discounts from a retailer to its suppliers. In the absence of external causes, consumers are likely to attribute price promotion either to the product or the retailer. When an external cause is present, consumers are likely to discount internal causes and attribute the outcome to external causes.

3.6.2 Consumers' Covariance Beliefs in a Price Promotion Context

During price promotions, consumers usually expect to receive some monetary benefits. However, offering a value that is too high or too low may be perceived as a violation of the common sense of selling. A price promotion offering too much value ("too-good-to-be-true") may be perceived as running counter to the marketers' interests and may be attributed to the inferior quality of the promoted product. On the other hand, a price promotion offering too little value ("too-little-to-be-good") may be perceived as running counter to consumers' interests and may be attributed to a marketer's pushing tactics.

The assumption that consumers do not expect to get too much value from retailers is supported by Raghubir (1999). The author reported that a coupon's face value affected consumers' estimates of the price for the promoted product. Higher face values result in higher price estimates, meaning that consumers do not expect too much value from a retailer and compensate for the attractive face value of the coupons by estimating higher product prices. A study by Jain et al. (2007) supported the notion that consumers recognize a firm's resource constraints and intuitively form appropriate correlations among the variables that carry financial implications for a firm and for them as well. Similarly, in the price promotion domain, consumers may infer a positive relationship between the size of a discount and time restrictions or an inverse relationship between the size of a discount and the time limits on the availability of a deal.

Consumers know that bigger discounts affect retailers' profits more than smaller discounts. Furthermore, when deals are offered for longer periods of time, more consumers may use the opportunity to buy the product, which also will affect the retailer profits. On the basis of this knowledge, consumers may infer a positive relationship between price-promotion attributes and expect higher discounts to be more restricted in time and that lower discounts will be less restricted.

Consumers constantly observe covariance between the two price promotion attributes and incorporate it into their schemata. As a result, consumers' schemata contain a range of expected

combinations of price promotion attributes (for a specific product, brand, retailer, season, etc.) and serve as a standard of comparison when consumers evaluate a specific price promotion.

Combinations of discount and time restrictions consistent with the covariance beliefs are likely to be processed heuristically by consumers who quickly refer to their schemata and automatically infer the general default retailer motivation(s) for price promotion of products (i.e., typical way of doing business). Inconsistent price-promotion attributes are likely to motivate consumers to find the "true" reason behind the promotion because the observed attributes no longer support the default cause(s).

3.6.3 Time Restrictions and Discount as Attributes of Price Promotion

In general, time restrictions are a much "weaker" cue than a discount cue. Consumers do not treat time in the same way as money (Okada and Hoch, 2004). The difference in several days or weeks may not be as important as a difference in a few dollars. Money is much more fungible, liquid, and transferable than time and can be reserved for future use (Soman, 2001).

It would be impossible to build an indifference curve (i.e., to determine the rate of exchange) for these two price-promotion attributes. Unlike the price-quality relationship in which consumers are willing to trade one attribute for the other at some exchange rate, larger discounts will always be preferred to smaller ones, regardless of how the offer is restricted in time (unless a high discount is attributed to inferior product quality). In general, the low value of a discount cannot be compensated by a "good" value of time restrictions. Consumers are not likely to trade discount for time restrictions. Though time restrictions do not represent a valued price-promotion attribute, they are used in constructing a meaning of price promotion and contribute to the perception of cue consistency.

Though time restrictions do not represent a valued price promotion attribute, they are utilized in constructing a meaning of price promotion and may activate attributional thinking and change consumers' perceptions of the merits of a deal when presented in particular combinations with discounts. Time restrictions may either attenuate or accentuate negative attributions about product quality and about a retailers' motives.

The attenuation of negative attributions is likely to happen when time restrictions are combined with discounts that on their own might seem suspiciously high or suspiciously low. For example, a high discount (e.g., the day-after-Thanksgiving sales) may appear too suspicious if it is not accompanied by high time restrictions (e.g., several hours), and a low discount (e.g., 1 cent) may be viewed as less offensive if it is offered for a longer period of time (e.g., 'enjoy it for the whole year' campaign). The more restricted the offer is in the former case and the less restricted it is in the latter case, the stronger attenuation effect. On the other hand, when price promotion cues are inconsistent, time restrictions may accentuate negative attributions. The longer a highly-discounted deal is offered, the more negative attributions about product quality will be generated, and the more restricted a low-discounted deal is, the more negative attributions about retailer ulterior motives will be generated.

3.7 ALTERNATIVE EXPLANATION OF FINDINGS BY INMAN ET AL. (1997)

According to Inman et al. (1997), time restrictions serve as a heuristic cue for deal evaluation as long as price-promotion cues are consistent with consumers' expectations. However, when price-promotion cues are counter to consumers' expectations, consumers disregard time restrictions

and base their evaluations on a more diagnostic cue: the size of the discount. However, the authors did not get empirical support for this suggestion. Results revealed that respondents' evaluations in a group that was exposed to low discount and time restrictions were significantly lower than those in the control group. The control group was exposed to the same size discount, but time restrictions were missing. It is argued that, in that control group, respondents inferred values of time restrictions in line with their expectations and, therefore, were not motivated to engage in attributional thinking. In the absence of time restrictions, respondents were not likely to think that they might contradict their expectations. On the other hand, respondents in a low discount–time restrictions group were likely to notice the inconsistency between the observed and the expected values of price-promotion attributes and generated attributions about the marketer's pushing tactics, which resulted in lower deal evaluations. In the latter situation, respondents did not discount any of the cues but took them into consideration to understand the motives behind the marketer's behavior (push-to-buy tactics).

3.8 SUMMARY

The conceptual foundations discussed in this chapter provide a theoretical background for developing the comprehensive conceptual model that incorporates an attributional perspective. Based on their marketplace experiences consumers form their covariance beliefs about the relationship between marketplace outcomes and their causes and between attributes of the products/outcomes they encounter in the marketplace. When incoming information (e.g. a set of attributes) is in line with consumers' expectations (or covariance beliefs), consumers are likely to process it in a heuristic manner by focusing on the most salient/diagnostic cues. In these situations, the expected relationships will be operable (e.g., deal evaluations will increase with the increase in the amount of discount). On the other hand, when incoming information is counter to consumers' expectations, consumers are likely to engage in attributional thinking to decide why a retailer is deviating from typical behavior. All relevant cues will be utilized to understand this atypical situation/behavior. In a price promotion context, offering deals which are too high or too low in value will be perceived as a deviation from typical behavior and cause a deviation from the judgments made in the typical situations. In the former case (too high a value), consumers are likely to attribute price promotion to low product quality, while in the later case (too low a value), consumer may perceive a push-to-buy tactic on the part of a retailer. In both cases consumers will generate negative attributions that will adversely affect final deal evaluations.

CHAPTER 4. CONCEPTUAL MODEL AND HYPOTHESES DEVELOPMENT

This chapter first introduces the terminology used in this research. Then a comprehensive conceptual model is developed which takes an attribution perspective to accommodate mixed findings from prior research. It is then compared to a linear model that does not account for the impact of consumers' attributions on deal evaluations and brief predictions based on both models are presented. Finally, hypotheses are developed to test the conceptual model.

4.1 TERMINOLOGY

We will start by clarifying the terminology used in this dissertation to assist in the presentation of the conceptual model and hypotheses. This is necessary due to differences in terms used in the description of marketplace behavior and the underlying theoretical concepts. First, researchers use a variety of slightly different terms to present the same variable or concept (e.g., length of a sale, time restrictions, temporal deal availability, etc.). Second, there is variation in the role played by these constructs. For example, depending on the theory at hand, price may be defined as a standard of comparison (prospect theory), as a signal of quality (signaling theory), as a central or peripheral cue (elaboration likelihood model), or as a potential loss/gain (mental accounting).

The focus of this research is price promotions, which will be defined as an outcome with two primary attributes -- discount and time restrictions. At the same time, these two price promotion attributes also act as price promotion cues providing information about the levels of attributes and causes of price promotion. According to attribute-value-structure concept, price promotion attributes have different levels from high to low and, therefore, create numerous attribute combinations. Some combinations may be observed more frequently in the marketplace and may be incorporated in a consumer's schemata as defaults and then serve as a standard of comparison during the deal evaluation process.

We will differentiate two general types of price promotion situations: match and mismatch (see Figure 2). Match situations are defined as those in which levels of two price promotion attributes are consistent with consumers' expectations. As such, they correspond to what has been described as "typical" price promotions. Match situations are further subdivided into high-value match and low-value match situations. Price promotions offering a high discount (i.e., accompanied by the expected short time restrictions) are defined as high-value match situations, while price promotions offering a low discount (i.e., also accompanied by the expected longer time restrictions) are defined as low-value match situations. Though high-value match and low-value match situations are different in terms of the size of discount they offer to consumers and their associated time restrictions, they are still perceived as typical price promotion situations.

Situations in which levels of two price promotion attributes are different from those based on consumers' expectations (i.e., atypical) are referred to as mismatch situations, which are further subdivided into positive mismatch and negative mismatch situations. In positive mismatch situations, configurations of cues (high discount and low time restrictions) suggest that the price promotion value is much higher than that offered during a typical price promotion (i.e., the "too-good-to-be-true" situation). Conversely, in a negative mismatch situation, configurations of cues (low discount and high time restrictions) suggest that the price promotion value is much lower than that offered during a typical price promotion.

		TIME RESTRICTIONS	
		High	*Low*
DISCOUNT	*High*	**High-Value Match** M_{HV}	**Positive Mismatch** MM_{Pos}
	Low	**Negative Mismatch** MM_{Neg}	**Low-Value Match** M_{LV}

Figure 2. Match versus Mismatch Situations

Match situations are also referred to as cue-consistent situations, and mismatch situations are referred to as cue-inconsistent situations. In match situations one observes price promotion attributes that are consistent with consumers' expectations, while in mismatch situations - price promotion attributes that are inconsistent with consumers' expectations. Generally speaking, attributes cannot be consistent or inconsistent with consumers' expectations. Rather, attribute levels in a specific combination of attributes can be consistent or inconsistent with consumers' expectations. However, the term "consistent/inconsistent price promotion attribute" is used as a more concise term. In interpreting the treatments presented to respondents, the term cue consistency/inconsistency is used to represent combinations of price promotion attributes that are either consistent or inconsistent with consumers'.

Drawing from established measures, four measures represent outcomes of the price promotion evaluation process and will be referred to collectively as deal evaluations. First is retailer credibility, a consumer's perception of whether a price promotion is trustworthy. The second measure is product quality, a consumer's perception regarding the quality of a promoted product. Third is value of the deal which is the consumer's perception of whether a certain product offered at a certain price is a good deal. This is expressed as the ratio of the product's sale price (or reduced price) over the product's quality. The final measure is purchase intention, indicating a consumers' willingness to take a deal and buy the product offered.

4.2 COMPREHENSIVE CONCEPTUAL MODEL

The conceptual model (Figure 3) represents a process where, after being exposed to a price promotion, individuals compare it with their price-promotion schemata containing, among other things, combinations of price-promotion attributes that consumers usually observe during price promotions. When the combination of price promotion attributes is consistent with consumers' expectations, the price promotion is categorized as typical, and the resulting situation is perceived as a match situation. On the other hand, an inconsistency of price promotion attributes results in a mismatch situation, and the price promotion is perceived as atypical. Consistency/inconsistency of price-promotion cues also determines the choice of information processing mode (heuristic or systematic) that is employed by the individual to process price-promotion information and to form deal evaluations.

Cue-consistent price promotions reinforce individuals' schemata and causation analysis in this case proceed by quickly referring to the beliefs about the reasons behind any typical promotional activity in general. No attributions are likely to be generated. Deal evaluations in match situations are based primarily on the size of the discount. Deals with a higher discount (high-value match situation) are evaluated higher than those with lower discounts (low-value match discounts).

On the other hand, when the observed combination of price promotion attributes runs counter to consumers' expectations, cue inconsistency may be salient enough to activate attributional thinking, which is associated with systematic processing. In mismatch situations, consumers are motivated to understand the situation beyond what is observed and form their deal evaluations based on the retailer motivations that they think are behind the price promotion. A price promotion offering too much value may be perceived as running counter to the marketers' interests and may be attributed to inferior quality of the promoted product (positive mismatch situation). Although good quality can hardly be a reason a for price promotion, inferior quality may motivate an unethical retailer, for example, to take advantage of price promotion as a means of getting rid of substandard products. In such situations, both attributions about the retailer's motives and inferior product quality are plausible. On the other hand, a price promotion offering too little value may be perceived as running counter to consumers' interests and may be attributed to push-to-buy tactics on the part of the marketer.

Attributions in negative mismatch situations will negatively affect purchase intentions by lowering the retailer credibility but are not likely to affect perceived quality and, consequently, perceived value. On the other hand, attributions in positive mismatch situations will negatively affect purchase intentions by lowering both the retailer credibility and product quality. Consequently, the perceived value of the deal is also lower because the perceived quality directly affects the perceived value of a deal.

Consumers' attributions on deal evaluations in mismatch situations may also depend on additional information cues, particularly when an external cause is identified. Such cues may change consumers' attributions and consequently consumers' deal evaluations. When an external cause is introduced, attributions about the retailers' true dispositions will be discounted because the responsibility for running a price promotion will shift to some external cause. For example, when a retailer offer is too-good-to-be-true, consumers are likely to attribute the price promotion to inferior product quality. However, if consumers also know that a retailer is going out of business, they are likely to discount the "inferior quality" explanation and manipulative intent on the part of a retailer in favor of an alternative and more plausible explanation under such circumstances: companies that go out of business will offer any discount to sell their inventories as quickly as possible.

Although the combination of price-promotion attributes is still counter to consumers' expectations for match situations, the introduction of an external cause providing an plausible alternative as to why the price promotion offers so much value causes participants to perceive the combination of price-promotion attributes as typical rather than atypical. Therefore, consumers' attributions in mismatch situations with plausible external causes will be neutral and will not adversely affect consumers' deal evaluations.

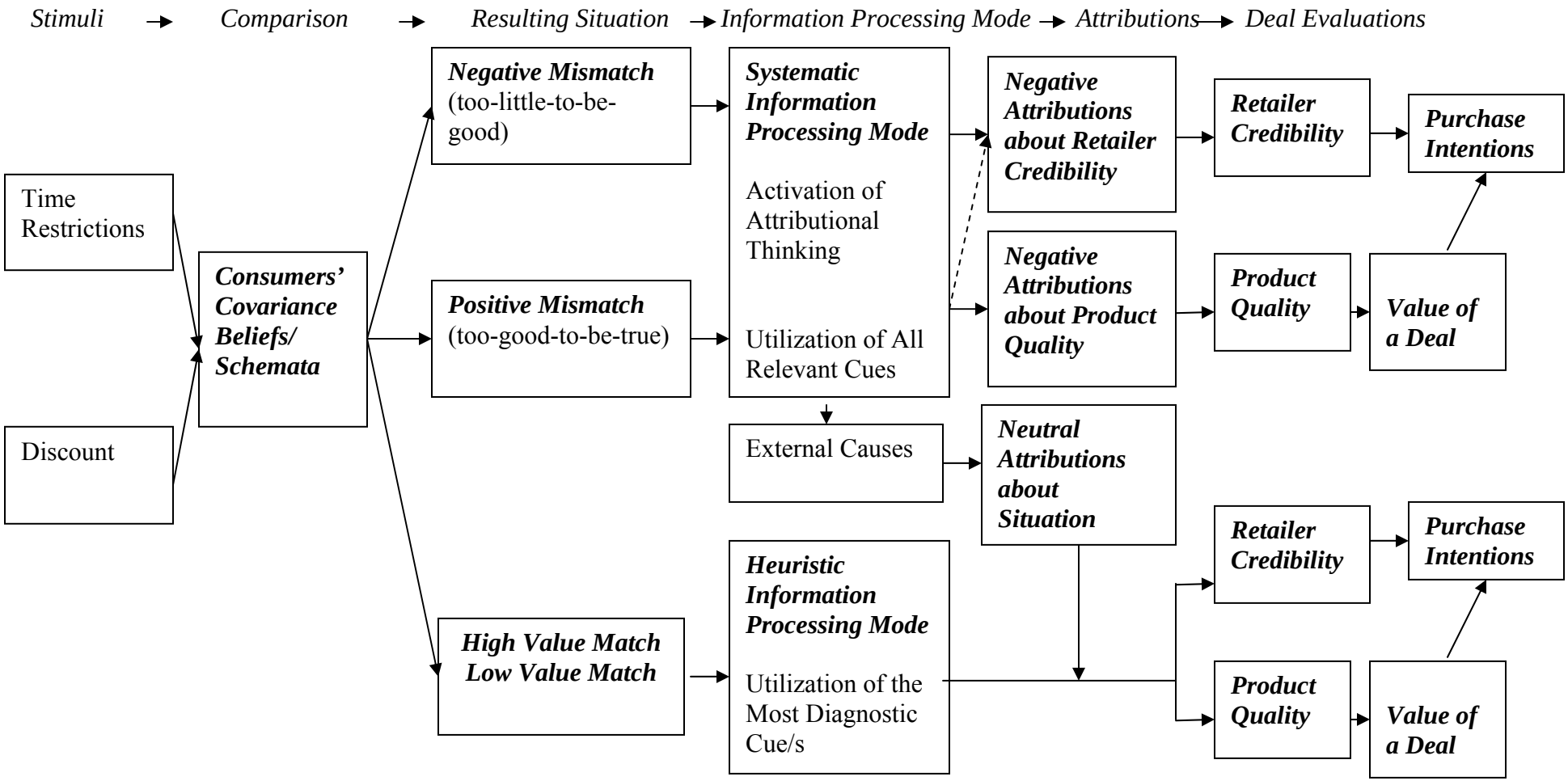

Figure 3. Effect of Consistency/Inconsistency of Price Promotion Cues on Deal Evaluations

4.3 LINEAR MODEL AND ITS PREDICTIONS

The assumed relationships about the effects of discount and time restrictions result in two linear models of deal evaluations. For discounts, the assumed relationship is that higher discounts are valued more than lower discounts. This relationship has been supported in many studies where time restrictions were not explicitly present. For time restrictions, the relationship is not as clear as those concerning discounts. Generally we might assume that consumers place more value on deals with fewer restrictions because they have more time to complete a purchase. At the same time, however, it is equally possible to assume that consumers will place a higher value on restricted deals since limited temporal availability may indicate higher value. To resolve this issue, both relationships will be used to specify two alternative linear models. It is important to note that emphasis is placed on testing for the linearity of the relationship and the direction of the relationship is of less concern.

Figure 4 shows purchase intentions (for illustration purposes we present just one variable from a set of our dependent variables) for two different linear models (A and B) based on the underlying relationships of discount and time restrictions. In model A, the assumed relationship is that more restricted deals are preferred over less restricted deals, whereas in Model B the assumption is that less restricted deals are preferred over more restricted deals. Both models incorporate the relationship that higher discounts are evaluated more favorably than those with lower discounts.

While both Models A or B reflect the two assumed relationships of discount and time restrictions, neither model can completely represent the potentially confounding effect of cue inconsistency. As discussed earlier, cue inconsistency results in an atypical price promotion (mismatch situation) which is hypothesized to generate additional processing and result in lower evaluations than expected. Thus, if this effect does occur, typical price promotions, all other things equal, should be evaluated higher than a comparable atypical price promotion. For example, in model A, the absence of the effect of cue inconsistency is seen at the low discount level where the more time restricted price promotion, which is an atypical price promotion (MM_{Neg}) is predicted to be higher than the less restricted price promotion (M_{LV}) which is a typical price promotion. Likewise, in Model B, the "misprediction" occurs at the high discount level where again the atypical price promotion (MM_{POS}) is predicted to be higher than the typical price promotion (M_{HV}).

As a result of evaluating Models A and B, we can see that a simple linear model cannot portray the effects of cue inconsistency and the resulting altered evaluations of the atypical price promotions. What is required is a model that not only accommodates the effects of discount and time restrictions, but also the moderating effect of cue inconsistency seen in the mismatch situations. The following section proposes an alternative model which does accommodate both the discount and time restriction effects while also allowing for the impacts of cue inconsistency.

According to our conceptual model deal evaluations depend not only on the level of the discount and time restriction, but also on whether there is a match or mismatch situation. In general, deal evaluations in match situations are perceived as more favorable than those in mismatch situations.

Figure 5 modifies the simple linear models discussed earlier to incorporate the effects of cue inconsistency. It follows that at each discount level and at each time restrictions level,

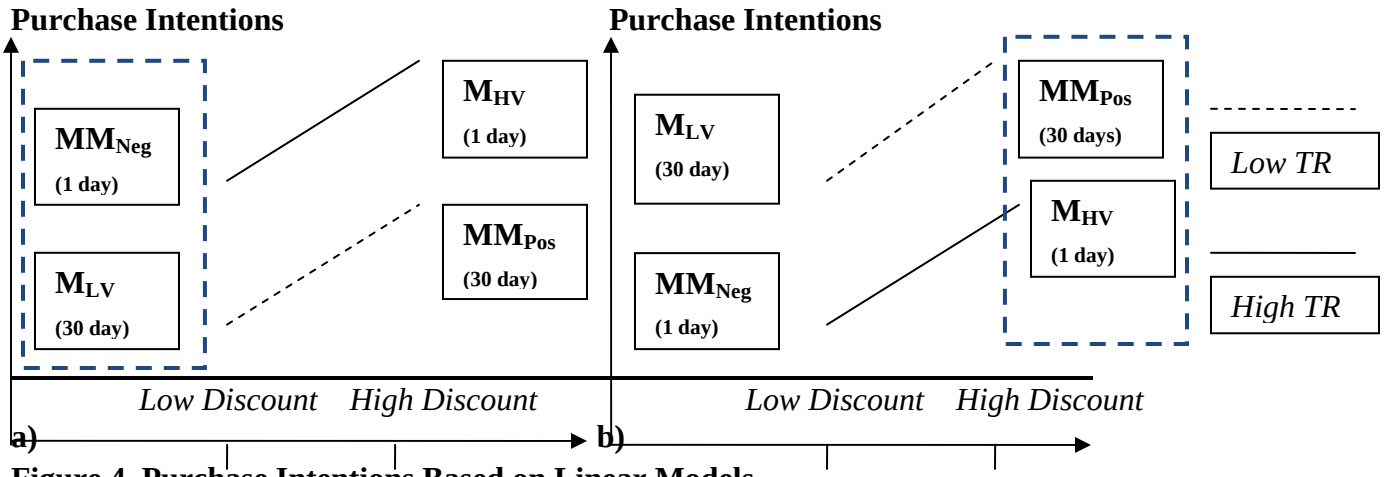

Figure 4. Purchase Intentions Based on Linear Models

4.4 COMPREHENSIVE CONCEPTUAL MODEL AND ITS PREDICTIONS

consumers will have higher purchase intentions in cue-consistent (match) situations than in cue-inconsistent (mismatch) situations when considering either discount or time restrictions. Therefore, we expect a disordinal interaction effect between these attributes such that cue-consistent deals will be valued higher than cue-inconsistent deals. Moreover, when considering only cue consistent (typical) price promotions, the relationships of discount amount and time restrictions are portrayed as well.

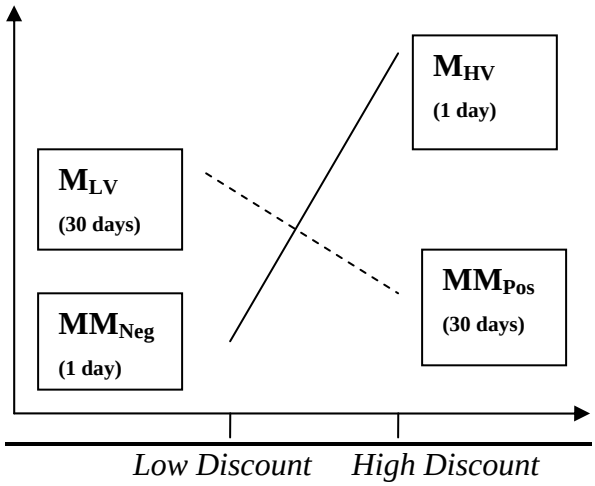

Figure 5. Purchase Intentions Based on Comprehensive Conceptual Model

A comparison of the conceptual model to either of the two linear models demonstrates the ability of the conceptual model to overcome the inability of the linear models to completely represent the hypothesized effects of cue inconsistency. Thus, support for the conceptual model when compared to either of the linear models would demonstrate the role that cue inconsistency play in a consumer's evaluations of price promotions.

4.5 HYPOTHESES DEVELOPMENT

In this section we develop five sets of hypotheses, each addressing a different issue in the conceptual model. The first issue relates to the types of cognitive responses associated with typical and atypical price promotions. A foundational concept of the conceptual model is that atypical price promotions activate attributional thinking and result in more negative thoughts than typical price promotions. Hypotheses H1 – H3 address both the magnitude and nature (positive versus negative) of the attributional thoughts for the two types of price promotions. The second issue is the impact cue inconsistency has on the evaluations of price promotions. We first examine the basic premise of the conceptual model -- cue inconsistency causes consumers to deviate from a linear additive model and instead creates a moderating effect between discount and time restrictions. The first hypothesis (H4) tests for the presence of a moderating effect of cue inconsistency. Then H5 – H8 examine the exact nature of this impact to assess its correspondence with the conceptual model. The third and fourth issues involve distinctive relationships that exist within match (H9) and mismatch (H10) conditions, respectively. Finally, the last issue is how the locus of causation of atypical price promotions may change consumers' attributions and consequently their deal evaluations. These effects are addressed for both types of mismatch situations in hypotheses H11 and H12.

As noted earlier, four different outcomes will be used in assessing a consumer's evaluation of the deal. For consistency purposes we will use letters indicating specific dependent variables throughout the hypotheses. Our dependent variables will be denoted as: (a) - retailer credibility, (b) - product quality, (c) - value of a deal and (d) - purchase intentions. A summary of all the hypotheses are presented in Table 1.

4.5.1 Consumers' Cognitive Responses to Match vs. Mismatch Situations

Previous research has shown that individuals are more likely to engage in attributional thinking when they encounter unexpected, as opposed to expected, outcomes. When individuals' expectations are violated, they will be motivated to find the reason behind the outcome that is the alternative to the default reason. In the context of price promotion, retailer behavior will be perceived as unexpected when it offers either too much (positive mismatch situation) or too little (negative mismatch situation) value. In both types of mismatch situations consumers are likely to generate negative attributions.

In positive mismatch situations, when a high discount is offered for a long period of time, consumers are likely to attribute the price promotion to inferior quality of the product. From the consumers' perspective, such tactics allow a retailer to get the price that matches the current (lower) level of product quality and, at the same time, to hide quality problems from consumers. Alternatively, in negative mismatch situations, when a low discount is severely restricted, in time consumers may attribute price promotion to a retailer's manipulative intent or, more specifically, to push-to-buy tactics. From the consumers' perspective, such tactics allow a retailer to attract more consumers by artificially improving the perception of a low discount while at the same time not sacrificing profit margin. In negative mismatch and low-value match situations, consumers are not going to ask product-quality questions because the discount is small. Although the ultimate reasons for running a price promotion in these two mismatch situations are different

(product quality vs. pure persuasive attempt), it is evident that, in both cases, the retailer will be perceived as responsible for initiating such manipulative tactics and the retailer's credibility will be lower than in the match situations. Therefore, it is hypothesized that:

Hypothesis 1

Mismatch situations compared to match situations will result in more attributional thoughts.

Hypothesis 2

Mismatch situations compared to match situations will result in more negative thoughts about retailer credibility.

Hypothesis 3

A positive mismatch situation compared to all other situations will result in more negative thoughts about product quality.

4.5.2 Consumers' Deal Evaluations in Match vs. Mismatch Situations

The proposed conceptual model predicts that the consistency/inconsistency of price promotion cues will moderate the effect of discount and time restrictions on deal evaluations. First, hypothesis 4 tests for the presence of an interaction effect. Next, hypotheses H5 through H8 test for the proposed disordinal nature of the interaction. Hypotheses 5 and 6 test for the proposed effects considering the level of discount, while hypotheses 7 and 8 assess the situations when viewed for each level of time restriction. The result will be tests assessing not only the presence/absence of the proposed moderating effect of cue inconsistency, but also the proposed disordinal interaction.

Although predictions of the proposed model and the two linear models coincide in some situations, neither linear model can address the proposed impact of cue inconsistency The proposed model predicts that deal evaluations do not change in a linear manner with changes in discount level and time restrictions level, but instead depend on the consistency/inconsistency of price promotion attributes. Thus, regardless of discount level and time restrictions level, the cue-consistent price promotions will be valued higher than cue-inconsistent price promotions. This leads to the hypothesized moderating effect stated as:

Hypothesis 4

Cue consistency/inconsistency will moderate the effect of discount and time restrictions on consumers' deal evaluations such that cue consistent situations will result in more favorable deal evaluations than cue inconsistent situations.

Full support for the proposed model requires not only a significant moderating effect (represented by the interaction of the two price promotion attributes), but also demonstration of a disordinality, such that the cue-consistent price promotions will always be evaluated higher than cue-inconsistent price promotions. This suggests that deals with identical discounts (time restrictions) will be valued more favorably when the second price promotion attribute – time

restrictions (discount) -- is consistent with consumers' expectations than when they are not. In other words, we assume that cue consistency can override the effect of time restrictions and discount on deal evaluations.

Hypothesis 5 tests for the proposed effect at the low level of discount, while hypothesis 6 tests for this effect at the high level of discount. Next, hypothesis 7 tests for the proposed effect at the low level of time restrictions and hypothesis 8 tests for this effect at the high level of time restrictions.

It should also be noted that the moderating effect of cue consistency/inconsistency will not be equivalent for all of the dependent variables due to differing consumer attributions in the two mismatch situations. In positive mismatch situations, consumers are likely to infer both inferior product quality and manipulative intentions on the part of a retailer, while in negative mismatch situations consumers are likely to infer only manipulative intentions. Therefore, all deal evaluations in positive mismatch situations will be lower than those in match situations. At the same time consumers' deal evaluations in negative mismatch situations will be lower than those in match situations only in terms of retailer credibility, value of a deal and purchase intentions. As consumers are not likely to generate negative product quality attributions in mismatch situations, consumers' perception of product quality will not be different from that in match situations.

While hypotheses 5 through 7 test all dependent variables, hypothesis 8 is reduced to test only product quality. This was done because predictions of our conceptual model for the high level of time restrictions coincide with predictions based on both linear models (despite different theoretical bases for these predictions). The only dependent variable that is not predicted by both linear models but can be predicted by our model is product quality. In the absence of negative attributions about product quality in negative mismatch situations, perceived product quality should not be significantly different between high value match and negative mismatch situations.

Therefore, it can be hypothesized that:

Hypothesis 5

When a deal offers a low discount, consumers will have higher (a) retailer credibility, (c) perceived value of a deal and (d) purchase intentions when a deal is less restricted in time (low time restrictions) than when it is more restricted in time (high time restrictions). However, consumers' perception of (b) product quality will not differ based on the restrictiveness of a deal.

Hypothesis 6

When a deal offers a high discount, consumers will have higher (a) retailer credibility, (b) product quality, (c) perceived value of a deal and (d) purchase intentions when a deal is more restricted in time (high time restrictions) than when it is less restricted in time (low time restrictions).

Hypothesis 7

When a deal is less restricted in time (low time restrictions) consumers will have higher (a) retailer credibility, (b) product quality, (c) perceived value of a deal

and (d) purchase intentions when it offers a low discount than when it offers a high discount.

Hypothesis 8

When a deal is more restricted in time (high time restrictions) consumers' perception of (b) product quality will not be different regardless of the size of discount.

4.5.3 Consumers' Deal Evaluations in Different Match Situations

Predictions for match situations when price promotion attributes are consistent with consumers' expectations can be made based on a linear model. In such situations observed price promotion attributes confirm consumers' covariance beliefs (i.e. that discount and time restrictions are positively associated) and consumers do not generate negative attributions. In match situations the assumed relationship between discount and value perceptions is expected to hold according to the concept of perceived value (Monroe, 1982). Applied in a price-promotion context, perceived value concept predicts that deals with higher discounts are likely to be evaluated higher than those with lower discounts (all other things being equal).

It is argued that consumers will have a higher perceived value of a deal and, consequently, higher purchase intentions in high-value match situations (with high discounts) than in low-value match situations (with low discounts). At the same time, consumers' perceptions of product quality and retailer credibility will not be different across these two match situations. Therefore, it can be hypothesized that:

Hypothesis 9

In match situations consumers will have higher (c) perceived value of a deal and (d) purchase intentions when a deal offers a high discount than when it offers a low discount. However, consumers' perception of (b) product quality and (a) retailer credibility will not be different across match situations.

4.5.4 Consumers' Deal Evaluations in Different Mismatch Situations

The conceptual model also suggests that in positive mismatch situations, consumers are likely to infer both inferior product quality and manipulative intentions on the part of a retailer, while in negative mismatch situations consumers are likely to infer only manipulative intentions. As a result a retailer's credibility in both mismatch situations will be low and not significantly different. At the same time, perceived quality in negative mismatch situations will be higher than that in positive mismatch situations.

At the same time, no predictions can be made about the value of a deal and purchase intentions. First, it is not clear what type of attributions (about product quality or pure manipulative intent) will result in stronger consumers' reactions. Second, it is not clear (and not in the realm of this research) as to how the degree of cue inconsistency may impact consumers' perception of the value of a deal and their purchase intentions. Therefore, we can hypothesize the

effect of the type of mismatch situation only on retailer credibility and product quality. It is hypothesized that:

Hypothesis 10

In mismatch situations consumers will have higher perception of (b) product quality when a deal offers a low discount than when it offers a high discount. However, consumers' perception of (a) retailer credibility will not be different across mismatch situations.

4.5.5 Consumers' Deal Evaluations in Mismatch Situations with and without External Cause

Hypotheses 1 through 10 are related to situations in which price promotions are perceived to be 'caused' by internal motivation of a retailer. In such situations a retailer may offer both typical and atypical price promotions. In the former case little information needs to be inferred about the retailer's true dispositions because typical price promotions are offered by majority of retailers. However, in the latter case consumers are likely to engage in attributional thinking and make negative inferences about the quality of a promoted product, retailer credibility or both. According to Wansink (1989) unexpected behavior in the absence of external causes is likely to encourage a consumer "to assume the worst" about the retailer.

At the same time, consumers' attributions in mismatch situations may change if some external cause is introduced. Research has shown that external attributions may shift responsibility for the observed behavior from the retailer to circumstances beyond the retailer's control. In such situations, what would be viewed as atypical price promotions may be viewed quite differently.

As discussed earlier, in positive mismatch situations, consumers are likely to infer low product quality, and retailer credibility will be low. However, when a valid plausible external explanation is offered (e.g., going out of business), it will cancel an "inferior product quality" explanation. Consumers will perceive the retailer's price promotional behavior as typical under such circumstances and will not generate negative attributions about both product quality and a retailer. Similar predictions can be made for negative mismatch situations. However, predictions for positive and negative mismatch situations will not be identical. Because of the absence of negative attributions about product quality in negative mismatch situations, perceived product quality will not be different across mismatch situations with and without external cause. Therefore, it is hypothesized that:

Hypothesis 11

In positive mismatch situations, consumers will have higher perception of (a) retailer credibility, (b) product quality, (c) value of a deal and (d) purchase intentions when an external cause is provided than when it is not.

Hypothesis 12

In negative mismatch situations, consumers will have higher perception of (a) retailer credibility, (c) value of a deal and (d) purchase intentions when an external cause is provided than when it is not. However, consumers' perception of (b) product quality will not be different across negative mismatch situations with and without external cause.

Table 1. Summary of Hypotheses

Hypothesis	**Dependent Variable**	**Hypothesized Level of Dependent Variable**			
		Match Situations		**Mismatch Situations**	
Hypothesis 1	Number of attributions	Low		**High**	
Hypothesis 2	Number of negative thoughts about retailer credibility	Low		**High**	
Hypothesis	**Dependent Variable**	**Hypothesized Level of Dependent Variable**			
		Match Situations		**Mismatch Situations**	
		High Value Match	**Low Value Match**	**Positive Mismatch**	**Negative Mismatch**
Hypothesis 3	Number of negative thoughts about product quality	Low	Low	**High**	Low
Hypothesis 4	All dependent variables	(Disordinal interaction effect)			
Hypothesis 5a	Retailer credibility		**High**		Low
Hypothesis 5b	Product quality		No diff.		No diff.
Hypothesis 5c	Value of a deal		**High**		Low
Hypothesis 5d	Purchase intentions		**High**		Low
Hypothesis 6a	Retailer credibility	**High**		Low	
Hypothesis 6b	Product quality	**High**		Low	
Hypothesis 6c	Value of a deal	**High**		Low	
Hypothesis 6d	Purchase intentions	**High**		Low	
Hypothesis 7a	Retailer credibility		**High**	Low	

Table 1 Continued.

Hypothesis	Dependent Variable	Hypothesized Level of Dependent Variable			
		Match Situations		Mismatch Situations	
		High Value Match	Low Value Match	Positive Mismatch	Negative Mismatch
Hypothesis 7b	Product quality		**High**	Low	
Hypothesis 7c	Value of a deal		**High**	Low	
Hypothesis 7d	Purchase intentions		**High**	Low	
Hypothesis 8	Product quality	No diff.			No diff.
Hypothesis 9a	Retailer credibility	No differences			
Hypothesis 9b	Product quality	No differences			
Hypothesis 9c	Value of a deal	**High**	Low		
Hypothesis 9d	Purchase intentions	**High**	Low		
Hypothesis 10a	Product quality			Low	**High**
Hypothesis 10b	Retailer credibility			No differences	
Hypothesis 11a	Retailer credibility	**High**		Low	
Hypothesis 11b	Product quality	**High**		Low	
Hypothesis 11c	Value of a deal	**High**		Low	
Hypothesis 11d	Purchase intentions	**High**		Low	
Hypothesis 12a	Retailer credibility		**High**		Low
Hypothesis 12b	Product quality		No diff.		No diff.
Hypothesis 12c	Value of a deal		**High**		Low
Hypothesis 12d	Purchase intentions		**High**		Low

4.6 SUMMARY

In this chapter we developed five sets of hypotheses. The first three hypotheses (H1-H3) address differences in consumers' cognitive responses to cue-consistent vs. cue-inconsistent price promotions. It is suggested that when price promotion attributes are inconsistent with consumers'

expectations about regular price promotion, consumers are likely to engage in attributonal thinking and may generate negative thoughts about a retailer offering such price promotion or quality of a promoted product or both.

Next set of hypotheses (H4-H8) suggests that cue consistency/inconsistency moderate the effect of discount and time restrictions on consumers' deal evaluations and that the nature of this interaction is disordinal. Then we specify moderating effect at each discount level and at each time restrictions level. In general we posit that cue consistency/inconsistency override the effect of both discount and time restrictions on deal evaluations and as a result deal evaluations will be higher for match than for mismatch situations regardless of the level of discount and time restrictions.

In the third set of hypotheses we compare two types of match situations (H9) and in the fourth - two types of mismatch situations (H10). Deal evaluations for cue-consistent price promotions can be predicted based on linear models like perceived value concept. Predictions for cue-inconsistent price promotions are based on differences in consumers' attributions across the two mismatch situations. Finally, in the fifth set of hypotheses we consider only mismatch situations and hypothesize the effect of the locus of causation on deal evaluations. It is suggested that introduction of an external cause that provides an alternative to the default explanation as to why a price promotion is offered makes consumers perceive a combination of price-promotion attributes as expected (or cue-consistent) for such mismatch situations

CHAPTER 5. METHODOLOGIES FOR THE EMPIRICAL STUDIES

This chapter presents the methodology for Study One and Study Two. First, the details of the experimental design, stimulus material, experimental procedure and sample profile are provided. This is followed by a description of the dependent variables, manipulation check measures, control variables and outcome measures.

5.1 METHODOLOGY FOR STUDY ONE

5.1.1 Experimental Design

A 2 (high vs. low level of discount) x 2 (high vs. low level of time restrictions) between-subjects full factorial design was utilized to test hypotheses 1 through 11 (see Figure 6). The two levels of discount were 5% and 50%, and the two levels of time restrictions were 1 day and 30 days. Levels of discount and levels of time restrictions were chosen based on Pretests One and Two. The study design is presented in Figure 6.

Mismatch conditions were operationalized by combining a high discount with low time restrictions in a positive mismatch condition (50% off, 30 day sale, that is, too-good-to-be-true), and by combining a low discount with high time restrictions in a negative mismatch condition (5% off, 1 day sale, too-little-to-be-good).

		Time Restrictions	
		High	Low
Discount	High	**High-Value Match Condition** 50% off/ 1 day	**Positive Mismatch Condition (too-good-to-be-true)** 50% off/ 30 days
	Low	**Negative Mismatch Condition (too-little-to-be-good)** 5% off/ 1 day	**Low-Value Match Condition** 5% off/ 30 days

Figure 6. Study One. Experimental Design/ Treatment Conditions

Match conditions were operationalized by combining discounts with expected levels of time restrictions: in a high-value match condition, a high discount was paired with high time restrictions(50% off, 1 day sale), and in a low-value match condition a low discount was paired with low time restrictions (5% off, 30 day sale).

5.1.2 Stimulus Material

Each participant received a survey with confidentiality disclosure information on the first page, instructions and a scenario on the second page, and a mock-up print advertisement of a chair on

the third page followed by a questionnaire. The scenarios in all four conditions were identical (see Appendix J). The participants were asked to imagine that they were considering purchasing an inflatable massage chair, and after visiting several stores selling such chairs and checking prices in Consumer reports, they learned that market prices on such chairs vary between $140 and $160. The participants were then asked to carefully examine the copy of an advertisement offering a sale on an inflatable massage chair and answer the questions that followed.

The print advertisement showed an inflatable massage chair in the middle of the page and a list of its features on the right-hand side. The description of a chair was kept constant across the four experimental conditions. The advertisement provided information about five features of the chair: "Three intensity levels", "Nine functions", "Time control", "Remote" and "Electric pump". The discounts and time restrictions were depicted in large fonts under the chair in the center of the page. Combinations of the discount and time restrictions represented four treatment conditions (see Appendixes F, G, H and I). There was a "Sale" sign in the top left corner and a regular price was located at the bottom of the advertisement. In addition, to the right of the "Sale" sign there was a slogan: "Today only!" in one-day sale conditions, and "This Month Only" in thirty-day sale conditions.

5.1.3 Experimental Procedure and Sample Characteristics

121 undergraduate students enrolled in business courses at a major southeastern university were randomly assigned to one of four experimental conditions. Cell sizes ranged from 30 to 31 participants. The participants were informed that their participation was voluntary and that they could withdraw at any time without negative consequences. To increase the participants' motivation, extra credit was offered for taking part in the survey. The participants were instructed to carefully read all the instructions and the scenario, and then answer the questions that followed. Following Petty and Cacioppo's (1979) procedures, immediately after exposure to the advertisement, the participants were asked to write down their thoughts about the sale that they had just observed. The participants then answered questions that measured different constructs of interest. 52.1 % of the participants were females; the average age was 21.88, the median and mode age was 21, and the majority of participants (70.8%) were juniors.

5.1.4 Dependent Measures

Scaled measures: The dependent variables were the number of thoughts (including both attributional and non-attributional thoughts), thought focus, thought valence, retailer credibility, perceived quality, perceived value of a deal, and purchase intentions. Scales used to measure constructs of interest (except thoughts) were all seven-point Lickert-type scales. Thoughts were measured by open-ended questions. All dependent variables are listed below (see Table 2 and Appendix J).

Participants' thoughts measures: The participants' thoughts (including attributional thoughts) were measured immediately after their exposure to the advertisement by asking them to share their thoughts about the sale. The participants were asked the following open-ended question: "What is your opinion on this sales promotion?" Though prior research in many cases has used close-ended scales to measure attributions (Lichtenstein et al., 1989: Burton et al., 1994;

Table 2. Dependent Measures

Dependent Variable	Scale Item/s	Scale Response/Anchors*	Source
Retailer Credibility	I believe that the retailer offering this deal is:	1 – Not Trustworthy, 7 – Trustworthy	Lichtenstein and Bearden (1989)
	I believe that the retailer offering this deal is:	1 – Insincere, 7 – Sincere	
Perceived Quality	I think that the quality of this chair is	1 – Bad, 7 – Good	Suri and Monroe (2003)
	How certain are you that this chair will perform satisfactorily?	1 – Uncertain, 7 – Certain	
	The likelihood that the advertised chair would be dependable is:	1 – Low, 7 – High	
Perceived Value	With this deal the advertised chair is very good value for money	1 – Strongly. Disagree, 7– Strongly Agree	Lichtenstein and Bearden (1999)
Purchase Intentions	The probability that I would consider buying this chair is:	1 – Low, 7 – High	Dodds, Monroe and Grewal (1991)
	My willingness to buy the advertised chair is:	1 – Low, 7 – High	

* seven-point Lickert-type scales

Raghubir and Corfman, 1995: Inman et al, 1997), there was a concern that exposing participants to causes that they might not ordinarily think about may increase the possibility of demand artifact. More details on how thoughts were measured are given below.

Thoughts including attributional thoughts were measured by their numbers. The unit of analysis was chosen at a thought level. As some sentences contained more than one thought, the number of thoughts was greater than the number of sentences. All thoughts including attributional thoughts were classified by their focus or relation to other factors (retailer credibility-related, product quality-related or other thoughts), and by their valence (neutral, positive or negative). Thought focus classification for the retailer credibility-related and product quality-related thoughts was made only when the retailer credibility or product quality issues were explicitly mentioned in the participants' responses. Thoughts where the retailer credibility or product quality were only implied (e.g., "It's a great deal") were classified as "other thoughts".

Attributional thoughts were coded based on the following scheme. A thought was considered as indicative of attributional processes when it contained some overt evidence of causal inferences in the form of a causal question (e.g., "why is a retailer advertising the chair in such a manner?") or a causal answer (e.g., "the retailer is trying to deceive customers by offering a low-quality product"). A thought was considered non-attributional when it addressed more general issues, such as the overall attitude toward a sale or comments about a product category, the product's price, the quality of the advertisement, and so on. To avoid the double-counting of thoughts if the same thought was mentioned more than once by the same participant, it was

included only once in the analysis. Some examples of attributional thoughts made in this study are as follows: "Why are they being sold at half-price for such a long period of time?", and " I would wonder if this chair is really as good as the chair that sells for $150", etc. Some examples of non-attributional thoughts made in this study include: "It's a typical promotion, nothing really stands out about it", and "50% off seems like great value" etc.

Thoughts were also coded based on their focus. Thought focus refers to the main object of a thought. Thoughts were classified as related either to the retailer credibility, product quality, or to any other issues. Some examples of product quality-related thoughts made in this study are as follows: "Is there anything wrong with the chair because the price is so low?", and "…the chair to be poorly manufactured", etc. Some examples of a retailer credibility-related thoughts made in this study include: "Most people probably get ripped off", etc. Some examples of other thoughts made in this study are: "One day is not very convenient for me", and "I've never heard of inflatable massage chairs", etc.

The valence of thoughts was coded based on the following scheme. The valence refers to the type of connotation (positive, negative or neutral) about the main object of a thought. Some examples of negatively valenced thoughts made in this study are as follows: "The product is not good; hence the 50% sale", "5% discount is not enough", etc. Some examples of positively valenced thoughts made in this study include: "Nothing seems like it is trying to scam the buyer", and "50% off seems like great value", etc. Some examples of neutrally valenced thoughts made in this study are: "Maybe a discounting product", and "The chair is selling for $75 dollars for 30 days", etc.

5.1.5 Manipulation Check Measures

The following items were used to check whether the manipulations were successful (see Table 3 and Appendix J).

Table 3. Manipulation Check Measures

Manipulation Check	**Levels**	**Scale Item/s**	**Scale Response/Anchors***
Match/Mismatch Conditions	Match Mismatch	The combination of the discount amount and time duration in this sales promotion is:	1 – Unexpected, 7 – Expected
Discount	Low High	The amount of the discount in the advertisement is:	1 – Low, 7 – High
Time Restrictions	High Low	Time duration in the advertisement is:	1 – Short 7 – Long

5.1.6 Control Measures

Several measures were taken to control other extraneous factors that can potentially confound experimental results (see Table 4 and Appendix J). The participants' product knowledge, sales proneness, perception of price-quality relationship and need for cognition, were measured closer to the end of a survey. Demographic questions concluded the survey.

Table 4. Control Measures

Control Measure	Scale Item/s	Scale Response/Anchors*	Source
Product Knowledge	I feel very knowledgeable about various inflatable massage chairs.	1- Strongly Disagree, 7 - Strongly Agree	Smith and Park (1992)
Sales Proneness	Compared to most people, I am more likely to buy brands that are on special.	1- Strongly Disagree, 7 - Strongly Agree	Lichtenstein, Ridgway and Netemeyer (1993)
Price-Quality Perception	Generally speaking, the higher the price of a product, the higher the quality.	1- Strongly Disagree, 7 - Strongly Agree	Lichtenstein, Ridgway and Netemeyer (1993)
Need for Cognition (NFC)	I don't like to have to do a lot of thinking.*	1 - Extremely Unlike Me, 7 – Extremely Like Me	Epstein (1991), Cacioppo and Petty (1982)
	I try to avoid situations that require thinking in depth about something.*	1 - Extremely Unlike Me, 7 – Extremely Like Me	
	I prefer to do something that challenges my thinking ability rather than something that requires little thought.	1 - Extremely Unlike Me, 7 – Extremely Like Me	
	I prefer complex to simple problems.	1 - Extremely Unlike Me, 7 – Extremely Like Me	
	Thinking hard and for a long time about something gives me little satisfaction.*	1 - Extremely Unlike Me, 7 – Extremely Like Me	

* Items one, two and five were reverse coded before being averaged with other items to form an index.

5.1.7 Outcome Measures

Outcome measures were used to assess the effect of respondents' exposure to stimuli on believability of the stimuli and respondents' level of involvement with stimuli (see Table 5). It was important to get assurance that the manipulations used in the study were not perceived as unrealistic. At the same time, it was also important to check if such strong psychological factor as involvement is responsible for some differences in respondents' reactions on stimuli.

Table 5. Outcome Measures

Outcome Measure	Scale Item/s	Scale Response/Anchors*	Source
Believability	How believable do you think this sales promotion is?	1 – Not Believable at all, 7 – Very Believable	
Involvement	I found the advertisement for the chair to be:	1 - Not relevant to me, 7 - Relevant to me	Chaiken and Maheswaran, (1994)

5.2 METHODOLOGY FOR STUDY TWO

In this section we present methodology for Study Two. The method is similar to that of Study One. The product used as a stimulus and the measures of the dependent and control variables as well as manipulation check measures remained unchanged. The important difference in Study Two was in the experimental design: a new independent variable, presence/absence of an external cause was introduced and only mismatch conditions from Study One were used. Treatment conditions where an external cause was absent replicated two mismatch conditions from Study One.

5.2.1 Experimental Design

A 2 (positive mismatch vs. negative mismatch conditions) x 2 (external cause present vs. external cause absent) between-subjects full factorial design was utilized to test hypotheses 12 to 14. Mismatch conditions were operationalized by combining a high discount with low time restrictions in a positive mismatch condition (50% off, 30 days – too-good-to-be-true), and by combining a low discount with high time restrictions in a negative mismatch condition (5% off, 1 day – too-little-to-be-good). External cause present conditions were operationalized by providing information about some external reason that forced a retailer to offer the price promotion. In a negative mismatch condition, the participants were informed that a store was doing its annual inventory check and that it was offering customers that day only a 5% discount for the inconvenience (see Appendix L). In a positive mismatch condition, the participants were informed that a company was going out of business and was offering a 50% discount for the next 30 days or till the end of a store lease (see Appendix M). The study design is presented in Figure 7.

		External Cause	
		Present	Absent
Type of Mismatch Condition	Positive Mismatch Condition (too-good-to-be-true)	**Going out of Business** 50% off /30 day	50% off/30 day
	Negative Mismatch Condition (too-little-to-be-good)	**Inventory Check** 5% off/1 day	5% off/1 day

Figure 7. Study Two. Experimental Design/ Treatment Conditions.

5.2.2 Stimulus Material

Each respondent received a survey with confidentiality disclosure information on the first page, instructions and a scenario on the second page, and a mock-up print advertisement of a chair on

the third page, followed by a questionnaire. The respondents were asked to imagine that they were considering purchasing an inflatable massage chair, and after visiting several stores selling such chairs and checking prices in consumer reports, they learned that market prices on such chairs vary between $140 and $160. The second part of the scenario was different depending on the treatment condition. The scenarios in the two conditions without an external cause were identical to those used in Study One (see Appendix J). The scenarios in the two conditions with an external cause provided additional information about the external causes behind the price promotion. In a positive mismatch condition, the respondents were asked to imagine that their friend had brought them the advertisement of a chair and told them that his parents knew the store's owners and they really were going out of business and therefore, were offering great discounts (see Appendix M). Information about the store owners was added to increase the trustworthiness of the advertisement, so that it would not be perceived as originating from a store that seems to go out of business every other month. In a negative mismatch condition, the respondents were asked to imagine that after they had entered a store they noticed that the furniture was being moved around the store, sales people are unavailable, and a big advertisement states that the store is conducting an inventory check and therefore a 5% discount is being offered for the inconvenience (see Appendix L). Print advertisements in the two conditions without external causes were identical to those used in Study One (see Appendix H and I). Print advertisements in the two conditions with external causes were similar to those used in Study One, but also incorporated the information about an external cause (see Appendixes L and M).

5.2.3 Experimental Procedure and Sample Characteristics

144 undergraduate students enrolled in business courses at the College of Business Administration at a major southeastern university were randomly assigned to one of four experimental conditions. Cell sizes ranged from 35 to 37 respondents. The respondents were informed that their participation was voluntary and they could withdraw at any time without negative consequences. To increase the participants' motivation, an extra credit was offered for taking part in the survey. The participants were instructed to carefully read all the instructions and scenarios and answer the questions that followed. 50% of the participants were female; the average age was 21.56, the median and mode age was 21, and the majority of the participants (61.1%) were juniors.

5.2.4 Dependent Measures, Manipulation Check Measures, Control Measures and Outcome Measures

All scaled variables measured in Study Two were identical to those measured in Study One (see Tables 2, 3, 4 and 5). A one-item scale that measured the price-quality relationship was dropped from the second study to save space in the survey. The respondents' thoughts were not measured in Study Two.

5.3 SUMMARY

In this chapter we present methodologies for the two studies. In both studies a 2 x 2 full factorial design was employed using an identical product – an inflatable massage chair -- as a stimulus. In the first study discount and time restrictions were manipulated to create two match and two mismatch conditions. In the second study only mismatch conditions were used and locus of causation was introduced as a second independent variable. Both studies utilized surveys and student samples. Dependent measures, manipulation checks, control and outcome measures were identical across the two studies for the purpose of consistency. In addition, in the first study participants' thoughts were measured by open-ended question.

CHAPTER 6. PRETESTS

In this chapter we present three pretests that were conducted to check assumptions and to choose stimuli and manipulation levels for main studies. More specifically, in the first pretest we check if consumers held a belief in a positive relationship between the size of discount and severity of time restrictions. We also determine preliminary manipulation levels for our independent variables. In the second pretest we examine the choice of experimental stimulus and check whether the levels of discount chosen in the first pretest for match situations are associated with the chosen time restrictions in the context of the selected stimulus. The goal of the third pretest is to determine the relative strengths of a discount and time restrictions as two price promotion attributes, as well as to check the conceptual assumption that respondents could differentiate between match and mismatch situations based on the consistency of price promotion attributes.

6.1 PRETEST ONE

The objective of this pretest was both practical and theoretical. The theoretical purpose was to determine whether the participants held a belief in a positive relationship between the size of a discount and time restrictions, that is, the bigger the discount, the more severe the time restrictions and vice versa. The practical objective was to first determine the levels of discount and time restrictions to be used in a study to successfully present match and mismatch conditions, without compromising their believability.

6.1.1 Experimental Design, Subjects and Procedure

A matching experiment was chosen as the appropriate tool to reveal the respondents' beliefs about covariation between time restrictions and discount. In a matching response, the inferred value of the missing attribute adjusts the pair of attributes (missing and observable) so that it is not different from any other pair of attributes that are regularly observed (Wilemsen and Karen, 2003).

Eighty-two students enrolled in business courses at the College of Business Administration at a major southeastern university were randomly assigned to two conditions (see Appendixes A and B). In one condition, the respondents were exposed to a set of time restrictions (e.g., 1 hour, 1 day etc.) and were asked to infer the corresponding value of a missing discount for each level of time restrictions. In the other condition, the respondents were exposed to a set of discount ranges (e.g., 0-5% off, 5-10% off etc.) and were asked to infer the corresponding value of missing time restrictions for each range of discount.

To eliminate any presentation order effect, half of the surveys in each condition began with the highest value, and the other half began with the lowest value. Each respondent provided inferred values for three product categories: DVD players, jeans and shampoo. In addition, the respondents in the "discount given" condition provided estimates of a discount they would typically expect in each product category. Before the experiment, respondents were informed that their participation was voluntary and they could withdraw from the experiment at any time without any negative consequences.

6.1.2 Results

The results of the two experiments for DVD players are presented in Tables 6, 7 and 8, and plotted in Figures 8 and 9. Overall, the results support the assumption that consumers infer a positive relationship between a discount and time restrictions. Both graphs show a relationship between a discount and the temporal availability of a deal. This relationship is negative. However, because time restrictions are inversely related to the temporal availability of a deal, high time restrictions means low temporal availability and vice versa. Therefore, the relationship between a discount and time restrictions is positive. An inspection of both the mean and median lines shows that they are not very different.

After comparing the two graphs, it follows that the rate of exchange between two price promotion attributes in the "discount given" condition is lower than that in the "time restrictions given" condition. In other words, the respondents in the "discount given" condition valued or gave greater weight to time restrictions (and therefore required less compensation for each unit of change in a discount) than those in the "time restrictions given" condition. Though the exchange rates between price promotion attributes (or the slopes of the lines) were different in the two experiments, this is not a surprising result as trading off one dimension against another reverse task do not usually provide identical results (Delquie, 1993). In addition, difference in the rates of exchange can be explained by the fact that respondents in the "discount given" condition were forced to provide values of time restrictions for all levels of discounts (up to "75% off and more"), while respondents in the "time restrictions given" condition could freely express their opinions about the appropriate discounts a each level of time restrictions.

Table 6. Pretest One. Inferred Time Restrictions in "Discount Given" Condition

DVD Players		**Given Discount Ranges (% off regular price)**						
		0–5 % off	5–10 % off	10–20 % off	20–35% off	35–50% off	50–75% off	Over 75% off
Inferred Time Restrictions (hours)	Mean	1957	1088.4	652.2	377.5	195	93.25	45.9
	Median	2160	720	612	192	168	48	24
	Mode	2160	720	720	168	168	24	24
	Min	504	168	48	28	24	3	1
	Max	8760	2160	2160	2160	720	336	240
	Range	8256	1992	2112	2132	696	333	239
	Variance	3073044	426374	311983	188914	39409	9481	3092

The respondents in the "discount given" condition were also asked to provide their estimates of a typical discount for each product category (see Table 8). The means of typical discounts were very close: 24.25% for DVD players, 26.12% for jeans, and 28.23% for shampoo. Typical discount estimates varied from 10% to 50% for DVD players and jeans, and from 5% to 75% for shampoo.

The preliminary choice of the levels of discount and levels of time restrictions for experimental studies was based on the following assumptions: a) levels should be believable in

Table 7. Pretest One. Inferred Discounts in "Time Restrictions Given" Condition

DVD Players		Given Time Restrictions				
		1 hour sale	1 day sale	1 week sale	1 month sale	3 month sale
Inferred Discount (% off regular price)	Mean	53.2	36.9	27	16.1	11.2
	Median	50	35	25	15	10
	Mode	50	40	25	15	10
	Min	20	15	10	5	0
	Max	90	75	75	30	40
	Range	70	60	65	25	40
	Variance	279.1	174.3	142.97	38.45	54.12

Table 8. Pretest One. Typical Discount Estimates

DVD Players		
Typical Discount Estimates (% off regular price)	Mean	24.25
	Median	20
	Mode	20
	Minimum	10
	Maximum	50
	Range	40
	Variance	128.9

Figure 8. Pretest One. Inferred Discounts in "Time Restrictions Given" Condition

Figure 9. Pretest One. Inferred Time Restrictions in "Discount Given" Condition

order to create the expected combinations when they are paired in match conditions, and b) levels should represent the lowest and the highest believable levels to create unexpected combinations when they are paired in mismatch conditions. Based on the presented results and the assumptions listed above, it was decided to use "50% off" and "5% off" as the two levels of discount, and "1 day" and "30 days" as two levels of time restrictions. Though the median of discount estimated for a 1 day time restriction was 35% off the regular price, 18.4% of respondents indicated 50% as appropriate for this level of time restrictions. A 50% discount was also indicated by some respondents as a typical discount for DVD players and jeans. At the same time, the median of time restrictions estimated for the 50%-75% discount range was 2 days, and 37% of respondents indicated 1 day as an appropriate time restriction for this range of discount. Therefore, it was assumed that a combination of 50% discount and a 1 day time restriction would be perceived as the expected combination of price promotion attributes; sales with such price promotion attributes would be perceived as providing good value for customers. Furthermore, although the median of discount estimated for a 30 day time restriction was 15% off the regular price, 4.5% of respondents indicated 5% discount as appropriate for this level of time restrictions. At the same time, the median of time restrictions estimated for the 0%-5% discount range was 90 days, but 33.3% of the respondents indicated 30 days as an appropriate time restriction for this range of discounts. Therefore, it was assumed that, although a combination of 5% discount and a 30 day time restriction would be perceived as an expected amalgamation of price promotion attributes, a sale with such price promotion attributes would be perceived generally as providing low value for customers.

At the same time, a 50% discount was never associated with a 30 day time restriction (see Table 7). The average of maximum time durations inferred for the two discount ranges of 35% to 50%, and 50% to 75%, was 22 days. It was assumed that a combination of 50% discount and a 30 day time restriction would be perceived as an unexpected combination of price promotion attributes. Such price promotion would be perceived as providing 'too-good-to-be-true' value. On the other hand, the average minimum time duration inferred for the two discount ranges, 0%

to 5% and 5% to 10% was 1.4 days. It was assumed that a combination of 5% discount and a 1 day time restriction would be perceived as an unexpected combination of price promotion attributes. Such price promotion would conversely be perceived as providing 'too-little-to-be-good' value.

In summary, the results of the Pretest One showed that consumers hold particular beliefs about the positive relationship between the size of a discount and the severity of its time restrictions (or a negative relationship between a discount and the temporal availability of a sale). Higher discounts were associated with higher time restrictions in all three product categories tested in the experiment. Based on the results of a matching experiment, the two levels of discount (5% and 50%) and two levels of time restrictions (1 day and 30 days) were chosen for the main studies. It was assumed that a combination of high (low) level of discount and high (low) level of time restrictions would be perceived as a match situation, while a combination of high (low) level of discount and low (high) level of time restrictions as a mismatch situation.

6.2 PRETEST TWO

The objective of this pretest was two-fold: to choose which product would be used as a stimulus in experimental studies, and to check whether the levels of discount chosen in Pretest One are associated with the chosen levels of time restrictions for match situations. Pretest Two provided an opportunity to test associations between the two price promotion attributes in the context of a specific product that would be used in experiments as a stimulus. The following section discusses the choice of a product and then presents the results of the data analysis.

6.2.1 Choice of a Product

The product selected for this study was an unbranded inflatable massage chair. The actual product's advertisement was found online and then modified for the purposes of the study (see Appendix F, G, H and I). The regular price and some of its product features were retained from the original advertisement. The choice of a stimulus was justified based on two reasons.

The first was that a product should be unbranded. Prior research indicates that brand name may affect consumers' evaluations of price promotions and vice versa (Rao and Monroe, 1989; Dodds et al., 1991; Grewal et al., 1998; Raghubir and Corfman, 1999). Specifically, a brand name can attenuate the effect of discount on perceived quality. In the absence of other cues, price may be used to infer product quality (Olson, 1977). However, adding a second cue of a brand name may result in the attenuation of the effect of price on quality perception (Dodds et al, 1991). Brand name is closely related with a company's reputation. According to Purohit and Srivastava (2001), reputation represents an accumulation of information and first-hand experiences about a company and its products; it cannot be changed as easily as a product's price, warranty, and some other extrinsic cues. In the presence of a well-known brand name, consumers may not use price reduction as an indication of low quality (Dickson and Sawyer, 1984), and are likely to switch from price-quality inferences to brand-quality inferences (Gardner, 1971). For example, in a study conducted by Della Bitta et al. (1981), the perceived quality of Texas Instruments calculators did not suffer regardless of the level of discount. Additionally, consumers tend to accept that some retailers can sell their products at substantially

lower than average prices (Lichtenstein, Burton and Karson, 1991; Bobinski, Cox and Cox, 1996). The introduction of a strong brand name may not allow respondents to use price reduction as an indicator of low product quality.

On the other hand, brand-quality inferences may also make consumers insensitive to price reduction manipulations for weaker brands. For example, Manchanda (1998) found that respondents' attitude toward weak brands did not change, and in some cases became even more favorable when those brands were offered with larger than expected discounts. The author suggests that respondents initially considered weak brands to be of a lower quality and large discounts did not lower their quality perceptions any further. Offering a high discount on a weak brand may be perceived as a situation in which the original price of a product was inflated but not as a situation raising any quality concerns. Therefore, an unbranded product will not attenuate the effect of a discount on the perception of quality.

The second reason for choosing a stimulus is that a product should not be very familiar to respondents. Prior research shows that respondents' product knowledge and knowledge of market prices of similar offerings may affect consumers' evaluation process (Rao and Monroe, 1988; Davis, Inman and Mcalister, 1992; Sujan, 1985; Janiszewski and Lichtenstein, 1999). More knowledgeable consumers tend to base their evaluations on attribute information, while less knowledgeable consumers rely on more simplistic, category-based knowledge (Sujan, 1985). Using a familiar product as a stimulus may result in different information-processing ways for more or less knowledgeable consumers, and could potentially confound results.

The second argument in favor of using an unfamiliar product is related to the respondents' knowledge of market prices. Consumers usually assess the monetary value of price promotions using their internal reference price as a standard of comparison (Lichtenstein and Bearden, 1989). Internal reference prices may vary significantly from consumer to consumer, and may result in high variance in data. On the other hand, the perception of unfamiliar products is also likely to produce high variance because of the respondents' low product knowledge. To take care of these effects, it was decided to choose an unfamiliar product and to manipulate (instead of measuring) the respondents' knowledge of price variations by providing information about the range of regular market prices for this type of product.

The reference price range of US$140 to $160 was chosen in such a manner that the regular price of a chair, $149.99, represented a midpoint of the range. The range was narrow enough to strengthen the manipulations and to further minimize any variance in data. At the same time, the high base price allowed for a price reduction of sufficient magnitude.

6.2.2 Choice of Discount Levels and Time Restrictions

Before proceeding to main experiments, it was important to get assurance that the respondents would perceive the chosen levels of discount as believable for an inflatable massage chair sale situation, and to check whether they would associate these discount levels with the chosen time restrictions (in the absence of time restriction information). In this pretest the respondents were not forced to answer whether a combination of discount and time restrictions was believable or not (they might have had different answers about discount and time restrictions), but rather they were asked to assess the credibility of a sale with a specific discount for a specific product with a

specific price and infer the level of time restriction that they would expect to accompany the discount in the context of this specific sale.

To test the choice of combinations of different price promotions for match conditions, a matching experiment was conducted. Fifty-seven students enrolled in business courses at the College of Business Administration at a major southeastern university were randomly assigned to two treatment conditions. In one condition they were offered a 50% discount, while in other it was a 5% discount. Apart from the discount, the information on the print advertisement of the inflatable massage chair was identical (see Appendixes C and D). The respondents were asked to provide their estimate of time restrictions, to rate their product knowledge, to assess the believability of the sale, and to decide whether the amount of discount offered during the sale was high or low (manipulation check).

The results showed that the participants could differentiate between the discount levels ($M_{\text{Low Discount}} = 2.166$, $M_{\text{High Discount}} = 5.74$; $F = 132.497$, $p < 0.001$), but were not significantly different in terms of their product knowledge ($p = 0.095$), and were not familiar with inflatable massage chairs ($M_{\text{Knowledge}} = 2.01$). In addition, stimulus believability was not significantly different across the two conditions ($p = 0.902$). The analysis of the inferred values of the time restrictions showed that the 5% discount was associated with an 32.6 day time restriction (median 14 days), and that the 50% discount with an 8.16 day time restriction (median 3 days). An inspection of the frequency distribution showed that 18.5% of respondents expected the 50% discount to be accompanied by a 1 day time restriction, and that 8% of respondents expected the 50% discount to be accompanied by a 30 day time restriction. At the same time, 13.8% of respondents expected the 5% discount to be accompanied by a 30 day time restriction, and 3.1% of respondents expected the 5% discount to be accompanied by a 1 day time restriction.

The overall results of the Pretest Two showed that the combinations of discounts and inferred values of time restrictions were very close to those that had been chosen in Pretest One for match situations. These combinations were perceived to be the expected price promotion attributes for the sale of a product that would be used as a stimulus in experimental studies.

6.3 PRETEST THREE

The objective of this pretest was to determine the relative strengths of discounts and time restrictions as two attributes of price promotions, as well as to check the conceptual assumption that the respondents could differentiate between match and mismatch situations based on the consistency of price promotion attributes. As discussed in the conceptualization part of this research, consumers are likely to value discount attributes more than time restrictions attributes in match situations, but the weight of time restrictions may change when a combination of discounts and time restrictions are counter to their expectations.

6.3.1 Experimental Design, Subjects, Procedure and Results

To assess these assumptions, 40 students enrolled in business courses at the College of Business Administration at a major southeastern university were asked to imagine that they had been hired as marketing consultants by a company producing inflatable massage chairs to help the company evaluate different sale options that the company was currently considering (see Appendix E).

The options were as follows: 5% off/ 1 day sale, 50% off/ 1 day sale, 5% off/ 30 day sale, 50% off/ 30 day sale. The respondents were asked to rank the options in terms of their value for customers, their capability to convey the highest chair quality, generate maximum sales, and convey the retailer credibility. The respondents were also asked to rank all options in terms of "best overall" and "worst overall", and to provide demographic information.

Conjoint analysis was used to analyze the data. The results provide evidence that, in general, discounts compared with time restrictions are a stronger price promotion attribute. The weights of discount and time restrictions were 0.67 and 0.33 respectively. The results were significant at a 0.05 level.

The results of the descriptive analysis of the responses about the best and the worst overall options supported the assumption that when respondents are exposed to a mismatch situation, their evaluations may be adversely affected by their attributions about the causes behind the sale. Two match sale options were ranked as the best overall options by 80% of the respondents. The respondents' distribution of votes between two match options was equal (40% and 40%). On the other hand, two mismatch sale options were ranked as the worst sale options by 92.5% of all respondents. The positive mismatch option received votes from 55% of the respondents, while the negative mismatch option was voted for by 37.5% of the respondents.

Overall, the results of the Pretest Three showed that in general the respondents valued discounts more than time restrictions. However, the high discount in the positive mismatch condition did not add to the value of a sale because more than half of the respondents rated it as the worst sale option. Therefore, the results provide evidence that the respondents' evaluations were affected by the consistency of price promotion attributes.

CHAPTER 7. RESULTS OF STUDY ONE

In this chapter we present results of the first study. First, we discuss preliminary results concerning reliability analysis and factor analysis for all multi-item scales, analysis of inter-coder reliability for the measure of cognitive responses, manipulation checks, randomization checks and checks of non-hypothesized effects of stimuli (outcome checks). Next, we present the results of hypotheses testing and discuss in detail all main and interaction effects. Then we proceed with the results of an additional study with involvement as a covariate. The chapter concludes with a brief summary of the results and a table showing support or not for each hypothesis.

7.1 PRELIMINARY DATA ANALYSIS

In this section we examine a series of preliminary analyses. We start with reliability analyses of all multi-item scales and factor analysis showing item loadings on different scales. Next, we analyze whether the experimental manipulations were perceived by respondents as intended (manipulation checks), whether respondents' individual characteristics affected their perception of stimuli (randomization checks) and whether respondents' exposure to stimuli resulted in some non-hypothesized effects (outcome checks).

7.1.1 Reliability Analysis

The reliability of multi-item measures was assessed based on three criteria provided by different sources. According to Hair's et al. (1998) rule of thumb, inter-item correlation should be greater than 0.3 and item-to-total correlation (internal consistency measure) greater than 0.5. At the same time, Cronbach's alpha must be at least at a 0.7 level for a scale to be reliable (Robinson and Shaver, 1973). An inspection of the correlation matrix showed acceptable levels for both inter-item and item-to-total correlation values. In addition, all Cronbach's alphas were greater than 0.8.

Table 9 presents the results of the reliability tests for multi-item scales. The overall results showed that all multi-item scales were reliable. However, due to the small number of items comprising each scale (2 to 3 items), it was decided to conduct factor analysis to assess the constructs' dimensionality.

Table 9. Study One. Reliability Tests for Multi-Item Scales

Construct	Reliability (Cronbach's Alpha)	Mean of item-to-total correlation
Perceived Quality	0.893	0.790
Retailer Credibility	0.800	0.668
Purchase Intentions	0.962	0.864
Need for Cognition	0.833	0.635

7.1.2 Factor Analysis

Exploratory factor analysis was conducted to ensure that items represented proposed variables and to show that items measuring different constructs loaded on different factors. The appropriateness of factor analysis was assessed by a number of different criteria (for more details see Hair et al., 1998). The ratio of cases to variables exceeded a ratio of 10 to 1 and the sample size was greater than 100. The factorability of the correlation matrix was supported by two statistical measures: the KMO value (measure of sampling adequacy) and Bartlett's test of sphericity (Tabachnik and Fidell, 1996). The KMO value was 0.721, exceeding the recommended value of 0.6 (Kaiser, 1970; 1974), and Bartlett's test of sphericity produced significant results at a $p < 0.001$ level (Bartlett, 1954). Direct oblimin rotation that allows factors to be correlated was performed and the rotated pattern matrix was examined to determine the highest loadings for each factor. The rotated solution revealed the presence of four components with all four showing a number of strong loadings (in a 0.661 to 0.983 range), and all variables loading substantially on one component. Four-factor solution accounted for 75.12% of total variance. The results of factor analysis are presented in Table 10.

Table 10. Study One. Pattern Matrix with Loadings: Exploratory Factor Analysis

Scale Items	Components (Constructs)*			
	1 (Perceived Quality)	**2 (Need for Cognition/NFC)**	**3 (Purchase Intentions)**	**4 (Retailer Credibility)**
Perceived Quality/ item 3	0.946			
Perceived Quality/ item 2	0.874			
Perceived Quality/ item 1	0.817			
NFC/ reversed item 1		0.877		
NFC/ reversed item 2		0.857		
NFC/ item 3		0.757		
NFC/ item 4		0.716		
NFC/ reversed item 5		0.661		
Purchase Intentions/ item 2			-0.983	
Purchase Intentions/ item 1			-0.955	
Retailer Credibility/ item 1				0.893
Retailer Credibility/ item 2				0.863

* Loadings lower than 0.2 suppressed.

7.1.3 Inter-Coder Reliability

To ensure objectivity in the analysis of open thought protocols, the participants' thoughts were coded by two coders who were blind to the hypotheses. To assess the inter-coder reliability thoughts, the 21 participants (at least 5 from each condition) were coded by both coders independently and then compared. The coders did not know what thoughts they coded for the

comparison purposes. After the coding task a contingency table was prepared (see Table 11). The diagonal cells in the table show the number of judgments for each type of measure on which both coders agreed. The off-diagonal cells show the cases of coders' disagreements. As the table show, there was some disagreement in the coding. All disagreements were later resolved through discussion between the coders. The results show that the coders were in agreement 89.6 % of the time (total number of thoughts: 135; number of agreements: 121). Additionally Cohen's kappa, a more sophisticated index for assessing inter-coder reliability, was computed (see Appendix K). In summary, the coding was performed in a consistent manner by both coders. The percentage of agreement method (89.6%) and Cohen's kappa (at 0.863 level) showed satisfactory results for inter-coder reliability.

Table 11. Study One. Inter-Coder Reliability Contingency Table

Type of Measure	**Coder 1**								
Coder 2	AT	NAT	RCRT	PQRT	OT	PT	NT	Neutral	MD
AT	3	0							3 (0.022)
NAT	1	41	(2)						42 (0.311)
RCRT		(0)	(1)	((0))	/5/				1 (0.007)
PQRT			((1))	((3))					4 (0.030)
OT			/6/		/34/	(0)			40 (0.296)
PT					(0)	2	((4))	/2/	2 (0.015)
NT						((3))	8		11 (0.081)
Neutral						/3/		/29/	32 (0.237)
MD	4 (0.030)	41 (0.304)	3 (0.022)	3 (0.022)	39 (0.289)	2 (0.015)	12 (0.089)	31 (0.230)	135

Note: Coding measures: AT –attributional thoughts, NAT – nonattributional thoughts, RCRT – retailer credibility-related thoughts, PQRT – product quality-related thoughts, OT – other thoughts, PT – positive thoughts, NT – negative thoughts, Neutral – neutral thoughts, MD – marginal distribution (number of thoughts judged per coder per measure; number in parentheses are percentages).

7.1.4 Manipulation Checks

The manipulation checks were used to determine the success of the manipulations in the study. First, it was checked whether the participants were able to distinguish between match and mismatch conditions and then whether they had perceived the manipulations of the levels of

discount and time restrictions as intended. The participants were asked to rate the degree of the likelihood of the combination of discount and time restrictions, to answer whether a discount was low or high and whether a deal was offered for a short or long time.

Match/mismatch manipulation check: in order to check whether the participants perceived mismatch conditions to be significantly less expected than match conditions, a one-way ANOVA was conducted. Prior to the analysis, the participants from both match conditions (high-value match and low-value match) were pooled into a match group, and the participants from both mismatch conditions (positive mismatch and negative mismatch) were pooled into a mismatch group. In this analysis, the expectedness of the combination of price promotion attributes served as a dependent variable and the cue consistency/inconsistency as an independent variable. Results showed that the combination of price promotion attributes in a mismatch group was perceived as significantly less expected than that in a match group.

	Match Conditions	Mismatch Conditions	F Value (p value)
Expectedness of the Combination of Price Promotion Attributes	3.03	4.50	22.044 (<**0.001**)

Additionally, another one-way ANOVA was conducted to check for any significant effect of the type of match/mismatch condition on the expectedness of the combination of price promotion attributes. This analysis was needed to get assurance that both mismatch conditions were perceived as equally unexpected, and that both match conditions were perceived as equally expected. Or, in other words, that the participants' perception of the expectedness of the price promotion attributes did not depend on the type of match/mismatch condition. In this analysis, the expectedness of the combination of price promotion attributes served as a dependent variable, and treatment conditions served as an independent variable. Two-way ANOVA was not appropriate for this type of analysis because of the operationalization of the match and mismatch conditions. The two-way ANOVA would allow comparison of the means within each level of discount and time restrictions but not within each type of condition, that is, match type and mismatch type.

The results revealed significant differences in the participants' perception of the expectedness of the combination of price promotion attributes ($F_{3,117} = 8.425$, $p < 0.001$), providing additional support to the earlier finding that the participants could distinguish between match and mismatch conditions. The examination of group differences was performed with the help of *post-hoc* tests. The results of *post-hoc* tests are presented in Table 12. These results showed that the combinations of price promotion attributes in both match conditions received insignificantly different ratings in terms of their expectedness. Similarly, the participants' perception of the expectedness of the combination of price promotion attributes did not differ significantly across the two mismatch conditions. At the same time, the means' differences between any match and mismatch condition were statistically significant. Therefore, the match/mismatch manipulation was successful and the participants' perception of the cue consistency/inconsistency did not depend on the type of match/mismatch condition.

Table 12. Study One. Post-hoc Tests: Expectedness of Price Promotion Attributes in Match and Mismatch Conditions

	Positive Mismatch	**Negative Mismatch**	**High-value match**	**Low-value match**
Means	*3.40*	*2.666*	*4.63*	*4.38*
Positive Mismatch		0.101[a]	**0.006**	**0.027**
Negative Mismatch			**< 0.001**	**< 0.001**
High-value match				0.577

[a] p value for post hoc test. In this example, comparison of negative mismatch (mean = 2.666) versus positive mismatch (mean = 3.40).

Since cue consistency/inconsistency had been operationalized by employing both price promotion attributes, it was also important to check for any significant discount by time restrictions interaction effects. This could be a problem if the participants perceived identical discounts (time restrictions) as significantly different in the context of expected vs. unexpected time restrictions (discounts). Such perceptual differences could result in a biased perception of the dependent variables. For example, if a 5% discount was perceived as significantly smaller when it was paired with a 1 day time restriction (because for such a restricted sale, consumers usually expect a higher discount) than when it was paired with a 30 day time restriction, then this perception could potentially confound the participants' perception of the merits of a deal (e.g., purchase intentions). Similarly, the participants in a 50%/30 day condition could feel that the amount of discount is greater than that in a 50%/1 day condition. In general, it was expected that a low discount in the context of high time restrictions may be perceived as lower than the identical discount in the context of low time restrictions. At the same time, a high discount in the context of low time restrictions may be perceived as higher than the identical discount in the context of high time restrictions. There might also be a possibility that low time restrictions in the context of a high discount would be perceived as longer than the identical time restrictions in the context of a low discount. Likewise, high time restrictions in the context of a low discount may be perceived as shorter than the identical time restrictions in the context of a high discount. It was important to get assurance that there were no significant discounts by time restrictions interaction effects. The manipulation checks that follow were performed to examine the participants' perceptions of the levels of discount and the levels of time restrictions in match and mismatch conditions, and to check for any interaction effects.

Manipulation check for the levels of discount. To check whether the participants distinguished between low and high levels of discount, a one-way ANOVA was conducted. Prior to the analysis, the participants from both low discount conditions (low-value match and negative mismatch) were pooled in a low discount group, and the participants from both high discount

conditions (high-value match and positive mismatch) were pooled in a high discount group. In this analysis, the participants' perception of discount served as a dependent variable, and the discount served as an independent variable. The results showed that the participants in a low discount group perceived the discount to be significantly lower than those in a high discount group.

	Low Discount Conditions	High Discount Conditions	F Value (p value)
Perception of Discount	1.70	5.66	259.12 (<**0.001**)

Additionally, a two-way ANOVA was conducted to check for any significant discount by the time restrictions interaction effect. This analysis was needed to get assurance that the participants' perception of discount did not depend on the level of time restrictions. In this analysis, the participants' perception of the discount served as a dependent variable and the discount and time restrictions served as independent variables. The results revealed the significant effect of discount on the perception of discount, providing additional support to the earlier finding that the participants were able to distinguish between high and low levels of discount (see Table 13). At the same time, the main effect of time restrictions and interaction effect were not significant. Therefore, the discount level manipulation was successful and the participants' perception of discount did not depend on the level of time restrictions.

Table 13. Study One. ANOVA: Effect of Discount and Time Restrictions on Perception of Discount

Sources	**Df**	**F value**	**P Value**
Main Effects			
Discount	1	254.87	< **0.001**
Time Restrictions	1	0.060	0.807
Interaction			
Discount*Time Restrictions	1	0.060	0.807
Residual	117		

Manipulation check for the levels of time restrictions. To check whether the participants had distinguished between low and high levels of time restrictions, a one-way ANOVA was conducted. Prior to the analysis, the participants from both low time restrictions conditions (low-value match and positive mismatch) were pooled in a low time restrictions group, and the participants from both high time restrictions (high-value match and negative mismatch) conditions were pooled in a high time restrictions group. In this analysis, the participants' perception of time restrictions served as a dependent variable and time restrictions served as an independent variable. The results showed that the participants in the low time restrictions group perceived time restrictions to be significantly longer than those in the high time restrictions group.

In addition, a two-way ANOVA was conducted to check for any significant discount by time restrictions interaction effect. This analysis was needed for assurance that the participants' perception of time restrictions did not depend on the level of discount. The participants'

	Low Time Restrictions Conditions	High Time Restrictions Conditions	F Value (p value)
Perception of Time Restrictions	5.08	1.73	181.54 (<**0.001**)

perception of time restrictions served as a dependent variable, and discount and time restrictions served as independent variables. The results revealed the significant effect of time restrictions on the perception of time restrictions, providing additional support to the earlier finding that the participants were able to distinguish between low and high levels of time restrictions (see Table 14). At the same time, the main effect of the discount and interaction effect were not significant. Therefore, the time restrictions level manipulation was successful and the participants' perception of time restrictions did not depend on the level of discount.

Table 14. Study One. ANOVA: Effect of Discount and Time Restrictions

Sources	**Df**	**F value**	**P Value**
Main Effects			
Discount	1	9.62	0.1
Time Restrictions	1	189.4	< **0.001**
Interaction			
Discount*Time Restrictions	1	1.01	0.318
Residual	117		

To get more insight on the participants' perception of time restrictions, two separate t-tests were conducted for each level of time restrictions. The results of the t-tests supported earlier findings and showed that time restrictions were not perceived as significantly different across two low time restrictions conditions ($p = 0.052$) and across two high time restrictions conditions ($p = 0.194$). However, the marginal effect of discount on the perception of time restrictions ($p = 0.052$) that was observed in this analysis in the low time restrictions condition provides some indirect support for the participants' distinct perception of match and mismatch conditions. The same 30 days were perceived as marginally longer when they were paired with a 50% discount ($M_{\text{Positive Mismatch}} = 5.50$) than when they were paired with a 5% discount ($M_{\text{Low-value match}} = 4.67$). In other words, the low time restrictions that were observed along with a low discount (match situations) simply supported the participants' expectations; however, when low time restrictions were paired with an unexpectedly high discount, the participants perceived the time duration of the price promotion as being marginally longer (too long for such a high discount) than that in a match situation.

7.1.5 Randomization Checks

The participants represented a student sample that was considered to be relatively homogenous. In addition, all the participants were assigned to treatment conditions in a random manner to further downplay any potential individual differences and to ensure the randomization of gender. Randomization checks were conducted to gain assurance that the results were not confounded by the participants' differences in gender, their perceptions of price-quality relationship, product

knowledge, sales proneness and their need for cognition. The results of all randomization checks are presented in Tables 15 and 16.

A series of one-way ANOVAs was conducted with control variables (except gender) as dependent variables and treatment conditions as an independent variable. The results showed that the participants were not significantly different on all tested variables across the four treatment conditions (see Table 17).

Table 15. Study One. Randomization Checks for Control Variables

Construct	F Value	P Value
Knowledge	$F_{3,117} = 0.661$	$p = 0.578$
Sales Proneness	$F_{3,117} = 0.267$	$p = 0.849$
Price-Quality Relationship	$F_{3,117} = 1.675$	$p = 0.176$
Need for Cognition	$F_{3,117} = 1.342$	$p = 0.264$

Finally, to check for any significant differences based on the participants' gender, a series of one-way ANOVAs was conducted. The data analysis revealed no significant differences on any dependent variable based on the participants' gender (see Table 16).

Table 16. Study One. Randomization Checks for Gender

Construct	F Value	P Value
Perceived Value	$F_{1,119} = 0.260$	$p = 0.611$
Purchase Intentions	$F_{1,119} = 0.606$	$p = 0.438$
Perceived Quality	$F_{1,119} = 1.861$	$p = 0.175$
Retailer Credibility	$F_{1,119} = 3.574$	$p = 0.061$

7.1.6 Outcome Checks

Finally, it was determined whether the participants perceived the treatment conditions they were exposed to as believable and whether participants' involvement was different across the treatment conditions. The participants were asked whether the offered deal was believable or not and whether they found the advertisement for the chair to be relevant to them or not.

Believability of the stimuli: The believability of the stimuli needed to be checked in order to gain assurance that, although the respondents perceived the combinations of price promotion attributes in mismatch situations as significantly less expected than those in match situations, they still did not doubt the stimulus believability in general. To check whether the believability of the presented stimuli was different based on the cue consistency/inconsistency, a

one-way ANOVA was conducted. Prior to the analysis, the participants from both match conditions (high-value match and low-value match) were pooled in a match group, and the participants from both mismatch conditions (positive mismatch and negative mismatch) were pooled in a mismatch group. In this analysis, the believability of a stimulus served as a dependent variable and the cue consistency/inconsistency served as an independent variable. The results showed that the participants in a match group perceived stimuli as more believable than those in a mismatch group. The results lend further support to the earlier finding that the participants were able to distinguish between more expected and hence, more believable match conditions, and less expected, and therefore, less believable mismatch conditions.

	Match Conditions	Mismatch Conditions	F Value (p value)
Believability of Stimuli	4.52	3.78	7.684 (**0.006**)

In addition, another one-way ANOVA was conducted to check how the stimuli believability differed across the four treatment conditions. This analysis was required to gain assurance that in general, the participants did not doubt the stimulus believability. In this analysis, the believability of a stimulus served as a dependent variable and treatment conditions served as an independent variable. The results are presented in Table 17.

Table 17. Study One. Post-hoc Tests: Believability of a Stimulus for Match

	Positive Mismatch	**Negative Mismatch**	**High-value match**	**Low-value match**
Means	*3.733*	*3.833*	*4.633*	*4.419*
Positive Mismatch		0.794	**0.020**	0.073
Negative Mismatch			**0.039**	0.125
High-value match				0.574

The results showed that the differences in the means across the four treatment conditions were not statistically significant ($F_{3,117} = 2.655$, $p = 0.052$). The results of *post-hoc* tests revealed that a high-value match condition was perceived as significantly more believable than both mismatch conditions. At the same time, the believability of a high-value match condition was not significantly different from that of a low-value match condition. In its turn, a low-value match condition was not perceived as significantly different from both mismatch conditions.

It follows that the participants did not perceive the stimuli as significantly different across all the four treatment conditions in terms of their believability. It was only when the participants were pooled in match and mismatch groups that the difference in the participants' perception of stimuli believability across these two groups achieved statistical significance.

Respondents' involvement: Respondents' involvement with the stimuli needed to be checked in order to reveal possible non-hypothesized effects. To check whether respondents' involvement with the presented stimuli was different across the treatment conditions, a one-way ANOVA was conducted. In this analysis, involvement served as a dependent variable and treatment conditions as an independent variable. The results showed that the participants were significantly different in terms of their level of involvement across the treatment conditions ($F_{3,117} = 7.38$, $p < 0.001$).

The differences between the participants were further examined by *post-hoc* tests and the results are presented in Table 18. The results of the *post-hoc* tests for involvement showed that basically there were two levels of involvement that were significantly different from each other. The participants in a high-value match condition had a significantly higher level of involvement than those in any other condition.

At the same time, participants' levels of involvement in a low-value match condition, in a positive mismatch condition and in a negative mismatch condition, were not significantly different from each other. It follows that in a positive mismatch condition (too-good-to-be-true), the participants' level of involvement dropped significantly and was not different from that in a low-value match condition and in a negative mismatch condition, despite substantial differences in the levels of discount.

Table 18. Study One. Post-hoc Tests: Involvement in Match and Mismatch Conditions

	Positive Mismatch	**Negative Mismatch**	**High-value match**	**Low-value match**
Mean	*2.56*	*1.833*	*3.7*	*2.612*
Positive Mismatch		0.069	**0.005**	0.907
Negative Mismatch			**< 0.001**	0.052
High-value match				**0.007**

The results of the *post-hoc* tests provide some evidence that both the discount and cue consistency/inconsistency may affect the participants' involvement and there may be interplay between these factors. To further investigate the role of the cue consistency/inconsistency and discount additional analyses were conducted.

Firstly, the effect of the discount on the participants' involvement was tested by a one-way ANOVA. Prior to the analysis, the participants from both low discount conditions (low-value match and negative mismatch) were pooled in a low discount group, and the participants from both high discount conditions (high-value match and positive mismatch) were pooled in a high discount group. In this analysis, involvement served as a dependent variable and discount served as an independent variable. The results showed that the participants in a high discount group had a higher level of involvement than those in a low discount group.

	Low Discount Conditions	High Discount Conditions	F Value (p value)
Respondents' involvement	2.22	3.13	9.49 (**0.003**)

Next a two-way ANOVA was conducted. In this analysis, involvement served as a dependent variable, and discount and time restrictions served as independent variables. It was not appropriate to use the cue consistency/inconsistency as an independent variable in this type of analysis because each type of condition (match and mismatch) combined both high and low levels of discount, and would produce unintelligible results. At the same time, time restrictions can uniquely identify both match and mismatch condition at each discount level. Therefore, time restrictions indirectly represented the cue consistency/inconsistency.

The results revealed an insignificant main effect for time restrictions and a significant main effect of discount. As was expected, the participants in low discount conditions were less involved than those in high discount conditions. However, the main effect of the discount was qualified by the significant discount by time restrictions interaction. In other words, the participants' involvement at each discount level depended on whether it was a match or mismatch condition. The results of the two-way ANOVA and a series of t-tests are presented in Tables19 and 20 and plotted in Figure 10.

Table 19. Study One. ANOVA: Effect of Discount and Time Restrictions on Involvement

Sources	**Df**	**F value**	**P Value**
Main Effects			
Discount	1	10.426	**0.002**
Time Restrictions	1	0.394	0.532
Interaction			
Discount*Time Restrictions	1	11.512	**0.001**
Residual	117		

Further data analysis results are interpreted in terms of the cue consistency/inconsistency because time restrictions *per se* are not the focus of this research. The results of t-tests showed that at a 50% discount level, the participants had a significantly higher level of involvement in a match than in a mismatch condition. Similarly, at a 5% discount level, a match condition resulted

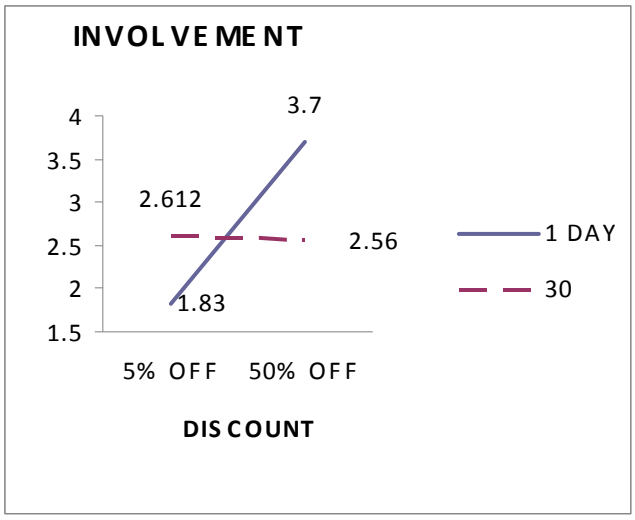

Figure 10. Study One. Effect of Discount and Time Restrictions on Involvement

Table 20. Study One. T-tests: Effect of the Type of Condition on Involvement

	High Time Restrictions	Low Time Restrictions	t-value (p-value)
High Discount	**High-value Match** 3.70	**Positive Mismatch** 2.56	2.629 (**0.011**)
Low Discount	**Negative Mismatch** 1.83	**Low-value Match** 2.61	-2.139 (**0.037**)

in a significantly higher level of the participants' involvement than in a mismatch condition. In summary, the results showed that at each discount level, the participants were more involved in a match than in a mismatch condition.

Overall, the results showed that though in general, the participants were more involved when they were offered a high vs. a low discount, at each discount level the participants had a significantly higher level of involvement in a match than in a mismatch condition. To neutralize the effect of involvement on dependent variables, it was decided to use involvement as a covariate, in order to 'equalize' the levels of the participants' involvement across all four treatment conditions.

7.1.7 Summary of Preliminary Results

The preliminary analysis showed that all multi-item measures used in the study were reliable. The factor analysis revealed the unidimensional nature of multi-item variables, and scale

reliability analysis showed that Cronbach's alphas were in the acceptable range of 0.8 to 0.962. The coding of the participants' thoughts was performed in a consistent manner. Inter-coder reliability was satisfactory with an 89.6% level of agreement and an 0.86 level of Cohen's kappa.

The manipulation checks showed that the participants perceived manipulations of the levels of discount and time restrictions as well as the manipulation of match and mismatch conditions as intended. The participants' perception of match (mismatch) factor did not depend on the type of match (mismatch) condition, and their perception of discount (time restrictions) did not depend on the level of accompanying time restrictions (discount). At the same time randomization checks showed that the participants' responses were not confounded by the participants' individual differences. It was also shown that the participants' gender did not significantly affect the results of hypotheses testing.

Outcome checks showed that the stimulus believability was not significantly different across four treatment conditions. At the same time level of involvement was significantly different across the treatment conditions and, therefore, it was decided to use involvement in the analysis as a covariate.

7.2 RESULTS OF HYPOTHESES TESTS

In this section we present results of testing hypotheses 1 through 10. Results are divided into three groups of related hypotheses. Hypotheses 1 through 3 test the effect of cue consistency/inconsistency of price promotion attributes on consumers' cognitive responses. Hypotheses 4 through 8 test the effect of cue consistency/inconsistency of price promotion attributes on consumers' deal evaluations across four treatment conditions. More specifically, first we test for the overall interaction effect and then for the disordinal effects at each discount level and at each time restrictions level. The third group of hypotheses test the effect of the type of cue-consistent and cue-inconsistent situations on deal evaluations. More specifically, hypothesis 9 tests the effect of the type of cue consistent situation (high value vs. low value) on consumers' deal evaluations, while hypothesis 10 tests the effect of the type of cue-inconsistent situation (negative mismatch vs. positive mismatch) on consumers' deal evaluations.

7.2.1 Consumers' Cognitive Responses to Match vs. Mismatch Situations

For the purpose of testing hypotheses where dependent variables were respondents' thoughts (H1 to H3), the participants' thoughts were coded and analyzed. The preliminary results showed that at least one thought was written down by each participant and that the total number of thoughts per treatment condition varied from 58 to 62. The average number of thoughts per person was not significantly different across all four treatment conditions ($p = 0.833$) and varied from 1.87 to 2.06.

Hypothesis H1: Test of number of attributions in match vs. mismatch situations. Hypothesis 1 stated that consumers will generate more attributional thoughts in mismatch than in match situations. Out of 121 participants, only 19 participants or 15.7% wrote down at least one attributional thought in their answers. When the attributional thoughts were broken down by treatment conditions, it became evident that the participants in the low discount conditions did not generate any attributional thoughts, regardless of whether it was a match or mismatch

condition. In other words, the cue consistency/inconsistency at a low discount level did not motivate the participants to engage in attributional thinking. At a high discount level, attributional thoughts were detected both in match and mismatch conditions. Within-group analysis showed that out of all 30 participants in a positive mismatch condition, 40% exhibited attributional thinking, while out of 30 participants in a high-value match condition, this figure was much lower at 23.3%.

Out of all the participants who engaged in attributional thinking, 63.15% (or 12 participants) was in a positive mismatch condition, and 36.85% (or 7 participants) was in a high-value match condition. The difference in the number of attributional thoughts across the two conditions was even greater: 68% (or 17 thoughts) in a positive mismatch condition vs. 32% (or 8 thoughts) in a high-value match condition. The results of a one-tailed t-test revealed that the average number of attributional thoughts in a mismatch condition was significantly higher than that in a match condition ($M_{\text{Positive Mismatch}} = 0.566$; $M_{\text{High-value match}} = 0.266$; $t_{58} = -1.762$, $p = 0.042$). Therefore, H1 was supported.

The results of attributional thought analysis provide evidence of interesting interplay between discount and the cue consistency/inconsistency. At a low discount level there was no evidence of attributional thinking in both match and mismatch conditions; however, the participants were significantly more involved in a match than in a mismatch condition. Hence, the participants could differentiate between match and mismatch conditions, but the mismatch condition did not motivate the participants to engage in attributional thinking in the context of a low discount. At a high discount level, the participants exhibited attributional thoughts in both conditions with significantly more attributions in a mismatch than in a match condition. Similarly to a low discount level participants' involvement in a mismatch condition was significantly lower than that in a match condition. However, exposure to a 'less involved' mismatch condition in the context of a high discount resulted in significantly more attributional thoughts than the exposure to the 'more involved' match condition. It follows that the mismatch condition resulted in a lower level of involvement and at the same time, in higher attributional thinking. It should also be noted that the levels of involvement in a match condition at a 5% discount level (low-value match), and in a mismatch condition at a 50% discount level (positive mismatch), were not significantly different; however, in a low-value match condition, the participants did not engage in attributional thinking at all, while in a positive mismatch condition, they produced the highest number of attributional thoughts.

The low number of attributional thoughts in the experiment can be explained by several factors. Firstly, the participants were not asked overtly about any reason behind the sale. Additionally, a conservative scoring criteria was used in order to avoid overestimating the number of actual attributional thoughts. Also, the product used in the study as a stimulus was not familiar to most of the participants ($M_{\text{Knowledge}} = 1.83$); therefore, they were not involved in general ($M_{\text{Relevance}} = 2.67$), and as a result, were not interested in thorough information processing. Finally, the degree of mismatch probably did not achieve a critical level for some of the participants. Stimuli believability that was not significantly different across all four treatment conditions may also be an indirect indicator in favor of such an assumption. Maheswaran and Chaiken (1992) encountered a similar problem when they failed to replicate their earlier finding that incongruence (or mismatch in our context) enhanced systematic processing under a low

involvement condition. The authors suggested that the degree of incongruence in their earlier study was more extreme and more salient.

Hypothesis 2: Test of number of negative retailer credibility related thoughts in match vs. mismatch situations. Hypothesis 2 stated that consumers will generate more negative retailer credibility-related thoughts in mismatch than in match situations. As the number of thoughts with explicitly expressed retailer credibility-related issues was relatively low, descriptive statistics was chosen as an appropriate tool for thought focus- and thought valence analyses. The results show that no retailer credibility-related thoughts were detected at a 5% discount level. At a 50% discount level there were four retailer credibility-related thoughts in each condition. In a match condition only half of the thoughts (2 thoughts) were negative and the other half was positive. At the same time, all the retailer credibility-related thoughts in a mismatch condition were unanimously negative. It follows that at a high discount level, the participants had more negative inferences about the retailer credibility in a mismatch than in a match condition. In summary, at a low discount level the participants did not explicitly express their retailer credibility-related thoughts. At the same time, at a high discount level the participants wrote down more negative retailer credibility-related thoughts in a mismatch than in a match condition. The overall results provide support for H2. H2 was supported at a descriptive statistics level because statistical methods could not be applied for the analysis.

Hypothesis 3: Test of number of negative product quality related thoughts in positive mismatch vs. all other situations. Hypothesis 3 stated that a consumer will generate more negative product quality-related thoughts in a positive mismatch situation than in any other situation. As the number of thoughts with explicitly expressed product quality-related issues was relatively low, descriptive statistics was chosen as the appropriate tool for thought focus- and thought valence analyses. The results showed that at a 5% discount level, the participants wrote down two negative product quality-related thoughts in a mismatch condition, while no product quality-related thoughts were detected in a match condition. At a 50% discount level, the participants wrote down product quality-related thoughts in both match and mismatch conditions. In a high-value match condition there were five product quality-related thoughts; all the thoughts were neutral. At the same time, in a positive mismatch condition, there were eleven product quality-related thoughts: 63.6% (or 7 thoughts) were negative and 16.4% (or 4 thoughts) were neutral. It follows that the participants had predominantly negative inferences about product quality in both mismatch conditions, with more negative thoughts in positive mismatch condition; only neutral or no product quality-related thoughts were detected in match conditions. In summary, at a low discount level, the participants did not provide any product quality-related thoughts in a match condition but there were few product quality-related thoughts in a mismatch condition. At the same time, at a high discount level, the participants wrote down some negative product quality-related thoughts in a mismatch condition but only neutral product quality-related thoughts in a match condition. Overall, the results provide support for H3. H3 was supported at a descriptive statistics level because statistical methods could not be applied for the analysis.

7.2.2 Deal Evaluations Across Treatment Conditions

Hypothesis 4 makes a general prediction about the presence of a disordinal interaction effect. In hypotheses 5 and 6 we assume that cue consistency/inconsistency affects consumers' deal

evaluations at each discount level. In hypotheses 7 and 8 we assume that cue consistency/inconsistency affects consumers' deal evaluations at each time restrictions level. Overall, this group of hypotheses suggests that cue consistency/inconsistency is stronger than either time restrictions or discount and predicts that a match situation will result in higher deal evaluations than mismatch situations regardless of the level of discount or time restrictions.

To test hypotheses 4 through 8 a two-way MANOVA was conducted. In this analysis, the retailer credibility, perceived quality, perceived value of a deal and purchase intentions served as dependent variables, and discount and time restrictions served as independent variables. The means and results of MANOVA are presented in Table 21 and plotted in Figure 11.

Hypothesis 4: Test for interaction effect. Table 21 presents results of testing H4. Overall results support the presence of significant interaction effect. In accordance with our conceptual model, changes in the level of discount and time restrictions did not result in linear increases or decreases in consumers' deal evaluations.

Data analysis revealed the insignificant main effect of time restrictions ($p = 0.780$) and the significant main effect of discount (Wilk's Lambda = 0.643, $F = 15.85$, $p < 0.001$). However, the main effect of discount was qualified by a significant discount by time restrictions interaction (Wilk's Lambda = 0.803, $F = 6.98$, $p < 0.001$).

Upon further investigation of univariate results, it was found that all dependent variables contributed to the multivariate interaction effect: perceived value ($F_{1,117} = 6.15$, $p = 0.015$), purchase intentions ($F_{1,117} = 7.35$, $p = 0.008$), perceived quality ($F_{1,117} = 13.67$, $p < 0.001$) and the retailer credibility ($F_{1,117} = 22.08$, $p < 0.001$). Therefore, hypothesis 4 was supported for all dependent variables.

Univariate results also indicated that the main effect of discount was due to the effects of perceived value ($F_{1,117} = 54.31$, $p < 0.001$) and purchase intentions ($F_{1,117} = 18.02$, $p < 0.001$). A series of t-tests was conducted to further analyze interaction effects for each dependent variable. First, the results of a series of t-tests for each discount level are presented and discussed (Table 22). Next, the results of a series of t-tests for each time restrictions level are presented and discussed (Table 23).

Hypotheses 5 and 6: Test for disordinal interaction effect at each discount level.

Table 22 presents results of testing hypotheses 5 and 6. Overall results support the disordinal nature of interaction effect at each discount level. At high discount level deal evaluations of price promotions offering identical discounts were higher in match situations than in mismatch situations. However, at low discount level predictions based on our conceptual model were supported only for retailer credibility and product quality. Perceived value of a deal and purchase intentions were not different regardless of whether price promotion attributes were consistent or inconsistent.

Retailer credibility: At a 5% discount level, the participants' perception of the retailer credibility was significantly affected by the cue consistency/inconsistency. The retailer credibility was significantly higher in a low-value match condition, when a low discount was paired with low time restrictions than in a negative mismatch condition, when a low discount was paired with high time restrictions ($M_{\text{Low-value match}} = 4.09$, $M_{\text{Negative Mismatch}} = 3.36$ $t_{59} = -2.85$, $p = 0.006$). Similarly, at a 50% discount level, the participants' perception of a retailer credibility was significantly higher in a high-value match condition, when a high discount was paired with

Table 21. Study One. MANOVA: Effect of Discount and Time Restrictions on Deal

MANOVA				
Sources	**Wilk's Lambda**	**Effect Size**	**F Value**	**P Value**
Main effects				
Discount	0.643	0.357	15.853	**0.000**
Time Restrictions	0.984	0.016	0.477	0.752
Interaction Effects				
Discount x Time Restrictions	0.803	0.197	6.981	**0.000**

ANOVA*					
Sources	**d.f.**	**Perceived Quality**	**Perceived Value**	**Purchase Intentions**	**Retailer Credibility**
Main effects					
Discount	1	0.463 (0.498)	54.312 **(0.000)**	18.028 **(0.000)**	0.429 (0.514)
Time Restrictions	1	0.060 (0.808)	1.843 (0.177)	0.324 (0.570)	0.429 (0.514)
Interaction Effects					
Discount x Time Restrictions	1	13.671 **(0.000)**	6.15 **(0.015)**	7.352 **(0.008)**	22.087 **(0.000)**
Residual	117				

* P values are provided in parentheses.

high time restrictions than in a positive mismatch condition, when a high discount was paired with low time restrictions ($M_{\text{High-value match}} = 4.33$, $M_{\text{Positive Mismatch}} = 3.36$; $t_{58} = 3.78$, $p < 0.001$).

In summary, the cue consistency/inconsistency significantly affected the participants' perception of the retailer credibility at both levels of discount with a significantly higher perception of a retailer credibility in a match than in a mismatch condition at each discount level. The results of t-tests provide support to H5a and H6a.

Perceived quality: A pattern of results similar to those for the retailer credibility was also observed for perceived product quality. At a 5% discount level, the participants' perception of

Table 22. Study One. T-tests: Effect of Cue Consistency/Inconsistency on Deal Evaluations at Each Discount Level

MEANS*	HIGH DISCOUNT			LOW DISCOUNT		
	High-value match	**Positive Mismatch**	**t-value (p-value)**	**Low-value match**	**Negative Mismatch**	**t-value (p-value)**
Retailer Credibility	4.33 (0.97)	3.36 (0.99)	3.789 (**0.000**)	4.09 (1.10)	3.36 (0.87)	- 2.859 (**0.006**)
Perceived Quality	3.57 (1.36)	2.67 (1.16)	2.743 (**0.008**)	3.67 (1.34)	2.88 (1.11)	- 2.481 (**0.016**)
Perceived Value	5.5 (1.00)	4.5 (1.79)	2.66 (**0.010**)	3.22 (1.47)	2.93 (1.33)	- 0.810 (0.421)
Purchase Intentions	3.98 (1.73)	3.01 (1.94)	2.032 (**0.047**)	2.56 (1.58)	1.93 (1.09)	- 1.803 (0.076)

* Standard deviations are provided in parentheses

product quality was significantly affected by the cue consistency/inconsistency. The perceived quality was significantly higher in a low-value match condition, when a low discount was paired with low time restrictions, than in a negative mismatch condition, when a low discount was paired with high time restrictions ($M_{\text{Low-value match}} = 3.67$, $M_{\text{Negative Mismatch}} = 2.88$; $t_{59} = -2.481$, $p = 0.016$). Similarly, at a 50% discount level, the participants' perceived quality was significantly higher in a high-value match condition, when a high discount was paired with high time restrictions, than in a positive mismatch condition when a high discount was paired with low time restrictions ($M_{\text{High-value match}} = 3.58$, $M_{\text{Positive Mismatch}} = 2.67$; $t_{58} = 2.74$, $p = 0.008$).

In summary, the cue consistency/inconsistency significantly affected the participants' perception of product quality at both levels of discount, with significantly higher quality perceptions in a match condition than in a mismatch condition at each discount level. The results of the t-tests provide support for H5b and H6b.

Perceived value: At a 5% discount level, the participants' perception of the value of a deal was not significantly different regardless of whether it was a match or mismatch condition ($p = 0.421$). In other words, at a 5% discount level, the cue consistency/inconsistency did not significantly affect the participants' perception of the value of a deal. This finding was counter to H5c, stating that the perceived value of a deal in a negative mismatch condition will be lower than that in a low-value match condition. However, at a 50% discount level, the participants' perception of the value of a deal was significantly affected by the cue consistency/inconsistency. The perceived value of a deal was significantly higher in a high-value match condition when a high discount was paired with high time restrictions, than in a positive mismatch condition when a high discount was paired with low time restrictions ($M_{\text{High-value match}} = 5.50$, $M_{\text{Positive Mismatch}} = 4.50$; $t_{58} = 2.66$, $p = 0.010$). This finding supports H6c.

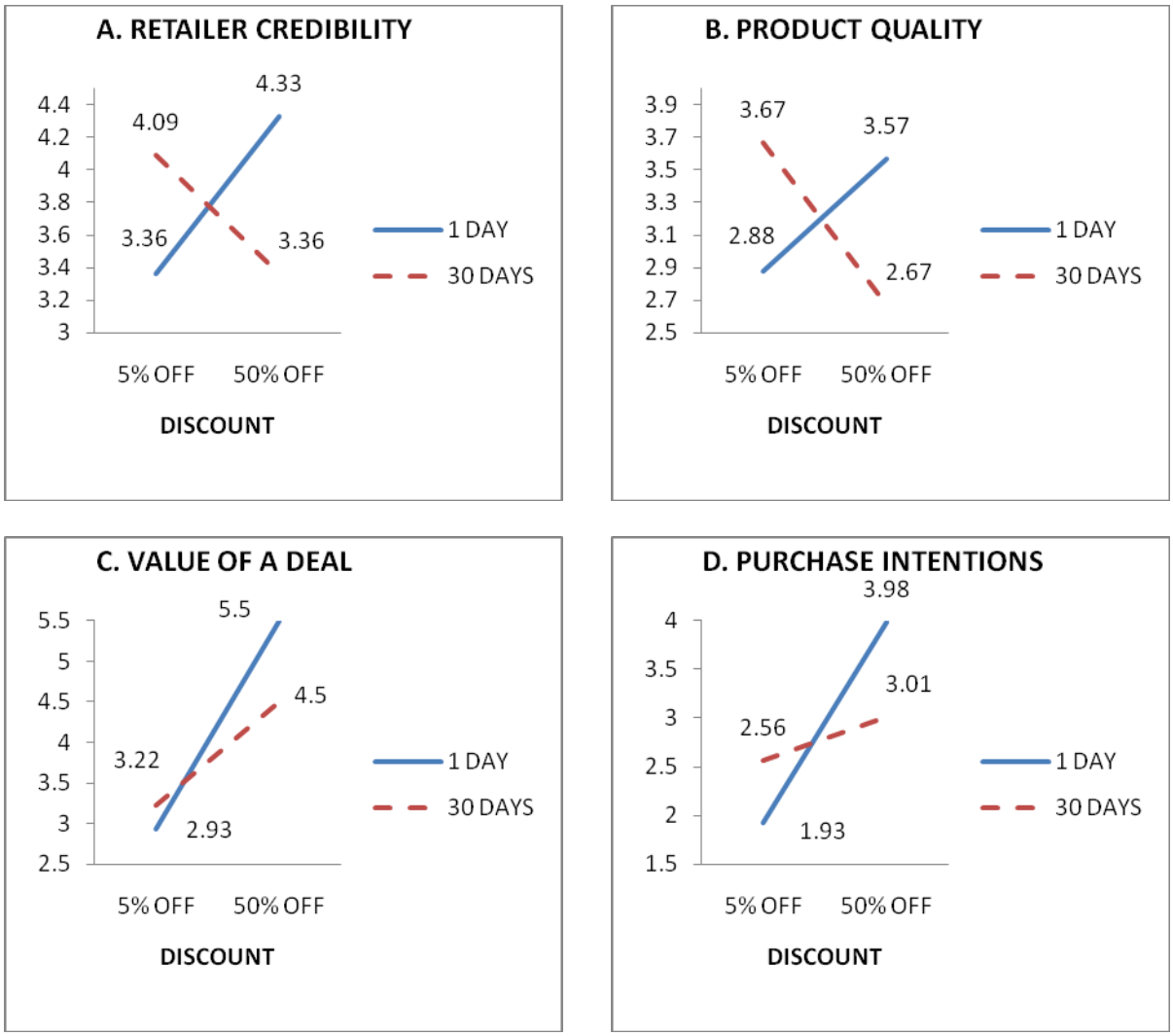

Figure 11. Study One. Effect of Discount and Time Restrictions on Deal Evaluations

In summary, the cue consistency/inconsistency had a significant effect on the perceived value of a deal at a 50% discount level, but not at a 5% discount level. The results of t-tests provide support to H6c but not to H5c.

Purchase intentions: A pattern of results similar to those for perceived value was also observed for purchase intentions. At a 5% discount level, the participants' purchase intentions were not significantly different regardless of whether it was a match or mismatch condition ($p = 0.076$). In other words, at a 5% discount level, the cue consistency/inconsistency did not significantly affect the participants' purchase intentions. This finding was counter to H5d, stating that the purchase intentions in a negative mismatch condition will be lower than those in a low-value match condition. However, at a 50% discount level, the participants' purchase intentions were significantly affected by the cue consistency/inconsistency. The purchase intentions were significantly higher in a high-value match condition when a high discount was paired with high

time restrictions, than in a positive mismatch condition when a high discount was paired with low time restrictions ($M_{\text{High-value match}} = 3.98$, $M_{\text{Positive Mismatch}} = 3.01$; $t_{58} = 2.03$, $p = 0.047$). This finding supports H6d.

In summary, the cue consistency/inconsistency had a significant effect on purchase intentions at a 50% discount level, but not at a 5% discount level. The results of the t-tests provide support for H6d but not for H5d.

Overall results of testing hypotheses H4 and H5 showed that H6 was supported and H5 was supported only partially. H5 made predictions for match vs. mismatch conditions at a 5% discount level, while H6 made predictions for match vs. mismatch conditions at a 50% discount level.

Consistent with H5a, it was found that a retailer credibility was perceived as higher in a low-value match condition than in a negative mismatch condition. However, contrary to H5c and H5d, the perception of the value of a deal, and purchase intentions were not significantly different across low-value match and negative mismatch conditions. Additionally, contrary to H5b, the participants perceived product quality across the two conditions as significantly different. The participants' quality perceptions were significantly higher in a low-value match than in a negative mismatch condition. Consistent with H6, it was found that the participants' perceived value, purchase intentions, perceived quality and a retailer credibility were significantly higher in a high-value match condition than in a positive mismatch condition.

In summary, at a low level of discount, the cue consistency/inconsistency affected the participants' perceptions of a retailer credibility and product quality but not the participants' perceptions of the value of a deal and their purchase intentions. At the same time, at a high level of discount, the cue consistency/inconsistency significantly affected the participants' perceptions of a retailer credibility, product quality, the value of a deal and their purchase intentions.

Hypotheses 7 and 8: Test of cue consistency/inconsistency effect at each time restrictions level. Table 23 presents results of testing hypotheses 7 and 8. Overall results support the effect of cue consistency/inconsistency at low time restrictions level. At high time restrictions level deal evaluations of price promotions offering identical discounts were higher in match situations than in mismatch situations. However, at low discount level predictions based on our conceptual model were supported only for retailer credibility and product quality. Perceived value of a deal and purchase intentions were not different regardless of whether price promotion attributes were consistent or inconsistent. Deal evaluations that were equally restricted in time were valued higher in match situations than in mismatch situations in terms of retailer credibility and product quality. However, perceived value of a deal in match situation was significantly lower than that in mismatch situation and purchase intentions were not significantly different.

Retailer credibility: At a 30 day time restrictions level, the participants' perception of the retailer credibility was significantly affected by the cue consistency/inconsistency. The retailer credibility was significantly higher in a low-value match condition, when a low discount was paired with low time restrictions than in a positive mismatch condition, when a high discount was paired with low time restrictions ($M_{\text{Low-value match}} = 4.09$, $M_{\text{Positive Mismatch}} = 3.36$ $t_{59} = 2.702$, $p = 0.009$).

In summary, the cue consistency/inconsistency significantly affected the participants' perception of the retailer credibility with a significantly higher perception of a retailer credibility

Table 23. Study One. T-tests: Effect of Cue consistency/inconsistency on Deal Evaluations

MEANS*	LOW TIME RESTRICTIONS			HIGH TIME RESTRICTIONS		
	Low-value Match	**Positive Mismatch**	**t-value (p-value)**	**High-value Match**	**Negative Mismatch**	**t-value (p-value)**
Retailer Credibility	4.09 (1.10)	3.36 (0.99)	2.702 (**0.009**)			
Perceived Quality	3.67 (1.34)	2.67 (1.16)	3.092 (**0.003**)	3.57 (1.36)	2.88 (1.11)	- 2.136 (**0.037**)
Perceived Value	3.22 (1.47)	4.5 (1.79)	-3.03 (**0.004**)			
Purchase Intentions	2.56 (1.58)	3.01 (1.94)	-0.99 (0.322)			

* Standard deviations are provided in parentheses.

in a match than in a mismatch condition regardless of the discount level. The results of a t-test provide support to H7a.

Perceived quality: At a 30 day time restrictions level, the participants' perception of product quality was significantly affected by the cue consistency/inconsistency. The perceived quality was significantly higher in a low-value match condition, when a low discount was paired with low time restrictions, than in a positive mismatch condition, when a high discount was paired with low time restrictions ($M_{\text{Low-value match}} = 3.67$, $M_{\text{Positive Mismatch}} = 2.67$; $t_{59} = 3.092$, $p = 0.003$). At a 1 day time restrictions level, the participants' perceived quality was significantly higher in a high-value match condition, when a high discount was paired with high time restrictions, than in a negative mismatch condition when a low discount was paired with high time restrictions ($M_{\text{High-value match}} = 3.57$, $M_{\text{Negative Mismatch}} = 2.88$; $t_{59} = - 2.136$, $p = 0.037$).

In summary, the cue consistency/inconsistency significantly affected the participants' perception of product quality at both levels of time restrictions, with significantly higher quality perceptions in a match condition than in a mismatch condition. The results of the t-tests provide support for H7b, but do not support H8b.

Perceived value: At a 30 day time restrictions level, the participants' perception of the value of a deal was significantly affected by the cue consistency/inconsistency. The perceived value of a deal was significantly higher in a positive mismatch condition, when a high discount was paired with low time restrictions than in a low-value match condition, when a low discount was paired with low time restrictions ($M_{\text{Low-value match}} = 3.22$, $M_{\text{Positive Mismatch}} = 4.5$; $t_{59} = - 3.03$, $p = 0.004$). This finding was counter to H7c, stating that the perceived value of a deal in a positive mismatch condition will be lower than that in a low-value match condition.

In summary, the cue consistency/inconsistency significantly affected the participants' perception of perceived value of a deal with significantly higher perceptions in a mismatch

Figure 12. Study One. Effect of Discount and Time Restrictions on Perceived Quality

condition than in a match condition. Therefore, the results of a t-test do not support H7c.

Purchase Intentions: At a 30 day time restrictions level, the participants' purchase intentions were not significantly affected by the cue consistency/inconsistency ($p=0.322$). In summary, the cue consistency/inconsistency did not significantly affect the participants' purchase intentions at a low time restrictions level. The results of a t-test do not support H7d.

Overall results of testing hypotheses H7 and H8 showed that H7 was supported partially and H8 was not supported. H7 made predictions for match vs. mismatch conditions at a 30 day time restrictions level, while H8 made prediction for match vs. mismatch conditions at a 1 day time restrictions level.

Consistent with H7a and H7b, it was found that a retailer credibility and product quality were perceived as higher in a low-value match situation than in a positive mismatch situation. However, contrary to H7c and H7d, purchase intentions were not significantly different across the conditions and the perception of the value of a deal was significantly higher in a positive mismatch situation than in a low-value match situation. Also contrary to H8, respondents' perception of product quality was different: it was significantly higher in a high-value match situation than in a negative mismatch situation.

In summary, the cue consistency/inconsistency affected the participants' perceptions of a retailer credibility and product quality regardless of the time restrictions level but the participants' perceptions of the value of a deal depended on the discount level. At the same time purchase intentions were not different across two time restrictions level despite a noticeable difference in the levels of discount.

Overall, the results of MANOVA and a series of t-tests showed that cue consistency/inconsistency moderates the effect of discount and time restrictions on deal evaluations and that the nature of this interaction is disordinal. Match conditions always resulted in higher perceptions of a retailer credibility and product quality, regardless of the level of discount and the level of time restrictions. However, the perceived value of a deal and purchase

intentions depended on the level of discount and the level of time restrictions. At a high discount level, cue consistency/inconsistency affected the participants' perceptions of the value of a deal and purchase intentions as it was hypothesized, while at a low discount level cue consistency/inconsistency did not have any effect on these dependent variables. At a low time restrictions level, cue consistency/inconsistency affected the participants' perceptions of the value of a deal in the opposite to the hypothesized direction. This means that cue consistency/inconsistency could not 'nullify' the effect of a high discount on perceptions of the value of a deal. At the same time, purchase intentions were not significantly different across these two levels of time restrictions despite the fact that discount offered in a low value match situation (5%) was significantly lower than that offered in a positive mismatch situation (50%). This finding (though it did not reach significance) illustrate how cue-inconsistency 'nullified' the effect of a high discount on participants' purchase intentions.

Probably these mixed findings can be partially explained by another factor – the level of involvement that was detected by the outcome measures. Preliminary results showed a significant (though non-hypothesized) effect of cue consistency/inconsistency and discount level on participants' involvement. Participants had significantly higher level of involvement when they were exposed to a high than to a low level of discount and to a match than to a mismatch situation. Potentially insignificance of results for the value of a deal and purchase intentions at a low discount level can be explain by lower participants' involvement. An additional analysis was conducted to isolate the effect of participants' involvement on dependent variables.

Additional analysis of study one: To examine the effect of cue consistency/inconsistency on consumers' deal evaluations while controlling for the level of participants' involvement, a two-way MANCOVA was conducted. In this analysis a retailer credibility, perceived quality, perceived value of a deal and purchase intentions served as dependent variables, discount and time restrictions served as independent variables and involvement served as a covariate. The results of MANCOVA are presented in Table 24.

Data analysis revealed an insignificant main effect of time restrictions ($p = 0.824$) and two significant main effects: for involvement (Wilk's Lambda = 0.620, $F = 17.344$, $p < 0.001$) and for discount (Wilk's Lambda = 0.699, $F = 12.184$, $p < 0.001$). The main effect of discount was qualified by a significant discount by time restrictions interaction (Wilk's Lambda = 0.877, $F = 3.966$, $p = 0.005$). Upon further investigation of univariate results it was found that only two variables contributed to multivariate interaction effect: perceived quality ($F_{1,116} = 6.255$, $p = 0.014$) and a retailer credibility ($F_{1,116} = 12.670$, $p = 0.001$).

Univariate results also indicated that the main effect of discount was due to the effects of the perceived value of a deal ($F_{1,116} = 40.000$, $p < 0.001$) and purchase intentions ($F_{1,116} = 7.925$, $p = 0.006$), and that a covariate (involvement) significantly affected all dependent variables: perceived value of a deal ($F_{1,116} = 23.336$, $p < 0.001$), purchase intentions ($F_{1,116} = 51.530$, $p < 0.001$), perceived quality ($F_{1,116} = 18.220$, $p < 0.001$) and a retailer credibility ($F_{1,116} = 16.334$, $p < 0.001$).

The overall results showed that the participants could differentiate between match and mismatch conditions, and their perceptions of product quality and a retailer credibility were always significantly higher in a match condition than in a mismatch condition, regardless of the level of discount and the level of time restrictions. However, participants' perceptions of the value of a deal and their purchase intentions were more volatile and were affected by the level of

Table 24. Study One. MANCOVA: Effect of Discount and Time Restrictions on Deal Evaluations

MANCOVA				
Sources	**Wilk's Lambda**	**Effect Size**	**F Value**	**P Value**
Main effects **Involvement**	0.620	0.380	17.344	**0.000**
Discount	0.699	0.301	12.184	**0.000**
Time Restrictions	0.987	0.013	0.378	0.824
Interaction Effects				
Discount x Time Restrictions	0.877	0.123	3.966	**0.005**

ANOVA*					
Sources	**d.f.**	**Perceived Quality**	**Perceived Value**	**Purchase Intentions**	**Retailer Credibility**
Main effects **Involvement**	1	18.22 (**0.000**)	23.336 **(0.000)**	51.53 **(0.000)**	16.334 **(0.000)**
Discount	1	3.684 (0.057)	40 **(0.000)**	7.925 **(0.000)**	0.238 (0.626)
Time Restrictions	1	0.000 (0.989)	1.438 (0.233)	0.070 (0.792)	0.213 (0.645)
Interaction Effects					
Discount x Time Restrictions	1	6.255 **(0.014)**	1.129 (0.258)	0.897 (0.345)	12.67 **(0.001)**
Residual	116				

***** P values are provided in parentheses.

involvement. Perception of the value of a deal and purchase intentions were significantly affected by the cue consistency/inconsistency only at a high level of discount, when participants had higher levels of involvement and hence, were more motivated to process the advertisements. At a low level of discount, the participants did not differ in terms of their perceptions of the value of a deal and purchase intentions. The role of involvement as motivation to process the

advertisement was supported when the participants' level of involvement was covaried out. Results of the MANCOVA showed that the participants' perception of the value of a deal and purchase intentions at a high level of discount also became insignificantly different across match and mismatch conditions when involvement was covaried out. However, involvement as a covariate was not able to nullify the significant differences in the participants' perceptions of product quality and a retailer credibility. This means that, regardless of the level of involvement, mismatch conditions always raised the participants' suspicions about the quality of a promoted product and the retailer motivation to offer a sale. As a result, the participants in mismatch conditions had lower perceptions of product quality and a retailer credibility. Though a low perception of product quality was predicted only in a positive mismatch condition when a high discount is offered for a long period of time, but not in a negative mismatch condition, it is probable that the unexpected combination of discount and time restrictions in a negative mismatch condition triggered not only consumers' negative inferences about a retailer credibility but also concerning product quality.

7.2.3 Deal Evaluations Across Match Situations

Hypothesis 9 was partially based on the concept of perceived value (Monroe, 1982) and stated that consumers in high-value match situations compared to low-value match situations will have a higher perception of (c) the value of a deal and higher (d) purchase intentions. At the same time, it was predicted there would be no significant differences in the participants' perceptions of (b) product quality and (a) retailer credibility across these two conditions.

To test the effect of the type of match condition on the perceived value of a deal, purchase intentions, perceived quality and retailer credibility, a one-way ANOVA was conducted. Data analysis revealed that perceived value of a deal and purchase intentions were significantly higher with high discount than with low discount. At the same time, the participants' perception of product quality and their perception of retailer credibility were not significantly different across these two conditions. Therefore, H9 was supported. Results are presented below in Table 25.

Table 25. Study One. ANOVA. Effect of the Type of Match Situation on Deal Evaluations

	High-value match	**Low-value match**	**F Value (p value)**
Retailer Credibility	4.33	4.09	0.782 (0.380)
Perceived Quality	3.57	3.67	0.082 (0.775)
Perceived Value	5.50	3.22	49.01 **(<0.001)**
Purchase Intentions	3.98	2.56	11.10 **(0.001)**

7.2.4 Deal Evaluations Across Mismatch Situations

Hypothesis 10 stated that consumers in a positive mismatch situation compared to a negative mismatch situation will have a lower perception of (b) product quality, and there will be no differences in consumers' perception of (a) a retailer credibility across these two conditions. No specific hypotheses were developed about the perceived value of a deal and purchase intentions.

To test the effect of the type of mismatch condition on perceived quality and a retailer credibility, a one-way ANOVA was conducted. Data analysis did not reveal any significant differences across these two conditions (see Table 26). Counter to H10b, the participants were not significantly different in their perception of product quality across two mismatch conditions. On the other hand, consistent with H10a, the participants were not significantly different in their perception of a retailer credibility across two mismatch conditions. The results showed that the participants' perceptions of product quality and the retailer credibility in both mismatch conditions were relatively low and were not significantly different. Therefore, H10 was supported only partially. H10 was supported regarding the retailer credibility (H10a), but not with respect to perceived quality (H10b).

Table 26. Study One. ANOVA. Effect of the Type of Mismatch Situation on Deal Evaluations

	Positive Mismatch	**Negative Mismatch**	**F Value (p value)**
Retailer Credibility	3.36	3.36	0.01 (0.998)
Perceived Quality	2.67	2.88	0.512 (0.477)
Perceived Value	4.50	2.93	14.69 **(<0.001**)
Purchase Intentions	3.02	1.93	7.085 (**0.010**)

Additional analysis revealed the participants in a positive mismatch condition had a significantly higher perception of the value of a deal and purchase intentions than those in a negative mismatch condition. Overall, these results mirror those from testing two match conditions (H9). Similar to the match conditions, the level of discount affected the participants' perception of the value of a deal and their purchase intentions, but not a retailer credibility and product quality.

7.3 SUMMARY

This study examines the effect of the cue consistency/inconsistency on the participants' deal evaluations as stated in hypotheses 1 through 10. The results of Study One provide partial support for our conceptual model. It was showed that the participants recognized match and mismatch situations based on the consistency of price promotion attributes and their cognitive reactions were negative when they suspected manipulative intent on the part of a retailer. In a

positive mismatch situation, consumers perceived the offered sale as an opportunity for the retailer to get rid of inferior products, while in a negative mismatch situation, consumers inferred that a retailer is trying to improve the perception of a low discount by severely limiting its temporal availability.

Participants' inferences about causes behind the retailer price promotion behavior in mismatch situations adversely affected the participants' perceptions of product quality, the value of a deal, the retailer credibility and their purchase intentions. In other words, cue consistency/inconsistency moderated the effect of discount and time restrictions on deal evaluations. This interaction effect was supported by a two-way MANOVA and its disordinal nature was supported for most of conditions by a series of t-tests..

The results also showed that participants' perceptions of product quality and a retailer credibility were always significantly higher in a match condition than in a mismatch condition, regardless of the level of discount and the level of time restrictions. However, participants' perception of the value of a deal and purchase intentions were significantly affected by the cue consistency/inconsistency only at a high level of discount, when participants had higher levels of involvement and hence, were more motivated to process the advertisements. At a low level of discount, the participants did not differ in terms of their perceptions of the value of a deal and purchase intentions. At the same time, counter to our hypotheses a high discount in a positive mismatch situation improved the perception of the value of a deal. However, cue consistency/inconsistency 'nullified' the effect of a high discount on purchase intentions.

In match situations when the participants did not question retailer price promotion behavior that was typical deal evaluations followed predictions based on the concept of perceived value (Monroe, 1980). The participants rated deals with high discounts significantly more favorably than those with low discounts. It was also found that mismatch situations were not perceived significantly different in terms of retailer credibility and product quality. At the same time the size of discount positively affected consumers' perception of the value of a deal and their purchase intentions even in mismatch situations.

In summary, mismatch situations always resulted in significantly lower perceptions of the retailer credibility and product quality, but differences in the participants' perceptions of the value of a deal and their purchase intentions across match and mismatch situations were significant only at a high discount level when the participants were more involved in the purchase situation. The overall results of Study One support most of the hypotheses. Details of all the results of Study One are presented in Table 27**.**

Table 27. Study One. Summary of Results of Hypotheses Tests

Hypothesis Number	Hypothesis	Tested Dependent Variable	Result
Hypotheses 1 and 2	Mismatch situations compared to match situations will result in:		
H1	more attributional thoughts.	Number of attributions	Supported
H2	more negative thoughts about retailer credibility.	Number of negative thoughts about retailer credibility	Supported at descriptive statistics level
Hypothesis 3	A positive mismatch situation compared to all other situations will result in more negative thoughts about product quality.	Number of negative thoughts about product quality	Supported at descriptive statistics level
Hypotheses 4	Cue consistency/inconsistency will moderate the effect of discount and time restrictions on consumers' deal evaluations such that cue consistent situations will result in more favorable deal evaluations than cue inconsistent situations.	All dependent variables	Supported
Hypotheses 5	Negative mismatch situation compared to a low-value match situation will result in:		
H 5a	lower retailer credibility.	Retailer credibility	Supported
H 5b	no differences in product quality.	Value of a deal	Supported
H 5c	lower perceived value of a deal.	Purchase intentions	Not Supported
H 5d	lower purchase intentions.	Product quality	Not Supported
Hypotheses 6	Positive mismatch situation compared to a high-value match situation will result in:		
H 6a	lower retailer credibility.	Retailer credibility	Supported
H 6b	lower product quality.	Product quality	Supported
H 6c	lower perceived value of a deal.	Value of a deal	Supported
H 6d	lower purchase intentions.	Purchase intentions	Supported
Hypotheses 7	Positive mismatch situation compared to a low-value match situation will result in:		
H 7a	lower retailer credibility.	Retailer credibility	Supported
H 7b	lower product quality.	Product quality	Supported
H 7c	lower perceived value of a deal.	Value of a deal	Not Supported
H 7d	lower purchase intentions.	Purchase intentions	Not Supported

Table 27 Continued.

Hypothesis Number	Hypothesis	Tested Dependent Variable	Result
Hypotheses 8	Negative mismatch situation compared to a high-value match situation will result in no differences in product quality.	Product quality	Not Supported
Hypotheses 9	High-value match situation compared to a low-value match situation will result in:		
H 10a	no differences in retailer credibility.	Retailer credibility	Supported
H 10b	no differences in product quality.	Product quality	Supported
H 10c	higher perceived value of a deal.	Value of a deal	Supported
H 10d	higher purchase intentions.	Purchase intentions	Supported
Hypotheses 10	Positive mismatch situation compared to a negative mismatch situation will result in:		
H 10a	no differences in retailer credibility.	Retailer credibility	Supported
H 10b	lower perception of product quality.	Product quality	Not Supported

CHAPTER 8. RESULTS OF STUDY TWO

In this chapter we present results of the second study. First, preliminary results are discussed. These results include reliability analysis, factor analysis, manipulation checks, randomization checks and check of non-hypothesized effects of stimuli (outcome measures). Next, we present results of hypotheses testing and discuss in detail all main and interaction effects. Then we proceed with the results of additional study with involvement as a covariate. Chapter concludes with a brief summary of the results.

8.1 PRELIMINARY DATA ANALYSIS

In this section we provide information about preliminary analyses before the actual test of hypotheses. We start with reliability analyses of all multi-item scales and factor analysis showing item loadings on different scales. Next, we analyze whether experimental manipulations were perceived by respondents as intended (manipulation checks), whether respondents' individual characteristics affected their perception of stimuli (randomization checks) and whether respondents' exposure to stimuli resulted in some non-hypothesized effects (outcome checks).

8.1.1 Reliability Analysis

The reliability of multi-item measures was assessed in the same manner as they were assessed in Study One. An inspection of the correlation matrices showed acceptable levels for both inter-item and item-to-total correlation values. In addition, all Cronbach's alphas were greater than 0.825. Table 28 presents the results of reliability tests for multi-item scales. The overall results showed that all multi-item scales were reliable. However, due to the small number of items comprising each scale (2 to 3 items), it was decided to conduct factor analysis to assess the constructs' dimensionality.

Table 28. Study Two. Reliability Tests for Multi-Item Scales

Construct	Reliability (Cronbach's alpha)	Mean of item-to-total correlation
Perceived Quality	0.861	0.739
Retailer Credibility	0.914	0.841
Purchase Intentions	0.942	0.891
Need for Cognition	0.825	0.622

8.1.2 Factor Analysis

Factor analysis was conducted to ensure that the items represented proposed variables and to show that the items measuring different constructs load on different factors. The ratio of cases to

variables exceeded a 10 to 1 ratio and sample size was greater than 100. The factorability of the correlation matrix was supported by two statistical measures, the KMO value that was equal to 0.759 exceeding the recommended value of 0.6, and Bartlett's test of sphericity that was significant at $p < 0.001$ level. Direct oblimin rotation was performed and the rotated pattern matrix was examined to determine the highest loadings for each factor. The rotated solution revealed the presence of four components with all four showing a number of strong loadings and all variables loading substantially on one component. However, one item, the need for cognition/reversed item five, loaded on both NFC factor (0.534) and on purchase intentions factor (0.301). It was decided to drop this item from the NFC scale and to use only four items to form an index. After deleting the NFC/reversed item, factor analysis produced results that are presented in Table 29. The four-factor solution accounted for 80.288% of total variance. The reliability of a need for cognition scale was then reanalyzed with only four items and produced acceptable results: no correlation lower than 0.3 was found in the inter-item correlation matrix, the mean item-to-total correlation was 0.692, and Cronbach's alpha was 0.851.

Table 29. Study Two. Pattern Matrix with Loadings: Exploratory Factor Analysis

Scale Items	Components (Constructs)*			
	1 (Perceived Quality)	**2 (Need for Cognition/NFC)**	**3 (Purchase Intentions)**	**4 (Retailer Credibility)**
Perceived Quality/ item 2	0.939			
Perceived Quality/ item 3	0.900			
Perceived Quality/ item 1	0.769			
NFC/ reversed item 1		0.873		
NFC/ reversed item 2		0.854		
NFC/ item 3		0.813		
NFC/ item 4		0.771		
Purchase Intentions/ item 2			- 0.814	- 0.217
Purchase Intentions/ item 1	0.213		- 0.782	
Retailer Credibility/ item 2				- 0.945
Retailer Credibility/ item 1				- 0.914

* loadings lower than 0.2 suppressed.

8.1.3 Manipulation Checks

Manipulation checks determined whether all the manipulations in the study were successful. First, it was checked whether the participants were able to distinguish between conditions with and without an external cause. Then it was checked whether the participants perceived the manipulations of the levels of discount and time restrictions as intended.

In Study Two the main focus was on the effect of an external cause; therefore, conditions with different levels of discount (and accordingly, with different levels of time restrictions because the type of mismatch condition was uniquely identified by only one price promotion

attribute) were not compared against each other directly. However, to show consistency in the respondents' perception of the price promotion attributes in both studies, it was decided to run manipulation checks for both the discounts and time restrictions. For an external cause absent/present manipulation check, a measure of the expectedness of a combination of price promotion attributes was used and it was identical to that used in Study One. In Study One this measure was used to check whether the participants could differentiate between match and mismatch conditions. The choice of this measure for an external cause absent/present manipulation check was based on the assumption that the respondents would perceive a combination of price promotion attributes in mismatch situations as more likely/expected when an external cause is present than when it is absent. Hence, the respondents' perceptions of two levels of external cause (absent/present) was not measured directly by asking the participants whether a retailer provided some explanation for running the price promotion or not, but indirectly, through their perception of the expectedness of a combination of price promotion attributes.

External cause manipulation check: A one-way ANOVA was conducted to check whether the participants perceived mismatch conditions to be significantly less expected when an external cause was absent than when an external cause was present. Prior to the analysis, the participants from both external cause absent conditions (negative mismatch without external cause and positive mismatch without external cause) were pooled into an external cause absent group, and the participants from both external cause present conditions (negative mismatch with external cause and positive mismatch with external cause) were pooled into an external cause present group. In this analysis the expectedness of the combination of price promotion attributes served as a dependent variable and the external cause as an independent variable. The results showed that a combination of price promotion attributes in an external cause present group was perceived as significantly more expected than that in an external cause absent group.

	Mismatch Conditions without External Cause	Mismatch Conditions with External Cause	F Value (p value)
Expectedness of the Combination of Price Promotion Attributes	3.91	4.73	7.546 (**0.007**)

In addition, a two-way ANOVA was conducted to check for any significant type of mismatch condition by external cause interaction effect. This analysis was needed to gain assurance that the participants' perception of the expectedness of the price promotion attributes depended only on the external cause factor but not on the type of mismatch condition (positive mismatch or negative mismatch). As both discount and time restrictions uniquely identify each type of mismatch condition, it did not make any difference what variable, discount or time restrictions, was used to specify the type of mismatch condition in a two-way ANOVA. In this analysis, the expectedness of the combination of price promotion attributes served as a dependent variable, and discount and external cause served as independent variables. Results are presented below in Table 30.

Table 30. Study Two. ANOVA: Effect of Discount and External Cause on Expectedness of the Combination of Price Promotion Attributes

Sources	**Df**	**F value**	**P Value**
Main Effects			
Discount	1	0.263	0.609
External Cause	1	7.60	**0.007**
Interaction			
Discount*External Cause	1	1.15	0.285
Residual	140		

The results revealed the significant main effect of external cause on the participants' perception of the likelihood of the combination of price promotion attributes, providing additional support to the earlier finding that the participants could distinguish between conditions with and without an external cause. At the same time, the main effect of the type of mismatch condition (or discount) and interaction effect were not significant. In summary, the results showed that the participants perceived conditions with and without an external cause as significantly different, regardless of whether it was a positive mismatch or negative mismatch condition. Therefore, the external cause absent/present manipulation was successful.

Manipulation check for the levels of discount: To check whether the participants distinguished between low and high levels of discount, a one-way ANOVA was conducted. Prior to the analysis, the participants from both low discount conditions (negative mismatch condition with external cause and negative mismatch condition without external cause) were pooled in a low discount group, and the participants from both high discount conditions (positive mismatch condition with external cause and positive mismatch condition without external cause) were pooled in a high discount group. In this analysis, the participants' perception of discount served as a dependent variable, and discount served as an independent variable. The results showed that the participants in a low discount group perceived the discount to be significantly lower than those in a high discount group.

	Low Discount Conditions	High Discount Conditions	F Value (p value)
Perception of Discount	1.69	5.73	509.308 (<**0.001**)

Additionally, a two-way ANOVA was conducted to check for any significant discount by an external cause interaction effect. This analysis was needed to get assurance that the participants' perception of discount did not depend on whether an external cause was absent or present. In this analysis the participants' perception of discount served as a dependent variable, and discount and external cause served as independent variables. Results are presented in Table 31.

The results revealed a significant main effect of discount on the perception of discount,

Table 31. Study Two. ANOVA: Effect of Discount and External Cause on Perception of Discount

Sources	**Df**	**F value**	**P Value**
Main Effects			
Discount	1	503.314	**<0.001**
External Cause	1	0.346	0.557
Interaction			
Discount*External Cause	1	0.056	0.813
Residual	140		

providing additional support to the earlier finding that the participants were able to distinguish between high and low levels of discounts. At the same time, the main effect of external cause and interaction effect were not significant. In summary, the results showed that the participants could differentiate between low and high levels of discount and their perception of discount did not depend on whether an external cause was absent or present. Therefore, discount level manipulation was successful.

Manipulation check for the levels of time restrictions: To check whether the participants distinguished between low and high levels of time restrictions, a one-way ANOVA was conducted. Prior to the analysis, the participants from both low time restrictions conditions (positive mismatch condition with external cause and positive mismatch condition without external cause) were pooled in a low time restrictions group, and the participants from both high time restrictions conditions (negative mismatch condition with external cause and negative mismatch condition without external cause) were pooled in a high time restrictions group. In this analysis, the participants' perception of time restrictions served as a dependent variable and time restrictions served as an independent variable. The results showed that the participants in a low time restrictions group perceived time restrictions to be significantly longer than those in a high time restrictions group.

	Low Time Restrictions Conditions	High Time Restrictions Conditions	F Value (p value)
Perception of Time Restrictions	5.11	1.36	319.476 (**<0.001**)

In addition, a two-way ANOVA was conducted to check for any significant time restrictions by external cause interaction effect. This analysis was needed to get assurance that the participants' perception of time restrictions did not depend on whether an external cause was absent or present. In this investigation, the participants' perception of time restrictions served as a dependent variable, and time restrictions and external cause served as independent variables. The results revealed a significant main effect of time restrictions on the perception of time restrictions, providing additional support to the earlier finding that the participants were able to distinguish between high and low levels of time restrictions (see Table 32). At the same time, the

main effect of external cause and interaction effect was not significant. In summary, the results showed that the respondents perceived the manipulation of time restrictions as intended, and their perception of time restrictions did not depend on whether an external cause was absent or present. Therefore, time restrictions level manipulation was successful.

Table 32. Study Two. ANOVA: Effect of Time Restrictions and External Causes

Sources	**Df**	**F value**	**P Value**
Main Effects **Time Restrictions** **External Cause**	 1 1	 328.29 1.99	 <**0.001** 0.160
Interaction **Time Restrictions*External Cause**	1	6.51	0.058
Residual	140		

8.1.4 Randomization Checks

The participants represented a student sample that was considered to be relatively homogenous. In addition, all the participants were assigned to treatment conditions in a random manner to further downplay any potential individual differences, and to ensure the randomization of gender. Randomization checks were conducted to get assurance that the results were not confounded by the participants' differences in gender, their product knowledge, sales proneness and their need for cognition. The results of all randomization checks are presented in Tables 33 and 34.

First, a series of one-way ANOVAs was conducted with control variables (except gender) as dependent variables, and treatment conditions as an independent variable. Similar to the results obtained in Study One, the results of the randomization check for Study Two showed that the participants were not significantly different on all tested variables across the four treatment conditions.

Table 33. Study Two. Randomization Checks for Control Variables

Construct	**F Value**	**P Value**
Knowledge	$F_{3,139} = 0.386$	$p = 0.764$
Sales Proneness	$F_{3,140} = 0.518$	$p = 0.670$
Need for Cognition	$F_{3,140} = 2.499$	$p = 0.062$

Finally, to check for any significant differences based on the participants' gender, a series of one-way ANOVAs was conducted. Data analysis revealed no significant differences on any dependent variable based on the participants' gender (see Table 34).

Table 34. Study Two. Randomization Checks for Gender

Variable	F Value	P Value
Perceived Value	$F_{1,142} = 0.758$	$p = 0.385$
Purchase Intentions	$F_{1,142} = 3.674$	$p = 0.057$
Perceived Quality	$F_{1,142} = 0.034$	$p = 0.855$
Retailer Credibility	$F_{1,142} = 0.307$	$p = 0.580$

8.1.5 Outcome Measures

Believability of the stimuli: A check of stimulus believability was needed to gain assurance that, though the respondents perceived mismatch situations with external causes as significantly more expected than mismatch conditions without external causes, they still did not doubt the believability of stimuli in general. Firstly, to check whether the believability of the presented stimuli was different between situations with and without an external cause, a one-way ANOVA was conducted. Prior to the analysis, the participants from both external cause absent conditions (negative mismatch condition without external cause and positive mismatch condition without external cause) were pooled in an external cause absent group, and the participants from both external cause present conditions (positive mismatch condition with external cause and negative mismatch condition with external cause) were pooled in an external cause present group. In this analysis, the believability of a stimulus served as a dependent variable, and external cause served as an independent variable. The results showed that stimulus believability was not different across the two groups. In other words, the stimulus believability did not depend on whether an external cause was absent or present.

	Mismatch Conditions with External Cause	Mismatch Conditions without External Cause	F Value (p value)
Believability of Stimuli	4.94	4.54	2.355 (0.127)

Next a one-way ANOVA was conducted to check for any significant differences among individual treatment conditions. In this analysis, the believability of a stimulus served as a dependent variable and treatment conditions served as an independent variable. The results revealed significant differences in stimulus believability across the treatment conditions ($F_{3,140} = 2.694$, $p = 0.048$). The results of *post-hoc* tests showed that a positive mismatch condition with an external cause was perceived as significantly more believable than any other condition (see Table 35). At the same time, perceptions of other conditions were not significantly different in terms of their believability.

Table 35. Study Two. Post-hoc Tests: Believability of a Stimulus for Match and Mismatch Conditions

	Positive Mismatch with External Cause	**Negative Mismatch with External Cause**	**Negative Mismatch without External Cause**	**Positive Mismatch without External Cause**
Means	*5.37*	*4.63*	*4.45*	*4.52*
Positive Mismatch with External Cause		**0.045**	**0.012**	**0.021**
Negative Mismatch with External Cause			0.617	0.758
Negative Mismatch without External Cause				0.849

It follows that the introduction of an external cause, such as going out of business, significantly increased the stimulus believability in a positive mismatch condition, but the introduction of an external cause such as an inventory check, in a negative mismatch condition, did not significantly affect the respondents' perception of stimulus believability. An inspection of means showed that these differences do not represent any serious threat for data analysis. All the means were above 4 points on a 7-point scale.

Respondents' involvement: A one-way ANOVAs was conducted with involvement as dependent variable, and treatment conditions as an independent variable. Results showed that participants' involvement was significantly different across treatment conditions ($F_{3,140} = 5.441$, $p = 0.001$).

The participants' differences were further examined with *post-hoc* tests (see Table 36). The results of *post-hoc* tests for involvement showed that the participants in the external cause present condition had a significantly higher level of involvement than those in the external cause absent condition in each type of mismatch situation. At the same time, the levels of involvement were not significantly different between the two external cause present conditions, as well as between two external cause absent conditions. Additionally, the participants' involvement in a negative mismatch condition with an external cause was not significantly different from that in a positive mismatch condition without external cause. It follows that the absence of external cause in a positive mismatch condition (with 50% discount) significantly lowered the level of the participants' involvement. To further investigate the effect of external cause and the type of mismatch situation on the participants' involvement, two additional tests were conducted.

Firstly, the effect of the type of mismatch situation on the participants' involvement was tested by a one-way ANOVA. Prior to the analysis, the participants from both negative mismatch conditions (negative mismatch with and without external cause) were pooled in a negative mismatch group, and the participants from both positive mismatch conditions (positive mismatch with and without external cause) were pooled in a positive mismatch group. In this analysis,

Table 36. Study Two. Post-hoc Tests: Involvement for Match and Mismatch Conditions

	Positive Mismatch with External Cause	**Negative Mismatch with External Cause**	**Negative Mismatch without External Cause**	**Positive Mismatch without External Cause**
Means	*4.57*	*4.00*	*2.89*	*3.36*
Positive Mismatch with External Cause		0.204	**0.000**	**0.008**
Negative Mismatch with External Cause			**0.013**	0.153
Negative Mismatch without External Cause				0.290

involvement served as a dependent variable and the type of mismatch situation served as an independent variable. The results did not reveal any significant differences, providing evidence that involvement did not depend on the type of mismatch situation.

	Negative Mismatch Conditions	Positive Mismatch Conditions	F Value (p value)
Involvement	3.44	3.96	2.521 (0.115)

A two-way ANOVA was then conducted to check for any significant type of mismatch situation by external cause interaction effect. In this analysis, involvement served as a dependent variable and type of mismatch situation, and external cause served as independent variables. The results revealed a significant main effect of external cause, providing additional support for the results of *post-hoc* tests that the participants in mismatch conditions with external cause are significantly more involved than those in mismatch conditions without external cause. At the same time, the main effect of the type of mismatch situation and interaction effect were not significant (see Table 37).

In summary, the results showed that the participants were more involved when an external cause was present than when it was absent, and the type of mismatch situation did not affect the participants' involvement. To neutralize the effect of involvement on dependent variables, it was decided to use involvement as a covariate, in order to 'equalize' levels of the participants' involvement across conditions with and without external cause.

Table 37. Study Two. ANOVA: Effect of the Type of Mismatch Condition and External Cause on Involvement

Sources	Df	F value	P Value
Main Effects **Type of Mismatch Condition** **External Cause**	 1 1	 2.740 13.528	 0.100 **<0.001**
Interaction **Type of Mismatch Condition *External Cause**	1	0.026	0.871
Residual	140		

8.1.6 Summary of Preliminary Results

The preliminary analysis showed that all multi-item measures used in the study were reliable. Factor analysis revealed the unidimensional nature of multi-item variables, and scale reliability analysis showed that Cronbach's alphas were in an acceptable range of 0.825 to 0.942. Manipulation checks showed that the participants perceived manipulations of the levels of discount and time restrictions as well as the manipulation of external cause absent/present conditions as intended. The participants' perception of an external cause absent/present factor did not depend on the type of mismatch situation, and their perception of discount (time restrictions) did not depend on the level of accompanying time restrictions (discount).

Randomization checks showed that the participants' responses were not confounded by the participants' individual differences. It was also shown that the participants' gender did not significantly affect the results of hypotheses testing. Outcome checks showed that, although stimulus believability was significantly different across four treatment conditions, in general its level indicated that the treatment conditions were perceived as realistic. Additional analysis of pooled conditions revealed that stimulus believability was not different, regardless of whether external cause was absent or present. Respondents' involvement was significantly different between mismatch conditions with and without an external cause, and was used in the analysis as a covariate.

8.2 RESULTS OF HYPOTHESES TESTS

Hypothesis 11 stated that consumers in positive mismatch situations without an external cause compared to positive mismatch situations with an external cause will perceive (a) a retailer as less credible and will have a lower perception of (b) product quality a lower perception of (c) the value of a deal and lower (d) purchase intentions.

Hypothesis 12 stated that consumers in negative mismatch situations without an external cause, compared to negative mismatch situations with an external cause will perceive (a) a retailer as less credible and will have a lower perception of (c) the value of a deal and lower (d)

purchase intentions. At the same time, no significant differences were predicted in consumers' perception of (b) product quality across these two conditions.

To test the effect of an external cause and the type of mismatch situation on a retailer credibility, perceived quality, perceived value of a deal and purchase intentions, a two-way MANOVA was conducted. The means and results of MANOVA are presented in Table 38 and plotted on Figure 13.

The data analysis revealed the significant main effect of the type of mismatch situation (Wilk's Lambda = 0.572, F = 25.609, $p < 0.001$) and the significant main effect of an external cause (Wilk's Lambda = 0.858, F = 5.688, $p < 0.001$). However, the main effects were qualified by a significant type of mismatch situation by an external cause interaction (Wilk's Lambda = 0.901, F = 3.752, p = 0.006). Upon further investigation of univariate results, it was found that multivariate interaction effect was due to the effects of perceived quality ($F_{1,140} = 11.564$, p = 0.004) and a retailer credibility ($F_{1,140} = 4.423$, p = 0.037). Univariate results also indicated that the main effect of the type of mismatch situation was due to the effects of the perceived value ($F_{1,140} = 79.454$, $p < 0.001$) and purchase intentions ($F_{1,140} = 24.214$, $p < 0.001$). The main effect of an external cause was due to the effects of a retailer credibility ($F_{1,140} = 20.199$, $p < 0.001$) and purchase intentions ($F_{1,140} = 4.562$, p = 0.034).

First, the main effect of an external cause on purchase intentions, and the main effects of the type of mismatch situation on purchase intentions and perceived value are discussed. Only the main effects were analyzed for these variables because the results of the MANOVA revealed that both perceived value and purchase intentions did not contribute to the multivariate interaction effect. The results showed that the respondents' purchase intentions were significantly higher when an external cause was present than when it was absent ($M_{\text{External Cause Absent}} = 3.88$, $M_{\text{External Cause Present}} = 4.46$; $F_{1,140} = 4.562$, p = 0.034). The type of mismatch situation affected both the perceived value of deal ($M_{\text{Negative Mismatch}} = 3.65$, $M_{\text{Positive Mismatch}} = 5.60$; $F_{1,140} = 79.454$, $p < 0.001$) and purchase intentions ($M_{\text{Negative Mismatch}} = 3.51$, $M_{\text{Positive Mismatch}} = 4.84$; $F_{1,140} = 24.214$, $p < 0.001$). The respondents in positive mismatch conditions had significantly higher perceptions of the value of a deal and purchase intentions than those in negative mismatch conditions. These differences were probably related to the higher level of discount in positive mismatch conditions.

A series of t-tests was then conducted to further analyze interaction effects for a retailer credibility and product quality. The results of a series of t-tests are presented in Table 39 and discussed below for each dependent variable.

Retailer credibility: In a positive mismatch condition, the respondents' perception of a retailer credibility was significantly affected by an external cause factor. The retailer credibility was significantly higher when an external cause was present than when it was absent ($M_{\text{Positive Mismatch/External Cause Present}} = 5.14$, $M_{\text{Positive Mismatch/External Cause Absent}} = 3.84$; $t_{69} = -5.032$, $p < 0.001$). This finding supports H11a. However, in a negative mismatch situation, the retailer credibility was not significantly affected by an external cause factor (p = 0.116). This finding was counter to the effect hypothesized in H12a. In summary, an external cause had a significant effect on a retailer credibility in a positive mismatch condition, but the respondents' perception of a retailer credibility in a negative mismatch condition was not different, regardless of whether an external cause was absent or present. The results of t-tests provide support for H11a but not for 12a.

Table 38. Study Two. MANOVA: Effect of Discount and External Cause on Deal Evaluations

	MANOVA			
Sources	**Wilk's Lambda**	**Effect Size**	**F Value**	**P Value**
Main effects				
Type of Mismatch Condition	0.572	0.428	25.609	**0.000**
External Cause	0.858	0.142	5.688	**0.000**
Interaction Effects				
Type of Mismatch Condition x External Cause	0.901	0.099	3.752	**0.006**

	ANOVA*				
Sources	**d.f.**	**Perceived Quality**	**Perceived Value**	**Purchase Intentions**	**Retailer Credibility**
Main effects					
Type of Mismatch Condition	1	0.900 (0.344)	79.454 **(0.000)**	24.214 **(0.000)**	3.256 (0.073)
External Cause	1	2.906 (0.090)	0.053 (0.817)	4.562 **(0.034)**	20.199 **(0.000)**
Interaction Effects					
Type of Mismatch Condition x External Cause	1	11.564 **(0.004)**	0.192 (0.662)	0.040 (0.841)	4.423 **(0.037)**
Residual	140				

* P values are provided in parentheses.

Table 39. Study Two. T-tests: Deal Evaluations for Conditions with and without External Cause

MEANS*	POSITIVE MISMATCH CONDITION			NEGATIVE MISMATCH CONDITION		
	External Cause Present	**External Cause Absent**	**t-value (p-value)**	**External Cause Present**	**External Cause Absent**	**t-value (p-value)**
Perceived Quality	4.07 (1.02)	3.17 (1.06)	- 3.622 **(0.001)**	3.68 (1.37)	3.91 (1.18)	0.779 (0.439)
Perceived Value	5.62 (1.37)	5.58 (1.31)	- 0.142 (0.888)	3.58 (1.36)	3.72 (1.19)	0.489 (0.626)
Purchase Intentions	5.15 (1.52)	4.52 (1.70)	- 1.638 (0.106)	3.77 (1.65)	3.25 (1.56)	- 1.381 (0.172)
Retailer Credibility	5.14 (1.10)	3.84 (1.06)	- 5.032 **(0.000)**	4.37 (1.45)	3.90 (1.03)	- 1.589 (0.116)

* Standard deviations are provided in parentheses.

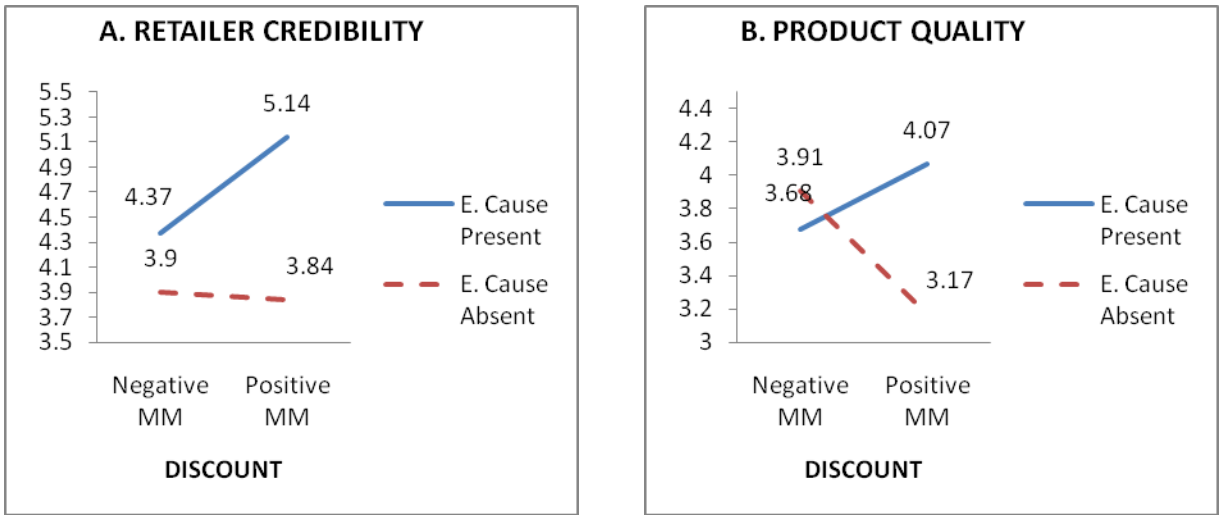

Figure 13. Study Two. Effect of External Cause and Type of Mismatch Situation

Perceived quality: This pattern of results for a retailer credibility were also observed for the perceived product quality. In a positive mismatch condition, the respondents' perception of

product quality was significantly affected by an external cause factor. The perceived quality was significantly higher when an external cause was present than when it was absent ($M_{\text{Positive Mismatch/External Cause Present}} = 4.07$, $M_{\text{Positive Mismatch/External Cause Absent}} = 3.17$; $t_{69} = -3.622$, $p = 0.001$). This finding supports H11b. However, in a negative mismatch condition, the perceived product quality was not significantly affected by an external cause factor ($p = 0.439$). This finding was counter to the effect hypothesized in H12b. In summary, an external cause had a significant effect on perceived product quality in a positive mismatch condition, but the respondents' perception of product quality in a negative mismatch condition was not different, regardless of whether an external cause was absent or present. The results of t-tests provide support for H11b but not for H12b.

The overall results showed that both H11 and H12 were supported only partially. H11 made predictions for the effect of an external cause in positive mismatch situations, while H12 made predictions for the effect of an external cause in negative mismatch situations. Consistent with H11a and H11b, it was found that in positive mismatch conditions, a retailer credibility and product quality were perceived to be significantly higher when an external cause was present than when it was absent. Also consistent with H12b, the results provide evidence that the respondents' perception of product quality in negative mismatch conditions was not affected by an external cause factor. On the other hand, contrary to H11c, H11d, H12c and H12d, an external cause factor did not affect the respondents' perceptions of the value of a deal and their purchase intentions in both types of mismatch conditions. Additionally, contrary to H12a, retailer credibility was not significantly different in negative mismatch conditions, regardless of whether an external cause was absent or present. Therefore H11c, H11d, H12a, H12c and H12d were not supported.

In summary, in positive mismatch conditions, an external cause factor affected the participants' perceptions of a retailer credibility and product quality but not the participants' perceptions of the value of a deal and their purchase intentions. Though the presence of an external cause in a positive mismatch condition significantly improved the respondents' perceptions of a retailer credibility and product quality, it did not transfer to higher perceptions of the value of a deal and higher purchase intentions. In a negative mismatch conditions, on the other hand, an external cause factor did not significantly affect all dependent variables.

Preliminary results showed a significant (though non-hypothesized) effect of the external cause on participants' involvement. Participants had significantly higher level of involvement when external cause was present than when it was absent. An additional analysis was conducted to isolate the effect of participants' involvement on dependent variables.

Additional analysis of study two. To examine the effect of external cause on consumers' deal evaluations in mismatch situations while controlling the level of participants' involvement a two-way MANCOVA was conducted. In this analysis a retailer credibility, perceived quality, perceived value of a deal and purchase intentions served as dependent variables, external cause and the type of mismatch situations served as independent variables and involvement served as a covariate. The means and results of the MANCOVA are presented in Table 40.

Data analysis revealed three significant main effects: for the type of mismatch condition (Wilk's Lambda = 0.579, $F = 24.686$, $p < 0.001$), for external cause (Wilk's Lambda = 0.919, $F = 2.977$, $p = 0.021$), and for involvement (Wilk's Lambda = 0.622, $F = 20.701$, $p < 0.001$).

Table 40. Study Two. MANCOVA: Effect of Type of Mismatch Condition and External Cause on Deal Evaluations

MANCOVA				
Sources	**Wilk's Lambda**	**Effect Size**	**F Value**	**P Value**
Main effects	0.622	0.378	20.701	**0.000**
Involvement				
Type of Mismatch Condition	0.579	0.421	24.686	**0.000**
External Cause	0.919	0.081	2.977	**0.021**
Interaction Effects				
Type of Mismatch Condition x External Cause	0.891	0.109	4.151	**0.003**

ANOVA*					
Sources	**d.f.**	**Perceived Quality**	**Perceived Value**	**Purchase Intentions**	**Retailer Credibility**
Main effects	1	49.356 **(0.000)**	8.844 **(0.003)**	51.583 **(0.000)**	33.565 **(0.000)**
Involvement					
Type of Mismatch Condition	1	4.254 **(0.041)**	74.995 **(0.000)**	22.011 **(0.000)**	1.403 (0.238)
External Cause	1	0.040 (0.841)	1.235 (0.268)	0.059 (0.808)	9.248 **(0.003)**
Interaction Effects					
Type of Mismatch Condition x External Cause	1	10.681 **(0.001)**	0.168 (0.683)	0.019 (0.892)	5.086 **(0.026)**
Residual	139				

* P values are provided in parentheses.

The main effects were qualified by a significant type of mismatch condition by the external cause interaction (Wilk's Lambda = 0.891, F = 4.151, p = 0.003). Upon further investigation of the univariate results, it was found that only two variables contributed to the multivariate interaction effect: perceived quality ($F_{1,139}$ = 10.681, p = 0.001) and a retailer credibility ($F_{1,139}$ = 5.086, p = 0.026). Univariate results also indicated that the main effect of the type of mismatch situation was due to the effects of perceived quality ($F_{1,139}$ = 4.254, p = 0.041), perceived value ($F_{1,139}$ = 74.995, p < 0.001) and purchase intentions ($F_{1,139}$ = 22.011, p < 0.001). The main effect of an external cause was due to the effects of a retailer credibility ($F_{1,139}$ = 9.248, p = 0.003). The involvement that was used as a covariate in the analysis significantly affected all dependent variables: a retailer credibility ($F_{1,139}$ = 33.565, p < 0.001), perceived quality ($F_{1,139}$ = 49.356, p < 0.001), perceived value ($F_{1,139}$ = 8.844, p = 0.003), and purchase intentions ($F_{1,139}$ = 51.583, p < 0.001).

The overall results show that the introduction of involvement as a covariate did not change the overall picture, and the respondents' perception of a retailer credibility and product quality depended on an external cause factor only in a positive mismatch condition, but not in a negative mismatch condition. In a positive mismatch condition, 'equally involved' respondents still rated a retailer credibility and product quality higher when an external cause was present than when it was absent.

8.3 SUMMARY OF RESULTS OF STUDY TWO

This study examines the effect of the external cause factor in mismatch situations on the participants' perceptions of a retailer credibility, the quality of a promoted product, the value of a deal and purchase intentions as stated in hypotheses 11 and 12. The results of study Two provide partial support for our conceptual model. It was showed that introduction of an external cause made the participants perceive a combination of price promotion attributes as expected for such 'atypical' situations. Though attributional thoughts were not measured we expected significant improvements in deal evaluations in mismatch situations with an external cause. However, the presence or absence of an external cause did not have any significant effect on the respondents' perceptions of product quality and the value of a deal. Additionally, hypothesized effects for retailer credibility and product quality were observed for only in positive mismatch situations. The absence of any effects in the negative mismatch situation may be explained by the respondents' lower motivation to process the low discount sale and low believability of an external cause. In a positive mismatch situation, an external cause (going out of business) probably was perceived as more valid than that in a negative mismatch situation (inventory check).

In summary, the results showed that the participants could differentiate between mismatch situations with and without external causes and were more involved in situations when an external cause was present than when it was absent. The overall results of Study Two support hypothesis 11 and do not support hypothesis 12. Details of all the results of Study Two are presented in Table 41.

Table 41. Study Two. Summary of Results of Hypotheses Tests

Hypothesis Number	Hypothesis	Dependent Variable	Result
Hypotheses 11	Positive mismatch situations without an external cause compared to positive mismatch situations with an external cause will result in:		
H 11a	lower retailer credibility.	Retailer credibility	Supported
H 11b	lower product quality.	Product quality	Supported
H 11c	lower perceived value of a deal.	Value of a deal	Supported
H 11d	lower purchase intentions.	Purchase intentions	Supported
Hypotheses 12	Negative mismatch situations without an external cause compared to negative mismatch situations with an external cause will result in:		
H 12a	lower retailer credibility.	Retailer credibility	Not Supported
H 12b	no difference in product quality.	Product quality	Not Supported
H 12c	lower perceived value of a deal.	Value of a deal	Not Supported
H 12d	lower purchase intentions.	Purchase intentions	Not Supported

CHAPTER 9. GENERAL DISCUSSION

In this chapter we start with the discussion of the results of two studies. Then we discuss the theoretical and managerial contributions of this dissertation. The final sections of this chapter discuss limitations of our studies and areas for future research.

9.1 DISCUSSION OF THE RESULTS OF STUDY ONE

Study One examines the effects of cue consistency/inconsistency and the resulting match and mismatch situations on a series of dependent measures. Included were the participants' thoughts (including attributional thoughts), those thoughts' focus and valence, as well as on the perceived quality of a promoted product, the retailer credibility, the perceived value of a deal, and the purchase intentions as stated in hypotheses 1 through 10.

Our model predicted that when consumers are exposed to atypical price promotions, they are likely to find the reason behind such deviation from regular price promotion practice. The results showed that the participants had significantly higher number of attributional thoughts and more concerns about product quality and the retailer credibility in mismatch situations than in match situations. When a combination of discount and time restrictions was counter to the consumers' expectations, the participants exhibited more negative product-related and more negative retailer credibility-related thoughts than when a combination of price promotion attributes supported their expectations (arising from their marketplace experiences).

Next, our model predicted that consumers' negative attributions will adversely affect perceptions of product quality, the value of a deal, the retailer credibility and their purchase intentions. More specifically we hypothesized that cue consistency/inconsistency will moderate the effect of discount and time restrictions on deal evaluations. Overall, the results showed significant interaction effect and disordinal nature of this interaction effect. Match conditions always resulted in higher perceptions of a retailer credibility and product quality, regardless of the level of discount and the level of time restrictions. However, the perceived value of a deal and purchase intentions depended on the level of discount and the level of time restrictions. At a high discount level, cue consistency/inconsistency affected the participants' perceptions of the value of a deal and purchase intentions as it was hypothesized, while at a low discount level cue consistency/inconsistency did not have any effect on these dependent variables. At a low time restrictions level, cue consistency/inconsistency affected the participants' perceptions of the value of a deal in the opposite to the hypothesized direction. This means that cue consistency/inconsistency could not 'nullify' the effect of a high discount on perceptions of the value of a deal. At the same time, purchase intentions were not significantly different across these two levels of time restrictions despite the fact that discount offered in a low value match situation (5%) was significantly lower than that offered in a positive mismatch situation (50%). This finding (though it did not reach significance) illustrate how cue-inconsistency 'nullified' the effect of a high discount on participants' purchase intentions

Some of the hypothesized effects that were not supported were probably confounded by the level of involvement. The results demonstrate the important role of involvement and show the effect of a significant discount by cue consistency/inconsistency interaction on involvement. In general, the participants had a higher level of involvement when they were offered a high

discount than when they were offered a low discount. At the same time, the participants at each discount level were more involved when they were exposed to a match situation than when they were exposed to a mismatch situation. The strength of the interaction effect is illustrated by the finding that the participants' involvement in a positive mismatch situation, when the participants were offered a 50% discount, was not significantly different from that in a low-value match situation, when the participants were offered only a 5% discount (despite a significant difference in discount levels).

The discount and cue consistency/inconsistency affected the participants' involvement and the perceptions of dependent variables in a variety of ways. The results show that the participants did not engage in attributional thinking at a low discount level, regardless of whether it was a match or mismatch situation, though the participants could differentiate between these two situations because their level of involvement was significantly higher in a match than in a mismatch situation. However, when the participants were offered a high discount, they exhibited attributional thoughts in both the match and mismatch situations with significantly more attributions in a mismatch situation. In this case, the cue consistency/inconsistency affected both the participants' level of involvement and their motivation to generate attributions. Although the participants' level of involvement in a mismatch situation was significantly lower than that in a match situation, the participants in a mismatch situation generated significantly more attributional thoughts about product quality and the retailer credibility (and these thoughts were predominantly negative).

Additional analysis lends further support to the notion that the cue consistency/inconsistency and discount level affected the participants' perceptions of dependent variables, not only through their level of involvement, but also directly. It was found that the participants' perception of the value of a deal and their purchase intentions were not different across match and mismatch situations at a low discount level, but were significantly different at a high discount level (higher in a match than in a mismatch situation). However, when the involvement was introduced as a covariate, the participants' perception of the value of a deal and their purchase intentions became insignificantly different across match and mismatch situations at each discount level. These findings demonstrate that when the participants were more involved (at a high discount level), they formed higher perceptions of the value of a deal and had higher purchase intentions in a match than in a mismatch situation. However, the cue consistency/inconsistency did not have any effect when involvement was covaried out.

At the same time, it was found that the level of involvement did not affect the participants' perceptions of the retailer credibility and product quality. The participants' perceptions of these two variables were always higher in match situations than in mismatch situations, regardless of the level of discount. Involvement, as a covariate could not nullify these significant differences as well. These findings demonstrate that the participants were able to distinguish between match and mismatch situations regardless of their level of involvement, and always rated product quality and the retailer credibility lower in mismatch situations than in match situations. Additionally, it was found that despite a greater discount, respondents in a positive mismatch situation evaluated retailer credibility and product quality as significantly lower than in a low-value match situation.

When only match situations were examined, it was found that the participants had a significantly higher perceived value of a deal and purchase intentions in a high-value match

situation (with a high discount) than in a low-value match situation (with a low discount). This finding supports the predictions based on the concept of perceived value (Monroe, 1980). At the same time, it was found that the size of the discount did not affect the participants' perceptions of a retailer credibility and the product quality. As long as the combinations of price promotion attributes remained consistent with the participants' expectations, the participants did not question the retailer credibility or the product quality. When only mismatch situations were examined, significant differences were found in the respondents' perceptions of the value of a deal and their purchase intentions, but not in their perceptions of the retailer credibility and the product quality.

Hypotheses for mismatch situations were developed based on the following assumption: when consumers are offered a big discount (50% off the regular price) for a suspiciously long period of time (30 days) they will infer low product quality; however, when they are offered a negligible discount (5% off the regular price) for a short period of time (1 day), they should not be concerned about product quality (due to low discount level). In both cases though, consumers are likely to recognize the manipulative intent on the part of the retailer and the retailer credibility will be low but not significantly different across the two conditions. In a positive mismatch situation, consumers may perceive the offered sale as an opportunity for the retailer to get rid of inferior products, while in a negative mismatch situation, consumers may infer that a retailer is trying to improve the perception of a low discount by severely limiting its temporal availability (1 day only). In accordance with the hypothesized effect for the retailer credibility, it was found that the participants' perceptions of the retailer credibility were not different across these two mismatch situations. Contrary to the hypothesized effect for product quality, it was found that exposure to a negative mismatch situation (too-little-to-be-good) triggered suspicions, not only about a retailer offering too little value, but also about the quality of a product. As a result, the perceived quality was low and the differences across two mismatch situations were not statistically significant. The finding that low retailer credibility negatively affected perception of product quality is similar to that from the study by Jain and Posavac (2004). The authors found that negative comparative advertising resulted not only in negative consumers' inferences about the advertiser but also about its promoted product – the advertiser using such tactics cannot be trusted in what it says about its own brand as well.

The results also showed that the perceived value of a deal and the purchase intentions were affected by the size of the discount, with higher perception values in a positive mismatch situation (too-good-to-be-true situation) than in a negative mismatch situation (too-little-to-be-good situation). These effects were not hypothesized due to uncertainty about what manipulative intent (getting rid of inferior products or improving the perception of a low discount) would result in a stronger reaction by the consumers and what the resulting effect would be of perceived quality on the perceived value of a deal in situations with different levels of discount. As perceived value is determined by the ratio of perceived quality to perceived sacrifice/price, it was impossible to accurately predict what the effect would be of lower perceived quality in the context of higher discount vs. higher perceived quality in the context of lower discount on the perceived value of a deal and purchase intentions. However, the results showed that the participants did not rate product quality as significantly different across the two mismatch conditions; therefore, the perceived value of a price promotion with a higher discount (lower price) was significantly higher than that of a price promotion with a lower discount.

In summary, the results provide support for our conceptual model and most of our hypotheses. Mismatch situations activated attributional thinking and always resulted in significantly lower perceptions of the retailer credibility and product quality. However, differences in the participants' perceptions of the value of a deal and their purchase intentions across match and mismatch situations were significant only at a high discount level when the participants were more involved in the situation. The strength of the cue consistency/inconsistency factor was also demonstrated by non-significant differences in the respondents' purchase intentions across price promotions offering 5% and 50% discounts (at low time restrictions level).

9.2 DISCUSSION OF THE RESULTS OF STUDY TWO

While study one tests situations when consumers perceive price promotions to be 'caused' by internal motivation of a retailer, study two examines the effect of the external cause in mismatch situations on deal evaluations as stated in hypotheses 11 and 12.

The presence of an external cause was assumed to shift responsibility for offering a price promotion from a retailer to some external circumstances and to change the participants' perception of mismatch conditions. While the combination of price promotion attributes remained counter to the consumers' expectations for typical price promotions, the introduction of an external cause that provided an alternative explanation of why the price promotion is offered made the participants perceive a combination of price promotion attributes as expected for such 'atypical' situations. In general, it was assumed that the respondents' perception of mismatch conditions with an external cause would be similar to the perception of match conditions in Study One.

The hypotheses for positive mismatch situations were developed based on the following assumptions: when consumers are offered a big discount (50% off regular price) for a suspiciously long period of time (30 days), they will infer low product quality; however, when they are offered a valid explanation as to why such a high discount is being offered for a long time (the retailer is going out of business), they should not be concerned about product quality. The retailer credibility is also likely to be significantly different across these two conditions. When no explanation is offered, consumers may assume that the sale is an opportunity for the retailer to get rid of inferior products. However, an identical retailer behavior in the context of a valid explanation is likely to be perceived as credible/expected for such a situation. It was also hypothesized that this greater assumption of a retailer credibility and perception of product quality in positive mismatch situations with external cause, compared to positive mismatch situations without external cause, will transfer to a higher perceived value of a deal and purchase intentions.

Hypotheses for negative mismatch situations were developed based on the following assumption: when consumers are offered a negligible discount (5% off regular price) for a short period of time (1 day) they should not be concerned about product quality (due to the low discount level) but are likely to infer manipulative intent on the part of the retailer. Consumers may infer that a retailer is trying to improve the perception of a low discount by severely limiting its temporal availability (1 day only). However, when a valid explanation of why they are being offered such a low discount for such a short period of time is presented (inventory check), they

should not be concerned about the retailer credibility. Hence, the retailer credibility will be higher with the introduction of an external cause, but the perception of product quality will not be affected by an external cause factor. It was also hypothesized that a higher retailer credibility in negative mismatch situations with external cause compared to negative mismatch situations without external cause will transfer to a higher perceived value and purchase intentions.

The overall results show that an external cause factor had a significant effect only on the retailer credibility and perceived quality, and only in positive mismatch situation. However, this improved perception did not result in a higher perceived value and higher purchase intentions (though all the means were in hypothesized directions).

It was found that in positive mismatch situations the presence of an external cause (going out of business) significantly increased the participants' perceptions of the retailers' credibility and product quality. At the same time, the external cause factor did not affect the participants' perception of the value of a deal and their purchase intentions.

For negative mismatch situations it was found that an external cause factor did not have any effect on dependent variables. The participants' perceptions of the retailer credibility, product quality, value of a deal and purchase intentions were not different regardless of whether an external cause was absent or present. The absence of the effect of an external cause on the perception of product quality in negative mismatch situations was hypothesized and was supported; however, all other results were not supported. Additional analysis showed that involvement as a covariate did not change the overall picture. However, the results also demonstrate that the participants had a higher level of involvement when an external cause was present than when it was absent.

The results do not provide clear answers on two questions. First, it is not obvious why the respondents' higher perceptions of the retailer credibility and product quality in positive mismatch situation with an external cause did not transfer to higher evaluations of the value of a deal and higher purchase intentions. Second, in negative mismatch situations, the respondents did not rate condition with external cause higher in terms of their perceptions of the retailer credibility, perceived value of a deal and purchase intentions. The explanation for the first finding may lie in the respondents' low familiarity with the stimulus. Indeed, the overall mean for product knowledge was relatively low: 2.13 points on a 7-point scale. Therefore, the presence of an external cause made the participants recognize the manipulative intent of a retailer and infer low product quality; however, low interest and knowledge of a product resulted in no differences in the respondents' evaluations of a deal and their purchase intentions. On the other hand, the absence of any effects in the negative mismatch situation may be explained by the respondents' lower motivation to process the low discount sale and the validity of an external cause. The results of the analysis of pooled conditions based on the type of mismatch situation revealed that the participants in positive mismatch situations had significantly higher perceptions of the value of a deal and purchase intentions. This finding indicates that the participants' perception was affected by the size of the discount. In addition to low interest due to low product knowledge, the participants were less motivated to process a sale in a negative mismatch situation than in a positive mismatch situation.

The strength of an external cause could also explain the observed effects. In a positive mismatch situation, an external cause (going out of business) may be perceived as more valid than that in a negative mismatch situation (inventory check). The going out of business situation

is very realistic in a retail environment, while the external cause that was provided in the negative mismatch situation of an inventory check was much weaker and sounded more artificial. While marketplace practice provides some examples of ‘‘positive mismatch” situations with reasonable justification (e.g. going out of business, technologically obsolete products), a practice when a retailer offers too little value and justify it somehow may be nonexistent. Even the retailer financial troubles or competitive pressure may not be perceived as a good reason to provide too little value. Therefore, the introduction of the external cause in a negative mismatch situation did not have any effect, though the respondents were more involved in this condition (when an external cause was present).

In summary, the results provide partial support for our conceptual model and the effect of locus of causation on deal evaluations in mismatch situations. The participants could differentiate between mismatch situations with and without external causes and were more involved in situations when an external cause was present than when it was absent. The introduction of an external cause in positive mismatch situations resulted in significantly higher perceptions of the retailer credibility and product quality, even when involvement was covaried out. However, because of the respondents' low familiarity with a product and consequently low interest in a stimulus, the respondents' evaluations of the value of a deal and their purchase intentions in positive mismatch conditions were not affected by an external cause factor. At the same time, an external cause factor did not affect any dependent variable in negative mismatch situations. Although the respondents were more involved when an external cause was present than when it was absent, the level of discount of 5% and the relatively weak justification for the sale of inventory check, probably left the respondents indifferent between these two conditions. The overall results of Study Two support most of hypotheses.

9.3 THEORETICAL CONTRIBUTION

Price promotion is a very popular and fast-growing promotional tool. In the era of decreased efficiency of mass advertising, retailers rely more and more on price promotions as a means of keeping their current consumers and attracting new consumers. However, research about price promotion practices provides evidence that price promotion may have both positive and negative effects.

The present research contributes to our understanding of how consumers process and evaluate price promotions and adds to the growing body of literature on price promotion. This study demonstrates the impact of the consistency/inconsistency of price promotion cues, and the locus of causation on consumers' deal evaluations shows how consumers react to typical and atypical price promotions and explains the psychological mechanisms behind consumers' reactions. The contribution of this research lies in four areas. First, a comprehensive conceptual model was developed that incorporates the attribution perspective and accounts for both typical and atypical price promotions. Second, this research shows the powerful role that time restrictions play during evaluation of atypical price promotions. Only a few studies have investigated the effect of time restrictions on consumers' deal evaluations, and no study systematically varied both price promotion attributes in order to understand the interaction between these two integral attributes of any price promotion. Third, the cue utilization framework was applied in the price promotion context, and this study showed how the cue

utilization process is different for typical and atypical price promotions. Finally, the investigation of consumers' covariance beliefs in the price promotion domain revealed that consumers' reactions on price promotions are based on these beliefs.

The results of the first study showed that consumers are able to recognize typical and atypical price promotions. Typical price promotions are likely to be processed in a heuristic manner and deal evaluations in such situations can be predicted by a linear model. However, when consumers face atypical price promotions they may generate negative attributions about the quality of a promoted product, retailer credibility or both. As a result deal evaluations in mismatch situations will be adversely affected by consumers' negative attributions and will always be lower than those in match situations. The second study showed that consumers' negative attributions about atypical price promotions may be cancelled when a retailer acts under some external circumstances over which it does not have control. However, validity of an external cause and the size of discount may decrease consumers' involvement and consequently 'nullify' the effect of the locus of causation.

9.4 MANAGERIAL IMPLICATIONS

This research emphasizes the importance of thorough design and implementation of price promotion campaigns to avoid potentially harmful consequences. The process of determining price promotion attributes (discount and time restrictions) should take into account possible consumers' reactions that may or may not coincide with managers' plans. Consumers are very sensitive to marketers' behavior and aware of tricks that some businesses may use to achieve their financial goals. This research indicates that atypical price promotions lower the consumer's perception of product quality and retailer credibility, which is good news for public policy makers. Consumers penalize retailers they perceive to be manipulative.

This research presents time restrictions as a powerful factor in evaluating price promotions. Sometimes managers think mainly about the size of discount they will offer during price promotion campaign. However, when the discount is relatively high or relatively low managers should use appropriate time restrictions to prevent the generation of negative consumers' attributions. Based on the overall price promotion budget managers can plan the depth and frequency of price promotions, but should not forget about the second price promotion attribute.

One more managerial implication relates to the locus of causation. Consumers may begin questioning why a high discount is offered for a long time period and may attribute price promotion to low product quality even if a company has some advantages over other market players and is able to offer great value to its customers. This research suggests that in such situations in order to cancel negative consumer attributions, a company should communicate the "atypical" causes behind its atypical price promotion activity. On the other hand, low and highly restricted times for discounts may be perceived as offensive. Therefore, if a company experiences financial problems, it may be better not to offer any price promotion at all. Managers might need to be more concerned about consistency of price promotion attributes and be sure that consumers will not suspect manipulative motives.

9.5 LIMITATIONS

Two major limitations of our research are the experimental settings and the student sample. Real world situations are much richer than experimental settings; therefore, results must be interpreted with care. It is difficult to make generalizations about the findings of most studies because factors of interest are examined in isolation, while in real retailing settings, consumers are exposed to and may assess multiple cues. Additionally, purchase intentions were measured instead of actual behavior.

It should be also noted that a minor limitation of simulation studies like this one is that researchers may not provide a sufficient stimulus for respondents to engage in the type of causal reasoning that is usually associated with attributional processes (Martinko and Thomson, 1998). Additionally, stimuli that were used in two studies were not highly familiar to respondents.

Results reported for student samples may not hold for other groups of consumers. Replication of these studies with non-student samples and with stimuli from different product categories may improve the external validity of our results.

9.6 FUTURE RESEARCH

This research revealed questions that deserve further examination. For example, it is not clear why a negative mismatch situation resulted not only in low retailer credibility perceptions as hypothesized but also in low perceptions of product quality. This finding is counter to the assumption that consumers will not be concerned about product quality in the context of low discount regardless of whether it's a match or mismatch situation (i.e., low discount is not going to be associated with low product quality).

Questions relating to the effect of discount on the perceived value and purchase intentions in mismatch situations also need to be addressed in more detail. It's not clear at what point consumers will continue to rate price promotions offering higher discounts better than price promotions offering lower discounts. It may be possible that at a very high discount level diminishing product quality perception will override discount attractiveness.

Introducing into the scope of research other factors that may affect consumers' deal perceptions like brand name or reference prices represents a very promising direction for future research. Purohit and Srivastava (2001) emphasized the importance of such "multi-cue" research.

Another question that could be of interest to marketing practitioners is what configurations of price promotion attributes create a perception of cue inconsistency? Though such perceptions will vary from one product category to another and from one consumer to another, businesses that know their target audience may be motivated to undertake such research. Finally, our findings need to be replicated in other product categories as well.

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APPENDIX A
PRETEST ONE: QUESTIONNAIRE FOR MATCHING EXPERIMENT (DISCOUNT GIVEN CONDITION)

****

Name _____

Price Promotion Survey

Privacy Terms:

Thank you for choosing to participate in this survey.

This survey is voluntary and your responses will remain **completely confidential**, i.e., they won't be released in any individually identifiable form. All data will be coded into numbers, thus preserving anonymity.

Introduction:

You will be asked to answer questions about different price promotions for three product categories – jeans, DVD players, and shampoos.

Please remember that this is not a test and, therefore, there is no right or wrong answers. What we are interested in is your genuine opinion.

****

Instructions

Imagine that you are going to buy ***JEANS***. Below you will find seven different price promotion situations - they are different in terms of the amount of discount offered. Please provide time restrictions (within '1 hour' to '3 month' range) that you would expect to be imposed in each situation.

Example: If I see '75% off sale' I would expect it will last for____ (put your estimation of duration of sale).

Discount	*Duration of Sale*
More than 75 % off regular price	_____
50 – 75% off regular price	_____
35 - 50 % off regular price	_____
20 - 35 % off regular price	_____
10 - 20 % off regular price	_____
5 - 10 % off regular price	_____
0 - 5 % off regular price	_____

When sellers offer a discount for jeans, what is the typical amount of the discount?

%_____ off regular price

****

Now imagine the same scenario for a ***DVD PLAYER*** and provide time restrictions (within '1 hour' to '3 month' range) that you would expect to be imposed in each situation.

More than 75 % off regular price	_____
50 – 75% off regular price	_____
35 - 50 % off regular price	_____
20 - 35 % off regular price	_____

10 - 20 % off regular price _____

5 - 10 % off regular price _____

0 - 5 % off regular price _____

When sellers offer a discount for DVD Players, what is the typical amount of the discount?

%_____ off regular price

****

Instructions

Now imagine the same scenario for ***SHAMPOO*** and provide time restrictions (within '1 hour' to '3 month' range) that you would expect to be imposed in each situation.

Discount	*Duration of Sale*
More than 75 % off regular price	_____
50 – 75% off regular price	_____
35 - 50 % off regular price	_____
20 - 35 % off regular price	_____
10 - 20 % off regular price	_____
5 - 10 % off regular price	_____
0 - 5 % off regular price	_____

When sellers offer a discount for shampoos, what is the typical amount of the discount?

%_____ off regular price

Your Gender (*circle one*) M F

********** ***THANK YOU FOR YOUR PARTICIPATION!!!*** **********

APPENDIX B
PRETEST ONE: QUESTIONNAIRE FOR MATCHING EXPERIMENT (TIME RESTRICTIONS GIVEN CONDITION)

****

Name _____

Price Promotion Survey

Privacy Terms:

Thank you for choosing to participate in this survey.

This survey is voluntary and your responses will remain **completely confidential**, i.e., they won't be released in any individually identifiable form. All data will be coded into numbers, thus preserving anonymity.

Introduction:

You will be asked to answer questions about different price promotions for three product categories – jeans, DVD players, and shampoos.

Please remember that this is not a test and, therefore, there is no right or wrong answers. What we are interested in is your genuine opinion.

****

****

Instructions

Imagine that you are going to buy ***JEANS***. Below you will find five different price promotion situations - they are different in terms of time restrictions. Please provide the amount of discount that you would expect in each situation. *Example: If I see 'only 1 hour sale' I would expect to receive ___ (put your estimation of a discount) % off regular price.*

Sale Duration	*Discount*
1 hour sale	_____ % off regular price
1 day sale	_____ % off regular price
1 week sale	_____ % off regular price
1 month sale	_____ % off regular price
3 month sale	_____ % off regular price

****

Instructions

Now imagine the same scenario for ***DVD PLAYER*** and provide the amount of discount (% off regular price) that you would expect in each situation.

Sale Duration	*Discount*
1 hour sale	____ % off regular price
1 day sale	____ % off regular price
1 week sale	____ % off regular price
1 month sale	____ % off regular price
3 month sale	____ % off regular price

****

****

Instructions

Now imagine the same scenario for ***SHAMPOO*** and provide the amount of discount (% off regular price) that you would expect in each situation.

Sale Duration	*Discount*
1 hour sale	____ % off regular price
1 day sale	____ % off regular price
1 week sale	____ % off regular price
1 month sale	____ % off regular price
3 month sale	____ % off regular price

Your Gender (*circle one*) M F

********** ***THANK YOU FOR YOUR PARTICIPATION!!!*** **********

APPENDIX C
PRETEST TWO: STIMULUS AND QUESTIONNAIRE FOR LOW DISCOUNT CONDITION.

****

Promotion Survey

Name _____

Privacy terms

Thank you for participating in this survey.

This survey is voluntary and your responses will be kept ***strictly confidential***. That is, they won't be released in any individually identifiable form. All data will be coded into numbers and combined with that of other participants, thus preserving anonymity.

Instructions

Please carefully examine the deal on the next page and answer the questions that follow.

Please remember that this is not a test and, therefore, there is no right or wrong answers. In most cases ***your first impression reflects your real attitude or opinion***.

You may now turn the page and begin.

****

SALE!

INFLATABLE MASSAGE CHAIR

Three intensity levels
Nine functions
Time control
Remote
Electric pump

5 % OFF REGULAR PRICE

Regular price $ 149.99

1. Based on your shopping experience, during what time period this discount is likely to be offered?

_____ (*provide your estimate in hours, days, weeks or months*)

The following questions are about ***the sale*** that was just presented to you.
You may refer back to the advertisement when answering these questions.
Please circle the number that most closely reflects your belief or opinion.

1. How believable do you think this sales promotion is?

Not Believable at all	1	2	3	4	5	6	7	*Very Believable*

2. The amount of the discount in the advertisement is:

Low	1	2	3	4	5	6	7	*High*

The following questions are about ***your knowledge*** of inflatable massage chairs.

3. I feel very knowledgeable about various inflatable massage chairs.

Strongly Disagree	1	2	3	4	5	6	7	*Strongly Agree*

****

<u>Demographic Questions</u>

1. Gender (*circle one*) <u>M</u> <u>F</u>

2. Age _____

3. Classification (*check one*) Freshman ___ Sophomore ___ Junior ___ Senior ___

******* **THANK YOU VERY MUCH FOR YOUR PARTICIPATION!!!** ******

Please remain seated. The instructor will collect the completed survey from you after everyone is done.

APPENDIX D
PRETEST TWO. STIMULUS AND QUESTIONNAIRE FOR HIGH DISCOUNT CONDITION.

****

Promotion Survey

Name _____

Privacy terms

Thank you for participating in this survey.

This survey is voluntary and your responses will be kept ***strictly confidential***. That is, they won't be released in any individually identifiable form. All data will be coded into numbers and combined with that of other participants, thus preserving anonymity.

Instructions

Please carefully examine the deal on the next page and answer the questions that follow.

Please remember that this is not a test and, therefore, there is no right or wrong answers. In most cases ***your first impression reflects your real attitude or opinion***.

You may now turn the page and begin.

****

SALE!

INFLATABLE MASSAGE CHAIR

Three intensity levels
Nine functions
Time control
Remote
Electric pump

50 % OFF REGULAR PRICE

Regular price $ 149.99

1. Based on your shopping experience, during what time period this discount is likely to be offered?

_____ (*provide your estimate in hours, days, weeks or months*)

The following questions are about ***the sale*** that was just presented to you.
You may refer back to the advertisement when answering these questions.
Please circle the number that most closely reflects your belief or opinion.

1. How believable do you think this sales promotion is?

Not Believable at all	1	2	3	4	5	6	7	*Very Believable*

2. The amount of the discount in the advertisement is:

Low	1	2	3	4	5	6	7	*High*

The following questions are about ***your knowledge*** of inflatable massage chairs.

3. I feel very knowledgeable about various inflatable massage chairs.

Strongly Disagree	1	2	3	4	5	6	7	*Strongly Agree*

****

<u>Demographic Questions</u>

1. Gender (*circle one*) <u>M</u> <u>F</u>

2. Age _____

3. Classification (*check one*) Freshman ___ Sophomore ___ Junior ___ Senior ___

******* **THANK YOU VERY MUCH FOR YOUR PARTICIPATION!!!** ******

Please remain seated. The instructor will collect the completed survey from you after everyone is done.

APPENDIX E
PRETEST THREE: SCENARIO AND QUESTIONNAIRE FOR RANKING EXPERIMENT.

****

Promotion Survey

Name _____

Privacy terms

Thank you for participating in this survey.

This survey is voluntary and your responses will be kept ***strictly confidential***. All data will be coded into numbers and combined with that of other participants, thus preserving anonymity.

Now turn the page and read the scenario and instructions.

****

****

Scenario and Instructions

Scenario

Imagine that you were hired as **a marketing consultant** by a company producing inflatable massage chairs. The company is going to run a sales campaign and is interested in your opinion. The company is considering the following sale options:

a) 5% off regular price/1 day sale

b) 50% off regular price/1 day sale

c) 5% off regular price/30 day sale

d) 50% off regular price/30 day sale

*Instructions (***1 – the highest or the best, 4 – the lowest or the worst***)*

I) Rank these options in terms of which sale would provide the best value for shoppers.

Option	*Rank*
a) 5% off regular price/1 day sale	_____
b) 50% off regular price/1 day sale	_____
c) 5% off regular price/30 day sale	_____
d) 50% off regular price/30 day sale	_____

II) Rank these options in terms of which sale would suggest the highest chair quality.

Option	*Rank*
a) 5% off regular price/1 day sale	_____
b) 50% off regular price/1 day sale	_____
c) 5% off regular price/30 day sale	_____
d) 50% off regular price/30 day sale	_____

III) Rank these options in terms of which sale would generate maximum sales.

Option	*Rank*
a) 5% off regular price/1 day sale	_____
b) 50% off regular price/1 day sale	_____

c) 5% off regular price/30 day sale _____

d) 50% off regular price/30 day sale _____

IV) Rank these options in terms of which sale would suggest the highest retailer's credibility.

Option *Rank*

a) 5% off regular price/1 day sale _____

b) 50% off regular price/1 day sale _____

c) 5% off regular price/30 day sale _____

d) 50% off regular price/30 day sale _____

V) Rank these options in terms of their believability.

Option *Rank*

a) 5% off regular price/1 day sale _____

b) 50% off regular price/1 day sale _____

c) 5% off regular price/30 day sale _____

d) 50% off regular price/30 day sale _____

VI) What do you think is the best option overall? (*check one*) a) __ b) __ c) __ d) __

VII) What do you think is the worst option overall? (*check one*) a) __ b) __ c) __ d) __

****

1. Gender (*circle one*) M F

2. Age _____

3. Classification (*check one*) Freshman ___ Sophomore ___ Junior ___ Senior ___

******** THANK YOU VERY MUCH FOR YOUR PARTICIPATION!!! *******

APPENDIX F
STUDY ONE: STIMULUS FOR HIGH VALUE MATCH CONDITION -- HIGH DISCOUNT AND HIGH TIME RESTRICTIONS.

SALE! Today ONLY!

INFLATABLE MASSAGE CHAIR

Three intensity levels
Nine functions
Time control
Remote
Electric pump

50 % OFF REGULAR PRICE !

1 DAY SALE !

Regular price $ 149.99

APPENDIX G
STUDY ONE: STIMULUS FOR LOW VALUE MATCH CONDITION -- LOW DISCOUNT AND LOW TIME RESTRICTIONS

SALE! This Month ONLY!

INFLATABLE MASSAGE CHAIR

Three intensity levels
Nine functions
Time control
Remote
Electric pump

5 % OFF REGULAR PRICE !

30 DAY SALE !

Regular price $ 149.99

APPENDIX H
STUDY ONE: STIMULUS FOR POSITIVE MISMATCH CONDITION -- HIGH DISCOUNT AND LOW TIME RESTRICTIONS

SALE! This Month ONLY!

INFLATABLE MASSAGE CHAIR

Three intensity levels
Nine functions
Time control
Remote
Electric pump

50 % OFF REGULAR PRICE !

30 DAY SALE !

Regular price $ 149.99

APPENDIX I
STUDY ONE: STIMULUS FOR NEGATIVE MISMATCH CONDITION -- LOW DISCOUNT AND HIGH TIME RESTRICTIONS

SALE! Today ONLY!

INFLATABLE MASSAGE CHAIR

Three intensity levels
Nine functions
Time control
Remote
Electric pump

5 % OFF REGULAR PRICE !

1 DAY SALE !

Regular price $ 149.99

APPENDIX J
STUDY ONE: SCENARIO AND QUESTIONNAIRE FOR STUDY ONE.

****

Promotion Survey

Name _____

Privacy terms

Thank you for participating in this survey.

This survey is voluntary and your responses will be kept ***strictly confidential***. That is, they won't be released in any individually identifiable form. All data will be coded into numbers and combined with that of other participants, thus preserving anonymity.

Purpose

The purpose of this survey is to learn about consumers' opinions on different sales promotions.

Now turn the page and read the scenario and instructions.

****

****

Scenario and Instructions

Scenario

Imagine that you are considering purchasing an ***inflatable massage chair***. You have looked at several models at different stores, checked Consumer Reports and found that ***prices on such chairs vary between $140 and $160***.

Now imagine that you see a sales promotion on such chair. The copy of the advertisement is shown on the next page.

Instructions

Please carefully examine the deal (not the execution of the advertisement) on the next page and answer the questions that follow.

Please remember that this is not a test and, therefore, there is no right or wrong answers. In most cases ***your first impression reflects your real attitude or opinion***.

You may now turn the page and begin.

****

What is your opinion on this sales promotion?

****

The following questions are about ***the deal*** that was just presented to you.
You may refer back to the advertisement when answering these questions.
Please circle the number that most closely reflects your belief or opinion.

1. With this deal the advertised chair is a very good value for the money.

Strongly Disagree	1	2	3	4	5	6	7	*Strongly Agree*

2. The probability that I would consider buying this chair is:

Low	1	2	3	4	5	6	7	*High*

3. My willingness to buy the advertised chair is:

Low	1	2	3	4	5	6	7	*High*

****

The following questions are about ***the chair***.

1. I think that the quality of this chair is:

Bad	1	2	3	4	5	6	7	*Good*

2. How certain are you that this chair will perform satisfactorily?

Uncertain	1	2	3	4	5	6	7	*Certain*

3. The likelihood that the advertised chair would be dependable is:

Low	1	2	3	4	5	6	7	*High*

****

The following questions are about ***your attitude toward the retailer offering the deal.***

I believe that the retailer offering this deal is:

1. *Not Trustworthy*	1	2	3	4	5	6	7	*Trustworthy*

2. *Insincere*	1	2	3	4	5	6	7	*Sincere*

****

The following questions are about ***the deal*** that was presented to you at the beginning of this survey.

1. How believable do you think this sales promotion is?

Not Believable at all	1	2	3	4	5	6	7	*Very Believable*

2. The combination of the discount amount and time duration in this sales promotion is:

Unexpected	1	2	3	4	5	6	7	*Expected*

3. I found the advertisement for the chair to be:

Not Relevant to me	1	2	3	4	5	6	7	*Relevant to me*

****

The following questions are about ***the deal*** that was presented to you at the beginning of this survey.

Please ***do not refer back*** to the advertisement when answering these questions.

1. The amount of the discount in the advertisement is:

Low	1	2	3	4	5	6	7	*High*

2. Time duration in the advertisement is:

Short	1	2	3	4	5	6	7	*Long*

****

The following questions are about ***your knowledge*** of inflatable massage chairs and ***your general attitude toward sales promotions***.

1. I feel very knowledgeable about various inflatable massage chairs.

Strongly Disagree	1	2	3	4	5	6	7	*Strongly Agree*

2. Compared to most people, I am more likely to buy brands that are on sale.

Strongly Disagree	1	2	3	4	5	6	7	*Strongly Agree*

3. Generally speaking, the higher the price of a product, the higher the quality.

Strongly Disagree	1	2	3	4	5	6	7	*Strongly Agree*

****

Questions that follow are very important. They measure ***your attitude towards various types of tasks.*** Please circle the number that most closely reflects your character.

1. I don't like to have to do a lot of thinking.

Extremely Unlike Me	1	2	3	4	5	6	7	*Extremely Like Me*

2. I try to avoid situations that require thinking in depth about something.

Extremely Unlike Me	1	2	3	4	5	6	7	*Extremely Like Me*

3. I prefer to do something that challenges my thinking ability rather than something that requires little thought.

Extremely Unlike Me	1	2	3	4	5	6	7	*Extremely Like Me*

4. I prefer complex to simple problems.

Extremely Unlike Me	1	2	3	4	5	6	7	*Extremely Like Me*

5. Thinking hard and for a long time about something gives me little satisfaction.

Extremely Unlike Me	1	2	3	4	5	6	7	*Extremely Like Me*

****

Demographic Questions

1. Gender (*circle one*) M F

2. Age _____

3. Classification (*check one*) Freshman ___ Sophomore ___ Junior ___ Senior ___

*********** *THANK YOU VERY MUCH FOR YOUR PARTICIPATION!!!* **********

APPENDIX K
STUDY ONE: ESTIMATION OF COHEN'S KAPPA.

Cohen's kappa = $(F_o - F_c)/(N - F_c)$

and $F_c = N*\sum(MD_{\text{coder 1}} * MD_{\text{coder 2}})_{\text{measure i}}$

where
N – total number of thoughts
F_o – total number of judgments on which both coders agreed
F_c – total number of judgments for which agreement is expected by chance
MD – marginal distribution
i – measure number (overall 8 measures)

$F_c = 135*[(0.030 * 0.022) + (0.304 * 0.311) + (0.022 * 0.007) +$
$+ (0.022 * 0.030) + (0.289 * 0.296) + (0.015 * 0.015) +$
$+ (0.089 * 0.081) + (0.230 * 0.237)] =$ **32.8733**

Cohen's kappa = (121 – 32.8733)/(135 – 32.8733) = **0.863**

\

APPENDIX L
STUDY TWO: STIMULUS FOR NEGATIVE MISMATCH WITH EXTERNAL CAUSE PRESENT CONDITION.

Dear Customers!

Today we are doing our annual inventory check.
We are sorry for any inconvenience you are experiencing.

As a token of our appreciation for your patience, we offer you a discout.

INFLATABLE MASSAGE CHAIR

Three intensity levels
Nine functions
Time control
Remote
Electric pump

5 % OFF REGULAR PRICE * !

1 DAY SALE !

Regular price $ 149.99

* Discount for the inconvenience

APPENDIX M
STUDY TWO: STIMULUS FOR POSITIVE MISMATCH WITH EXTERNAL CAUSE PRESENT CONDITION.

SALE!

Going out of Business.

Everything MUST go!

INFLATABLE MASSAGE CHAIR

Three intensity levels
Nine functions
Time control
Remote
Electric pump

50 % OFF REGULAR PRICE !

30 DAY SALE * !

Regular price $ 149.99

* Store lease ends in one month.

APPENDIX N
STUDY TWO: SCENARIO FOR NEGATIVE MISMATCH WITH EXTERNAL CAUSE PRESENT CONDITION.

****

Scenario and Instructions

Scenario

Imagine that you are considering purchasing an ***inflatable massage chair***. You have looked at several models at different stores, checked Consumer Reports, asked your friends and found that ***prices on such chairs usually vary between $140 and $160***.

Now imagine that you enter a store selling such chairs and see that there's an inventory check going on in this store. Sales assistants are busy and are not available to answer questions. There are also people moving some furniture around the store. Then you notice a big advertisement near the area with inflatable massage chairs. The copy of the advertisement is shown on the next page.

Instructions

Please carefully examine the deal on the next page (not the execution of the advertisement) and answer questions that follow.

****

APPENDIX O
STUDY TWO: SCENARIO FOR POSITIVE MISMATCH WITH EXTERNAL CAUSE PRESENT CONDITION.

****

Scenario and Instructions

Scenario

Imagine that you are considering purchasing an ***inflatable massage chair***. You have looked at several models at different stores, checked Consumer Reports, asked your friends and found that ***prices on such chairs usually vary between $140 and $160***.

Now imagine that one of your friends brought you an advertisement for such a chair. He told you that the store selling these chairs is ***going out of business*** and they are offering great prices. He also told you that his parents know the store's owners and they are really closing their business, not like some other stores that seem to go out of business every other month. The copy of the advertisement is shown on the next page.

Instructions

Please carefully examine the deal on the next page (not the execution of the advertisement) and answer questions that follow.

****

APPENDIX P
STUDY TWO: QUESTIONNAIRE FOR STUDY TWO.

****

Promotion Survey

Name _____

Privacy terms

Thank you for participating in this survey.

This survey is voluntary and your responses will be kept ***strictly confidential***. That is, they won't be released in any individually identifiable form. All data will be coded into numbers and combined with that of other participants, thus preserving anonymity.

Purpose

The purpose of this survey is to learn about consumers' opinions on different sales promotions.

Now turn the page and read the scenario and instructions.

****

The following questions are about ***the deal*** that was just presented to you.
You may refer back to the advertisement when answering these questions.
Please circle the number that most closely reflects your belief or opinion.

1. With this deal the advertised chair is a very good value for the money.

Strongly Disagree	1	2	3	4	5	6	7	*Strongly Agree*

2. The probability that I would consider buying this chair is:

Low	1	2	3	4	5	6	7	*High*

3. My willingness to buy the advertised chair is:

Low	1	2	3	4	5	6	7	*High*

****

The following questions are about ***the chair*** presented in the advertisement.

1. I think that the quality of this chair is:

Bad	1	2	3	4	5	6	7	*Good*

2. How certain are you that this chair will perform satisfactorily?

Uncertain	1	2	3	4	5	6	7	*Certain*

3. The likelihood that the advertised chair would be dependable is:

Low	1	2	3	4	5	6	7	*High*

****

The following questions are about your ***attitude toward the retailer*** offering the deal.

I believe that the retailer offering this deal is:

1. *Not Trustworthy*	1	2	3	4	5	6	7	*Trustworthy*

2.	*Insincere*	1	2	3	4	5	6	7	*Sincere*

The following questions are about ***the deal*** that was presented to you at the beginning of this survey.

1. How believable do you think this sales promotion is?

Not Believable at all	1	2	3	4	5	6	7	*Very Believable*

2. The combination of the discount amount and length of the sale in this sales promotion is:

Unexpected	1	2	3	4	5	6	7	*Expected*

3. I found the advertisement for the chair to be:

Not Relevant to me	1	2	3	4	5	6	7	*Relevant to me*

****

Please ***do not refer back*** to the advertisement when answering these questions.

1. The amount of the discount in the advertisement is:

Low	1	2	3	4	5	6	7	*High*

2. The length of the sale in the advertisement is:

Short	1	2	3	4	5	6	7	*Long*

****

The following questions are about ***your knowledge*** of inflatable massage chairs and ***your general attitude toward sales promotions***.

1. I feel very knowledgeable about various inflatable massage chairs.

Strongly Disagree	1	2	3	4	5	6	7	*Strongly Agree*

2. Compared to most people, I am more likely to buy brands that are on sale.

Strongly Disagree	1	2	3	4	5	6	7	*Strongly Agree*

****

Questions that follow are about ***your attitude towards various types of tasks.***
Please circle the number that most closely reflects your character.

1. I don't like to have to do a lot of thinking.

Extremely Unlike Me	1	2	3	4	5	6	7	*Extremely Like Me*

2. I try to avoid situations that require thinking in depth about something.

Extremely Unlike Me	1	2	3	4	5	6	7	*Extremely Like Me*

3. I prefer to do something that challenges my thinking ability rather than something that requires little thought.

Extremely Unlike Me	1	2	3	4	5	6	7	*Extremely Like Me*

4. I prefer complex to simple problems.

Extremely Unlike Me	1	2	3	4	5	6	7	*Extremely Like Me*

5. Thinking hard and for a long time about something gives me little satisfaction.

Extremely Unlike Me	1	2	3	4	5	6	7	*Extremely Like Me*

****

Demographic Questions

1. Gender (*circle one*) M F

2. Age _____

3. Classification (*check one*) Freshman ___ Sophomore ___ Junior ___ Senior ___

******* **THANK YOU VERY MUCH FOR YOUR PARTICIPATION!!!** ******

Please remain seated. The instructor will collect the completed survey from you after everyone is done.

VITA

Igor Makienko was born in Sochi, Russia in 1962. He grew up in Sochi and moved to Moscow to attend university. In 1985 he earned his Bachelor of Science degree in mechanical engineering from Moscow Aviation Institute. For the next three years Igor worked as an engineer, designing jet engines in one of the leading airspace companies in the Soviet Union.

In 1989 Igor received his master's degree in journalism from Moscow State University. From 1989 to 1994 Igor was an editor and staff writer of entertainment programs in Ostankino – the major national TV and Radio Company. Igor has created around 200 radio and television programs and published more than 100 articles in Soviet and Russian newspapers and magazines (mainly humor stories). In 2001 he published his first book of short humor stories. Igor is a member of the Journalists Union of Russia since 1998. While in Ostankino he was among the first to introduce sponsorship for radio programs.

In 1994 Igor moved into advertising and marketing. These areas were very challenging in the new growing market economy of Russia. During the next four years Igor worked in leading international advertising agencies (DMB&B and United Campaigns-Publicis) as a media planner and media analyst. Igor planned advertising campaigns in Russia, Belarus and Ukraine for such clients as Proctor and Gamble, Nike, Revlon, Cadbury and Whirlpool. He was also a marketing manager for Bacardi-Martini Group and a brand manager for PBI Paris (Lancôme).

While working in industry Igor was pursuing his master's degree in international economics which he received in 1997 from the Russian Foreign Trade Academy. Desire to learn more about market economy also brought Igor to the United Kingdom (1994), USA (1995) and Australia (1996) where he completed courses of studies and received certificates in management.

In 1998 Igor was awarded a US Government scholarship and joined a master's program in mass communication at Louisiana State University, which he successfully completed in the summer of 2000. Later Igor began doctoral study in the Department of marketing at Louisiana State University. As a student Igor presented his papers at national conferences and coauthored three journal articles. He was also a Doctoral Consortium Fellow at the Society of Marketing Advances 2004 conference.

In 2005 before completing his dissertation, Igor joined Loyola University New Orleans as a visiting professor. In 2008 Igor moved to the University of Nevada, Reno, where he is currently an assistant professor in the Managerial Sciences department. In December 2008 Igor will receive the Doctor of Philosophy degree with a major in marketing and two minors: in economics and experimental statistics.