FACTORS INFLUENCING CONSUMERS' WARRANTY PURCHASE: THE ROLE OF GOAL ORIENTATION, INDIVIDUAL MOOD, AND FRAMING

By

AMJAD AHMAD ABU ELSAMEN

Bachelor of Business Administration
University of Jordan
Amman, Jordan
2000

Master of Business Administration
University of Jordan
Amman, Jordan
2003

Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
DOCTOR OF PHILOSOPHY
July, 2009

FACTORS INFLUENCING CONSUMERS' WARRANTY PURCHASE: THE ROLE OF GOAL ORIENTATION, INDIVIDUAL MOOD, AND FRAMING

Dissertation Approved:

John C. Mowen
Dissertation Adviser

Xiang Fang

Alex Zablah

James Pappas

A. Gordon Emslie
Dean of the Graduate College

PREFACE

This dissertation investigated how individuals' mood and goal orientation interact with whether a decision is framed as a loss or gain to influence their decision to buy a car warranty. Additionally, the psychometric properties of the goal orientation construct were examined. This dissertation employed two studies. The first examined the psychometric properties of the goal orientation construct, and the second investigated a proposed three-way interaction among mood, goal orientation, and decision framing.

In Study 1, a series of confirmatory factor analyses indicated that the goal orientation scale should be shortened in length to 10 items--5 of which measure promotion orientation and 5 of which measure prevention orientation. The two scales were shown to have good discriminant validity. The nomological network for the goal orientation construct was examined based upon the recommendations of the general hierarchical model (Mowen and Voss 2008). The structural relationships revealed that goal orientation was better specified as two constructs than as a single construct because the antecedents and consequences of the two constructs were different.

An experiment was conducted in the second study. As predicted, the results revealed a significant three-way interaction among mood, prevention orientation, and whether the problem was framed in the gain or the loss domain. For prevention-oriented individuals, when a maximum fit occurred (i.e., prevention oriented individuals in a sad mood, and exposed to loss-framed information), the likelihood of buying a car warranty

decreased. These results hold only when controlling for purchase risk, situational risk, information diagnosticity, and arousal needs. In contrast, the expected three-way interaction among mood, frame, and promotion orientation was not significant. Theoretical, managerial and policy implications were discussed, and research limitations and future research avenues were presented.

ACKNOWLEDGMENTS

The words in my dictionary are not enough to salute my friend and mentor, Dr. Mowen, for his unconditional support and countless hours of meetings throughout the years to make this work rise to the surface. I wish to express my sincere gratitude to my committee members, Dr. Zablah, Dr. Fang, and Dr. Pappas for their insightful direction throughout my dissertation. The faculty members and doctoral students at Spears School of Business have been my examples in researching and teaching. I thank them for their inspirations. I also wish to especially thank my family who gave me the encouragement and the emotional support throughout my years of studying.

TABLE OF CONTENTS

Chapter Page

LIST OF TABLES

Table Page

LIST OF FIGURES

Figure Page

NOMENCLATURE

GO	Goal Orientation
alpha	Cronbach's Alpha
df	Degrees of Freedom
EFA	Exploratory Factor Analysis
CFA	Confirmatory Factor Analysis
F	*F* – Test
T	*T*-Test
p	*p* – value

LIST OF SYMBOLS

α	Cronbac̲h'̲s Alpha
χ^2	Chi-Square

CHAPTER I

INTRODUCTION

Consider the following two scenarios:

Scenario 1:

You feel very happy because you just passed your final exams, and you are getting ready to graduate. At the same time, you are looking forward to getting a new car. You find a car in a dealership nearby in Oklahoma. The car has 40,000 miles on it and the manufacturer's warranty has expired. The car is priced at $10,000, which is fair because the price is slightly lower than the Kelly Blue Book value.

A mechanic that you trust goes with you to the dealership to inspect the car. The car seems to be operating well. Since it is a used car, within the first two years, the mechanic tells you, there is a 75% chance that the car will not have any problems and a 25% chance that it will have mechanical problems costing $2000 to fix.

Currently, the car has no warranty. However, before finalizing the deal, the dealer offers you the chance to buy a 2 year warranty, for a premium of $500, that will cover all repair expenses if a problem occurs.

Buying a warranty means you might SAVE money

A. If you buy the warranty, you are certain of **SAVING** $1,500 no matter what happens.

B. If you do not buy the warranty, there is a 75% chance that you will **SAVE** $2,000 and a 25% chance that you will **SAVE** nothing.

Scenario 2:

You feel very happy because you just passed your final exams, and you are getting ready to graduate. At the same time, you are looking forward to getting a new car. You find a car in a dealership nearby in Oklahoma. The car has 40,000 miles on it and the manufacturer's warranty has expired. The car is priced at $10,000, which is fair because the price is slightly lower than the Kelly Blue Book value.

A mechanic that you trust goes with you to the dealership to inspect the car. The car seems to be operating well. Since it is a used car, within the first two years, the mechanic tells you, there is a 75% chance that the car will not have any problems and a 25% chance that it will have mechanical problems costing $2000 to fix.

Currently, the car has no warranty. However, before finalizing the deal, the dealer offers you the chance to buy a 2 year warranty, for a premium of $500, that will cover all repair expenses if a problem occurs.

Buying a warranty means you might SPEND money

A. If you buy the warranty, you are certain of **SPENDING** $500 no matter what happens.

B. If you do not buy the warranty, there is 75% chance that you will **SPEND** nothing and 25% chance that you will **SPEND** $2,000.

The above scenarios illustrate situations in which consumers face risk when buying a car. This risk can be reduced by purchasing a warranty. In addition, the scenarios introduce the role of affect in high-involvement contexts. Decision-making under risk and uncertainty has been an active research topic over the years. Both psychologists and economists have made important theoretical and empirical contributions to the study of decision-making under risk, for example expected utility and subjective expected utility theories. In addition, research in the field has identified a wide range of anomalies, which have fostered the emergence of theories such as prospect theory (Kahneman and Tversky, 1979). Prospect theory posits that choices in risky situations depend primarily on peoples' assessment of the severity and likelihood of possible outcomes. Accordingly, people evaluate decision alternatives by expressing their outcomes as either gains or losses in comparison to a specific reference point. Kahneman and Tversky (1979) also stated that the pain associated with a loss is greater than the pleasure associated with an equivalent gain, which results in the loss-aversion phenomenon.

A number of marketing studies draw upon prospect theory, either to derive their hypotheses or support the results of their studies (Diamond, 1988; Kalwani and Yim, 1992; Hardie, Johnson, and Fader, 1993; and Dhar and Wertenbroch, 2000). Despite this support, however, inconsistencies have been found in the loss-aversion predictions of prospect theory. Based on previous research, Novemsky and Kahneman (2005) identified four moderators for loss aversion: (1) the substitutability of goods in an exchange, (2) a shorter duration of ownership (3), availability of expendable resources, and (4) alternative uses for the money.

In this dissertation, I propose that additional anomalies impact prospect theory predictions. Significant and important factors influence individuals' choices. Two of these factors are the effects of feelings (affect) and whether an individual has a promotion or prevention goal orientation. Over the years, affect has been found to influence risk perception (Johnson and Tversky, 1983; Keller, Lipkus, and Rimer, 2003; Fedorikhin and Cole, 2004) and researchers have identified factors that influence how affect can bias individual judgment (Forgas, 1995; Lerner and Keltner, 2001; Pham, Cohen, Pracejus, and Hughes, 2001). Moreover, Higgins (1997) asserted that individuals' judgments differ according to whether their orientation has a promotion or prevention focus. Promotion-oriented people approach their goals with eagerness and are sensitive to gains and non-gains. In contrast, prevention-oriented people seek to fulfill their obligations and are sensitive to losses and non-losses.

Integrating affect and goal orientation constitutes an evolving area of research in consumer behavior literature. While consumers often incorporate affect into judgment (Schwarz and Clore, 1983), their reliance on affect is qualified by their goal orientation (Kramer and Yoon, 2007). More specifically, promotion-oriented people are more likely to rely on their affect, regardless of its valance, in a product satisfaction judgment, with a positive affect promoting higher satisfaction compared to a negative or neutral affect. Prevention-oriented people, on the other hand, rely on a positive affect only because they monitor their internal state and are less likely to rely on their affect unless it does not match their chronic affect valence.

The relationship between goal orientation and framing is supported in goal orientation literature. Chernev (2004) found that prevention-oriented people are more

likely to overweight the negative consequence of any potential departure from the status quo. This influence is found to be consistent and significant for outcomes framed both as gains and as losses. Moreover, research on affect and framing shows that the influence of message framing varies across affect valence levels (Keller et al., 2003). Therefore, I propose that the influence of affect on the relationship between individuals' goal orientations and their choices will differ across framing conditions as well. This issue is worth investigating because the research on affect and framing does not account for individuals' tendency to feel certain emotions more than others, which may confound the observed findings.

The interaction among mood state, framing, and goal orientation on individuals' decisions about buying a car warranty is examined in this research. Warranty decisions constitute the context of interest in this dissertation. Individuals' decisions regarding warranties have received rising attention in consumer behavior. The literature on warranties has explored several outcomes, such as individuals' evaluation of product quality, risk, and warranty cost redemption (Price and Dawar, 2002; Shimp and Bearden, 1982; Jain and Slotegraaf, 2007).

Although these studies have advanced our knowledge in regard to the outcomes of warranty decisions, the factors that influence consumer decisions about buying the warranties have received limited attention. Here, I propose that among these factors are consumers' mood and goal orientation and the framing of warranty information. Research on warranty decision-making has examined the influence of affect and framing in isolation. Piao (2003) found that an individual's affective state (love vs. disappointment) is an important factor in driving decisions about whether to buy a laptop warranty (Piao,

2003). Other research found that message framing influenced consumers' decisions about buying flood insurance: gain-framed messages were more preferred and persuasive than loss-framed messages (Wiener, Gentry, and Miller, 1986).

Despite this support, research on warranty purchases has not accounted for individual difference variables that may influence the buying decision. Among these variables is individual goal orientation (promotion vs. prevention). In the opening scenarios, the decision as to whether to buy the car warranty is based not only on how individuals feel at the moment of purchase, but also on whether they are optimistic or pessimistic individuals.

Because of the importance of goal orientation as a moderating variable, this dissertation will further explore the measurement properties of this variable. A number of scales have been used to measure an individual's goal orientation. These scales, however, suffer from methodological flaws: dimensionality (behavioral inhibition, behavioral activation (BIS, BAS) scale; Carver and White, 1994), social desirability (RFQ; Higgins et al., 2001), generalizability (Lockwood, Jordan, and Kunda, 2002), and poor model fit (RFS; Fellner et al., 2007). In this dissertation, the general hierarchical model (GHM) (Mowen and Voss, 2008) is used as a framework for examining the structure of individual goal orientation. This framework minimizes the problems that occur in the scale development process: (a) defining the construct, (b) drawing items from multiple domains, (c) identifying dimensions, and (d) showing nomological validity.

Research Questions

The research questions for this dissertation are the following:

- What are the measurement properties of an individual's goal orientation (i.e. dimensionality, discriminant validity)
- How do individual mood and goal orientation interact with choice framing to influence the purchase of a car warranty?

The research questions have theoretical, managerial, and public policy implications. From the theoretical perspective, this dissertation extends the work on risky choice framing by including affect and goal orientation as factors that moderate the prospect theory predictions. I propose that risk-taking for promotion-oriented and prevention-oriented individuals is affected by their positive or negative mood. Adding an affect component to prospect theory is consistent with recent findings concerning affect and risk preference. Lowenstein, Weber, Hsee, and Welch (2001) proposed a risk-as-feeling hypothesis in which individuals' responses toward risky situations are determined by the interplay between an individual's emotional reactions to and cognitive evaluations of the risk. That is, the results from emotional reactions to risky situations are different from the results of cognitive evaluation alone.

From the managerial perspective, this dissertation advances knowledge by identifying factors that influence decisions to purchase warranties and insurance policies. Such decisions occur as a result not only of message framing or inducing a certain mood, but also of individual difference factors such as goal orientation. Moreover, previous research on warranty purchases has focused on an individual's affect toward the object under investigation as a driver for purchasing a warranty (Piao, 2003). This research

focuses the attention on an individual's affect that is not related to the object under investigation. This is important from a practical point of view because an individual's affect toward the object is not the only factor driving the decisions. Unrelated affects may also contribute to the decision.

Finally, from a public policy perspective, the findings from this dissertation will be helpful not only in educating consumers about warranty purchases but also in selecting those mechanisms that will be effective in achieving this objective, that is the combination of affect and frame that best matches a consumer's goal orientation.

This dissertation contains six chapters. Chapter II provides a literature review and theoretical development of each of the model constructs. Then, previous research on how goal orientation interacts with decision framing to influence an individual's risk perception and risk-taking is presented. The chapter concludes with the hypotheses and their theoretical rationale. A three-way interaction among mood, framing, and goal orientation on individuals' decisions about buying an automobile warranty is proposed.

Chapter III describes the survey and experimental design, the survey and experimental overview, and the measures for the independent variables and dependent variables. Chapter IV includes the procedures, data analysis, and discussion related to survey design. Chapter V provides experimental procedures, data analysis, findings, and discussions for the second study. Chapter VI discusses the findings, identifies research limitations, and proposes future research.

CHAPTER II

LITERATURE REVIEW

Individuals' decisions regarding warranties have received rising attention in consumer behavior and social psychology literature. Several outcomes related to warranties have been discussed: product quality judgment, and reliability (Price and Dawar, 2002), risk (Shimp and Bearden, 1982), and warranty cost redemption (Jain and Slotegraaf, 2007).

Although these studies have advanced our knowledge in regard to the outcomes of warranty decisions, the factors that influence consumer decisions regarding buying the warranties have received limited attention. Among these factors are mood, goal orientation, and the framing of warranty information. This chapter presents an overview of six streams of literature that investigates the influence of framing, mood, and goal orientation on judgment and decisions under uncertainty. First, an overview of the literature on warranty purchase is presented. The second stream presents a general overview of prospect theory and the framing influence on warranty decision-making. This stream is represented by Kahneman and Tversky (1979) and Wiener et al. (1986). The third stream examines the influence of mood on judgment. This stream is represented by Arkes, Herren, and Isen (1988) and Nygren (1998). The fourth stream investigates the relationship between mood and framing. The fifth stream examines the relationship between goal orientation and framing and between goal orientation and affect. This

stream is represented by Higgins (1997), Avnet and Higgins (2006), Chernev (2004), and Casario et al. (2004). Finally, a validation of the regulatory focus measurement scale is discussed in the sixth stream. See Table 1 below for a review.

Table 1
Summary of the Literature

Theoretical Framework	Literature Cited	Context	Findings	Gap & Contribution
Warranty Decisions	Price and Dawar (2002); Weiner (1985); Shimp and Bearden (1982); Jain and Slotegraaf, (2007); Kunreuther (1978)	Warranty outcomes (reliability risk; warranty cost redemption). Antecedents (probability of the threatening event, the severity of the loss, affect toward the object)	Affect toward the object plays a dominant factor in influencing decision of buying a warranty.	Examining additional factors that influence consumers' decisions of buying a warranty: the mood, goal orientation, and framing
Choice Framing	Weiner et al. (1986); Wang and Fischbeck (2004); Novemsky and Kahneman (2005)	Likelihood of warranty purchase, loss aversion moderators	(1) Gain frame is more effective than loss frame in warranty purchase. (2) Four moderators (Substitutability, duration of ownership, availability of resources, and alternative uses for money)	Examining additional moderators for the loss aversion (mood, and consumers' goal orientation)
Affect-As-Information (Direct affect)	Kramer and Yoon (2007); Hsee and Kunreuther (2000); Piao (2003)	Satisfaction judgment, insurance purchase, and willingness to collecte compensation for damages	(1) A positive affect is associated with a high satisfaction judgment and a negative affect is associated with lower satisfaction. (2) The more affection people felt toward the object, the more willing they become of buying the insurance and collect for damages.	The literature on warranty purchase has overlooked the influence of indirect affect on consumers' decisions
Mood -As-Resources (Indirect affect)	Raghunathan and Trope (2002); Zhang and Fishbach (2004)	(1) The Infleunce of mood state on positive and negative information processing regarding cafeine consumption. (2) Mood infleunce on the magnitude of the endowment effect	(1) Positive mood facilitates the recall of negative information about caffeine consumption and visa versa for negative mood. (1) Endowment effect is established when people are in a negative mood.	Sensitivity to gains and losses differs across different mood states

Table 1 (Continued)

Theoretical Framework	Literature Cited	Context	Findings	Gap & Contribution
Choice Framing and Mood	Nygren (1998); Keller et al. (2003); Cox et al. (2006)	(1) The interaction effect of mood and frame on message persuasivness regarding a breast cancer. (2) Individuals' risk perception regarding the potential negative consequences of skin product use	(1) Participants who were in a positive mood state perceived a higher risk of getting breast cancer when they were exposed to a loss-framed rather than to a gain-framed message.	(1) Although affect researchers cite the work related to choice framing, they used the goal- framing or the attribute-framing approaches. (2) Examining the influence of individual goal orientation as a moderator for loss aversion.
Regulatory Focus	Cesario et al (2004); Avnet and Higgins (2006)	The infleunce of fit on message persuasivness and the amount of money people are willing to pay for a product of their choice.	(1) Promotion oreinted people were more persuaded by eager-means messages whereas prevention oreinted people were more persuaded by vigilant framed messages (2) The monetary value of the chosen product increase when the choice startegy matches people's oreintatios.	The infelunce of regulatory fit differs across message frames.
Regulatory Focus and Framing	Chernev (2004); Kluger et al (2004)	The interaction effect of goal oreintation and choice frame	(1) In consistent results. Prevention oreinted people are more likely to express loss aversion in their choice regardless of message frame (Chernev 2004). (2) Promotion oreinted people are risk takers in gain frame and risk averse in the loss frame.	An omitted variable may explain this inconsistency, that is mood.
Regulatory Focus and Mood	Avnet and Higgins (2006); Kramer and Yoon (2007)	(1) The infleunce of fit and mood on the amount of money offered to buy a chooses product. (2) How goal orientation moderates people's reliance on their affect in satisfaction judgments.	(1) The effect of fit should be independent of mood or other hedonic characteristics involved in the decision. (2) Positive affect is used in satisfaction judgments primaly by both promotion oriented individuals, while negative affect is relied on only by promotion-oriented individuals.	I propose that the influence of mood on the relationship between individuals' goal orientations and their choices will differ across framing conditions as well

2.1 Warranty Decisions

In deciding to protect themselves, people evaluate future outcomes that are risky and for which they have the option of investing in either financial or physical protective mechanisms. People face many such decisions in their lives: for example, investing in insurance against a potential loss in the event of a hurricane, getting immunized, and investing in buying stocks or bonds (Piao, 2003).

A warranty purchase is a protective decision consumers can take to reduce the financial risk from a purchase. Previous research has identified several outcomes related to warranty decisions. Among these factors are product quality judgment (Price and Dawar, 2002), reliability (Weiner et al, 1986; Price and Dawar, 2002), risk (Shimp and Bearden, 1982), and more recently, warranty cost redemption (Jain and Slotegraaf, 2007).

In general, the findings from this research assert that warranties are effective signals of security and product quality, and that perceived quality increases as consumers' warranty redemption costs decrease. Moreover, the warranty can enhance brand signal credibility, which then intensifies brand signaling effects.

In addition to exploring the outcomes from protective decisions, empirical research has identified various factors that influence people's protective decisions. Among these factors are the probability of the threatening event, the severity of the loss, affect toward the object, social influence, peace of mind, and return on investment (Kunreuther, Ginsberg, Miller, Sagi, Slovic, Borkan, and Katz, 1978; Weinstein, 1987). Overall, the results indicate that people's affect toward the object (i.e. love vs. disappointment) and their feelings toward a threatening event play a dominant factor in influencing their decision about buying the warranty.

This dissertation examines the influence of additional factors on consumers' decisions about buying a warranty: mood, goal orientation, and framing. Research on warranty decision-making has examined the influence of individual mood and framing in isolation. Piao (2003) found that the individual's affective state (love vs. disappointment) is an important factor in driving decisions as to whether to buy a laptop warranty (Piao, 2003). This finding is important in drawing attention to the role one's feelings toward an object play in deciding whether to buy a warranty for that object. These feelings are primarily derived from one's experience with that object. In real life, however, one may not have had the opportunity to try the object over a long period of time. Moreover, one's feelings may not be directly related to the issue at hand. Therefore, it is important to examine the influence of affects not directly related to the object or to the issue at hand on our decisions about buying warranties.

Research about buying flood insurance found that message framing influences consumers' decisions and that gain-framed messages are more preferred and persuasive than loss-framed messages (Wiener, Gentry, and Miller, 1986). In addition, Wang and Fischbeck, (2004) found that framing health insurance as a gain was more effective in selling health insurance policies.

Previous research has also found that framing has a potentially strong affective influence on decision-makers' anticipation of their future experience. Hence, framing the information as a gain or as a loss may evoke positive or negative feelings (Nygren, 1998). In what follows, I will present a general overview of framing research, and how framing may influence an individual's decision as to whether to buy a warranty.

2.2 Framing Effect

Strong support exists in the literature for prospect theory predictions. However, many studies throughout the years have deviated from the original framing concept, causing a misunderstanding of prospect theory and the framing concept. Levin, Schneider, and Gaeth (1998) described the taxonomy of three different types of framing.

The first is attribute framing. Here, only a single contextual attribute is subjected to manipulation (i.e. success versus failure), and consumers' judgments or evaluations are assessed instead of their choices. A classic example of this framing typology is Levin and Gaeth's (1988) study in which they showed that people's perception of ground beef depended on whether the beef was labeled 75% lean or 25% fat.

The second typology of framing, which became important in persuasion studies, is goal framing. In this approach, the issue is manipulated in a way to focus attention on its potential to gain benefits (the positive frame) or to avoid losses (the negative frame). The study of Keller et al. (2003) is an example. The authors were interested in how varying the frame of the message would influence the persuasiveness of the message for individuals in different affective states. The positive frame condition emphasized the benefits of getting a mammogram to reduce breast cancer, whereas the negative frame emphasized the costs of not getting the mammogram.

Recently, Cox, Coz, and Zimet (2006) examined the influence of message framing and product function on consumers' responses to product risk information in a skin cancer context. Product function was manipulated by showing a skin cancer lotion as either curing or preventing cancer. Message framing was manipulated by presenting either the benefits from using the lotion or the costs from not using it. The authors found

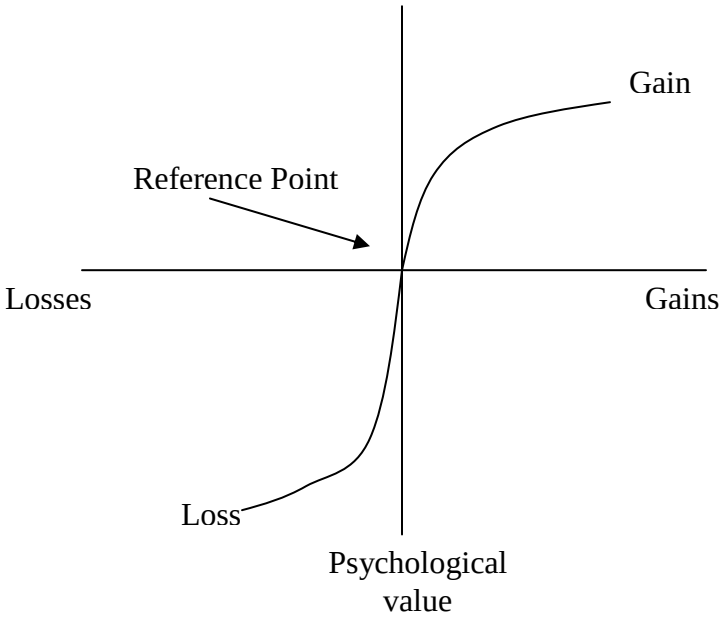
that individuals exhibited risk-averse behavior when exposed to loss-framed messages. In contrast, those exposed to upbeat, gain-framed messages essentially disregarded temporary product risks in evaluating the product. Participants exposed to gain-framed messages appear to be better able to discriminate between important and unimportant risks; they essentially ignore minor or temporary product risks but exhibit considerable caution regarding the possibility of more permanent, serious risks.

The third approach, risky choice framing, was originated by Tversky and Kahneman (1981). An example is the "Asian disease problem," where outcomes of various risks are described in term of gains versus losses. The general findings from the choice framing literature show that people exposed to gain-framed messages exhibit risk-aversion behaviors. In contrast, those exposed to loss-framed messages exhibit risk-seeking behaviors; that is, people tend to take more risk when options focus attention on avoiding losses than when options focus attention on realizing gain. Tversky and Kahneman (1981) explained these findings in prospect theory.

Prospect theory (Kahneman and Tversky 1979) describes how the valuation of outcomes influences risky choice decisions. It postulates that individuals make risky decisions using a two-stage process: an editing stage and an evaluation stage. In the editing stage, the decision-maker views (frames) the prospects as either gains or losses. In the evaluation stage, the decision-maker assigns a value to each of these edited prospects and chooses the one with the highest value. This evaluation stage is governed by two functions: the value function and the probability function (See Figure 1 below). The value function is hypothesized to be concave for gains and convex for losses, and steeper for losses than for gains. Kahneman and Tversky (1979) proposed that the probability

function translates the estimates of probabilities into decision weights. Most decision weights are lower than their corresponding probabilities, and thus do not necessarily adhere to the strict rules of mathematical probability theory, e.g., they need not sum to one (Wiener et al., 1985; Kahneman and Tversky 1979).

Figure 1
The Value Function of Prospect Theory



The framing of a prospect into a loss or gain domain influences subsequent decisions (Levin and Gaeth, 1988; Kahneman and Tversky, 1984) and can result in a reversal in an individual's risk preference. The reversal occurs even though the options are objectively equivalent (Levin et al., 1998). More specifically, when outcomes are framed as a gain, one tends to be risk-averse, and when outcomes are framed as a loss, one tends to be a risk seeker. This preference reversal violates the invariance criterion

listed by Tversky and Kahneman (1984). Despite the similarity of the consequences, people often choose differently depending on how the choice is framed.

In the context of this dissertation, risk aversion is associated with the decision about buying the car warranty because the fear of loss is high. As a result, the sure outcome (either sure gain or sure loss) will be preferred over the probable one. In contrast, risk seeking is associated with the decision of not buying the car warranty because purchase risk is low. As a result, the probable outcome (either probable gain or probable loss) will be preferred over the sure one.

In the first scenario in chapter one, the decision outcome is framed as a gain: buying the warranty results in saving money on repairs. Here, I expect that individuals will show risk-averse behavior and choose the sure gain option (i.e. buy the warranty). The outcome in the second scenario is framed as a loss: buying the warranty results in losing money. Here, individuals will show risk seeking behavior (i.e. not buying the warranty). These hypothesized patterns are drawn from prospect theory predictions.

A number of marketing studies draw upon prospect theory, either to derive their hypotheses or to support the results of their studies. In the context of insurance, Wiener et al. (1986) examined the influence of framing on buying flood insurance. Framing was manipulated either as a loss or as a change in total assets by estimating the amount of money to be lost under four conditions: (1) flood with no insurance, (2) flood with insurance, (3) no flood with no insurance, and (4) no flood with insurance. The authors measured respondents' purchase intentions and beliefs about the insurance. They found tentative support for the greater likelihood to purchase insurance when the respondents were using the asset decision frame. In a similar vein, Wang and Fischbeck (2004) found

that framing health insurance as a gain was more effective in selling health insurance policies because people have less cognitive difficulty in dealing with gains than with losses.

Despite this support, however, inconsistencies have been found for the loss aversion predictions of prospect theory. As noted previously, Novemsky and Kahneman (2005) identified four moderators for loss aversion: (1) the substitutability of goods in an exchange, (2) a shorter duration of ownership (3), availability of expendable resources, and (4) alternative uses for money.

This dissertation addresses the influence of moderators not examined by Novemsky and Kahneman (2005), mood and goal orientation. The role of affect in decision-making under uncertainty constitutes an evolving area of research in marketing and consumer behavior (for a review see Clore, Schwarz, and Conway, 1994; Forgas, 1995, Lowenstein, 1996; Isen and Geva, 1987; Johnson and Tversky, 1983; Cox et al., 2006). In what follows, I will present an overview of the role of affect in decision-making under uncertainty and the integration of affect and decision framing.

2.3 Role of Affect in Decision-Making under Uncertainty

A growing body of literature supports the influence of emotional state (mood) on information processing and decision-making under uncertainty. In most studies, positive and negative moods are induced by factors that are either irrelevant to the risky situation, such as receiving a gift or recalling happy or sad life events, or factors that are relevant to the risky situation, such as describing whether the performance of the product under investigation confirms customers expectations (Schwarz, 2001; Piao, 2003; Kramer and Yoon, 2007). The effects of these two approaches to mood induction have been explained

by different theoretical frameworks, each of which produces different results. What follows is an overview of the literature concerning these frameworks. Section 2.3.1 introduces studies of how direct affect influences decision-making under risk and uncertainty. Section 2.3.2 reviews the studies of how indirect affect (affect unrelated to decision-making under uncertainty) influences decision-making.

2.3.1 Role of Direct Affect to Decision Making under Uncertainty

The studies reviewed in this section are concerned with the role of affect that is related to the risky situation and experienced at the time of making the decision about this situation. An example is how you would evaluate a laptop you just purchased that confirms your expectations.

Early proponents of the importance of direct affect in judgment are Clore, Schwarz, and colleagues who proposed the "Affect-As-Information" hypothesis (Schwarz and Clore, 1983; Clore, Schwarz, and Conway, 1994). This hypothesis states that affects not only influence risk perception but also may serve as information individuals use as a basis for their judgments, with good feelings signaling a benign situation and bad feelings signaling a problematic situation (Schwarz, 2001). Thus, people ask themselves," How do I feel about It" when evaluating objects. Negative feelings are interpreted as disliking the products and positive feelings are interpreted as liking the products (Schwarz and Clore, 1983).

In line with this reasoning, Kramer and Yoon (2007) relied on the "Affect-As-Information" hypothesis to examine how individuals' affects influence their satisfaction judgment. Affect was manipulated by varying the degree to which a recently purchased PDA confirmed buyers' expectations. Across three studies, the authors confirmed their

expectation that a positive affect is associated with high satisfaction and a negative affect is associated with lower satisfaction.

In warranty-buying situations, Hsee and Kunreuther (2000) examined how the direct affect toward a vase influenced people's decisions about buying insurance and their willingness to collect compensation for damages. They found that the more affection people felt for the vase, the more willing they were to buy the insurance and collect for damages. Similarly, Hsee and Menon (1999) found that students who had recently purchased cars were more willing to buy a warranty for a sporty car than for an ordinary-looking one when the cost of expected repairs remained constant.

Piao (2003) examined the influence of affect toward a recently purchased laptop on people's willingness to pay for insurance. Affect was manipulated by varying two attributes: (1) the degree to which subjects fell in love with their laptop, (2) and the extent to which the laptop worked properly. The author found that subjects' intention to buy a warranty for their laptop was influenced by their affect toward it, as they were more willing to pay for a warranty if they loved the laptop and it was working properly.

The studies mentioned above have increased our understating of the role of one's affect toward an object in evaluating that object. However, in real life, people may experience emotional states unrelated to the situation that influence their judgment regarding a purchase. For example, while shopping for a car, one may have a negative mood because he or she failed a test or is having personal problems. Here, the emotional state is clearly not related to the car-buying situation, but may influence the decision-maker's judgment. Other studies assumed that people's affect results from whether the object under evaluation confirms their expectations. This assumption is not always true.

In some cases, people do not have the chance to try the product and keep it over a long period of time in order to know whether its performance confirms their expectation.

To sum up, the literature on warranty purchase situations has overlooked the influence of indirect affect on consumers' decisions. Including this type of affect is important from a practical perspective because people usually do not have the chance to try the product before deciding on buying the warranty. This dissertation addresses this issue by investigating the effect of indirect affect on people's buying decisions. I propose that individuals' judgment from experiencing affect not related to the purchase situation will be different from their judgment when experiencing affect that is related to the object under investigation.

2.3.2 Role of Indirect Affect to Decision-Making under Uncertainty

The second approach to mood induction is to induce emotional states that are not related to the risky situation. Past research has demonstrated that when people process information, mood may serve as a desired final state or as a resource (Raghunathan and Trope, 2002). When mood serves as individuals' final desired state or objective, they tend to ignore negative information and seek positive information for the purpose of repairing their negative state or maintaining their positive state (Wegener and Petty, 1994). Isen and colleagues conducted a series of studies examining the role of positive affect in decision-making under risk (Isen and Patrick, 1983; Isen, Nygren, and Ashby, 1988). They proposed the "Mood Management Hypothesis" to explain their findings that when people were in a positive mood, their perception of the probability of losing a gamble decreased.

The Mood Management Hypothesis states that people in a positive mood prefer to maintain their positive state. Hence, they consider negative information carefully and make prudent risk-related decisions because they have more to lose if they make the wrong choice. As a result, they are risk-averse in their decisions. In contrast, people in a negative affective state are concerned about lifting their mood in order to move themselves out of the negative mood. As a result, they are less risk-averse in their decisions compared to those in a positive mood.

An alternative approach proposed by Raghunathan and Trope (2002) is the Mood-As-Resource hypothesis. According to this hypothesis, a positive mood may act as a buffer against the affective cost of negative information. This buffer, in turn, enables individuals to focus on the long term benefits of the information if this information is considered self-relevant. Hence, a positive mood facilitates individuals' searching, elaborating, and revising of their intentions in light of negative self-relevant information. Individuals in a negative mood, in contrast, lack the resources to cope with the negative self-relevant information, and their confidence and motivation for information processing decreases. Hence, they will seek to improve their state, and the negative information is likely to be superficially processed.

Raghunathan and Trope (2002) investigated the influence of mood states on the processing of positive and negative information regarding caffeine consumption. Participants reported their daily consumption of caffeine and were given a short essay about the potential health benefits and risks associated with caffeine consumption. In a series of studies, the authors found that the induction of a positive mood facilitated the recall of negative and unpleasant information about caffeine consumption, while

induction of a negative mood facilitated the recall of positive information about caffeine consumption. This difference in information recall occurs because people in a negative mood lack the resources to cope with negative feedback.

The authors interpreted the results to indicate that individuals in a negative mood recalled positive information as a way to lift their mood state, but this action came at the expense of adopting a healthier attitude toward caffeine consumption. In contrast, positive mood participants were more attentive to negative than to positive information regarding their caffeine consumption and were able to adopt a healthier attitude toward caffeine consumption, but this came at the expense of their positive mood.

In line with the previous reasoning, Zhang and Fishbach (2004) explored the role of people's anticipated negative feelings about the possible loss of what they own. Participants were given the opportunity to use a popular pen. Half of the participants (sellers) were told that the pen was theirs to keep (i.e., endowed to them), the other half (buyers) were given cash money and were offered the opportunity to buy the pens. The authors examined the influence of mood on the magnitude of the endowment effect (the difference between prices buyers were willing to pay for the pen and the amount the sellers were willing to accept for the pen). A negative mood was induced by asking the participants to complete a negative life events survey. A positive mood was induced by asking participants to respond to a series of funny thought questions. The authors found support for the Mood-as-Resource hypothesis. Specifically, when people did not anticipate negative feelings (they were in a positive mood), their willingness to trade the object increased, and both buyers and sellers offered a similar price, but when people

anticipated negative feelings (they were in a negative mood), the disparity between the two prices increased, and the endowment effect was established.

These findings suggest that individuals' sensitivity to gains and losses differs across their mood states. The following section presents the literature on the relationship between decision framing and mood.

2.4 Choice Framing and Mood

Framing has a potentially strong affective influence on decision-makers' anticipation of their future experience. Hence, framing the information as a gain or as a loss may evoke positive or negative feelings. This predication is supported by Nygren (1998). He found that information presented in the gain domain produces an effect on people similar to that of a positive mood. That is, they become risk-averse. Hence, framing and mood may have a similar impact on individuals' risk perception. This conclusion assumes that individuals' affective state and frame operate congruently (i.e. a positive mood follows a positive frame).

Keller et al. (2003) examined the persuasiveness of negative and positive message frames when subjects were placed in a positive or negative mood state. They found that participants who were in a positive mood state perceived a higher risk of getting breast cancer when they were exposed to a loss-framed message than to a gain-framed message. In contrast, participants who were in a negative mood state perceived more risk from the gain-framed than the loss-framed message.

Although affect researchers cite the work related to choice framing, they have used the goal- framing or the attribute-framing approaches to examine the influence on individuals' risk perception. Keller et al. (2003) were interested in how varying the

message framing influenced message persuasiveness in respondents' different affective states. The gain frame condition emphasized the benefits of getting a mammogram, whereas the loss frame emphasized the costs of not getting the mammogram. Additionally, Cox et al. (2006) examined individuals' risk perception regarding the potential negative consequences of skin product use (i.e., using this lotion is risky) by emphasizing the benefits of adopting the lotion in the gain frame, but emphasizing the costs of not adopting it in the loss frame.

Arkes et al. (1988) adopted the attribute framing approach to examine the interaction between positive mood and risk-taking. The authors manipulated the positive frame by asking the subjects the most they would pay for each of 25 lottery tickets that varied in the amount to be won and the probability of winning. In the negative frame condition, subjects were asked the most they would pay for insurance in order to protect themselves against future loss for each of 25 lottery tickets that varied in amount to be lost and the probability of losing.

Although there is a consistency in the findings that risk perception tends to be lower when an individual's affective state becomes positive, the research on affect and framing does not investigate individuals' risk preference (i.e. whether they are risk takers or risk-averse). Additionally, the previous research does not investigate the influence of individual goal orientation and whether subjects are more likely to feel one affective state over another. These topics are important because the literature has shown that people vary in their perception of positive versus negative emotions (Higgins, 1997) and that the influence of affect is qualified by goal orientation. Hence, this dissertation extends the

literature by adding mood state and goal orientation as factors that moderate prospect theory predictions.

2.5 Regulatory Focus Theory

The third perspective under investigation is individuals' regulatory orientation. Regulatory orientation investigates how a particular concern or interest guidea a person's behavior. Carver and White (1994) and Higgins (1997) identified two types of motivational systems. Promotion-focused people strive to realize their ideals, approach their goals with eagerness, and are sensitive to gains and non-gains. They are thought to be influenced by affect that is positive in valence. In contrast, prevention-focused people strive to fulfill their duties and obligations and are sensitive to losses and non-losses. They are thought to be influenced by affect that is negative in valence.

Regulatory focus theory concerns the relation between an individual's regulatory orientation to an activity and the manner in which that activity is pursued. Hence, regulatory orientation can affect the value of an individual's decision outcome, depending on the manner in which the decision is made. Decision-makers value their decisions more when they use decision strategies that are suitable to their regulatory orientation. Higgins (2000, 2002) proposed that people experience a *regulatory fit* when they pursue a goal in a manner that sustains their regulatory orientation. When there is regulatory fit, the manner of goal pursuit feels right and the person assigns greater value to what he or she is doing and has more confidence in his/her decisions (Avnet and Higgins, 2003; Camacho, Higgins, and Luger, 2003). For example, Cesario, Grant, and Higgins (2004) considered how the feeling of being right that comes from regulatory fit can influence persuasion. Persuasive messages usually involve some goal and some means described as

the way to attain it. In their study, participants were given persuasive messages describing the importance of more fruits and vegetables in one's daily diet. Emphasizing either the accomplishment concerns or the safety concerns of eating more fruits and vegetables served to temporarily induce either a promotion focus or a prevention focus, respectively. Additionally, within each regulatory focus condition, the message was experimentally framed in terms of either *eager means* (i.e., presence and absence of gain/non-gain information) or *vigilant means* (i.e., presence and absence of loss/ non-loss information).

After reading the communication, participants rated how persuasive they had found it and expressed their intention to consume more fruits and vegetables. For both these variables, it was found that when the promotion system had been activated, participants would give more positive ratings with eager-means framing than with vigilant-means framing, whereas the reverse was true when the prevention system had been activated.

Regulatory fit has also been tested by the choice strategies people adopt. For example, Avnet and Higgins (2006) investigated how the manner in which a person makes a decision sustains the decision-maker's regulatory state. More specifically, they investigated how regulatory fit influences the amount of money people are willing to pay to purchase a chosen product. Participants were shown two types of correction fluid. Two choice strategies were employed in choosing between the products. Those in the feeling-based strategy were asked to use their feelings to rate their emotions after seeing the two products. Those in the reason-based strategy were asked to rate their overall evaluations of the products. After the ratings, participants were asked to choose one of the products

based on either their feelings or reason. Finally, they were asked how much money they would be willing to pay for this product if they saw it in a store. Participants' mood and chronic regulatory orientation were measured at the end of the study.

The authors found that when promotion-oriented participants used their feelings to make a choice, the monetary value of the chosen product increased. In contrast, when prevention-oriented participants used their feelings to make a choice, the opposite effect occurred. The authors also found that when prevention-oriented participants based their choice on reason, the monetary value of the chosen product increased, whereas when promotion-oriented participants used their reason to make a choice, the opposite effect occurred.

The link between goal orientation and individuals' sensitivity to gains and losses is supported in goal orientation literature. Chernev (2004), for example, examined the influence of goal orientation on consumer preference for the status quo. The author manipulated goal orientation by varying the salience of different decision outcomes (feeling satisfaction versus feeling regret). The decision frame was manipulated by asking the respondents to choose between two financial plans with varying levels of return. The choice was set in a way that one of the options became the status quo alternative. Results across three experiments show that different goal orientations lead to different loss aversion patterns. Because prevention-oriented people focus more on minimizing negative outcomes, the overweighting of losses relative to gains is likely to be more pronounced for them than for promotion-focused individuals. Hence, prevention-oriented people are more likely to overweight the negative consequence of any potential departure from the status quo. This influence is found to be consistent and significant for outcomes

framed both as gains and losses. Hence, the impact of goal orientation on consumer preference for the status quo is not necessarily moderated by loss aversion.

In another study, Kluger, Elena, Yoav, and Meirav (2004) proposed that the classical framing effect could be inverted when the context evoked a promotion focus among promotion-oriented people. Specifically, when participants were given an Asian disease-like scenario involving teaching children music, people who scored high in values of self-direction and who were in artistic /science occupations were risk-seeking in the positive frame and risk-averse in the negative frame. These findings are not consistent with Chernev (2004) who did not find a significant goal orientation by framing interaction. An omitted variable may explain this inconsistency.

Research has shown that a person's affective state influences attitude and has a complex influence on risk perception and risk preference. For example, people in a positive affective state have been found to be risk-averse in choice situations where there is a chance for a meaningful loss (Arkes et al., 1988). However, when the situation is seen as low in risk, they tend to show risk-taking behavior (Nygren, 1998). This is important for understanding how individuals' affective states influence their choices.

In the previously mentioned Avnet and Higgins's (2006) study, the authors found that mood had no significant effect on the amount of money offered to buy the chosen fluid. Additionally, there was no significant effect of fit, defined by matching the choice strategy (feelings vs. reason) to regulatory orientation, on mood. The authors concluded that the effect of fit should be independent of mood or other hedonic characteristics involved in the decision process. Therefore, decision-makers in a positive mood evaluate their decisions more positively when experiencing fit than when experiencing non-fit, and

decision makers in a negative mood evaluate their decisions more negatively when experiencing fit than when experiencing non-fit (Avnet and Higgins, 2003, 2006; Cesario et al., 2004; Idson, Liberman, and Higgins, 2004)

Related to this issue is previous research that has investigated how goal orientation moderates people's reliance on their affect in satisfaction judgments. Kramer and Yoon (2006, 2007) looked at when people use their affect as information in satisfaction judgments. They found that individuals' primed affect interacts with their goal orientation to influence satisfaction judgments. More specifically, positive affect is used in satisfaction judgments by both promotion-oriented and prevention-oriented individuals, while negative affect is relied on only by promotion- oriented individuals. Moreover, promotion-oriented people reported higher satisfaction ratings in a positive mood condition and lower satisfaction in the negative mood than in the control mood condition. In contrast, prevention-oriented people reported higher satisfaction in the positive mood condition compared to the control mood, and no difference in satisfaction ratings were found in the negative mood condition. The authors asserted that these patterns emerge because promotion-oriented people monitor their internal states, making the momentary affect of any valance salient. On the other hand, prevention-oriented people focus on the external environment, making the affect influential only by its mismatch to their trait-affective valence.

I propose that this conclusion is incomplete. Previous research has shown that affect has a direct effect on the amount of money people are willing to pay (Piao, 2003). Individuals with different goal orientations have different risk preferences (Avnet and Higgins, 2006) and different product satisfaction judgments (Kramer and Yoon, 2006)

across different affect valences. Because research on affect and framing shows that the influence of message framing varies across affect valence levels (Keller et al., 2003), I propose that the influence of affect valence on the relationship between individuals' goal orientations and their choices will differ across framing conditions as well. This issue is worth investigating because the research on affect and framing does not account for individuals' tendency to feel certain emotions more than others, which may confound the observed findings.

As seen in work by Higgins (1997), Avnet and Higgins (2006), Kluger et al. (2004), and Chernev. (2004) on the role of fit, promotion-oriented people are gain seekers and are sensitive to the presence or absence of gains. In contrast, prevention-oriented people are loss averse and are sensitive to the presence or absence of losses (Avnet and Higgins, 2006). Accordingly, both promotion- and prevention-oriented people may show risk-seeking or risk- aversion behaviors, depending on whether the outcomes of their behaviors involve gains or losses. For example, previous research has shown that promotion-oriented people become risk takers if the outcomes involve gains, while prevention oriented people become risk-takers if the outcomes involve the absence of losses (Kluger et al., 2004; Chernev., 2004). Hence, risk-taking behavior increases when there is a match-up or fit between the decision frame (gain vs. loss) and people's goal orientation (promotion vs. prevention).

In the context of this dissertation, promotion-oriented people achieve a psychological fit or a match-up when the outcomes of buying a warranty are described in terms of gains. Promotion-oriented people seek to maximize the positive outcomes from buying or not buying a warranty; therefore, framing the information in term of gains

enhances the match-up and thus minimizes their fear of a loss. Hence, risk-taking is maximized, and the likelihood of buying a car warranty will decrease.

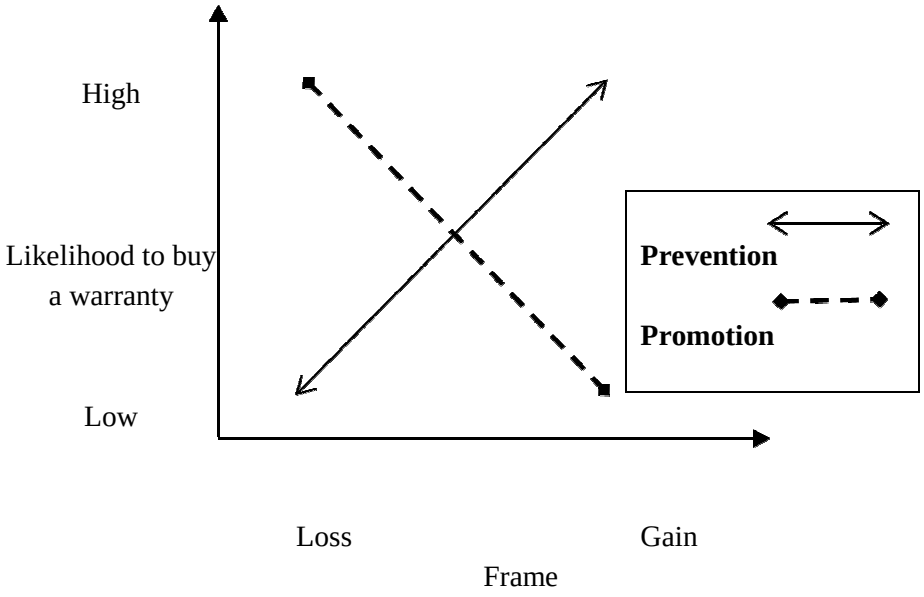
Prevention-oriented people, on the other hand, achieve a psychological fit when outcomes are framed in the loss domain. Because they strive to minimize the negative outcomes from buying or not buying the warranty, framing the information in term of losses motivates prevention-oriented people to overweight the negative consequence of any potential departure from the current normal behavior (Kluger et al., 2004; Chernev, 2004). Thus, risk-taking is maximized, and the likelihood of buying a car warranty will decrease.

Risk-taking will decrease when people experience a non-fit. Promotion-oriented people experience a non-fit when outcomes are described as losses, while prevention-oriented people experience a non-fit when outcomes are described as gains. The non-fit increases people's fear that their desired outcomes will not be attained. The high level of fear motivates people to be risk avoiders. As a result, they will choose buying the warranty because it ensures them guaranteed outcomes. The logic is that as the fear of risk from having a mechanical problem increases, the likelihood of purchasing a warranty increases. Thus, the warranty is purchased as a means to minimize the effects of a problem should it occur.

To sum up, previous literature that examined the relationship between goal orientation and decision framing found compelling evidence that prospect theory predictions hold for prevention-oriented people. More specifically, as Figure 2 below shows, prevention-oriented people become risk-takers when outcomes are framed in the loss domain, whereas promotion oriented people become risk takers when outcomes are

framed in terms of gains. In both cases, the likelihood of buying a car warranty will be low.

Figure 2
Goal Orientation by Framing Interaction



Individuals' goal orientation has been measured in a number of ways. However, due to the centrality of this variable in the context of this dissertation, the structure of the goal orientation variable needs to be further examined. Therefore, in this dissertation, the psychometric properties and the structure of the goal orientation scale will be examined using the GHM framework (Mowen and Voss, 2008). In what follows, I will discuss the different scales that have been used to measure individuals' goal orientation and the principles derived from the GHM that will be used to examine the structure of goal orientation.

2.6 Validation of the Regulatory Focus Measurement Scale

Individuals' dispositional regulatory focus has been measured using a number of scales. Carver and White (1994) developed the behavioral inhibition, behavioral activation (BIS, BAS) scale. The BIS is sensitive to signals of punishment and it inhibits

behaviors that may lead to negative or painful outcomes. In contrast, the BAS is sensitive to signals of rewards and it increase persons' movement toward goals. The final scale comprises of four factors: a unidimensional BIS scale and three BAS related scales (BAS reward responsiveness, BAS drive, and BAS fun-seeking). The validity and generalizability of the four-factor model of this scale has been established by Leone, Perugini, Bagozzi, Pierro, and Mannetti (2001). Recently, Dholakia, Gopinath, bagozzi, and Ntaraajan (2006) used the BIS/ BAS scale when examining the role of regulatory focus in the experience and control of desire in a situation of temptation. The results demonstrated that a consumer with a promotion focus not only experienced desire to a greater intensity but was also able to more effectively resist such desires than were prevention focused consumers. Despite these findings, however, the BIS and BAS scales appear to be a mix of other personality scales. For example, the fun-seeking scale could be explained by the need-for-arousal scale and the BAS scale could be explained by the impulsiveness scale.

The Regulatory Focus Questionnaire (RFQ) developed by Higgins, Friedman, Harlow, Idson, Ayduk, and Taylor (2001) relates items to situations experienced in the past, partly even in childhood, (e.g., "Did you get on your parents' nerves often when you were growing up?"). People are classified as promotion- or prevention-focused according to a median split on the difference between the RFQ promotion scale and the RFQ prevention scale. Herzenstein et al. (2007) adopted the RFQ scale in exploring how consumers' self regulation affects the likelihood of their adopting new products. Across three studies, the authors found that prevention-focused consumers react to new products differently from promotion-focused consumers as the ownership of new high-tech

products is higher among promotion-focused consumers. Herzenstein et al. (2007) found support for their predictions, but because the items relate to events often taking place many years earlier, which is intended to reduce the tendency to give socially desirable responses, answers might be less precise.

Lockwood et al. (2002) examined the impact of role models on motivation. The authors developed an instrument that relates the items to current attitudes, actions, and habits (e.g., I typically focus on the success I hope to achieve in the future). Across three studies, it was found that individuals are motivated by role models who encourage strategies that fit their regulatory concerns. More specifically, promotion-focused individuals are most inspired by positive role models who highlight strategies for achieving success. On the other hand, prevention-oriented individuals are most inspired by negative role models who highlight strategies for avoiding failure. Given the wording of some of the items in this scale (e.g., "My major goal in school right now is to achieve my academic ambitions"), this questionnaire can only be used in a context relating to initial and continuing education.

Zhao and Pechmann (2007) examined the impact of individuals' regulatory focus as measured by the Lockwood et al. scale on adolescents' responses to an antismoking advertising campaign. Across two studies, the authors found that the impact of ad messages can be enhanced by aligning the message's regulatory focus and the message frame to viewers' regulatory focus. More specifically, for promotion focused adolescents, a promotion-focused message that is framed positively is the most effective at persuading them not to smoke. For prevention-focused adolescents, on the other hand, a prevention-focused message that is farmed negatively is the most effective.

Shah, Higgins, and Friedman (1998) developed the Regulatory Strength Measure (RSM), which is administered exclusively by computer and is intended to measure the strength of promotion and prevention orientation. It measures the time people require to type and in their own *ideals* and *thoughts* and to rate them; based on this data, conclusions are drawn about the importance and strength of their promotion or prevention orientation. The shortcoming of this scale is that it can be administered only under extremely controlled conditions (e.g., in the laboratory) and is therefore unsuitable for online studies, for example.

Recently, Fellner et al. (2007) presented the Regulatory Focus Scale (RFS), an instrument comprising 10 items to record promotion orientation and prevention orientation. In generating these items, the authors attempted to reflect the core statements of Higgins' (1997) regulatory focus theory by wording the items in a way that depicts the importance of the individual's own ideals and obligations (e.g., I often think about what other people expect of me). The confirmatory factor analysis (CFA) shows a four-factor model with one item cross-loading and four correlated error terms, which poorly satisfies the requirements of a good model fit.

The goal orientation scale that will be used in this dissertation is adapted from Lockwood et al. (2002). The scale has 18 items, half measuring promotion focus and the other half measuring prevention focus. This scale appears to be the most appropriate for this study for two reasons. First, this scale is more related to the student sample and has been used in marketing and consumer behavior literature to examine the impact of regulatory focus on adolescents' responses to an antismoking advertising campaign (Zhao and Pechmann, 2007). Second, the objective in this study is to determine the strength of

individuals' goal orientation (whether they are dominant in promotion or prevention) rather than simply measuring goal orientation. In pursuing this objective, Lockwood et al. (2002) used the difference scores between the promotion-focus and prevention focus values.

To summarize, a number of scales have been used to measure individuals' goal orientation. However, for the reasons discussed earlier and because of the importance of this variable in the context of this dissertation, the structure of the goal orientation variable needs to be further examined. Therefore, the psychometric properties and the structure of goal the orientation scale are examined here using the GHM framework (Mowen and Voss, 2008). In what follows are the principles derived from the GHM that will be used to examine the structure of goal orientation.

2.7 General Hierarchical Model (GHM)

Mowen and Voss (2008) propose a general hierarchical model (GHM) that provides an organizational structure for placing many of the individual difference constructs used in marketing and consumer behavior. Three principles derived from the GHM have been suggested to solve some of the problems in current scale development paradigms. These principles are (1) the hierarchical net principle, (2) the dimensionality principle, and (3) the item-matching principle. What follow is a discussion of the structure of goal orientation using the GHM framework.

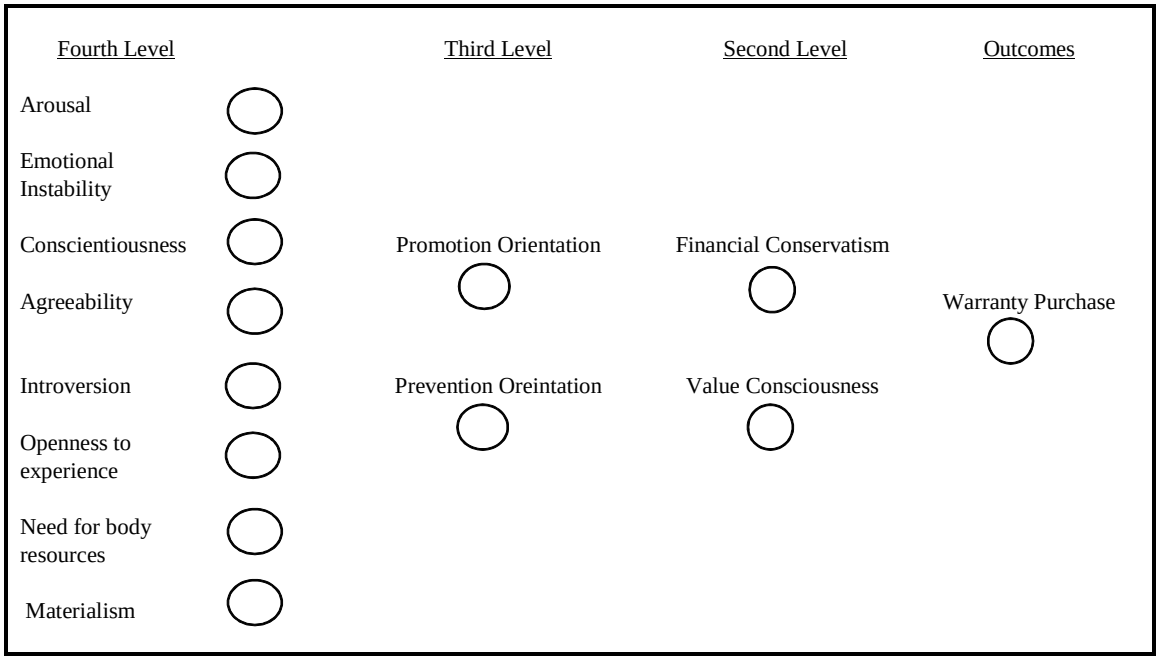
Principle 1: The Hierarchical Net Principle

The goal orientation trait is proposed to be at the third level of a respondent hierarchy. By definition, goal orientation reflects a disposition to act or behave either toward or away from an end state. This disposition, however, does not change or is not

influenced by situational factors. Therefore, goal orientation is proposed to result from the effects of subsets of elemental traits on the fourth level of the respondent hierarchy

It is anticipated that value consciousness and financial conservatism and propensity to buy a warranty are on the second level of the respondent hierarchy. Mowen (2000) placed the value consciousness trait at the situational level when examining bargaining proneness, as people express a disposition to be value-conscious within the general purchase situation. Moreover, in the previously mentioned study, Chernev (2004) found that different goal orientations lead to different loss aversion when asking the respondents to choose between two financial plans with varying levels of return. Therefore, it is anticipated that individuals with different goal orientations will exhibit different value consciousness and financial conservatism traits. The proposed model is presented in Figure 3 below.

Figure 3
The General Hierarchical Model



Principle 2: The Dimensionality Principle

Examining the dimensionality principle is important for determining whether promotion focus and prevention focus are two underlying dimensions of goal orientation or two separate constructs. The literature on affect demonstrated that emotions of the same valence may have a different appraisals and different influence on risk perception. For example, Lerner and Keltner (2000) proposed the appraisal tendency framework. In their framework, the negative emotion anger is appraised high on the control dimension and has low influence on risk perception. In contrast, fear is appraised low on control and has high influence on risk perception.

In the context of this study, a promotion focus triggers a positive affect whereas a prevention focus triggers a negative affect. Within the GHM context, I propose that a promotion focus and a prevention focus have different antecedents and consequences; therefore, they should be treated as separate constructs.

Although goal orientation is proposed as two separate constructs, in this dissertation, to examine the three-way interaction, I will employ goal orientation as a two-dimensional construct in accordance with previous literature. Also, I will explore how the prediction and results may change if goal orientation is employed as two separate constructs.

Principle 3: Item Matching Principle

This study examines whether the items tapping promotion and prevention focus are within the same level in the GHM. According to Mowen and Voss (2008), the item-matching principle is important because items from two different constructs at the same level in the hierarchy should not be combined to form a single measure.

Moreover, Mowen and Voss (2008) recommend using scales that have four to eight items. However, the goal orientation scale developed by Lockwood et al. (2002) has 18 items, of which nine measure a promotion focus and the other nine measure prevention focus, which violates the item-number corollary principle.

To sum up, due to the centrality of goal orientation in this study, it is important to examine the structure of this variable in more depth. This dissertation determines the trait predictors of goal orientation within the General Hierarchical Model (GHM) and it examines the discriminant validity of the promotion- and prevention-focus constructs.

Moreover, this study investigates whether mood moderates the effect of individuals' goal orientation and framing on risk-taking in the context of the likelihood of purchasing a car warranty.

Figure 4 depicts the proposed triple interaction among goal orientation, mood state, and frame. As can be seen in the figure, the interaction can be conceptualized as two, two-way interactions that are organized based upon whether a respondent is promotion- or prevention-oriented. The predictions are based on the same theoretical rationale employed previously. Goal orientation is a chronic, stable factor, therefore it is expected to drive the predictions rather than mood state or information frame because these two are situational factors that can be changed over time. Thus, it is proposed that the highest risk-taking occurs when individuals' goal orientations match their mood state and the information frame.

As seen in Figure 4, maximum fit is proposed to occur in two situations. First, as in Figure 4a, a high level of fit occurs when a subject has a high level of the promotion trait and is in a positive mood state, and the information is framed in the gain domain.

Second, as shown in Figure 4b, a high level of fit also occurs when a subject has a high level of the prevention trait and is in negative mood state, and the information is framed in the loss domain,. In these two situations, mood and information frame are congruent, and thus match the individual's goal orientation. Thus, the congruency among the three constructs is proposed to drive the predictions. As a result, higher levels of risk-taking are proposed to occur.

The rationale for this prediction is based upon resource theory. When there is congruency among goal orientation, mood state, and frame, the match-up gives people sufficient resources to handle threatening information and the possible losses that may occur. Hence, if a person is promotion-oriented and is in a positive mood state, and the information is framed in the gain domain, the emotional resources are maximized. As a result, the fear of a loss is low as the match-up signals no threats that the desired outcomes will not be attained. Hence, risk-taking is maximized, and the likelihood of buying a car warranty will decrease. Conversely, when goal orientation is not congruent with mood and frame, a maximum lack of fit occurs and the individual becomes less risk-taking. Hence, the likelihood of buying a warranty will increase.

The lowest level of risk-taking is expected to occur when there is a maximum lack of fit between an individual's goal orientation and his or her mood state and frame. Thus, the incongruency among the three constructs is proposed to drive the prediction as to the two situations when maximum non-fit occurs: first, when a subject has a high level of the prevention trait and is in positive mood state, and information is framed in the gain domain; and second, when a respondent has a promotion goal orientation and is in negative mood state and information is framed in the loss domain. In both cases,

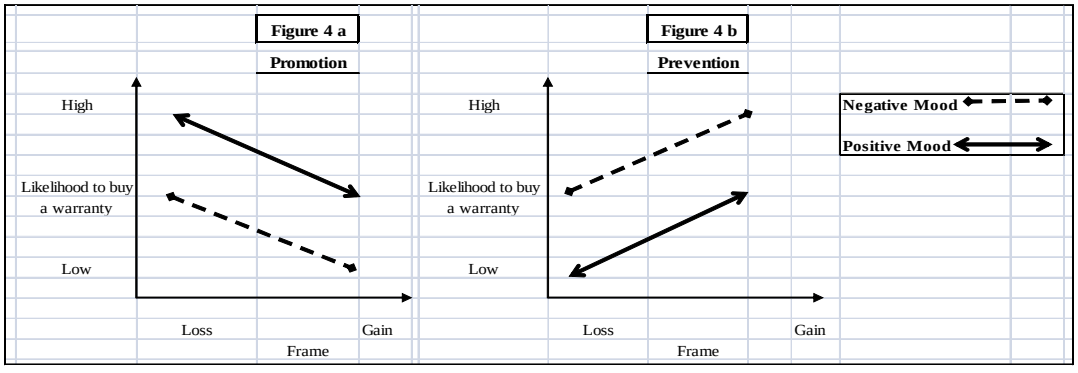
individuals' goal orientation is incongruent with their mood state and the information frame. In this instance, it is predicted that maximum risk aversion will occur.

The rationale for this prediction is that when there is maximum incongruency, or lack of fit, among goal orientation, mood state, and frame, people will not have enough resources to elaborate on any threatening, incongruent information. Consequently, the fear increases that a problem will occur and that they will not be able to attain the desired outcomes (either maximizing gains or minimizing losses). The high level of fear motivates people to be risk avoiders. As a result, subjects will choose to buy the warranty because it ensures them guaranteed outcomes.

It is also predicted that at intermediate levels of non-fit, risk-taking propensity will fall between the two extremes. Thus, if the goal orientation is congruent with either the mood state or the information frame, risk-taking will be at a moderate level, and thus, people will show a moderate likelihood of buying a car warranty.

If the expected pattern of effects is found, a triple interaction will result. Looking at Figure 4, one sees that the pattern of means is different in Figures 4a and 4b. In each case a two-way interaction is predicted. However, the pattern of the two-way interactions is different. This will result in a 3-way interaction.

Figure 4
Goal Orientation by Framing by Mood Interaction



CHAPTER III

SURVEY AND EXPERIMENTAL DESIGN

3.1 Introduction

This dissertation employs a survey and experimental design to answer the research questions. The survey serves two objectives. First, it determines the trait predictors of goal orientation within the General Hierarchical Model (GHM). Second, it examines the discriminant validity of promotion- and prevention-focus constructs.

The experiment serves two objectives. First, it compares mood effect on individuals' risk-taking under gain and loss conditions. Second, it examines the three-way interaction among mood, framing, and goal orientation on individuals' risk-taking.

3.2 Survey Design

3.2.1 Overview

As mentioned previously, due to the centrality of goal orientation in this study, it is important to examine the structure of this variable in more depth. Utilizing the GHM recently proposed by Mowen and Voss (2008), it is proposed that the elemental traits of personality developed by Mowen (2000) are at the fourth level of the respondent hierarchy. It is proposed that both promotion and prevention focuses are placed at the third level. At the second level of the respondent hierarchy, value consciousness is expected to predict individual financial conservatism and likelihood to buy a warranty.

3.2.2 Illustration of The GHM

To illustrate the GHM, the present study investigates the trait antecedents of two compound-level traits: promotion and prevention focus. Measures of the elemental traits are taken from Licata, Mowen, and Brown (2003), where subjects were asked, "How often do you feel/act this way," and responded on 9-point scales anchored by "never" and "always." Measures of the situational trait of value consciousness are taken from Lichtenstein, Netemeyer, and Burton (1993), where responses were also on 9-point scales anchored by "never" and "always."

3.2.3 Discriminant Validity of Goal Orientation

Individual differences in promotion versus prevention orientation are assessed using items from Lockwood, Jordon, and Kunda's (2002) scale. The scale has 18 items, half of which measure promotion focus (e.g., "I frequently imagine how I will achieve my hopes and aspirations," and the other half measure prevention focus (e.g., "I frequently imagine how I can prevent failure in my life). A measure of dominant regulatory focus is created by subtracting the prevention focus score from the promotion focus score. That is, high scores reflect a relatively stronger promotion focus than prevention focus. Then participants are classified as either promotion-focused or prevention-focused on the basis of a median split. Furthermore, the dimensionality of Lockwood's scale has not been established in the literature. Within the GHM context, if promotion focus and prevention focus have different antecedents and consequences, then they should be treated as different constructs.

3.3 Experiment Design and Independent Variables Manipulation

Design: 2 (affect valance: positive vs. negative) x 2 (frame: loss vs. gain) x 2 (goal orientation: promotion vs. prevention) between-subjects design. The different levels were randomly assigned to the groups of subjects that signed up for the experiment.

3.3.1 Mood Manipulation

Because the experiment focuses on the influence of affect valence, it is important to manipulate participants' affect valence (either positive or negative) while controlling for variation in arousal. Although previous research suggested several techniques to manipulate valence (music, gift giving, feedback, life story, videos), the researchers either manipulated affect valence while ignoring the arousal level (Keller et al., 2003; Pham, 1998) or manipulated valence and arousal orthogonally in the same study (Shapiro, MacInnis, and Park, 2002). Gorn, Pham, and Sin (2001) used music to manipulate participants' affect valence (pleasant- unpleasant) while controlling for arousal to examine the difference on ads evaluation. The authors choose two stimuli that differ in valence but perceived to be highly aroused. Since highly-aroused individuals perceive high risk compared to quite individuals (Mano,1994) and the arousal influence on ad evaluation appears when there is a clear affective positive or negative ad tone (Gorn et al., 2001), controlling for arousal by using high aroused stimuli appears to confound the results of ad evaluation and risk perception.

Therefore, in this experiment, participants will be asked to write a life inventory passage that elicits a happy mood in one condition and a sad mood in another. Arousal will be controlled for by including six items for arousal on a 7-point Likert scale adapted from Shapiro et al. (2002). These items are stimulated versus relaxed, excited versus

calm, frenzied versus sluggish, jittery versus dull, wide awake versus sleepy, aroused versus unaroused.

As a manipulation check, questions on the survey verify the magnitude of the manipulations for individuals' mood. For individuals' mood, participants were asked to rate on a 7- point scale their agreement with how they were feeling (joyful, unpleasant, happy, and in a good mood).

3.3.2 Framing Manipulation

Framing manipulation is adapted from Wang and Fischbeck's, (2004) health insurance manipulation. All participants received a car warranty scenario. The scenario stated that the probability of mechanical failure is 25%, the cost associated with repairs is $2,000, and the cost of the warranty offered by the dealer is $500. The widely used "Asian disease problem" adapted from Tversky and Kahneman (1981) was used to manipulate the outcomes result from either buying or not buying the warranty under the gain versus loss domain.

Under the gain domain, participants had two options, either a sure gain or a probable gain. The sure gain option results in saving $1,500, if repairs are needed and the participant buys the warranty. The probable gain option involves not buying the warranty. Here, there is a 75% of chance of saving $2,000 if no repairs are needed, and 25% of a chance of saving nothing if repairs are needed.

Under the loss domain, participants have two options, either a sure loss or a probable loss. The sure loss option results in the participant's paying $500, if the participant buys the warranty and no repairs are needed. The probable loss option

involves not buying the warranty. Here, there is a 25% of chance of spending $2,000 if repairs are needed and a 75% chance of spending nothing.

To check for the framing manipulation, participants were asked to rate on a 7-point scale their agreement as to whether or not purchasing warranty will indeed reduce the purchase risk. Under the loss domain, it was anticipated that respondents would not perceive the warranty as a means to reduce the purchase risk, and hence they would show a risk-seeking behavior.

3.4 Dependent Variable Measures

3.4.1 Likelihood to Purchase

Participants indicated their preference toward either buying a car warranty or not. Buying the car warranty was associated with the sure outcome (either sure gain or sure loss), which indicates risk aversion. In contrast, choosing not to buy the warranty is associated with the probable outcome (either probable gain or probable loss), which indicates risk taking.

3.4.2 Attitude Toward Warranty

Finally, participants indicated on a 9-point scale their utilitarian attitude toward the 2- year car warranty following the two dimensional approach recommended by Voss, Spangenberg, and Grohmann (2003) (i.e., bad deal/ good deal, practical/impractical).

3.5 Process Measures

3.5.1 Purchase Risk

There is no universally accepted scale for perceived risk, and different types of risk need to be studied, depending on the product category (Fedorikhin and Cole, 2004). Therefore, my questionnaire included risk measures that fit in the context of my study.

Participants indicated on a 7-point scale whether they consider buying the warranty a risky decision or not, whether buying the car warranty would reduce their worries or not, and if buying the warranty would reduce their purchase risk or not.

3.5.2 Regulatory Fit

Subjects will be asked to evaluate the framed message. A regulatory fit occurs when promotion-oriented subjects give a higher rating to the gain-framed messages and when prevention-oriented subjects give a higher rating to the loss-framed messages (Cesario et al., 2004).

3.5.3 Anticipated Regret

Participants' positive and negative anticipated regret is measured using items adapted from Simonson (1992). More specifically, participants indicated in what case they would feel greater regret: if they bought the warranty and did not use it, or if they did not buy the warranty and they ended up needing it. Moreover, participants were asked in what case they would be happier: if they did not buy the warranty and ended up not needing it, or if they bought the warranty and ended up needing it.

3.5.4 Mood Change

Participants' mood was measured again to test whether participants changed their mood state with information. If mood was used as a resource, one expects that a participant's mood after being exposed to incongruent information will be different from his or her mood at the beginning of the experiment (Raghunathan and Trope, 2002).

3.5.5 Information Diagnosticity

Message diagnosticity was measured by asking the participant to indicate how helpful and how useful the information in the warranty scenario was in making the decision about the warranty purchase (Kempf and Smith, 1998; Pham and Avnet, 2004, Zhao and Pechmann, 2007).

3.5.6 Situational Risk

Risk and uncertainty are essentials for the situation when dealing with choice framing. Therefore, two items that measure situational risk were included. Participants were asked to rate on a 7-point scale their agreement as to whether the situation described was risky and represented a threat.

3.5.7 Thought Listings

At the end of the questionnaire, participants were asked to explain in detail why they chose the option they chose (either buying the warranty or not).

CHAPTER IV

STUDY 1

4.1 Introduction

Although Lockwood et al.'s (2002) goal orientation scale has been used previously in the marketing literature (Zhao and Pechmann, 2007), the psychometric properties of this scale have not been tested before. Therefore, because of the centrality of goal orientation in this research, study 1 examines the dimensionality and the discriminant validity of this construct scale. The objectives are to (1) test whether goal orientation is in fact a single construct or two separate constructs, and (2) to determine the nomological network of the goal orientation construct. To that end, the trait predictors and consequents of goal orientation were investigated within the General Hierarchical Model (GHM). I propose that goal orientation resides at the third level in the GHM, such that one or more elemental traits will be significant antecedents to goal orientation.

4.2 Sample and Procedures

In the first study, the Lockwood et al. goal orientation scale was administrated to 280 undergraduate students from a large mid-western university. They were offered course credit for their voluntary completion of the study. The sample consists of 44% males and 56% females, with a mean age of 21.7 years. In addition to the 18 goal orientation items, other existing scales were also administrated to assess the discriminant validity of the

measure. Prior to data analysis, however, the missing values were imputed via mean substitution.

To assess the dimensionality of the goal orientation scale, promotion and prevention were specified in a second order factor CFA, single order factor, and a two-factor model. The fit indexes for this scale were examined and compared using comparative fit indexes and guidelines suggested by Voss et al. (2003); that is, the item deletion process will stop when one or two possible results occur: (1) the X^2 difference test shows no difference and /or (2) the AGFI did not increase

To assess the nomological validity, the goal orientation scale will be employed as an antecedent to the constructs of value consciousness, financial conservatism, and likelihood to buy a car warranty. In addition, elemental traits from the 3M model will be employed as antecedents to goal orientation. Within the GHM context, if the promotion and prevention dimensions have different antecedents and consequences, then they should be treated as separate constructs.

4.3 Analysis and Results

In order to further evaluate the scales' properties, the 18 measurement items were subjected to a confirmatory factor analysis (CFA) using LISREL 8.8. The first step of the analysis was to specify and test a second order CFA in which each of promotion and prevention focus served as indicators of the higher order construct (i.e. goal orientation). The test for the second order factor revealed poor model fit (X^2 565.47, 134 df); comparative fit index [CFI] = 0.86; goodness of fit (GFI) = 0.82; root mean square error of approximation [RMSEA] = 0. 11. These results show that GO scale used in the

literature has psychometric problems that need to be solved. Therefore, it was decided to further examine the properties of this scale.

Because the goal orientation scale is composed of nine pairs of items measuring both promotion and prevention orientation, it is expected to have items that share a greater proportion of variance with each other. Because of the exploratory nature of this study, the objective is to retain the items that have high loadings to maintain face validity, since the modification indices suggest that many items have more in common with each other than the specified model allows. Therefore, consistent with the literature, offending items were sequentially deleted until the standardized loadings and the fit indices revealed that no improvement could be attained through item deletion. In addition, following guidelines outlined by Voss et al. (2003), a series of shortened versions of the scale were compared using X^2 difference tests, goodness of fit indices (GFI), and adjusted goodness of fit indices (AGFI). Following the decision rules, item deletion process stops when one of two possible results occurs: (1) the X^2 difference test shows no difference and /or (2) the AGFI does not increase. Additionally, the comparative fit indexes are used to compare the scales (i.e., AIC, CFI).

After a series of analyses, the final model consists of 10 items, five of which measure prevention orientation and five measure promotion orientation. The CFA fit indices revealed that the model provides an adequate fit to the data (Hu and Bentler, 1999) (X^2 138.17, 34 df); comparative fit index [CFI] =0.92; standardized root mean square residual [SRMR] = 0. 078; goodness of fit [GFI] = 0.91; and root mean square error of approximation [RMSEA] = 0. 10. X^2 difference test results (X^2 = 427.24, df = 100) revealed that the 10-item model was a better fitting model than the 18-item scale.

The AGFI for the 10-item scale (0.86) was higher than that for the 18-item scale (0.77). Furthermore, the comparative fit indexes for the 10-item scale were better than those for the 18-item scales. The AIC for the 10-item scale (176.86) was lower than that for the 18-item scale (629.25), the CFI for the 10-item scale (0.92) was higher than the CFA for the 18-item scale (0.86). The significant X^2 difference test, the improvement in AGFI, and the comparative fit indexes, taken together, support the 10-item scale.

To further test the structure of the GO scale, the second order factor CFA was compared to a single-order factor model in which all 10 items measuring prevention and promotion focuses loaded on one factor (i.e. goal orientation). The CFA fit index for the single-order factor revealed that the model provides a poor fit to the data (Hu and Bentler, 1999) (X^2 1377.28, 35 df); comparative fit index [CFI] = 0.70; standardized root mean square residual [SRMR] = 0. 17; [GFI] = 0.71; root mean square error of approximation [RMSEA] = 0. 24. X^2 difference test results (X^2 = 1239.11, df = 1) strongly support the conclusion that promotion and prevention do not represent a single-order goal orientation construct.

Although the researcher was able to achieve a shorter, yet more acceptable scale, the fact that the correlation between promotion and prevention was not significant (r = 0.26) and that the loadings of each prevention and promotion dimension on the higher order construct were not similar in magnitude (prevention = 0.3; promotion = 0.87) and significant for one dimension (i.e., promotion, t = 3.2), strongly suggests that the dimensions are different constructs (see Voss et al., 2003). Finally, the second order model was compared to a two-factor model of promotion and prevention focus. The CFA fit indexes for the two-factor model were identical to those indexes obtained for the

second-order factor. These results strongly support the conclusion that promotion and prevention focuses are in fact two separate constructs.

In addition, I examined item reliabilities, tests of composite reliability, and average variance extracted. As can be seen in Table 2, the composite reliabilities were acceptable and around 0.8, provide evidence in support of the measures' reliability (Fornell and Larcker 1981; Gerbing and Anderson 1988). Average variance extracted measures the amount of variance captured by a construct in relation to the variance due to random measurement error. The estimates of average variance extracted were below the 0.5 minimum cutoff suggested by Bagozzi and Yi (1988). These values are reported in Table 2.

To establish the evidence for the discriminant validity among the constructs, I compared the squared multiple correlation [SMR] = 0.067 with AVE. The discriminant validity is established between two constructs if the AVE of each one is higher than the SMR. The AVE of the prevention orientation construct is 0.43 and for promotion orientation, the AVE is 0.49. Since the AVE values of the two constructs are higher than the squared multiple correlation, the discriminant validity among the latent variables is supported.

Table 2
Construct Measures and Validity

Construct Measures and Validity				
Construct	*Items*	*Std Loading*	*Composite Reliability*	*AVE*
Prevention Orientation			0.79	0.43
	I often imagine myself experiencing bad things and I fear might happen to me.	0.79		
	I often think about the person I am afraid I might become in the future.	0.63		
	I often worry that I will fail to accomplish my academic goals.	0.64		
	I am more oriented toward preventing losses than I am toward achieving gains.	0.6		
	I frequently think about how I can prevent failures in my life.	0.62		
Promotion Orientation			0.82	0.49
	I typically focus in the success I hope to achieve in the future.	0.83		
	In general, I am focused on achieving positive outcomes in my life.	0.66		
	I often think about the person I would ideally like to be in the future.	0.65		
	I often imagine myself experiencing good things that I hope will happen to me.	0.63		
	I frequently imagine how I will achieve my hopes and aspirations.	0.7		

To sum up, the CFA results, the significant X^2 difference test, and the improvement in AGFI, taken together, reveal that the 10-item scale, of which five items measure promotion orientation and five measure prevention orientation, is a better fitting model than the 18-item scale. The scales representing promotion and prevention focus demonstrate both discriminant and statistical conclusion validity.

4.4 Empirical Test of the Nomological Model

To further ascertain whether, as expected, the goal orientation items represent two different constructs or are, in fact, two dimensions of the same construct (i.e., promotion orientation and prevention orientation), a total of 10 items measuring goal orientation derived from the CFA model reported previously were used to represent the antecedent (value consciousness and financial conservatism) and consequent (elemental traits) constructs employed in the General Hierarchical Model.

Single indicators were employed for the elemental and surface traits. Following convention, it was assumed that the warranty purchase construct had a reliability of 0.85 for model estimation (Cannon and Hombourg, 2001). Given this assumption, the elemental and surface traits measurement errors were fixed at $(1 - \alpha)$ times the variance of the scale score. This approach of model estimation is consistent with prior literature (i.e., MacKenzie, Podsakoff, and Ahearne, 1998). The model was estimated using structural equation modeling using LISREL 8.8. If goal orientation is in fact a single construct, its predictors and consequences should remain the same when modeling goal orientation as two separate constructs.

The analysis began with an assessment of the measurement model. Because the measurement properties of the elemental traits have been supported previously, the measurement model was performed only on the compound, situational, and surface traits. Fit statistics for the model when GO was specified as a single construct were poor (X^2 = 776.72, df = 165, CFI = 0.85, RMSEA = 0.12). A second measurement model was estimated in which goal orientation was modeled as two separate constructs, promotion orientation and prevention orientation. The fit indices were excellent (X^2 = 336.43; df =

146, CFI = 0.94, RMSEA = 0.06). This model outperforms and better fits the data than the previous model in which goal orientation was modeled as a single construct. This indicates, thus, that goal orientation is better modeled as two separate constructs than as single constructs.

Next, a partial mediation model was estimated in which paths were created from the elemental traits to the compound, situational, and surface traits and paths were run from the compound to the situational to the surface traits. Multiple indicators were employed for the compound and situational traits. This model allows for examining the nomological network as well as identifying any unexpected relationships. Consistent with the 3M model principles, the elemental traits act as control variables that help avoid missing variables problems. Again, two models were estimated, the first in which goal orientation was modeled as a single construct and the second in which goal orientation was modeled as two separate constructs: promotion orientation and prevention orientation..

When GO was specified as a single construct in the nomological net, the fit indices for the first model were poor (X^2 = 1085.16; df = 294, CFI = 0.85, RMSEA = 0.10). In this model, the following constructs were found to be significant predictors for the goal orientation construct: material resource needs (t = 2.57, p = 0.01) and body needs (t = 2.62, p = 0.01). Additionally, two constructs were found to be significant outcomes for the goal orientation construct: value consciousness (t = 2.04, p = 0.05) and financial conservatism (t = 2.06, p = 0.05). Finally, two constructs were significantly related to warranty purchase: value consciousness (t = 2.49, p = 0.01) and the need for material resources (t = 2.16, p = 0.05).

When specifying GO as two constructs in the nomological net, the fit indices were excellent (X^2 = 537.24; df = 283, CFI = 0.94, RMSEA = 0.05). Three of the constructs were found to be significant predictors for the prevention orientation construct: Introversion (t = 3.43, p = 0.01), consciousness (t = -2.38, p = 0.01), and emotional instability (t = 4.14, p = 0.01). Additionally, two constructs were found to be significant predictors for the promotion orientation construct: the need for material resources (t = 3.07, p = 0.01) and body resource needs (t = 3.23, p = 0.01). Furthermore, in this model, none of the constructs were significant outcomes for either the prevention orientation or the promotion orientation constructs. Finally, two constructs were significantly related to warranty purchase: value consciousness (t = 2.45, p = 0.01) and the need for material resources (t = 2.12, p = 0.05).

4.5 Discussion

A major goal of study 1 was to examine the psychometric properties of the goal orientation construct. After a series of confirmatory factor analyses, the final scale contains 10 items, five of which measure promotion orientation and five of which measure prevention orientation. The two scales have both discriminant and statistical validity.

To test the nomological validity, two measurement models were built. In the first, goal orientation was modeled as a single construct, and in the second it was modeled as two separate constructs of promotion orientation and prevention orientation. The fit indexes revealed that the second model is a better fitting model.

Additionally, examining the structural relationships in the two models supports the previous results. When modeled as a single construct, the need for material resources

and body needs were found to be significant predictors for the goal orientation construct. Moreover, two constructs were found to be significant outcomes for the goal orientation construct: value consciousness and financial conservatism.

Finally, when modeled as two constructs, three of the antecedent constructs were significant predictors for the prevention orientation construct: Introversion, consciousness, and emotional instability. Additionally, two constructs were significant predictors for the promotion orientation construct: the need for material resources and body needs. The findings that promotion and prevention orientations have multiple antecedents support the prediction that promotion and prevention orientations reside at the third level of the GHM. Furthermore, in this model, none of the constructs were significant outcomes for either the prevention orientation or the promotion orientation constructs.

To sum up, the predictors and outcomes were different when goal orientation was modeled differently. This finding provides evidence that the measures representing the goal orientation constructs are in fact formative measures. The rationale behind this conclusion lies in the fact that when modeled as a single construct, goal orientation had two outcome variables. These outcomes, however, were not significant when goal orientation was modeled as two constructs. This means that the goal orientation construct had a different meaning when its items were divided between promotion and prevention orientations, which is consistent with the formative measures characteristics.

CHAPTER V

STUDY2

5.1 Introduction

After examining the psychometric properties of the goal orientation scale, study2 tests the proposed interactions among mood, frame, and goal orientation. I proposed that the highest risk-taking occurs when individuals' goal orientations match their mood state and the information frame. Hence, subjects will show a low likelihood to buy the car warranty. To that end, this study employs a 2 (goal orientation: promotion vs. prevention) x2 (mood: positive vs. negative) x 2 (frame: loss vs. gain) between-subjects design, where mood and frame were manipulated variables and goal orientation was a measured variable.

5.2 Sample and Procedures

The experiment was designed using the Qualtrcis software. In the first step, goal orientation was measured. Here, participants assigned themselves a unique code that consisted of the first two letters of their first name and the last four digits of their ID. After two weeks, the same participants were introduced to the main experiment and told that it consists of two independent tasks. Before starting, participants used the same unique code they created. That gives the researcher the ability to match the participants' responses from the two studies. The first task manipulated mood. As indicated in Chapter III, participants were told that the objective was to build a life event inventory that made them feel either happy or sad, and their mood was measured immediately after (Keller,

2003; Pham, 1998). Appendixes B and C show the scenario used to manipulate positive and negative moods, respectively.

After the mood induction task, participants were asked to perform the second task. They were given a scenario in which the decision frame was manipulated. In this task, participants read a scenario where they imagined that they were buying a used car they liked. The probability of a mechanical failure and the repair cost were provided. The dealer offered the participants the chance to buy a warranty that cost $500. At the end, decision framing was introduced to the participants who were given the option of either buying the warranty or not buying it. After reading the scenario, participants' mood was measured again along with the dependent variables measures. Appendix B shows the scenario used to manipulate the gain-framed message and Appendix C shows the scenario used to manipulate the loss-framed message.

5.3 Manipulation Check

The success of the mood manipulation was checked first. Results from ANOVA with measured mood as a dependent variable and mood condition (sad vs. happy) as an independent variable revealed a significant difference in subjects' mood between happy and sad conditions [$F(1,228) = 658.36$, $p < 0.00$]. The mood mean for subjects who were asked to report happy events was 6.03, compared to 2.86 for those who were asked to report sad events.

To the author's knowledge, none of the previous literature has checked for frame manipulation, relying on the notion that the gain domain triggers risk aversion, whereas the loss domain triggers risk-seeking behavior. In this research, the quality of the framing manipulation was checked by examining the difference in purchase risk between gain and

loss domain conditions. It is assumed that subjects choose to buy the warranty in order to reduce the risk associated with their purchase. Because this risk is anticipated to be low in the loss domain, subjects would not purchase the warranty to reduce the purchase risk. Results from ANOVA with purchase risk as a dependent variable and frame (loss vs. gain) as the independent variable, supported this prediction and showed that subjects in the loss domain did not perceive the warranty to reduce the purchase risk [F (1,228) = 3.4, p< 0.064].

Finally, the mood-as-resource hypothesis was tested. If mood was used as resource, two conditions must be met. The first condition is that the decision scenario has to be relevant to the subjects. A t-test was run with relevance as a test variable. The results revealed that subjects rated the decision scenario as relevant [(t (229) = 55.3, M = 4.6, p< 0.00)], and that relevance was a cross framing condition [(F (1,228) = 0.86, p< 354)].

In the second condition, one expects that participants' mood after being exposed to incongruent information to be different from their mood at the beginning of the experiment (Raghunathan and Trope, 2002). An independent sample t-test was run to examine the mood difference. The results indicated a significant change in subjects' mood at the end of the study [(t, 228 = 25.6, p <0.00)].

5.4 Assumptions Testing

Prior to testing the research model, the data was subjected to tests of the assumption within the regression and ANOVA frameworks. The following section outlines the tests and their results.

First, the studentized residuals, skewness, and kurtosis of the dependent variable were examined to explore any potential outliers. The results showed that 10 observations had residuals outside the range of (-, +3). After careful consideration, these respondents were deleted sequentially, which resulted in 230 usable responses for analysis. The research design of this study satisfies the regression requirement of interval-scaled dependent and independent variables. The normality of the error terms distribution was assessed using the normal probability plot (P-P). The results showed that the plotted standardized residuals closely resemble the distribution diagonal, thus satisfying the normality assumption. The independence of error term was assessed using the Durbin-Watson statistic which showed to be close the 2 supporting the independence of the observations. Finally, the homoscedasticity assumption was tested using the Levene's test for the equality of variance. The results showed that the dependent variable exhibited an equal level of variance across the independent variable, thus satisfying the homoscedasticity assumption.

5.5 Measurement Model

The measurement model of the scaled variables was examined using EFA, reliability, and CFA. For mood, participants were asked to rate on a seven- point scale their agreement with statements about how they were feeling (i.e., enjoyable, unpleasant, and happy) (Keller et al, 2003). The EFA results revealed a single-factor solution where all three items of the mood scale loaded on one factor with factors loading greater than 0.80. The explained variance of the single-factor solution was 72%. The coefficient alpha for the three-item mood scale was 80.

For purchase risk, my questionnaire included risk measures that fit in the context of the study. Participants were asked to indicate on a 7-point scale whether they considered buying the warranty a risky decision or not, whether buying the car warranty would reduce their worries or not, and whether buying the warranty would reduce their purchase risk or not. The EFA revealed a single-factor solution where all three items of the perceived risk scale loaded on one factor with factors loading greater than 0.60. The explained variance of the single factor solution was 62%. The coefficient alpha for the three-item purchase risk scale was 70.

Situational risk was measured with two items. Participants were asked to rate on a 7-point scale their agreement as to whether or not the situation described was risky and whether or not it represented a threat (Mano, 1994). The EFA results revealed a single-factor solution where the two items loaded on one factor with factors loading greater than 0.80. The explained variance of the single factor solution was 67%. The correlation between the two items was 0.4

Perceived information diagnosticity was measured with two items. Participants were asked to indicate how helpful and how useful the information in the warranty scenario was in making the decision about the warranty purchase (Kempf and Smith, 1998; Pham and Avnet, 2004, Zhao and Pechmann, 2007). The EFA results indicated a single-factor solution where the two items loaded on one factor with factors loading greater than 0.9, and the explained variance of the single factor solution was 95%. The correlation between the two items was 0.9.

Finally, arousal was controlled for by including six items for arousal on a 7-point Likert scale adapted from Shapiro et al. (2002): stimulated versus relaxed, excited versus

calm, frenzied versus sluggish, jittery versus dull, wide awake versus sleepy, aroused versus unaroused). The EFA results indicated a two-factor solution where the six items loaded on two factors with factors loading greater than 0.5, and the explained variance of the two-factor solution was 0.65. After examining the item-to-total correlation, it was decided to drop two items (i.e., sleep and arousal). The EFA was run on the four items. The results indicated a single-factor solution where the four items loaded on one factor with factors loading greater than 0.6, and the explained variance of the single factor solution was 0.62. The coefficient alpha for the four-item arousal scale was 79.

Next, items that measure promotion orientation, prevention orientation, mood, arousal, purchase risk, situational risk, and information diagnosticity were subjected to CFA. The results showed an excellent model fit indexes (X^2 = 484.08, df = 296, RMSEA = 0.05, NFI = 0.87, CFI = 0.94, and SRMR = 0.06). The next step was to test the model's proposed predictions. Table 4 below shows the correlations, means, and standard deviations of the variables in the measurement model.

Table 3
Correlations among the Variables in the Measurement Model

	Mood	Arousal	Purchase	Purchase Risk	Promotion	Prevention	Situation Risk	Diagnostic
Mood (M = 4.4, std = 1.8)	**1.00**							
Arousal (M = 4.3, std = 1.3)	**0.7	**1.00**						
Purchase (M = 5.6, std = 0.8)	-0.07	0.00	**1.00**					
Purchase Risk (M = 5.4, std = 0.9)	-0.06	-0.20	**0.67	**1.00**				
Promotion (M = 2.8, std = 1.2)	0.06	*0.16	-0.09	**-0.18	**1.00**			
Prevention (M = 4.8, std = 1.6)	0.00	*0.14	-0.06	-0.08	0.09	**1.00**		
Situation Risk (M = 4.2, std = 1.4)	-0.03	-0.08	**-0.17	*-0.13	0.04	0.03	**1.00**	
Diagnostic (M = 4.9, std = 1.2)	-0.10	0.00	**0.33	**0.28	-0.07	*0.13	**-0.17	**1.00**

**Correlation is significant at the 0.01 level
*Correlation is significant at the 0.05 level

5.6 Hypotheses Testing

It was proposed that a maximum fit occurs when (1) a person is promotion oriented and is in a positive mood state, and the information is framed in the gain domain, and (2) when person is prevention oriented and is in a sad mood state, and the information is framed in the loss domain. When a maximum fit occurs, the emotional resources are maximized. As a result, the fear of a loss is low as the match-up signals no threats that the desired outcomes will not be attained. Hence, risk-taking is maximized, and the likelihood of buying a car warranty will decrease. Conversely, when goal orientation is not congruent with mood and frame, a maximum lack of fit occurs and the individual becomes less risk-taking. Hence, the likelihood of buying a warranty will increase.

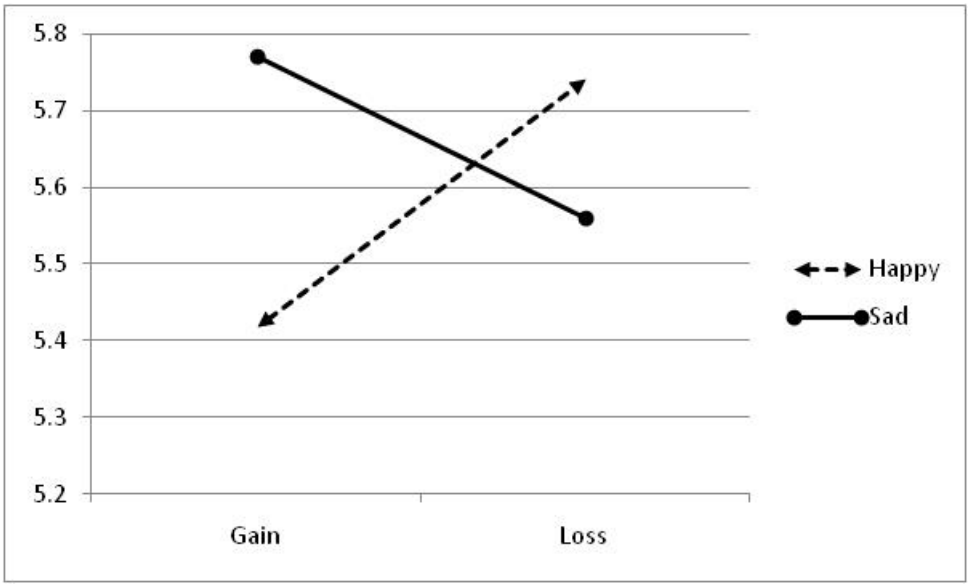
To test the hypothesized predictions, two analyses were performed. In the first, an ANOVA was run to examine the two way interaction between mood and frame with warranty purchase as a dependent variable. The results revealed a significant two-way interaction [$F(1, 226) = 6.175$, $p < 0.01$]. That is, subjects were more likely to purchase the car warranty in one of two situations: (1) when they were in a negative mood and the warranty information was framed as a gain, and (2) when subjects were in a happy mood and the warranty information was framed as a loss. These findings are important for two reasons. First, they provide evidence for mood as a moderator for the prospect theory prediction, as the framing effect was attenuated when exposing subjects to a positive mood. Second, these findings provide initial support for the hypothesis that when a match up or fit occurs, that is exposing subjects to a sad mood and loss-framed information or exposing subjects to a happy mood and gain-framed information, the likelihood to purchase the car warranty will decrease.

This conclusion is supported by the fact that subjects' mood did not change across framing conditions. An ANOVA was run with mood as a dependent variable and frame as an independent variable to examine mood difference across frame conditions. The results revealed no significant difference in subjects' mood [$F(1, 228) = 0.406$, $p < 0.525$)] when exposed to differently framed information, as those who were in positive mood reported a higher mood rating than those in a negative mood regardless of the information frame. This finding is important for ruling out any possible mood carry-over effect and to establish the effect of mood as independent from the effect of frame. Complete results for the interaction are shown in Table 4 and Figure 5 below.

Table 4
Two-Way-Interaction between Mood and Frame

Effect	F	Sig.
Mood	0.63	0.59
Frame	0.28	0.42
Mood * Frame	6.17	0.01

Figure 5
Two-Way Interaction between Mood and Frame



In the second analysis, goal orientation was added to examine the three-way-interaction among frame, mood, and goal orientation. Following the goal orientation literature (Lockwood et al., 2002), the researcher averaged the promotion and prevention focus scores and created a measure of dominant regulatory focus by subtracting the prevention focus score from the promotion focus score. That is, high scores reflected a relatively stronger promotion focus than prevention focus. Then, participants were classified as either promotion or prevention focused on the basis of a median split (Mdn = -1.44).

When examining goal orientation as a moderating variable, previous research specified goal orientation as a fixed factor in an ANOVA framework (Zhao and Pechmann, 2007). Following this standard procedure, a 2 (Frame: loss vs. gain) x 2 (Mood: sad vs. happy) x 2 (Goal orientation: promotion vs. prevention) ANOVA with warranty purchase as a dependant variable was run. The results revealed only a significant mood by frame interaction [$F(1,222) = 5.57$, $p < 0.02$]; the three-way interaction among mood, frame, and goal orientation was not significant. To test for potential mediational effects, purchase risk, situational risk, and information diagnosticity were specified as dependent variables, but the results were not significant. Therefore, it was decided to control for these factors. Here, an ANCOVA was run with purchase risk, situational risk, and information diagnosticity as covariates; the results revealed a significant main effect only for information diagnosticity [$F(1, 219 = 8.9, p< 0.00)$] and a significant mood by frame interaction [$F(1, 219) = 5.3, p< 0.02$].

Since the proposed three-way interaction was not significant when specifying goal orientation as a two-dimensional construct, the researcher built on the findings from study 1 and re-examined the proposed relationships. Results from study 1 showed that the current goal orientation scale suffers from psychometric problems and that specifying goal orientation as two separate constructs provides a better model fit than when specifying it as a single construct. Therefore, an analysis was run with goal orientation specified as two separate constructs, promotion orientation and prevention orientation, and the proposed relationships were re-examined using regression models. Using regression in the analysis has two advantages: (1) it maintains the meaningfulness and the integrity of the data, as opposed to losing its variation when classifying the data using the

median split, and (2) it satisfies the assumption of a continuous scaled independent variable, as in this stage of analysis, the average scores of promotion and prevention orientation items were used as independent variables rather than a median split on the difference score because each score represents a separate construct.

A series of regression analyses was run to examine the three-way interaction. At first, the difference scores (i.e., promotion - prevention), mood, frame, and their two-way and three-way interactions were specified as independent variables after controlling for arousal. The results revealed no significant interactions. Next, purchase risk, situational risk, and information diagnosticity were specified as dependent variables to examine potential mediational effects on warranty purchase. The results showed that warranty purchase is not mediated by these factors. This finding suggests that the influence of frame, mood, and individual orientation on warranty purchase is beyond the risk and information diagnosticity.

Therefore, in addition to arousal, it was decided to control for purchase risk, situational risk, and information diagnosticity when examining the proposed relationships. The overall model was significant [$F(11, 218) = 20.56$, $R^2 = 0.51$, $p < 0.00$)] and revealed a significant main effect for difference score ($t = 2.5$, $p < 0.01$) and a significant frame by difference score interaction ($t = 2.5$, $p < 0.01$). Also, the three way interaction among frame, mood, and difference scores was significant ($t = 2.16$, $p < 0.03$). The results also showed a significant main effect for purchase risk ($t = 12.2$, $p < 0.00$) and a significant main effect for information diagnosticity ($t = 3.1$, $p < 0.00$). Complete results for the three-way interaction are presented in Table 5 below

Table 5
Three-Way Interaction among Mood, Frame, and Difference Scores

Effect	Beta	t	sig
Frame	-0.09	-0.94	0.35
Mood	0.05	0.47	0.64
Difference Scores	0.24	2.55	0.01
Mood* Frame	-0.01	-0.08	0.94
Mood* Difference Scores	-0.24	-1.87	0.06
Frame* Difference Scores	-0.32	-2.55	0.01
Mood* Frame* Difference Scores	0.31	2.16	0.03
Situational Risk	-0.07	-1.51	0.13
Purchase Risk	0.62	12.23	0.00
Information Diagnosticity	0.16	3.11	0.00
Arousal	0.05	0.84	0.40

The significant three-way interaction could be explained as due to either high promotion scores or low prevention scores. Therefore, it was decided to build two more regression models. The first one examines the interaction among frame, mood, and prevention orientation, and the second model examines the interaction among frame, mood, and promotion orientation. The first model was significant [$F (11, 218) = 20.22$, $R^2 = 0.51$, $p < 0.00$)] and revealed a significant main effect for prevention ($t = -2.03$, $p < 0.04$) and a significant frame by prevention interaction ($t = 2.22$, $p < 0.03$). More importantly, the three-way interaction among the three constructs was significant ($t = -1.98$, $p < 0.05$). This result supports the hypothesized prediction that when a maximum fit occurs (i.e., prevention-orientated individuals in a negative mood and are exposed to loss-framed information), people are less likely to purchase the car warranty. The results also

showed a significant main effect for purchase risk (t = 11.9, p < 0.00) and a significant main effect for information diagnosticity (t = 3.02, p < 0.00).

The second model examined the interaction among frame, mood, and promotion orientation. The overall model was significant [F (11, 218, = 19.56, R^2 = 0.5, p < 0.00)]. The results showed a significant main effect for mood (t = 2.06, p < 0.04), a significant main effect for purchase risk (t =1 1.83, p < 0.00), and a significant main effect for information diagnosticity (t = 2.98, p < 0.00), although the three-way interaction among frame, mood, and promotion orientation was not significant. Complete results for these relationships are presented in Tables 6 and 7 below.

Table 6
Three-Way Interaction among Mood, Frame, and Prevention Orientation

Effect	Beta	t	sig
Frame	-0.38	-1.73	0.09
Mood	-0.12	-0.54	0.59
Prevention	-0.20	-2.03	0.04
Mood* Frame	0.31	1.12	0.26
Mood* Prevention	0.35	1.43	0.15
Frame* Prevention	0.54	2.23	0.03
Mood* Frame* Prevention	-0.58	-1.98	0.05
Situational Risk	-0.07	-1.36	0.17
Purchase Risk	0.61	11.91	0.00
Information Diagnosticity	0.16	3.02	0.00
Arousal	0.04	0.77	0.44

Table 7
Three-Way Interaction among Mood, Frame, and Promotion Orientation

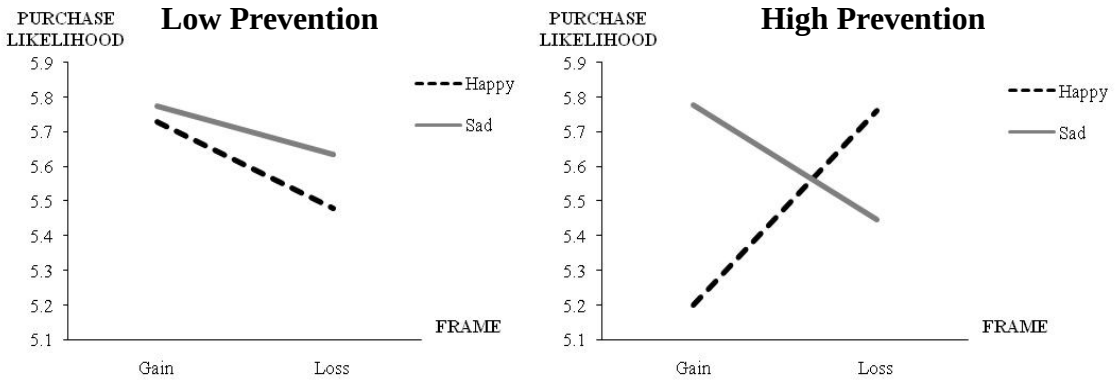
Effect	Beta	t	sig
Frame	0.30	1.61	0.11
Mood	0.39	2.06	0.04
Promotion	0.16	1.56	0.12
Mood* Frame	-0.39	-1.75	0.08
Mood* Promotion	-0.26	-1.32	0.19
Frame* Promotion	-0.26	-1.30	0.19
Mood* Frame* Promotion	0.21	0.93	0.35
Situational Risk	-0.06	-1.20	0.23
Purchase Risk	0.62	11.84	0.00
Information Diagnosticity	0.15	2.97	0.00
Arousal	0.05	0.81	0.42

Next, a slope analysis was run to fully understand the direction of the three-way interaction among mood, framing, and prevention orientation (see Figure 6 below). The results showed that low prevention people are risk averse and are more likely to purchase a car warranty when the warranty information is framed as a gain. However, when the warranty information is framed as a loss, low-prevention people are risk takers and are less likely to purchase a car warranty.

High-prevention people, on the other hand, are more likely to purchase a car warranty in either of two situations: (1) when they were in a sad mood and the warranty information was framed as a gain, and (2) when they were in a happy mood and the warranty information was framed as a loss. These findings are important for two reasons. First, they provide evidence for mood as a moderator for the prospect theory prediction, as the framing effect was attenuated when exposing subjects to a happy mood. Second, these findings provide partial support for the hypothesis that when a match-up or fit

occurs, that is exposing prevention people to a sad mood and loss-framed information, high risk-taking occurs and the likelihood of purchasing the car warranty decreases. These findings, however, did not support the prediction that the lowest level of risk-taking is expected to occur when there is a maximum lack of fit between an individual's goal orientation and his or her mood state and frame (i.e., when a subject has a high level of the prevention trait and is in positive mood state, and information is framed in the gain domain). The results showed that when a maximum lack of fit (MNF) occurs, risk-taking is higher than when a maximum fit occurs (MF), and the likelihood of purchasing a car warranty is lower.

Figure 6
Slope Analysis for Low and High Prevention Focus



5.7 Discussion

An experimental design was employed to answer the second research question: How do individual mood and goal orientation interact with choice framing to influence the purchase of a car warranty?

Reliability and CFA were applied to data from a sample of undergraduate students. From the Mood-As-Resource hypothesis, the prediction of the three-way interaction among mood, frame, and goal orientation was derived. This hypothesis

proposes that a positive mood may act as a buffer against the affective cost of negative information. This buffer, in turn, enables individuals to focus on the long-term benefits of the information if this information is considered self-relevant. (Raghunathan and Trope, 2002). An independent sample t-test was run to examine the mood difference. The results indicated a significant change in subjects' mood at the end of the study compared to their mood at the beginning of the study. These results support the mood-as-resource hypothesis, that is, subjects used their mood as a resource when making their decision regarding buying the warranty.

It was proposed that warranty purchase is a function of the match-up or the fit among mood, frame, and goal orientation. This prediction was tested on a sample of students (N = 230). Building on the findings from study 1 that goal orientation is better specified as two separate construct than as a single two- dimensional construct, a regression model that specified the three-way interaction among mood, frame, and difference scores was built. The results showed a significant three-way interaction. Because this interaction effect could be explained due to either high promotion or low prevention scores, two additional regression models were built. The first one specified the three-way interaction among mood, frame, and prevention orientation, and the second model specified the three-way interaction among mood, frame, and promotion orientation. The results support the proposed prediction. For prevention-oriented individuals, when a maximum fit occurs (i.e., prevention-oriented individuals in a sad mood are exposed to loss-framed information), the likelihood of buying a car warranty decreased, thus, supporting the proposed three-way interaction among mood, frame, and prevention orientation. These results hold only when controlling for purchase risk,

situational risk, information diagnosticity, and arousal. However, the three-way interaction among mood, frame, and promotion orientation was not significant.

Next, a slope analysis was run to fully understand the direction of the three-way interaction among mood, framing, and prevention orientation. The results showed that high-prevention people were more likely to purchase a car warranty in one of two situations: (1) when they were in a sad mood and the warranty information was framed as a gain, and (2) when they were in a happy mood and the warranty information was framed as a loss. These findings provide partial support for the prediction that when a match-up or fit occurs, that is exposing prevention people to a sad mood and loss-framed information, high risk-taking occurs and the likelihood of purchasing the car warranty decreases. These findings, however, did not support the prediction that the lowest level of risk-taking occurs when there is a maximum lack of fit between an individual's goal orientation and his or her mood state and the frame (i.e., when a subject with a high level of the prevention trait is in positive mood state and the information is framed in the gain domain). The results showed that when a maximum lack of fit (MNF) occurs, risk-taking is higher than when a maximum fit occurs (MF), and the likelihood of purchasing a car warranty is lower.

Taken alone, the mood-as-resource perspective does not explain these findings. An alternative perspective is found in the cue diagnosticity perspective. According to this perspective, multiple cues combine to form the overall judgment, and a single cue might be weighted more heavily than others when forming a judgment. Kluger et al. (2004) for example, proposed that the classical framing effect could be inverted when the context evoked a promotion focus among promotion-oriented people. Specifically, when

participants were provided with an Asian disease-like scenario involving teaching children music, people who scored high in values of self-direction and who were in artistic /science occupations were risk-seeking in the positive frame and risk-averse in the negative frame. Hence, because the context of this research (that is warranty purchase) may have evoked a prevention focus, the results were more significant for prevention-oriented than for promotion-oriented individuals. Additionally, the mean for promotion scores was below the scale mid-point (2.7), compared to the 4.8 prevention score, and that may explain why significant results were found for prevention orientation and not for the promotion orientation.

Mood management theory (Isen and Patrick, 1983, Isen, Nygren and Ashby, 1988) is an alternative perspective that can explain why, contrary to the expectations, when a maximum lack of fit (MNF) occurs, risk-taking is higher than when a maximum fit occurs (MF) for high-prevention people. According to this theory, when mood serves as individuals' final desired state or objective, they tend to ignore negative information and seek positive information for the purpose of repairing their negative state or maintaining their positive state (Wegener and Petty, 1994). In the context of this research, a MNF distorts the psychological balance that prevention people strive to maintain. In this situation, they will be more likely take risks in order to repair their psychological state and to attain their balance. Hence, the perception that a loss may occur in the future will decrease because things will not get any worse for them, and therefore, high risk-taking occurs and the likelihood of purchasing a car warranty decreases.

To sum up, a significant three-way interaction was found only for high-prevention people. Two alternative theories can explain the findings. First, mood-as-resource theory

explains the findings when a maximum fit occurs (i.e., high prevention, sad mood, and loss), and second, mood management theory explains the findings when a maximum non-fit occurs (i.e., high prevention, happy mood, and gain). No process measures are available in this research to provide evidence for the mood management rationale. Future research should consider comparing and contrasting the premises of these two theories and should examine the situations/combinations of mood, frame, promotion focus, and prevention focus under which consumers form their final judgment.

CHAPTER VI

DISCUSSION AND CONCLUSION

This chapter discusses and synthesizes the findings of this research and the implications of these findings. It concludes with the research limitations and a future research agenda.

6.1 Dissertation Overview

This dissertation examines how consumers' mood, decision framing, and goal orientation influence their decision to buy a car warranty. To the author's knowledge, this is the first work that examines the three-way interaction among these factors. In addition, because of the centrality of goal orientation in this study, the psychometric properties of this construct are examined. This study employs a survey approach and an experimental approach to addressing two research questions:

- What are the measurement properties of an individual's goal orientation (i.e., dimensionality, discriminant validity)?
- How do individual mood and goal orientation interact with choice framing to influence the purchase of a car warranty

The first research question was addressed using a survey approach. The second research question was addressed using an experimental approach. What follows is a discussion of the results from these two studies.

6.2 The Survey Study

A major goal of the survey study (i.e., study 1) was to examine the psychometric properties of the individual goal orientation construct. In study 1, the goal orientation scale from Lockwood et al. (2002) was investigated. This scale is the most appropriate to use in this dissertation because it has been used previously in the consumer behavior literature (i.e., Zhao and Pechmann, 2007).

In the study, the items from Lockwood et al.'s goal orientation scale were administered to 280 undergraduate students from a large mid-western university. Preliminary analysis revealed the scale has very poor psychometric properties. After a series of confirmatory factor analyses, a final scale was obtained which was composed of 10 items, 5 of which measure promotion orientation and 5 of which measure prevention orientation. The two dimensions had good discriminant validity. The correlation between the two scales was 0.2, a signal that the two scales are tapping different domains. To further test whether promotion and prevention are two separate constructs or two dimensions of a single construct, the nomological network for promotion and prevention was investigated. Here, the goal orientation scale was employed as an antecedent to the constructs of value consciousness, financial conservatism, and likelihood to buy a car warranty. In addition, elemental traits from the 3M model were employed as antecedents to goal orientation. If the promotion and prevention dimensions have different antecedents and consequences, they should be treated as separate constructs (Mowen and Voss, 2008).

Two measurement models were built. The first specified goal orientation as a second-order construct of two dimensions (promotion vs. prevention). The second model

specified goal orientation as two separate constructs: promotion orientation and prevention orientation. The fit indices revealed that specifying goal orientation as two constructs produce a better fitting model.

Additionally, examining the structural relationships in the two models revealed that the predictors and outcomes of goal orientation were different. For example, when specified as a single construct, the needs for material resources and for body resources were found to be significant predictors of the goal orientation construct. Moreover, two constructs were found to be significant outcomes of the goal orientation construct: value consciousness and financial conservatism. However, when specified as two constructs, three of the antecedents constructs were significant predictors for the prevention orientation construct: introversion, consciousness, and emotional instability. On the other hand, two constructs were significant predictors for the promotion orientation construct: the need for material resources and for body resources. Finally, none of the constructs were significant outcomes for either the prevention orientation or the promotion orientation constructs.

These findings provide evidence that the goal orientation construct as conceived by Lockwood et al. (2002) is formative in nature. The rationale behind this conclusion lies in the fact that when specified as a single construct, goal orientation had two outcome variables. These outcomes, however, were not significant when goal orientation was specified as two constructs. This means that the goal orientation construct had a different meaning when its items were divided between promotion orientation and prevention orientation, which is consistent with the formative measures characteristics.

6.3 The Experimental Study

An experimental study (i.e., study 2) was conducted to address the second research question. The experiment investigated the joint effect of mood, framing, and goal orientation on a car warranty purchase. The interaction can be conceptualized as two, two-way interactions that are based upon whether a respondent is promotion or prevention oriented. The predictions are based on the theoretical rationale that goal orientation is a chronic, stable factor that is expected to drive the predictions rather than mood state or information frame because these two are situational factors that will change over time. Thus, it was proposed that the highest risk-taking occurs when individuals' goal orientations match their mood state and the information frame. As a result, subjects show less likelihood of buying the car warranty.

The prediction was tested using responses from experimental scenarios about a hypothesized car-buying situation. The scenario states that the probability of mechanical failure is 25%, and that the cost associated with repairs is $2,000, and the cost of the warranty offered by the dealer is $500. Two variables were manipulated: mood and frame. Mood was manipulated by asking the participants to write life events that made them feel either happy or sad. The widely used "Asian disease problem" adapted from Tversky and Kahneman (1981) was used to manipulate the outcomes result from either buying or not buying the warranty under the gain versus loss domain. The experiment was conducted on 246 students. The data from 230 were subjected to analysis.

Because goal orientation was expected to drive the predictions rather than mood state or information frame, the analysis began by examining the two-way interaction between mood and frame with warranty purchase as a dependent variable. Next, the

influence of goal orientation on the relationship between mood and frame was examined to test for the proposed two, two-way interactions. The results revealed a significant two-way interaction between mood and frame. That is, subjects were more likely to purchase the car warranty in one of two situations: (1) when they were in a sad mood and the warranty information was framed as a gain, and (2) when subjects were in a happy mood and the warranty information was framed as a loss. These findings are important because they provide evidence that mood moderates the prospect theory prediction, because the framing effect was attenuated when subjects were in a happy mood. Additionally, the findings provide initial support for the hypothesis that when a match-up occurs,(i.e., exposing subjects to a sad mood and loss framed information or exposing subjects to a happy mood and gain framed information), the likelihood of purchasing the car warranty decreased.

Next, the proposed three-way interaction was examined. Following standard procedure, a 2 (Frame: loss vs. gain) x 2 (Mood: sad vs. happy) x 2 (Goal orientation: promotion vs. prevention) ANOVA with warranty purchase as the dependant variable was run. The results revealed that the three-way interaction among mood, frame, and goal orientation was not significant. Next, building on the findings from study 1, I re-examined the proposed relationships. Here, goal orientation was specified as two separate constructs: promotion orientation and prevention orientation.

A series of regression analyses was run to examine the three-way interaction. At first, the difference scores (i.e., promotion – prevention), mood, frame, and their two-way and three- way interactions were specified as independent variables. The results revealed a significant main effect for difference score, a significant frame by difference score

interaction, and a significant three-way interaction among frame, mood, and difference scores. These results, however, hold only when controlling for purchase risk, situational risk, information diagnosticity, and arousal.

Because the significant three-way interaction could be explained as due to either high promotion scores or low prevention scores, two additional regression models were built. The first model examined the interaction among frame, mood, and prevention orientation, and the second model examined the interaction among frame, mood, and promotion orientation. The first model revealed a significant main effect for prevention, a significant frame by prevention interaction, and a significant three-way interaction among frame, mood, and prevention orientation. The results from the second model, however, did not support the interaction among frame, mood, and promotion orientation. In sum, prevention orientation, rather than promotion orientation is the moderating construct.

Next, a slope analysis was run to fully understand the direction of the three-way interaction among mood, framing, and prevention orientation. The results showed that high-prevention people were more likely to purchase a car warranty in one of two situations: (1) when they were in a sad mood and the warranty information was framed as a gain, and (2) when they were in a happy mood and the warranty information was framed as a loss.

These results can be explained through the cue diagnosticity perspective. According to this perspective, multiple cues combine to form the overall judgment and a single cue might be weighted more heavily than others when forming a judgment. In this dissertation study, it is possible that the context (that is warranty purchase) may have

evoked a prevention focus. As a result, more significant results were found for the prevention orientation than for the promotion orientation.

Mood management theory (Isen and Patrick, 1983; Isen, Nygren, and Ashby, 1988), is an alternative perspective that can explain why when a maximum lack of fit (MNF) occurs, risk-taking is higher than when a maximum fit occurs (MF) for high-prevention people. In the context of this research, a MNF distorts the psychological balance that prevention people strive to maintain. In this situation, they will be more likely take risks in order to repair their psychological state and regain their balance. Hence, the perception that a loss may occur in the future will decrease because things will not get any worse for them, and therefore, high risk-taking occurs and the likelihood of purchasing a car warranty decreases.

Hence, two alternative theories can explain the findings. First, mood-as-resource theory explains the findings when a maximum fit occurs (i.e., high prevention, sad mood, and loss), and second, mood management theory explains the findings when a maximum non-fit occurs (i.e., high prevention, happy mood, and gain).

6.4 Theoretical Implications

This research has a number of theoretical implications. This dissertation extends the work on risky choice framing by including mood as a factor that moderates the prospect theory prediction, as the framing effect was attenuated when exposing subjects to a happy mood.

For example, it was found that subjects were more likely to purchase the car warranty in one of two situations: (1) when they were in a sad mood and the warranty

information was framed as a gain, and (2) when they were in a happy mood and the warranty information was framed as a loss.

Additionally, it was found that the mood and goal orientation interact with the frame to influence the likelihood of buying a car warranty. For example, for prevention-oriented individuals, the fit or the match-up between mood and framing is what drives warranty purchases; when a match-up or fit occurs, less likelihood of purchasing a warranty is shown. Hence, prevention consumers are less likely to purchase a car warranty when they are in a sad mood and information is framed as a loss. This finding is important for two reasons. First, it replicates the findings from previous research on warranty purchases that found tentative support for the greater likelihood consumers would purchase insurance when the respondents were using the asset or gain decision frame (Wiener et al., 1986; Wang and Fischbeck, 2004). Second, this research extends the work on warranty purchases by adding goal orientation as a factor that influences consumers' decisions to buy a warranty.

Another important addition of this research is that it extends the mood-as-resource hypothesis. This theory proposes that a positive mood acts as a buffer or resource against any potential negative information. In this dissertation, I proposed that warranty purchase is a function of the match-up or the fit among individuals' mood, the information frame, and their goal orientations. Hence, not only a positive mood, but also a negative mood may be considered as a resource, depending on an individual's orientation. For example, prevention-oriented individuals may consider a negative mood as a resource because it gives them the psychological balance they seek. In contrast, promotion-oriented

individuals may consider a positive mood as a resource because it gives them the psychological balance they seek.

Moreover, previous research either manipulated mood while ignoring the arousal level (Keller, 2003; Pham, 1998) or manipulated mood and arousal orthogonally in the same study (Shapiro et al., 2002). Gorn et al. (2001) used music to manipulate participants' mood (pleasant- unpleasant) controlling for arousal; the authors chose two stimuli that differed in valence but were perceived to be highly aroused. Since highly-aroused individuals perceived higher risks compared to calm individuals (Mano,1994) and the arousal influence on ad evaluation appeared when there was a clear affective positive or negative ad tone (Gorn et al., 2001), controlling for arousal by using high-arousal stimuli appears to have confounded the results of ad evaluation and risk perception. Therefore, in this research, arousal was controlled for when examining the proposed relationships.

Finally, an important addition to the goal orientation literature is the finding that goal orientation is in fact two different constructs (i.e., promotion and prevention) rather than a single two-dimensional construct. After examining the structural relationships in the GHM, it was found that promotion focus and prevention focus have different antecedents and consequences. This finding provides evidence that the measures representing the goal orientation constructs are formative. The rationale behind this conclusion lies in the fact that when modeled as a single construct, goal orientation had two outcome variables. These outcomes, however, were not significant when goal orientation was modeled as two constructs. This means that the goal orientation construct

had a different meaning when its items were divided between promotion and prevention orientation, which is consistent with the formative measures characteristics.

As a result, this dissertation proposes a shorter version of a promotion and prevention scale that has a better fit than the already-established Lockwood et al. (2002) scale. Moreover, instead of classifying individuals as either promotion-oriented or prevention-oriented, the findings suggest that an individual can be high or low on either trait. This is an interesting finding which calls into question the findings of many past studies that specified goal orientation as a two dimensional construct of promotion and prevention. Moreover, in opposition to what has been suggested—that the prevention trait is a compound trait—the finding that high-prevention people are risk-takers when a maximum non-fit occurs suggests that the prevention trait is a situational trait that can be influenced by mood and frame.

6.5 Managerial and Policy Implications

In addition to the theoretical implications, this dissertation has several managerial and policy implications. From the managerial perspective, previous research on warranty purchases has focused on an individual's affect toward the object under investigation as a driver for purchasing a warranty (Piao, 2003). This dissertation focuses attention on an individual's affect that is not related to the object under investigation. This is important from a practical point of view because individuals' affect toward the object is not the only factor driving their decisions. Unrelated affects may also contribute to the decision. For example, consumers are aware that sales people are intentionally trying to develop a positive affect toward the car in order to motivate them to buy the warranty. Managers

may also motivate their potential buyers to purchase a car warranty simply by creating a positive mood and framing the warranty as a way to save money.

The findings also advance knowledge by identifying the joint effects of mood, frame, and goal orientation as factors that influence the decision to purchase warranties. Such decisions occur as a result of a congruency among these factors combined. For example, by identifying whether a consumer is promotion-oriented or prevention-oriented, a sales manager can adapt the warranty information and mood to finish the sale and close the transaction.

From a public policy perspective, the findings from this dissertation will be helpful not only in educating consumers about warranty purchases, but also in selecting those mechanisms that will be effective in achieving this objective, that is, the combination of affect and frame that best matches a consumer's goal orientation. For example, it is beneficial to educate the general public that sales people may adapt consumers' mood and the framing of the warranty information as a means of motivating them to purchase the warranty, that is, when there is a mis-match between consumers' orientation on the one hand and their mood and the information framing on the other hand.

6.6 Research Limitations

There are limitations with this research. One limitation is the generalizability of the findings. The proposed model was tested in a car warranty context, which may have evoked a prevention focus. Previous research suggested that the context of the study may evoke either a promotion or a prevention focus (Kluger et al., 2004). Future work should attempt to test the proposed three-way-interaction in a promotion-focused context and/or

in another context that evokes neither a promotion nor a prevention focus. This is important in the light of the average response pattern observed for the warranty purchase items, which was found to be higher than the midpoint. This pattern may have occurred because customers feel that it is better to be safe than sorry and therefore reported a higher likelihood of purchasing the warranty regardless of their attitude toward the warranty itself.

Another limitation is related to using a student sample. Although previous literature showed the adequacy of Lockwood's scale on a student sample, the response patterns for the promotion and prevention were different. For promotion items, the response pattern was lower than the midpoint. In contrast, for prevention items, the response pattern was close to the midpoint. This may explain why significant results were found for a prevention focus and not for a promotion focus.

Finally, it is also important to note that data were obtained after manipulating mood and frame. To completely rule out any possible mood carry over effect, future research should replicate the findings relying on the current mood state of the subjects. Manipulating mood is associated with mis-attribution errors, that is, subjects become aware that their mood is being manipulated, and how would this awareness influence their subsequent decisions (Schwarz and Clore, 1983).

6.7 Future Research

The research limitations suggest several future avenues for research. One area of future research is to replicate the findings in a promotion-focused context and another in a context that evokes neither a promotion nor a prevention focus. For example, one could adopt a context related to financial plans or a musical concert (e.g., Chernev., 2004;

Kluger et al., 2004). In these situations, I anticipate that the three-way interaction will be significant. Kluger et al. (2004) for example, proposed that the classical framing effect could be inverted when the context evoked a promotion focus among promotion-oriented people. People who were in artistic /science occupations were risk-seeking in the positive frame and risk-averse in the negative frame. Hence, the framing effect was attenuated.

It is established in the affect literature that emotions of the same valence (i.e., fear and anger) trigger different behavioral responses, and that they vary in the level of control (Lerner and Keltner, 2001). Therefore, a second area of research is to examine the joint effect of frame, goal orientation, and specific emotions (i.e., anger, fear, hope, aspiration) on consumers' judgments. This would be examined within the cue diagnosticity context, in which the weight that individuals give to each of these emotions, frames, and goal orientations in forming the overall judgment is investigated.

Within the warranty context, other behavioral theories could be used to answer different research questions. For example, one could rely on information integration theory and integrated information response model (IIRM) to examine the mathematical representation of the different information consumers use to make the decisions regarding the warranty, taking into account changing the order of this information (Anderson 1979, Smith, 1993).

Furthermore, it would be worthwhile to examine the proposed relationships in actual settings and collect the data from real customers in actual warranty purchase situations. Such research could be operationalized by having salespeople provide actual data on consumers' responses and how their mood, promotion or prevention orientation, and framing the warranty information impacted their decisions. Based on this

information, managers can have a better understanding of how consumers process the buying situation and thus design the best combination of mood, frame, and orientation to help customers in their warranty purchase. This is important in order to educate consumers about the mechanisms that sales people use in approaching them about buying a warranty.

Finally, a number of scales have been used to measure an individual's goal orientation. These scales, however, suffer from methodological flaws: dimensionality (BIS and BAS; Carver and White, 1994), social desirability (RFQ; Higgins et al., 2001), generalizability (Lockwood et al., 2002), and poor model fit (RFS; Fellner et al., 2007). Future research should examine the psychometric properties, compare and contrast these different scales. This is important from a theoretical perspective because the results will improve understanding of the goal orientation structure and determine which of these scales, if any, is most suitable.

REFERENCES

Anderson, Norman H. (1979). Algebraic rules in psychological measurement. In Hal R. Arkes and Kenneth R. Hammond (Eds.)**,** *Judgment and Decision Making* (pp. 77-94).

Arkes, Hal R., Herren, Lisa Tandy, & Isen, Alice M. (1988). The role of potential loss in the influence of affect on risk-taking behavior. *Organizational Behaviors and Human Decision Processes*, *42*, 181-193.

Avnet, Tamar, & Higgens, E. Troy. (2003). Locomotion, assessment, and regulatory fit: Value transfer from "How to what. *Journal of Experimental Social Psychology, 39*, (September), 525-530.

Avnet, Tamar, & Higgens, E. Troy. (2006). How regulatory fit affects value in consumer choice and opinions. *Journal of Marketing Research*, *43*, (February), 1-10.

Bagozzi, R. and Youjae Yi.(1988). On the evaluation of structural equation models. *Journal of The Academy of Marketing Science*, 16, (1), 74-94

Camacho, C. J., Higgins, E. T., & Luger, L. (2003). Moral value transfer from regulatory fit: "What feels right is right" and "what feels wrong is wrong." *Journal of Personality and Social Psychology, 84*, 498–510.

Cannon, Joseph P., & Homburg, Christian. (2001). Buyer-seller relationships and customer firm costs. *Journal of Marketing*, *65*, (January), 29-43.

Carver, Charles S., & White, Teri L. (1994). Behavioral inhibition, behavioral activation, and affective responses to impending reward and punishment: The BIS/BAS scales.

Cesario, Joseph, Grant, Heidi, & Higgens, E. Troy. (2004). Regulatory fit and persuasion: Transfer from feeling right. *Journal of Personality and Social Psychology*, *86*, (March), 388-404.

Chernev, A. (2004). Goal orientation and consumer preference for the status quo. *Journal of Consumer Research*, *31*, (December), 557-565.

Clore, G.L., Schwarz, N., & Conway, M. (1994). Affective caused and consequences of social information processing. In R.S. Wyer and T.K. Srull (Eds.), *Handbook of Social Cognition* (2^{nd} ed), 1, (pp. 323-418). Hillsdale, N.J: Erlbaum.

Cox, Anthony D., Coz, Dena, & Zimet, Gregory. (2006). Understanding consumer response to product risk information. *Journal of Marketing*, *70*, (January), 79-91.

Dholakia, Utpal M., Gopinath, Mahesh, Bagozzi, Richard, & Nataraajan, Rajan. (2006). The role of regulatory focus in the experience and self-control of desire for temptation. *Journal of Consumer Psychology, 16*, (2), 163-175.

Dhar, Rhavi, & Wertenbroch, Klaus. (2000). Consumer choice between hedonic and utilitarian goods. *Journal of Marketing Research, 37,* 60-71.

Diamond, William D. (1988). The effect of probability and consequences levels on the focus of consumer judgment in risky situations. *Journal of Consumer Research, 15,* 280-283.

Fedorikhin, Alexander, & Cole, Catherine A. (2004). Mood effect on attitude, perceived risk and choice: moderators and mediators. *Journal of Consumer Psychology, 14,* (1&2), 2-12.

Fellner, Bernhard, Marianne Holler, Erich Kirchler, & Alfred Schabmann.(2007). Regulatory focus scale (RFS): Development of a scale to record dispositional regulatory focus. *Swiss Journal of Psychology,* 66 (2), 109–116

Forgas, J.P. (1995). Mood and judgment: The affect infusion model (AIM). *Psychological Bulletin, 117,* 39-66.

Fornell C, Larcker DF.(1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research,* 18, (1), 39-50

Gerbing, David W., & Anderson, James C. (1988). An updated paradigm for scale development incorporating unidimensionality and its assessment. *Journal of Marketing Research, 25,* (2), 186-192.

Gorn, Gerald, Pham, Michel, & Sin, Leo Yatming. (2001). When arousal influences ad evaluation and valence does not (and visa versa). *Journal of Consumer Psychology, 11,* (1), 43-55.

Hardie, Bruce G.S., Johnson, Eric J., & Fader, Peter S. (1993). A logit model of brand choice calibrated on scanner data. *Marketing Science, 2,* 203-208.

Michal Herzenstein, Steven Posavac, & Jos'ko Brakus. (2007). Adoption of new and really new products: The effects of self-regulation systems and risk salience. *Journal of Marketing Research,* 44, (2), 251-260

Higgins, E. Troy. (1997). Beyond pleasure and pain. *American Psychologist, 55,* (December), 1280-1300.

Higgins, E. T. (2000). Making a good decision: Value from fit. *American Psychologist, 55,* 1217–1230.

Higgins, E. T. (2002). How self-regulation creates distinct values: The case of promotion and prevention decision making. *Journal of Consumer Psychology, 12,* 177–191.

Higgins, E. Troy, Friedman, R.S., Harlow, R.E., Idson, L.C., Ayduk, O.N., & Taylor, A. (2001). Achievement orientations from subjective histories of success: Promotion pride versus prevention pride. *European Journal of Social Psychology, 31*, 3–23.

Hsee, C.K., & Kunreuther, H.C. (2000). The affection effect in insurance decisions. *Journal of Risk and Uncertainty, 20*, (2), 141-159.

Hsee, C.K., & Menon, S. (1999). Affection effect in consumer choice. Unpublished study. University of Chicago.

Hu, Litze, & Bentler, Peter M. (1999). Cutoff criteria for fit indexes in covariance structural analysis: conventional criteria versus new alternatives. *Structural Equation Modeling*, *6*, (1), 1-55

Idson, Lorraine Chen, Liberman, Nira, & Higgens, E. Troy (2004). Distinguishing gain from nonlosses and losses from nongains: A regulatory focus perspective on hedonic intensity. *Journal of Experimental Social Psychology*, *36*, (May), 252-274.

Isen, Alice M., & Geva, Nehemial (1987). The influence of positive affect on acceptable levels of risk: The person with the large canoe has a large worry. *Organizational Behaviors and Human Decision Processes*, *39*, (2), 145-154

Isen, A. M., Nygren, T. E., & Ashby, F. G. (1988). The influence of positive affect on the subjective utility of gains and losses: It's not worth the risk. *Journal of Personality and Social Psychology*, 55,710-717

Isen, A. M. & Patrick, R., (1983). The effect of positive feelings on risk taking: when the chips are down. *Organizational behavior and human performance*, 31, 194--202

Jain, S.P., Slotegraaf, R.J., & Lindsey, C.D. (2007). Towards dimensionalzing warranty information: The role of consumer costs of warranty redemption. *Journal of Consumer Psychology*, *17*, (1), 70-80.

Johnson, E.J., & Tversky, A. (1983). Affect, generalization, and the perception of risk. *Journal of Personality and Social Psychology*, *45*, 30-31

Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica, 47* (2), 263-291.

Kahneman, D., & Tversky, A. (1984). Choices, value, and frames. *American Psychologist*, *39*, (4), 341-350.

Kalwani, M.U., & Kim, C.K. (1992). Consumer price and promotion expectations: An experimental study. *Journal of Marketing Research*, *20*, 90-100.

Keller, Punam Anand, Lipkus, Isaac M., & Rimer, Barbara K. (2003). Affect, framing, and Persuasion. *Journal of Marketing Research*, (February), 54-64.

Kempf, Deanna S., & Smith, Robert E. (1998). Consumer processing of product trial and the influence of prior advertising: Structural modeling approach. *Journal of Marketing Research, 35*, (August), 325-338.

Kluger, A.N, Elena S., Yoav, G., & Meirav, H. (2004). The effect of regulatory focus on the shape of probability-weighting function: Evidence from a cross modality matching method. *Organizational Behaviors and Human Decision Processes, 95*, 20-39.

Kramer, Thomas, & Yoon, Song-Oh (2006). Affect as information: The moderating roles of self-regulatory system and diagnosticity of affective valence. *Advances in Consumer Research, 33*, 102-103.

Kramer, Thomas, & Yoon, Song-Oh (2007). Approach-avoidance and affect as information. Working paper.

Kunreuther, H., Ginsberg, R., Miller, L., Sagi, P., Slovic, P., Borkan, B., & Katz, N. (1978). *Disaster insurance protection: Public policy lessons*. New York: Wiley & Sons.

Leone, Luigi, Perugini, Marco, Bagozzi, Richard, Pierro, Antonio, & Mannetti, Lucia (2001). Construct validity and generalizability of the Carver-White behavioral inhibition system/behavioral activation system scales. *European Journal of Personality, 15*, 373-390.

Lerner, Jennifer, & Keltner, Dacher (2000). Beyond valence: Toward a model of emotion-specific influence on judgment and choice. *Cognition and Emotion, 14*, (4), 473-493.

Lerner, Jennifer, & Keltner, Dacher (2001). Fear, anger, and risk. *Journal of Personality and Social Psychology, 81*, (1), 149-159.

Levin, Irwin P., & Gaeth, Gary J. (1988). Framing of attribute information before and after consuming the product. *Journal of Consumer Research, 15*, 374-378.

Levin, Irwin P., Schneider, Sandra L., & Gaeth, Gary J. (1998). All frames are not created equal: A typology and critical analysis of framing effects. *Organizational Behavior and Human Decision Processes, 76*, (2), 149-188.

Licata, J., Mowen, J.C., & Brown, T. (2003). Service worker job resourcefulness, customer orientation, and performance: a hierarchical model approach. *Journal of the Academy of Marketing Science, 31* (3), 256-271.

Lichtenstein, D.R., Netemeyer, Richard G., & Burton, Scot (1990). Distinguishing coupon proneness from value consciousness: an acquisition-transaction utility theory perspective. *Journal of Marketing, 54*, 54-67.

Lockwood, P., Jordan, C.H., & Kunda, Z. (2002). Motivation by positive or negative role models: Regulatory focus determines who will best inspire us. *Journal of Personality and Social Psychology, 83*, 854-864.

Lowenstein, George F. (1996). Out of control: Visceral influences on behavior. *Organizational Behavior and Human Decision Processes, 65*, 272-292.

Lowenstein, George F., Weber, Elke U., Hsee, Christopher K., & Welch, Ned (2001). Risk as Feelings. *Psychological Bulletin, 127*, (2), 267-286.

MacKenzie, Scott, Podsakoff, M., & Ahearne, M. (1998). Some possible antecedents and consequences of in-role and extra-role salesperson performance. *Journal of Marketing, 62*, 87-98.

Mano, Haim (1994). Risk-taking, framing effects, and affect. *Organizational Behavior and Human Processes, 57*, 38-58.

Mowen, J.C. (2000). *The 3M model of motivation and personality: Theory and empirical applications to consumer behavior*. Boston: Kluwer Academic Publishers

Mowen, J.C., & Voss, Kevin (2008). On building better construct measures: Implications of a general hierarchical model. *Psychology and Marketing*, 25, (6), 485-505

Novemsky, Nathan, & Kahneman, Daniel (2005). The boundaries of loss aversion. *Journal of Marketing Research*, (May), 119-128.

Nygren, Thomas E. (1998). Reacting to perceived high- and low-risk win-lose opportunities in a risky decision-making task: Is it framing or affect or both? *Motivation and Emotion, 22*, (1), 73-97.

Pham, M.T. (1998). Representatives, relevance and use of feelings in decision making. *Journal of Consumer Research, 25*, 144-159.

Pham, M.T., Cohen, J.B., Pracejus, J.W., & Hughes, G.D. (2001). Affect monitoring and primacy of feelings in judgment. *Journal of Consumer Research, 28*, (2), 167-188.

Pham, M.T., & Avenet, Tamar (2004). Ideals and oughts and the reliance on affect versus substance in persuasion. *Journal of Consumer Research*, 30 (March), 503-518.

Piao, Xin (2003). Affect and protective decisions. Unpublished study. University of Pennsylvania.

Price, L.J., & Dawar, N. (2002). The joint effects of brands and warranties in signaling new product quality. *Journal of Economic Psychology, 23*, 165-190.

Raghunanthan, Rajagopal, & Trope, Yaacove (2002). Walking the tightrope between feeling good and being accurate: Mood as resource in processing persuasive messages. *Journal of Personality and Social Psychology, 83*, (3), 510-525.

Schwarz, N., (2001). Feeling as information: Mood influence judgments and processing strategies. In T. Gilovich, D. Griffin, D. Kahneman (Eds.). New *Perspective on Judgment under Uncertainty*. Cambridge: Cambridge University press.

Schwarz, N., & Clore, G.L. (1983). Mood, misattribution, and judgment of well-being: informative and directive functions of affective states. *Journal of Personality and Social Psychology, 458*, 513-523.

Shah, J.Y., Higgins, E.T., & Friedman, R.S. (1998). Performance incentives and means: How regulatory focus influences goal attainment. *Journal of Personality and Social Psychology, 74*, 285-293.

Shapiro, Stewart, MacInnis, Deborah J., & Park, C. Whan (2002). Understanding program induced mood effects: Decoupling arousal from valence. *Journal of Advertising*, (4), 15-26.

Shimp, T., & Bearden, W. (1982). Warranty and other extrinsic cue effects on consumer risk perception. *Journal of Consumer Research, 9*, 38-46.

Simonson, Itamar (1992). The Influence of anticipating regret and responsibility on purchase decisions. *Journal of Consumer Research, 19* (June), 105-118.

Smith, Robert E. (1993). Integrating information from advertising and trial: processes and effects on consumer response to product information. *Journal of Marketing Research, 30*, 204-219.

Tversky, Amos, & Kahneman, Daniel (1981). The framing of decisions and the psychology of choice. *Science, 211*, 36-60.

Voss, Kevin E., Spangenberg, Eric R., & Grohmann, Bianca (2003). Measuring the hedonic and utilitarian dimensions of consumer attitude. *Journal of Marketing Research, 40*, (August), 310-320.

Wang, M & Paul Fischbeck (2004). Similar in how to frame but different in how to choose. Marketing Bulletin, 15,(2).

Wegener, Duane T., & Petty, Richard E. (1994). Mood management across affective states: The hedonic contingency hypothesis. *Journal of Personality and Social Psychology, 66*, (6), 1034-1048.

Wiener, Joshua L., Gentry, James W., & Miller, Ronald K. (1986). The framing of insurance purchase decisions,. *Advances in Consumer Research, 13*, 251-256.

Weinstein, N. (1987). *Taking care: Understanding and encouraging self-protective behavior*. Cambridge: Cambridge University Press.

Zhao, Guangzhi, & Pechmann, Cornelia (2007). The impact of regulatory focus on adolescents' response to antismoking advertising campaigns. *Journal of Marketing Research*, (November), 671-687.

APPENDICES
APPENDIX A
Study 1 Instrument

Survey of Consumer Lifestyle and Motivation

Directions

This is an informed consent statement for research being conducted by Professor John Mowen and Doctoral student Amjad Abu ELSamen in the Department of Marketing. Through this 20 minutes survey we seek to understand the motives and personality traits that influence a number of different consumer activities. The results of this survey will be employed to develop an understanding of the individual difference variables that influence consumer behavior. The ideas behind the study will be discussed in class at a later date.

Your responses are confidential! There are no known risks associated with this project which are greater than those ordinarily encountered in daily life**.** The data will be stored in an electronic database on the workstation computer in Dr. Mowen's office, on electronic media maintained by Mr. Amjad Abu ElSamen. The data will be held until destroyed by both Dr. Mowen and Mr. Amjad. To get the extra credit, you need to create an ID number for your self at the beginning of the survey. This ID should contain the first two letters of your first name and the last four digits of your Campus Wide ID (CWID). When you finish the survey, simply hit submit and logoff your computer. You are not required to complete the survey. If you do not wish to complete the survey, and desire to receive extra credit points, you can complete a one-page type written evaluation of a print advertisement by identifying the marketing concepts illustrated by the ad. There is no penalty for not completing the survey. Just indicate to your instructor that you wish to do the one-page write-up.

If you have any questions, please ask them to John Mowen (744-5112, SSB 323) or Amjad Abu ELSamen (614-1580, CLB 007). In addition, if you have questions about your rights as a research volunteer, you may contact Dr. Shelia Kennison, IRB Chair, Oklahoma State University, 219 Cordell North, Stillwater, OK, 74075, 405-744-1676 or at irb@okstate.edu.

I have read and I understand the procedure described above. Your completion and submission of this survey indicates your consent to participate.

In the space below, you are required to type your ID that contains the first two letters of your first name and the last four digits of CWID

Below are two descriptions for two persons. Please put an X mark next to the one that best describes the way you are

_____ **Person A:** An individual that seeks to achieve success and positive outcomes through high degree of commitment. My main objectives are to satisfy my own ideals, hope and wishes, and achieve self actualization need.

_____ **Person B:** An individual that seeks to avoid failure and prevent negative outcomes by being careful and precise. My main objectives are to live-up to other's expectations, fulfill my obligations, and achieve security needs.

Directions

For each item circle the number that best describes how frequently you feel or act in the manner described in your professional, leisure, and home lives. There are no right or wrong answers. Just circle the response that most accurately describes how you feel or act in your daily life, not how you wish you would act. **Please note that some of the questions may appear to be similar to each other. It is important, however, that you Answer ALL Questions!! Thanks.**

How often do you feel/act this way?	**Never**								**Always**
Feel bashful more than others.	1	2	3	4	5	6	7	8	9
Keep to myself (introverted)	1	2	3	4	5	6	7	8	9
Quiet when with people.	1	2	3	4	5	6	7	8	9
Shy.	1	2	3	4	5	6	7	8	9
Precise	1	2	3	4	5	6	7	8	9
Efficient	1	2	3	4	5	6	7	8	9
Organized	1	2	3	4	5	6	7	8	9
Orderly	1	2	3	4	5	6	7	8	9
Frequently feel highly creative.	1	2	3	4	5	6	7	8	9
Imaginative.	1	2	3	4	5	6	7	8	9
Find novel solutions.	1	2	3	4	5	6	7	8	9
More original than others.	1	2	3	4	5	6	7	8	9
Tender hearted with others.	1	2	3	4	5	6	7	8	9
Agreeable with others	1	2	3	4	5	6	7	8	9
Kind to others.	1	2	3	4	5	6	7	8	9
Softhearted	1	2	3	4	5	6	7	8	9
Moody more than others.	1	2	3	4	5	6	7	8	9
Temperamental	1	2	3	4	5	6	7	8	9
Touchy	1	2	3	4	5	6	7	8	9
Emotions go way up and down.	1	2	3	4	5	6	7	8	9
Enjoy buying expensive things	1	2	3	4	5	6	7	8	9
Like to own nice things more than most people	1	2	3	4	5	6	7	8	9
Acquiring valuable things is important to me	1	2	3	4	5	6	7	8	9
Enjoy owning luxurious things	1	2	3	4	5	6	7	8	9
Drawn to experiences with an element of danger	1	2	3	4	5	6	7	8	9
Seek an adrenaline rush	1	2	3	4	5	6	7	8	9
Actively seek out new experiences	1	2	3	4	5	6	7	8	9
Enjoy taking more risks than others	1	2	3	4	5	6	7	8	9
Focus on my body and how it feels	1	2	3	4	5	6	7	8	9
Devote time each day to improving my body	1	2	3	4	5	6	7	8	9
Feel that making my body look good is important	1	2	3	4	5	6	7	8	9
Work hard to keep my body healthy	1	2	3	4	5	6	7	8	9
Enjoy competition more than others	1	2	3	4	5	6	7	8	9
Feel that it is important to outperform others	1	2	3	4	5	6	7	8	9
Enjoy testing my abilities against others	1	2	3	4	5	6	7	8	9
Feel that winning is extremely important	1	2	3	4	5	6	7	8	9
Enjoy learning new things more than others.	1	2	3	4	5	6	7	8	9
People consider me to be intellectual.	1	2	3	4	5	6	7	8	9
Enjoy working on new ideas.	1	2	3	4	5	6	7	8	9
Information is my most important resource.	1	2	3	4	5	6	7	8	9

How often do you feel/act this way?	**Never**								**Always**
I feel in control of what is happening to me.	1	2	3	4	5	6	7	8	9
Once I make up my mind, I can reach my goals.	1	2	3	4	5	6	7	8	9
I feel like I have a great deal of will power.	1	2	3	4	5	6	7	8	9
When I make a decision, I can carry it out.	1	2	3	4	5	6	7	8	9
I'm long term goal oriented	1	2	3	4	5	6	7	8	9
When doing a task, I set a deadline for completion.	1	2	3	4	5	6	7	8	9
I set long term goals for the future	1	2	3	4	5	6	7	8	9
I approach tasks in a serious manner.	1	2	3	4	5	6	7	8	9
More playful than others.	1	2	3	4	5	6	7	8	9
Lighthearted.	1	2	3	4	5	6	7	8	9
More fun loving than others.	1	2	3	4	5	6	7	8	9
Find that I can have doing almost anything.	1	2	3	4	5	6	7	8	9
The distant future is too uncertain to plan for	1	2	3	4	5	6	7	8	9
I pretty much live on a day-to-day basis	1	2	3	4	5	6	7	8	9
The future seems very vague and uncertain to me	1	2	3	4	5	6	7	8	9
I focus on the present more than the future	1	2	3	4	5	6	7	8	9
When shopping, I compare the prices of different brands to be sure I get the best value……	1	2	3	4	5	6	7	8	9
When purchasing a product, I always try to maximize the quality I get for the money I spend	1	2	3	4	5	6	7	8	9
I generally shop around for lower prices on products, but they still must meet certain quality requirements requirements before I buy them	1	2	3	4	5	6	7	8	9
I always check prices at the grocery store to be sure I get the best value for the money I spend	1	2	3	4	5	6	7	8	9

Circle the number that best represents the extent that you disagree to agree with each statement.

	Strongly Disagree			**Neutral**			**Strongly Agree**
I am extremely financially conservative	1	2	3	4	5	6	7
I do not like to take risks with my money	1	2	3	4	5	6	7
I am very cautious about making investments that are not a sure thing	1	2	3	4	5	6	7
I take steps to keep my money safe	1	2	3	4	5	6	7
Protecting my money is very important to me	1	2	3	4	5	6	7
It is important to me that those who know me can predict what I will do	1	2	3	4	5	6	7
The appearance of consistency is an important part of the image I Present to the world	1	2	3	4	5	6	7
An important requirement for any friend of mine is personal consistency	1	2	3	4	5	6	7
I typically prefer to do things the same way	1	2	3	4	5	6	7
I want my close friends to be predictable	1	2	3	4	5	6	7
It is important to me that others view me as a stable person	1	2	3	4	5	6	7
I make an effort to appear consistent to others	1	2	3	4	5	6	7
It doesn't bother me much if my actions are inconsistent	1	2	3	4	5	6	7

Using the scale below, please write the appropriate number in the blank beside each item.

1	2	3	4	5	6	7	8	9
Not at all true of me								Very true of me

1. _____ In general, I am focused on preventing negative events in my life.
2. _____ I am anxious that I will fall short of my responsibilities and obligations.
3. _____ I frequently imagine how I will achieve my hopes and aspirations.
4. _____ I often think about the person I am afraid I might become in the future.
5. _____ I often think about the person I would ideally like to be in the future.
6. _____ I typically focus in the success I hope to achieve in the future.
7. _____ I often worry that I will fail to accomplish my academic goals.
8. _____ I often think about how I will achieve academic success.
9. _____ I often imagine myself experiencing bad things and I fear might happen to me.
10. _____ I frequently think about how I can prevent failures in my life.
11. _____ I am more oriented toward preventing losses than I am toward achieving gains.
12. _____ My major goal in school right now is to achieve my academic ambitions.
13. _____ My major goal in school right now is to avoid becoming an academic failure.
14. _____ I see myself as someone who is primarily striving to reach my "ideal self" – to fulfill my hopes, wishes and aspirations.
15. _____ I see myself as someone who is primarily striving to become the self I "ought" to be – to fulfill my duties, responsibilities, and obligations.
16. _____ In general, I am focused on achieving positive outcomes in my life.
17. _____ I often imagine myself experiencing good things that I hope will happen to me.
18. _____ Overall, I am more oriented toward achieving success than preventing failure.

This set of questions asks you about specific events in your life. Please indicate your answer to each question by circling the appropriate number below it

1. Compared to most people, are you typically unable to get what you want out of life?

1	2	3	4	5
Never or seldom		Sometimes		Very often

2. Growing up, have you ever "cross the line" by doing things that your parents would not tolerate?

1	2	3	4	5
Never or seldom		Sometimes		Very often

3. How often have you accomplished things that got you "psyched" to work even harder?

1	2	3	4	5
Never or seldom		A few times		Many times

4. Did you get on your parents' nerves often when you were growing up?

1	2	3	4	5
Never or seldom		Sometimes		Very often

5. How often did you obey rules and regulations that were established by your parents?

1	2	3	4	5
Never or seldom		Sometimes		Always

6. Growing up, have you ever acted in a way that your parents thought were objectionable?

1	2	3	4	5
Never or seldom		Sometimes		Very often

7. Do you often do well at different things that you try?

1	2	3	4	5
Never or seldom		Sometimes		Very often

8. Not being careful enough has gotten me into trouble at times

1	2	3	4	5
Never or seldom		Sometimes		Very often

9. When it comes to achieving things that are important to me, I find that I don't perform as well as I ideally would like to do?

1	2	3	4	5
Never true		Sometimes true		Very often true

10. I feel like I have made progress toward being successful in my life?

1	2	3	4	5
Certainly false				Certainly true

11. I have found very few hobbies or activities in my life that capture my interest or motivate me to put effort into them?

1	2	3	4	5
Certainly false				Certainly true

Below is a pair of description for two persons. Please divide 100 points between the two descriptions so that the division will reflect the way you are.

_____ **Description A:** An individual that frequently imagines how to achieve my hopes and aspirations and typically focuses on the success I hope to achieve in the future. I often think about the person I would ideally like to be in the future.

_____ **Description B:** An individual that is anxious not to fall short of my responsibilities and obligations and frequently thinks about how I can prevent failures in my life. I often think about the person I am afraid I might become in the future.

Total=100

Please read the below scenario and then answer the three items that follow.

Imagine that you need to purchase a car. You find a car that you like in a dealership nearby in Oklahoma. The car has 60,000 miles on it and the manufacture warranty has expired. You are planning to keep the car for two years until you get established after graduation. The car is priced at $10,000 which is fair because it is slightly lower that the Kelly Blue Book value. You have the money in your bank account and decide to go and test drive the car. Although it runs well, a mechanic you trust tells you that there is a 25 percent chance it will need repairs in the next two years that they could cost as much as $1,500. You decide that you want the car, and make an offer for $9,700, which the dealer accepts.

As you go through the details of finalizing the purchase, the dealer offers you the option of buying a 2-year extended warranty that costs $1,000. The dealer tells you that if you buy the warranty, you will save money for sure if repairs are needed. However, if you decide not to buy the warranty, you still have a chance to save some money if repairs are not needed.

Using a 1 to 9 scale below, where 1 = strongly disagree and 9 = strongly agree, please indicate the level of agreement with each of the following statements

1. I would definitely purchase the car warranty.

Strongly Disagree 1 2 3 4 5 6 7 8 9 Strongly Agree

2. Purchasing the car warranty will substantially reduce the purchase risk

Strongly Disagree 1 2 3 4 5 6 7 8 9 Strongly Agree

3. The price of the car warranty is a really good deal.

Strongly Disagree 1 2 3 4 5 6 7 8 9 Strongly Agree

APPENDIX B
Study 2-1 Instrument: Happy Mood-Gain Domain Conditions

Life Events Inventory Construction Study

This study is concerned with constructing a life events inventory.

This is an informed consent statement for research being conducted by Professor John Mowen and doctoral student Amjad Abu ELSamen in the Department of Marketing. Through this 30 minute survey we seek to build a life events inventory. The results of this survey will be employed to develop an understanding of the individual difference variables that influence consumer behavior. The ideas behind the study will be discussed in class at a later date.

Your responses are confidential! There are no known risks associated with this project that are greater than those ordinarily encountered in daily life. The data will be stored in an electronic database on the workstation computer in Dr. Mowen's office, on electronic media maintained by Mr. Amjad Abu ElSamen. The data will be held until destroyed by both Dr. Mowen and Mr. Amjad. To get the extra credit, you need to create an ID number for yourself at the beginning of the survey. This ID should contain the first two letters of your first name and the last four digits of your Campus Wide ID (CWID). When you finish the survey, simply hit submit and logoff your computer. You are not required to complete the survey. If you do not wish to complete the survey and desire to receive extra credit points, you can complete a one-page type written evaluation of a print advertisement by identifying the marketing concepts illustrated by the ad. There is no penalty for not completing the survey. Just indicate to your instructor that you wish to do the one-page write-up.

If you have any questions, please contact John Mowen (744-5112, SSB 323) or Amjad Abu ELSamen (614-1580, CLB 007). In addition, if you have questions about your rights as a research volunteer, you may contact Dr. Shelia Kennison, IRB Chair, Oklahoma State University, 219 Cordell North, Stillwater, OK, 74075, 405-744-1676 or at irb@okstate.edu.

I have read and I understand the procedure described above. Your completion and submission of this survey indicates your consent to participate.

In the space below, you are required to type your ID that contains the first two letters of your first name and the last four digits of your CWID

Life Events Inventory Construction Task

Your task is to answer the following two questions. You have 15 minutes to finish this task.

Question 1:

Please take 5 minutes of your time and write down three to five life events that you experienced in the past and made you feel **HAPPY.**

Question 2:

Now, please recall a single pleasant event in your life that caused you to feel the most **happy** at the time it occurred. Write down the event as you remember it. In particular, describe how the event came about as concretely and vividly as you can so that someone reading it might even feel happy. In fact, before you begin writing, take a few minutes to re-experience this event as vividly as possible. Then, take about 10 minutes to write your description. Your description will be confidential and anonymous.

Using a 1 to 7 scale below, where 1 = strongly disagree and 7 = strongly agree, please indicate the level of agreement with each of the following statements

- I have shared this story with my friends before

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- It was enjoyable to be in the situation I just described

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- The event I described was a realistic one

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I keep an updated diary of my life events

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- Currently, I feel unpleasant

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I would like to participate in this study again if I have the chance

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I like to tell people stories

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At this moment, I feel happy

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At this moment, I feel relaxed

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At this moment, I feel excited

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At this moment, I feel sluggish

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At this moment, I feel dull

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At this moment, I feel sleepy

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At this moment, I feel aroused

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

Car Warranty Evaluation Study

This study is concerned with evaluating car warranties.

On the next page, you will be given a description of a situation. We would like you to imagine that you have just bought your first car and that you are given the chance to purchase a warranty on that car. Please take 15 minutes of your time and answer all of the questions on the following pages carefully. There are no right or wrong answers. All of your answers are confidential

Please move to the next page

Car Warranty Description

Imagine that you have $10,000 in your bank account, and you are shopping for a car. You find a car in a dealership nearby in Oklahoma. The car has 40,000 miles on it and the manufacturer's warranty has expired. The car is priced at $10,000 which is fair because it is slightly lower than the Kelly Blue Book value.

A mechanic that you trust goes with you to the dealership to inspect the car. The car seems to be operating well. Since it is a used car, within the first two years, the mechanic tells you that there is 75% chance that the car will not have any problems, and 25% chance that it will have mechanical problems that need to be fixed for $2000.

Currently, the car has no warranty. However, before finalizing the deal, the dealer offers you the chance to buy a 2 year warranty that has a premium of $500 that will cover all repair expenses if a problem occurs.

Please read the following options carefully before answering the questions.

Buying a warranty means you might SAVE money

a. If you buy the warranty, you are certain of **SAVING** $1,500 no matter what happens.
b. If you do not buy the warranty, there is 75% chance that you will **SAVE** $2,000 and 25% chance that you will **SAVE** nothing.

Using a 1 to 7 scale below, where 1 = strongly disagree and 7 = strongly agree, please indicate the level of agreement with each of the following statements

- I would buy the 2- years warranty offered by the dealer

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- In the long run , I would definitely save the most money by buying the described car warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- The scenario I have just read signifies an opportunity

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I like buying cars

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- Purchasing the car warranty described in the scenario will substantially reduce my worries

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I like to have my car windows tinted

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- It is possible that I would buy the described car warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- Cars are important

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I will use the described car warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At the end of the day, I would lose the most by not buying the described warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- The scenario I have just read signifies a threat

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- The scenario I have just read is self relevant

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- The situation discussed in the scenario is risky

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- Purchasing the car warranty described in the scenario will substantially reduce the purchase risk

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- Purchasing the car warranty described in the scenario will make me less concerned about my purchase decision

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- Ultimately, I will probably lose the most by not buying the described car warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- Buying the described car warranty is a risky decision

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- In the long run, I will probably save the most by buying the described car warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I would feel sorry when buying the described car warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I would regret buying the described car warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

Please answer the following question:

1- What was the price of the car

- ◊ $5,000
- ◊ $10,000
- ◊ $15,000

2- What was the chance that the car will need a repair

- ◊ 20%
- ◊ 25%
- ◊ 30%

3- What was the amount of money that the repair would require if needed

- ◊ $2,000
- ◊ $3,000
- ◊ $4,000

4- What was the amount of money that the warranty would require

- ◊ $5,00
- ◊ $1,000
- ◊ $2,000
- ◊ $3,000

5-What was your preferred option:

- ◊ Buying the warranty
- ◊ Not buying the warranty

6- In which case you would feel greater regret:

- ◊ If I bought the warranty and did not use it
- ◊ If I did not buy the warranty but I ended up needing it

7- In which case you would feel happier:

- ◊ If I bought the warranty and ended up needing it
- ◊ If I did not buy the warranty and ended up not needing it

For each item below, please circle the number closer to the adjective that you believe describes your feelings about the 2-years car warranty you just read.

Bad deal	1	2	3	4	5	6	7	Good deal
Practical	1	2	3	4	5	6	7	Impractical
Effective	1	2	3	4	5	6	7	Ineffective
Functional	1	2	3	4	5	6	7	Not Functional
Unenjoyable	1	2	3	4	5	6	7	Enjoyable
Favorable	1	2	3	4	5	6	7	Unfavorable
Unpleasant	1	2	3	4	5	6	7	Pleasant
Dull	1	2	3	4	5	6	7	Exciting

For each item below, please circle the number closer to the adjective that you believe describes the information presented in the scenario you just read.

Not at all useful	1	2	3	4	5	6	7	Extremely Useful
Not at all Helpful	1	2	3	4	5	6	7	Extremely Helpful
Difficult to Understand	1	2	3	4	5	6	7	Easy to Understand
Difficult to Comprehend	1	2	3	4	5	6	7	Easy to Comprehend
Not Clear at All	1	2	3	4	5	6	7	Very Clear

For each item below, please circle the number closer to the adjective that you believe describes your mood

Pleasant	1	2	3	4	5	6	7	Unpleasant
Happy	1	2	3	4	5	6	7	Sad
Good Mood	1	2	3	4	5	6	7	Bad Mood

Please explain in detail why did you make the decision regarding buying the car warranty.

What, in your opinion, is the purpose of this study?

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

APPENDIX C
Study 2-2 Instrument: Sad Mood-Loss Domain Conditions

Life Events Inventory Construction Study

This study is concerned with constructing a life events inventory.

This is an informed consent statement for research being conducted by Professor John Mowen and doctoral student Amjad Abu ELSamen in the Department of Marketing. Through this 30 minute survey we seek to build a life events inventory. The results of this survey will be employed to develop an understanding of the individual difference variables that influence consumer behavior. The ideas behind the study will be discussed in class at a later date.

Your responses are confidential! There are no known risks associated with this project that are greater than those ordinarily encountered in daily life. The data will be stored in an electronic database on the workstation computer in Dr. Mowen's office, on electronic media maintained by Mr. Amjad Abu ElSamen. The data will be held until destroyed by both Dr. Mowen and Mr. Amjad. To get the extra credit, you need to create an ID number for yourself at the beginning of the survey. This ID should contain the first two letters of your first name and the last four digits of your Campus Wide ID (CWID). When you finish the survey, simply hit submit and logoff your computer. You are not required to complete the survey. If you do not wish to complete the survey and desire to receive extra credit points, you can complete a one-page type written evaluation of a print advertisement by identifying the marketing concepts illustrated by the ad. There is no penalty for not completing the survey. Just indicate to your instructor that you wish to do the one-page write-up.

If you have any questions, please contact John Mowen (744-5112, SSB 323) or Amjad Abu ELSamen (614-1580, CLB 007). In addition, if you have questions about your rights as a research volunteer, you may contact Dr. Shelia Kennison, IRB Chair, Oklahoma State University, 219 Cordell North, Stillwater, OK, 74075, 405-744-1676 or at irb@okstate.edu.

I have read and I understand the procedure described above. Your completion and submission of this survey indicates your consent to participate.

In the space below, you are required to type your ID that contains the first two letters of your first name and the last four digits of your CWID

Life Events Inventory Construction Task

Your task is to answer the following two questions. You have 15 minutes to finish this task.

Question 1:

Please take 5 minutes of your time and write down three to five life events that you experienced in the past and made you feel **SAD.**

Question 2:

Now, please recall a single pleasant event in your life that caused you to feel the most **SAD** at the time it occurred. Write down the event as you remember it. In particular, describe how the event came about as concretely and vividly as you can so that someone reading it might even feel happy. In fact, before you begin writing, take a few minutes to re-experience this event as vividly as possible. Then, take about 10 minutes to write your description. Your description will be confidential and anonymous.

Using a 1 to 7 scale below, where 1 = strongly disagree and 7 = strongly agree, please indicate the level of agreement with each of the following statements

- I have shared this story with my friends before

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- It was enjoyable to be in the situation I just described

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- The event I described was a realistic one

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I keep an updated diary of my life events

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- Currently, I feel unpleasant

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I would like to participate in this study again if I have the chance

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I like to tell people stories

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At this moment, I feel happy

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At this moment, I feel relaxed

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At this moment, I feel excited

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At this moment, I feel sluggish

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At this moment, I feel dull

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At this moment, I feel sleepy

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At this moment, I feel aroused

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

Car Warranty Evaluation Study

This study is concerned with evaluating car warranties.

On the next page, you will be given a description of a situation. We would like you to imagine that you have just bought your first car and that you are given the chance to purchase a warranty on that car. Please take 15 minutes of your time and answer all of the questions on the following pages carefully. There are no right or wrong answers. All of your answers are confidential

Please move to the next page

Car Warranty Description

Imagine that you have $10,000 in your bank account, and you are shopping for a car. You find a car in a dealership nearby in Oklahoma. The car has 40,000 miles on it and the manufacturer's warranty has expired. The car is priced at $10,000 which is fair because it is slightly lower than the Kelly Blue Book value.

A mechanic that you trust goes with you to the dealership to inspect the car. The car seems to be operating well. Since it is a used car, within the first two years, the mechanic tells you that there is 75% chance that the car will not have any problems, and 25% chance that it will have mechanical problems that need to be fixed for $2000.

Currently, the car has no warranty. However, before finalizing the deal, the dealer offers you the chance to buy a 2 year warranty that has a premium of $500 that will cover all repair expenses if a problem occurs.

Please read the following options carefully before answering the questions.

Buying a warranty means you might SAVE money

c. If you buy the warranty, you are certain of **SPENDING** $500 no matter what happens.
d. If you do not buy the warranty, there is 75% chance that you will **SPEND** nothing and 25% chance that you will **SPEND** $2,000.

Using a 1 to 7 scale below, where 1 = strongly disagree and 7 = strongly agree, please indicate the level of agreement with each of the following statements

- I would buy the 2- years warranty offered by the dealer

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- In the long run , I would definitely save the most money by buying the described car warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- The scenario I have just read signifies an opportunity

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I like buying cars

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- Purchasing the car warranty described in the scenario will substantially reduce my worries

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I like to have my car windows tinted

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- It is possible that I would buy the described car warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- Cars are important

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I will use the described car warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At the end of the day, I would lose the most by not buying the described warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- The scenario I have just read signifies a threat

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- The scenario I have just read is self relevant

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- The situation discussed in the scenario is risky

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- Purchasing the car warranty described in the scenario will substantially reduce the purchase risk

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- Purchasing the car warranty described in the scenario will make me less concerned about my purchase decision.

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- Ultimately, I will probably lose the most by not buying the described car warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- Buying the described car warranty is a risky decision

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- In the long run, I will probably save the most by buying the described car warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I would feel sorry when buying the described car warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I would regret buying the described car warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

Please answer the following question:

5- What was the price of the car

◊ $5,000
◊ $10,000
◊ $15,000

6- What was the chance that the car will need a repair

◊ 20%
◊ 25%
◊ 30%

7- What was the amount of money that the repair would require if needed

◊ $2,000
◊ $3,000
◊ $4,000

8- What was the amount of money that the warranty would require

◊ $5,00
◊ $1,000
◊ $2,000
◊ $3,000

5-What was your preferred option:

◊ Buying the warranty
◊ Not buying the warranty

6- In which case you would feel greater regret:

◊ If I bought the warranty and did not use it
◊ If I did not buy the warranty but I ended up needing it

8- In which case you would feel happier:

◊ If I bought the warranty and ended up needing it
◊ If I did not buy the warranty and ended up not needing it

For each item below, please circle the number closer to the adjective that you believe describes your feelings about the 2-years car warranty you just read.

Bad deal	1	2	3	4	5	6	7	Good deal
Practical	1	2	3	4	5	6	7	Impractical
Effective	1	2	3	4	5	6	7	Ineffective
Functional	1	2	3	4	5	6	7	Not Functional
Unenjoyable	1	2	3	4	5	6	7	Enjoyable
Favorable	1	2	3	4	5	6	7	Unfavorable
Unpleasant	1	2	3	4	5	6	7	Pleasant
Dull	1	2	3	4	5	6	7	Exciting

For each item below, please circle the number closer to the adjective that you believe describes the information presented in the scenario you just read.

Not at all useful	1	2	3	4	5	6	7	Extremely Useful
Not at all Helpful	1	2	3	4	5	6	7	Extremely Helpful
Difficult to Understand	1	2	3	4	5	6	7	Easy to Understand
Difficult to Comprehend	1	2	3	4	5	6	7	Easy to Comprehend
Not Clear at All	1	2	3	4	5	6	7	Very Clear

For each item below, please circle the number closer to the adjective that you believe describes your mood

Pleasant	1	2	3	4	5	6	7	Unpleasant
Happy	1	2	3	4	5	6	7	Sad
Good Mood	1	2	3	4	5	6	7	Bad Mood

Please explain in detail why did you make the decision regarding buying the car warranty.

What, in your opinion, is the purpose of this study?

___

___

___

___

___

___

___

___

APPENDIX D
Study2-3 Instrument: Happy Mood-Loss Domain Conditions

Life Events Inventory Construction Study

This study is concerned with constructing a life events inventory.

This is an informed consent statement for research being conducted by Professor John Mowen and doctoral student Amjad Abu ELSamen in the Department of Marketing. Through this 30 minute survey we seek to build a life events inventory. The results of this survey will be employed to develop an understanding of the individual difference variables that influence consumer behavior. The ideas behind the study will be discussed in class at a later date.

Your responses are confidential! There are no known risks associated with this project that are greater than those ordinarily encountered in daily life. The data will be stored in an electronic database on the workstation computer in Dr. Mowen's office, on electronic media maintained by Mr. Amjad Abu ElSamen. The data will be held until destroyed by both Dr. Mowen and Mr. Amjad. To get the extra credit, you need to create an ID number for yourself at the beginning of the survey. This ID should contain the first two letters of your first name and the last four digits of your Campus Wide ID (CWID). When you finish the survey, simply hit submit and logoff your computer. You are not required to complete the survey. If you do not wish to complete the survey and desire to receive extra credit points, you can complete a one-page type written evaluation of a print advertisement by identifying the marketing concepts illustrated by the ad. There is no penalty for not completing the survey. Just indicate to your instructor that you wish to do the one-page write-up.

If you have any questions, please contact John Mowen (744-5112, SSB 323) or Amjad Abu ELSamen (614-1580, CLB 007). In addition, if you have questions about your rights as a research volunteer, you may contact Dr. Shelia Kennison, IRB Chair, Oklahoma State University, 219 Cordell North, Stillwater, OK, 74075, 405-744-1676 or at irb@okstate.edu.

I have read and I understand the procedure described above. Your completion and submission of this survey indicates your consent to participate.

In the space below, you are required to type your ID that contains the first two letters of your first name and the last four digits of your CWID

Life Events Inventory Construction Task

Your task is to answer the following two questions. You have 15 minutes to finish this task.

Question 1:

Please take 5 minutes of your time and write down three to five life events that you experienced in the past and made you feel **HAPPY.**

Question 2:

Now, please recall a single pleasant event in your life that caused you to feel the most **HAPPY** at the time it occurred. Write down the event as you remember it. In particular, describe how the event came about as concretely and vividly as you can so that someone reading it might even feel happy. In fact, before you begin writing, take a few minutes to re-experience this event as vividly as possible. Then, take about 10 minutes to write your description. Your description will be confidential and anonymous.

Using a 1 to 7 scale below, where 1 = strongly disagree and 7 = strongly agree, please indicate the level of agreement with each of the following statements

- I have shared this story with my friends before

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- It was enjoyable to be in the situation I just described

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- The event I described was a realistic one

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I keep an updated diary of my life events

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- Currently, I feel unpleasant

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I would like to participate in this study again if I have the chance

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I like to tell people stories

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At this moment, I feel happy

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At this moment, I feel relaxed

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At this moment, I feel excited

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At this moment, I feel sluggish

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At this moment, I feel dull

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At this moment, I feel sleepy

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At this moment, I feel aroused

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

Car Warranty Evaluation Study

This study is concerned with evaluating car warranties.

On the next page, you will be given a description of a situation. We would like you to imagine that you have just bought your first car and that you are given the chance to purchase a warranty on that car. Please take 15 minutes of your time and answer all of the questions on the following pages carefully. There are no right or wrong answers. All of your answers are confidential

Please move to the next page

Car Warranty Description

Imagine that you have $10,000 in your bank account, and you are shopping for a car. You find a car in a dealership nearby in Oklahoma. The car has 40,000 miles on it and the manufacturer's warranty has expired. The car is priced at $10,000 which is fair because it is slightly lower than the Kelly Blue Book value.

A mechanic that you trust goes with you to the dealership to inspect the car. The car seems to be operating well. Since it is a used car, within the first two years, the mechanic tells you that there is 75% chance that the car will not have any problems, and 25% chance that it will have mechanical problems that need to be fixed for $2000.

Currently, the car has no warranty. However, before finalizing the deal, the dealer offers you the chance to buy a 2 year warranty that has a premium of $500 that will cover all repair expenses if a problem occurs.

Please read the following options carefully before answering the questions.

Buying a warranty means you might SAVE money

e. If you buy the warranty, you are certain of **SPENDING** $500 no matter what happens.
f. If you do not buy the warranty, there is 75% chance that you will **SPEND** nothing and 25% chance that you will **SPEND** $2,000.

Using a 1 to 7 scale below, where 1 = strongly disagree and 7 = strongly agree, please indicate the level of agreement with each of the following statements

- I would buy the 2- years warranty offered by the dealer

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- In the long run , I would definitely save the most money by buying the described car warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- The scenario I have just read signifies an opportunity

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I like buying cars

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- Purchasing the car warranty described in the scenario will substantially reduce my worries

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I like to have my car windows tinted

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- It is possible that I would buy the described car warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- Cars are important

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I will use the described car warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At the end of the day, I would lose the most by not buying the described warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- The scenario I have just read signifies a threat

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- The scenario I have just read is self relevant

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- The situation discussed in the scenario is risky

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- Purchasing the car warranty described in the scenario will substantially reduce the purchase risk

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- Purchasing the car warranty described in the scenario will make me less concerned about my purchase decision

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- Ultimately, I will probably lose the most by not buying the described car warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- Buying the described car warranty is a risky decision

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- In the long run, I will probably save the most by buying the described car warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I would feel sorry when buying the described car warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I would regret buying the described car warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

Please answer the following question:

9- What was the price of the car

- ◊ $5,000
- ◊ $10,000
- ◊ $15,000

10- What was the chance that the car will need a repair

- ◊ 20%
- ◊ 25%
- ◊ 30%

11- What was the amount of money that the repair would require if needed

- ◊ $2,000
- ◊ $3,000
- ◊ $4,000

12- What was the amount of money that the warranty would require

- ◊ $5,00
- ◊ $1,000
- ◊ $2,000
- ◊ $3,000

5-What was your preferred option:

- ◊ Buying the warranty
- ◊ Not buying the warranty

6- In which case you would feel greater regret:

- ◊ If I bought the warranty and did not use it
- ◊ If I did not buy the warranty but I ended up needing it

9- In which case you would feel happier:

- ◊ If I bought the warranty and ended up needing it
- ◊ If I did not buy the warranty and ended up not needing it

For each item below, please circle the number closer to the adjective that you believe describes your feelings about the 2-years car warranty you just read.

Bad deal	1	2	3	4	5	6	7	Good deal
Practical	1	2	3	4	5	6	7	Impractical
Effective	1	2	3	4	5	6	7	Ineffective
Functional	1	2	3	4	5	6	7	Not Functional
Unenjoyable	1	2	3	4	5	6	7	Enjoyable
Favorable	1	2	3	4	5	6	7	Unfavorable
Unpleasant	1	2	3	4	5	6	7	Pleasant
Dull	1	2	3	4	5	6	7	Exciting

For each item below, please circle the number closer to the adjective that you believe describes the information presented in the scenario you just read.

Not at all useful	1	2	3	4	5	6	7	Extremely Useful
Not at all Helpful	1	2	3	4	5	6	7	Extremely Helpful
Difficult to Understand	1	2	3	4	5	6	7	Easy to Understand
Difficult to Comprehend	1	2	3	4	5	6	7	Easy to Comprehend
Not Clear at All	1	2	3	4	5	6	7	Very Clear

For each item below, please circle the number closer to the adjective that you believe describes your mood

Pleasant	1	2	3	4	5	6	7	Unpleasant
Happy	1	2	3	4	5	6	7	Sad
Good Mood	1	2	3	4	5	6	7	Bad Mood

Please explain in detail why did you make the decision regarding buying the car warranty.

What, in your opinion, is the purpose of this study?

_____

_____

_____

_____

_____

_____

_____

_____

APPENDIX E
Study 2-4 Instrument: Sad Mood-Gain Domain Conditions

Life Events Inventory Construction Study

This study is concerned with constructing a life events inventory.

This is an informed consent statement for research being conducted by Professor John Mowen and doctoral student Amjad Abu ELSamen in the Department of Marketing. Through this 30 minute survey we seek to build a life events inventory. The results of this survey will be employed to develop an understanding of the individual difference variables that influence consumer behavior. The ideas behind the study will be discussed in class at a later date.

Your responses are confidential! There are no known risks associated with this project that are greater than those ordinarily encountered in daily life. The data will be stored in an electronic database on the workstation computer in Dr. Mowen's office, on electronic media maintained by Mr. Amjad Abu ElSamen. The data will be held until destroyed by both Dr. Mowen and Mr. Amjad. To get the extra credit, you need to create an ID number for yourself at the beginning of the survey. This ID should contain the first two letters of your first name and the last four digits of your Campus Wide ID (CWID). When you finish the survey, simply hit submit and logoff your computer. You are not required to complete the survey. If you do not wish to complete the survey and desire to receive extra credit points, you can complete a one-page type written evaluation of a print advertisement by identifying the marketing concepts illustrated by the ad. There is no penalty for not completing the survey. Just indicate to your instructor that you wish to do the one-page write-up.

If you have any questions, please contact John Mowen (744-5112, SSB 323) or Amjad Abu ELSamen (614-1580, CLB 007). In addition, if you have questions about your rights as a research volunteer, you may contact Dr. Shelia Kennison, IRB Chair, Oklahoma State University, 219 Cordell North, Stillwater, OK, 74075, 405-744-1676 or at irb@okstate.edu.

I have read and I understand the procedure described above. Your completion and submission of this survey indicates your consent to participate.

In the space below, you are required to type your ID that contains the first two letters of your first name and the last four digits of your CWID

Life Events Inventory Construction Task

Your task is to answer the following two questions. You have 15 minutes to finish this task.

Question 1:

Please take 5 minutes of your time and write down three to five life events that you experienced in the past and made you feel **SAD.**

Question 2:

Now, please recall a single pleasant event in your life that caused you to feel the most **SAD** at the time it occurred. Write down the event as you remember it. In particular, describe how the event came about as concretely and vividly as you can so that someone reading it might even feel happy. In fact, before you begin writing, take a few minutes to re-experience this event as vividly as possible. Then, take about 10 minutes to write your description. Your description will be confidential and anonymous.

Using a 1 to 7 scale below, where 1 = strongly disagree and 7 = strongly agree, please indicate the level of agreement with each of the following statements

- I have shared this story with my friends before

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- It was enjoyable to be in the situation I just described

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- The event I described was a realistic one

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I keep an updated diary of my life events

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- Currently, I feel unpleasant

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I would like to participate in this study again if I have the chance

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I like to tell people stories

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At this moment, I feel happy

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At this moment, I feel relaxed

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At this moment, I feel excited

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At this moment, I feel sluggish

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At this moment, I feel dull

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At this moment, I feel sleepy

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At this moment, I feel aroused

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

Car Warranty Evaluation Study

This study is concerned with evaluating car warranties.

On the next page, you will be given a description of a situation. We would like you to imagine that you have just bought your first car and that you are given the chance to purchase a warranty on that car. Please take 15 minutes of your time and answer all of the questions on the following pages carefully. There are no right or wrong answers. All of your answers are confidential

Please move to the next page

Car Warranty Description

Imagine that you have $10,000 in your bank account, and you are shopping for a car. You find a car in a dealership nearby in Oklahoma. The car has 40,000 miles on it and the manufacturer's warranty has expired. The car is priced at $10,000 which is fair because it is slightly lower than the Kelly Blue Book value.

A mechanic that you trust goes with you to the dealership to inspect the car. The car seems to be operating well. Since it is a used car, within the first two years, the mechanic tells you that there is 75% chance that the car will not have any problems, and 25% chance that it will have mechanical problems that need to be fixed for $2000.

Currently, the car has no warranty. However, before finalizing the deal, the dealer offers you the chance to buy a 2 year warranty that has a premium of $500 that will cover all repair expenses if a problem occurs.

Please read the following options carefully before answering the questions.

Buying a warranty means you might SAVE money

g. If you buy the warranty, you are certain of **SAVING** $1,500 no matter what happens.
h. If you do not buy the warranty, there is 75% chance that you will **SAVE** $2,000 and 25% chance that you will **SAVE** nothing.

Using a 1 to 7 scale below, where 1 = strongly disagree and 7 = strongly agree, please indicate the level of agreement with each of the following statements

- I would buy the 2- years warranty offered by the dealer

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- In the long run , I would definitely save the most money by buying the described car warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- The scenario I have just read signifies an opportunity

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I like buying cars

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- Purchasing the car warranty described in the scenario will substantially reduce my worries

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I like to have my car windows tinted

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- It is possible that I would buy the described car warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- Cars are important

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I will use the described car warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- At the end of the day, I would lose the most by not buying the described warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- The scenario I have just read signifies a threat

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- The scenario I have just read is self relevant

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- The situation discussed in the scenario is risky

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- Purchasing the car warranty described in the scenario will substantially reduce the purchase risk

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- Purchasing the car warranty described in the scenario will make me less concerned about my purchase decision.

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- Ultimately, I will probably lose the most by not buying the described car warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- Buying the described car warranty is a risky decision

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- In the long run, I will probably save the most by buying the described car warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I would feel sorry when buying the described car warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- I would regret buying the described car warranty

  Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

Please answer the following question:

13- What was the price of the car

- ◊ $5,000
- ◊ $10,000
- ◊ $15,000

14- What was the chance that the car will need a repair

- ◊ 20%
- ◊ 25%
- ◊ 30%

15- What was the amount of money that the repair would require if needed

- ◊ $2,000
- ◊ $3,000
- ◊ $4,000

16- What was the amount of money that the warranty would require

- ◊ $5,00
- ◊ $1,000
- ◊ $2,000
- ◊ $3,000

5-What was your preferred option:

- ◊ Buying the warranty
- ◊ Not buying the warranty

6- In which case you would feel greater regret:

- ◊ If I bought the warranty and did not use it
- ◊ If I did not buy the warranty but I ended up needing it

10- In which case you would feel happier:

- ◊ If I bought the warranty and ended up needing it
- ◊ If I did not buy the warranty and ended up not needing it

For each item below, please circle the number closer to the adjective that you believe describes your feelings about the 2-years car warranty you just read.

Bad deal	1	2	3	4	5	6	7	Good deal
Practical	1	2	3	4	5	6	7	Impractical
Effective	1	2	3	4	5	6	7	Ineffective
Functional	1	2	3	4	5	6	7	Not Functional
Unenjoyable	1	2	3	4	5	6	7	Enjoyable
Favorable	1	2	3	4	5	6	7	Unfavorable
Unpleasant	1	2	3	4	5	6	7	Pleasant
Dull	1	2	3	4	5	6	7	Exciting

For each item below, please circle the number closer to the adjective that you believe describes the information presented in the scenario you just read.

Not at all useful	1	2	3	4	5	6	7	Extremely Useful
Not at all Helpful	1	2	3	4	5	6	7	Extremely Helpful
Difficult to Understand	1	2	3	4	5	6	7	Easy to Understand
Difficult to Comprehend	1	2	3	4	5	6	7	Easy to Comprehend
Not Clear at All	1	2	3	4	5	6	7	Very Clear

For each item below, please circle the number closer to the adjective that you believe describes your mood

Pleasant	1	2	3	4	5	6	7	Unpleasant
Happy	1	2	3	4	5	6	7	Sad
Good Mood	1	2	3	4	5	6	7	Bad Mood

Please explain in detail why did you make the decision regarding buying the car warranty.

What, in your opinion, is the purpose of this study?

_____

_____

_____

_____

_____

_____

_____

_____

_____

Oklahoma State University Institutional Review Board

Date	Friday, March 13, 2009	**Protocol Expires:**	**3/12/2010**
IRB Application No:	BU087		
Proposal Title:	Factors Influencing Consumers' Warranty Purchase: The Role of Goal Orientation, Individual Mood, and Framing		
Reviewed and Processed as:	Exempt **Continuation**		
Status Recommended by Reviewer(s)	**Approved**		

Principal Investigator(s)

Amjad Abu El Samen
405D Business
Stillwater, OK 74078

John Mowen
323 CBA
Stillwater, OK 74078

Approvals are valid for one calendar year, after which time a request for continuation must be submitted. Any modifications to the research project approved by the IRB must be submitted for approval with the advisor's signature. The IRB office MUST be notified in writing when a project is complete. Approved projects are subject to monitoring by the IRB. Expedited and exempt projects may be reviewed by the full Institutional Review Board.

☒ The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

The reviewer(s) had these comments:

Approval is granted for continued data analysis only. Should any further data collection be necessary or desired a modification request must be submitted for review and approval by the IRB prior to initiation.

Signature : 

Shelia Kennison, Chair, Institutional Review Board

Friday, March 13, 2009
Date

VITA

Amjad Abu ELSamen

Candidate for the Degree of

Doctor of Philosophy

Dissertation: FACTORS INFLEUCING CONSUMERS' WARRANTY PURCHASE: THE ROLE OF GOAL OREINTATION, INDIVIDUAL MOOD, AND FRAMING

Major Field: Business Administration

Biographical:

Personal Data:

Education:
Completed the requirements for the Doctor of Philosophy in Business Administration at Oklahoma State University, Stillwater, Oklahoma in July, 2009.

2004-2008	Certified Predictive Modeler using SAS Enterprise Miner
2004-2008	OSU SAS and Data Mining Certificate
2004-2008	Graduate Collage for Business and Data Mining Certificate
2000-2003	Master of Business Administration, University of Jordan
1996- 2000	Bachelor of Business Administration, University of Jordan

Experience:

2006- 2009	Graduate Teaching Assistant, Oklahoma State University
2004- 2006	Graduate Research Assistant for Spears School of Business Performance Assessment and Accreditation Committee, Oklahoma State University

Professional Memberships:

- Member, American Marketing Association, 2005-Present
- Member, Academy of Marketing Science, 2005-Present

Name: Amjad Abu ELSamen Date of Degree: July, 2009

Institution: Oklahoma State University Location: Stillwater, Oklahoma

Title of Study: FACTORS INFLUENCING CONSUMERS' WARRANTY PURCHASE: THE ROLE OF GOAL ORIENTATION, INDIVIDUAL MOOD, AND FRAMING

Pages in Study: 158 Candidate for the Degree of Doctor of Philosophy

Major Field: Business Administration

Scope and Method of Study: This dissertation investigated how decision framing and an individuals' mood and goal orientation interact to influence the decision to buy a car warranty. In the process, the psychometric properties of a measure of goal orientation developed by Lockwood et al. (2002) were investigated. Two methods were employed in the dissertation. First, a survey approach was employed to assess the psychometric properties of the goal orientation construction. Second, an experimental approach was used to examine the predicted three-way interaction among decision framing, mood, and goal orientation.

Findings and Conclusions: In Study 1, 280 undergraduates completed the goal orientation scale (Lockwood et al 2002), which was subjected to confirmatory factor analysis. The results revealed a factor assessing a promotion orientation and a factor assessing a prevention orientation, and that the factors had good discriminant validity. Using the same data, the antecedents and consequences of each factor were investigated. The results showed that the antecedents and consequences of the two factors were different, which strongly suggests that they represent two different constructs rather than dimensions of a single construct.

In Study 2, 246 students participated in an experiment in which the dependent variable was the likelihood of buying a car warranty. In a single study, four variables were investigated in two 2 x 2 x 2 between subjects factorial design. The variables were: (1)whether the respondents were high or low in promotion orientation, (2) whether they were high or low in prevention orientation, (3) whether they were placed in a good or bad mood, and (4) how the warranty purchase was framed (i.e., as a gain or a loss). The expected three-way interaction among mood, decision frame, and promotion orientation was not found. As predicted, however, a significant three-way interaction was found when a maximum fit occurred among mood, decision frame, and prevention orientation. Thus, the likelihood of buying a car warranty decreased when a prevention oriented individual was placed in a sad mood and read a warranty description framed as a loss. Theoretical, managerial, and public policy implications, as well limitations and future directions were discussed.

ADVISER'S APPROVAL: John C. Mowen