

Effects of Chronic Regulatory Focus and Product Type on Internet Purchase Decisions

The Honors Program
Senior Capstone Project
Student's Name: Chad Ryan
Faculty Sponsor: Jane McKay-Nesbitt
April 2011

Table of Contents

Abstract	1
Acknowledgements	2
Introduction	2
Theoretical Background and Hypothesis	3
Internet Shopping and Risk	3
Regulatory Focus Theory and Risk	4
Promotion Focus	4
Prevention Focus	4
Chronic Regulatory Focus	5
Regulatory Focus Theory and Shopping Risk	5
Hedonic and Utilitarian Products	6
Regulatory Focus and Product Type	7
Methods	8
Pretest	8
Experimental Design	8
Participants	9
Procedure	9
Measures	9
Independent Variables	9
Dependent Variables	10
Covariates	10
Analysis and Results	11
General Discussion of Results	18
Conclusion	18
Theoretical Implications	18
Managerial Implications	19
Limitations and Future Research	19
Appendices	22
Appendix A – Example of the Pretest Survey	23
Appendix B	24
References	26

Effects of Chronic Regulatory Focus and Product Type on Internet Purchase Decisions
Senior Capstone Project for Chad Ryan

ABSTRACT

This study draws on Regulatory Focus Theory (RFT; Higgins 1987) to explore factors that affect a consumer's online purchase attitudes and intentions. According to RFT, consumers tend to be either chronically promotion- or prevention-focused. Promotion-focused consumers are concerned with positive outcomes. Conversely, prevention-focused consumers are concerned with avoiding negative outcomes. Promotion-focused consumers are more willing to take risks than prevention-focused consumers (Higgins 1997). Promotion-focused consumers also prefer hedonic shopping experiences (i.e., pleasurable), whereas prevention-focused consumers prefer utilitarian shopping experiences (i.e., task-oriented) (Arnold & Reynolds 2009). Because products that are purchased on the Internet cannot be seen or touched prior to purchase, it is argued that online purchasing is risky. Given that promotion-focused consumers are more willing to take risks, and given that online purchasing is risky, it is expected that promotion-focused consumers will be more willing to purchase products online. Furthermore, given the relationship between regulatory focus and hedonic/utilitarian shopping experiences, it is expected that promotion-focused consumers will have more positive purchase attitudes and greater intentions to purchase hedonic products (i.e., enjoyable) than utilitarian products (i.e., necessity) online. These hypotheses are tested in a 2 (chronic focus: promotion/prevention) x 2 (product type: hedonic/utilitarian) between subjects design in which chronic focus is measured and product type is manipulated. Purchase attitudes, purchase intentions, and perceived risk are the dependent variables. Data is analyzed using regression analysis and analysis of variance. The implications of results are discussed.

Effects of Chronic Regulatory Focus and Product Type on Internet Purchase Decisions
Senior Capstone Project for Chad Ryan

ACKNOWLEDGEMENTS

I would like to take the time to acknowledge select individuals who have contributed greatly to the completion of this study. First, I would like to express my thanks to Dr. Jane McKay-Nesbitt, who served as my faculty sponsor. Dr. McKay-Nesbitt was extraordinary throughout the entire process. Not only have I learned a lot about marketing, but I have also learned a lot about problem-solving, such as thinking logically, which is a practice that will help me along my entire career.

I would also like to thank Professor Sukki Yoon for all of his efforts as an editorial reviewer. Professor Yoon provided his assistance by offering comments and suggestions as the study was being conducted. He was willing to share his researching expertise, which generated stronger results based on the particular tests that were used.

Finally, I would like to thank Dr. Kenneth Sousa for the tremendous amount of work he puts forth in order to establish a continuously-improving Honors Program at Bryant University. This program has made me a stronger individual and has provided me with higher levels of self-confidence, motivation, and determination.

INTRODUCTION

Over the past two decades, the evolution of and reliance on technology has expanded greatly (World Development Indicators 2011). More specifically, the use of the Internet has grown so that individuals use it on a regular basis and rely on its speed and efficiency. Corporations also rely on the Internet to operate in an economy that prospers on timely information. In the United States alone, there are over 230 million individual users of the Internet.

Various applications of the Internet have developed rapidly as more and more consumers surf the web, accessing the information they want through a mere click of the mouse (Racolta 2010). One of these applications is online shopping. Consumers are able to purchase products in their home with ease and efficiency. They can quickly and easily gather information needed to help make the proper purchase decision. Online shopping frees the consumer from the stresses of traffic as they travel to a store. It also frees them from the stress of dealing with

Effects of Chronic Regulatory Focus and Product Type on Internet Purchase Decisions *Senior Capstone Project for Chad Ryan*

large numbers of other shoppers once they are in the store. Finally, online shoppers avoid dealing with poor employees who either constantly ask if help is needed or ignore shoppers altogether. Due to the growth in online shopping, marketers need to understand factors that influence consumers' decisions to purchase products online.

This paper presents a study that was conducted in order to better understand what types of consumers shop online and what kinds of products they are most willing to purchase online. Specifically, this study explores the effects of differences in consumers' regulatory focus on their online risk perceptions, online purchase attitudes, and online purchase intentions. It also investigates the effects of hedonic versus utilitarian product types on consumers' online purchase attitudes and intentions.

The paper begins with a discussion of the literature on Regulatory Focus Theory (Higgins 1987), online shopping, and hedonic versus utilitarian products. Several hypotheses regarding the effects of regulatory focus and product type on risk perceptions, online purchase attitudes, and online purchase intentions are then presented. This is followed with a description of a study that was conducted to test these hypotheses. The paper concludes with a discussion of the results and their implications for theory and management.

THEORETICAL BACKGROUND AND HYPOTHESIS

Internet Shopping and Risk

Online shopping poses some problems for consumers. Unlike in-store shopping, there is no direct contact between a consumer and an online retailer. Online shoppers do not have the benefit of a relationship with the retailer or its employees and the retailer does not have the opportunity to have a relationship with the customer. Secondly, the use of the Internet involves risk and privacy issues, because consumers must submit private information to purchase their products. Consumers in a store may be asked to provide e-mail addresses, home addresses, telephone numbers, and use debit card pin numbers. However, consumers can use cash in stores and are not required to share this information. With internet purchases, the consumer is required to enter home address, telephone number, and credit card number, which can be perceived as riskier. There is also evidence that the majority of Internet users

Effects of Chronic Regulatory Focus and Product Type on Internet Purchase Decisions

Senior Capstone Project for Chad Ryan

have experienced some type of virus or spyware (Racolta 2010). These experiences could result in consumers perceiving online shopping as riskier than in-store shopping. In summary, given the problems associated with online shopping, it is expected that:

Hypothesis 1: Consumers will perceive online shopping as more risky than shopping in a store.

Regulatory Focus Theory and Risk

Regulatory Focus Theory (RFT) is a theory about how individuals prefer to pursue their goals (Higgins 1997). According to the RFT, individuals pursue their goals in one of two ways, either with a promotion focus or a prevention focus (Higgins 1997).

Promotion Focus

Some consumers prefer a promotion-focused approach. A promotion-focused consumer is concerned with achievements and views desired goals based upon a set of gains and non-gains (Arnolds & Reynolds 2009). They are characterized by their concern for positive outcomes and their eagerness to approach their desired end states (Semin 2005). For a promotion-focused consumer, the presence or absence of a positive outcome aids in mandating that consumer's behaviors and actions (Florack 2009). Not only are promotion-focused consumers attentive to achievements, but they do so in an eager and aggressive manner. Additionally, a promotion-focused consumer seeks to achieve their goals by advancement and progression (Crowe 1997). A promotion-focused consumer is viewed as a risk-seeking consumer who concentrates on achieving desired end results, regardless of the risk involved.

Prevention Focus

Other consumers adopt a prevention focus, viewing goals and life events as a set of losses and non-losses (Arnolds & Reynolds 2009). Additionally, prevention-focused consumers achieve their goals safely and responsibly (Crowe 1997). Prevention-focused consumers consider goals to be duties and obligations, and are concerned with avoiding mistakes (Semin 2005). Therefore, unlike a promotion-focused consumer, a prevention-focused consumer can be described as being risk averse in order to reach their goals. A prevention-focused consumer is more passive and cautious than their promotion-focused counterpart. A prevention-focused

Effects of Chronic Regulatory Focus and Product Type on Internet Purchase Decisions *Senior Capstone Project for Chad Ryan*

consumer relies on the information they receive to try to avoid any negative outcomes, and in avoiding negative outcomes, they will often achieve their desired end states (Florack 2009).

Chronic Regulatory Focus

Regulatory Focus can either be chronic or situationally-induced (Camacho 2003). As a result of childhood socialization, consumers develop a tendency to exhibit the traits of one of the two particular foci, regardless of the task or situation presented (Higgins 1987). Conversely, a particular regulatory focus can be induced by a particular situation. Thus, a consumer may take a promotion-focused approach to achieve one task, but may take a prevention-focused approach when given another task. For example, if a particular instructor grades students based on their level of class participation, a student may opt for the promotion focus, where they will achieve their goal (getting a good grade) by being aggressive and raising their hand to participate, even if they are unsure of the answer. Although there are risks involved, such as getting a question wrong, they are ultimately concerned with getting points for participation. In a class where students are graded on the depth and accuracy of their response, and not frequency, students may choose the prevention focus. They might not be willing to raise their hand if they are unsure of the correct answer, to avoid getting the wrong answer and consequently receiving a deduction in their participation grade.

Regulatory Focus Theory and Shopping Risk

There is evidence that Regulatory Focus influences consumers' attitudes and intentions to use websites. Safety cues on websites lower risk perceptions and increase attitudes and intentions regarding websites for prevention-focused consumers (Van Noort et al., 2008). To date however, little evidence has been gathered regarding the relationship between a consumer's regulatory focus and online purchase attitudes and intentions. As discussed, promotion-focused consumers tend to be risk-takers whereas prevention-focused consumers tend to be risk-averse. Promotion-focused consumers view their environment as benign; these consumers choose to engage in creative behavior and are better suited for unique experiences (Arnold & Reynolds 2009). This suggests that a promotion-focused consumer would not be concerned with the risks associated with online shopping. Conversely, prevention-focused consumers tend to be more analytical and approach situations with greater detail (Arnold & Reynolds 2009). They view their environment with more care, and are more likely to be

Effects of Chronic Regulatory Focus and Product Type on Internet Purchase Decisions ***Senior Capstone Project for Chad Ryan***

concerned with the risks associated in an online environment. A prevention-focused consumer would be concerned about having a bad experience shopping online. Therefore it is expected that when shopping online:

Hypothesis 2a: Promotion-focused consumers will exhibit more positive purchase attitudes than prevention-focused consumers.

Hypothesis 2b: Promotion-focused consumers will exhibit greater purchase intentions than prevention-focused consumers.

Hedonic and Utilitarian Products

The type of product that consumers seek may also have an effect on their purchase attitudes and intentions. Products can be categorized according to their purpose and the effect they have on consumers. Utilitarian products are considered necessities (Hartman 2006). These products are considered practical and little excitement is generated from their purchase. Vacuum cleaners and vitamin water have been identified as being functional or utilitarian products in ordinary shopping situations (Micu 2010). The fact that utilitarian products are purchased through necessity limits the products available to purchase. In addition, these products serve a particular purpose and function, known by the consumer, which is the reason they seek the product. Therefore, there is little risk associated with utilitarian products. For example, calculators are practical and necessary for classes, and thus represent a utilitarian product for a college student. Although there are many varieties of calculators available, there is little risk in purchasing one, because the student requires it for class.

Consumers purchase hedonic products for their pleasure and entertainment; they are not considered to be necessary. Hedonic products involve feelings of fun, excitement, playfulness, and arousal (Hartman 2006). Hedonic products are exciting and satisfying to the purchaser. Previous studies have listed chocolate and ice cream as hedonic products (Micu 2010). Since hedonic products are fun and pleasurable by definition, there is a wide variety of hedonic products that may satisfy the consumer's desire for fun and excitement. The availability of a wide variety of products creates risk because it generates opportunity cost; that is, there are many products a consumer could purchase that would create utility. Therefore when the consumer selects a product, they are giving up the potential utility of many other products. For example, video games may represent hedonic products for college

Effects of Chronic Regulatory Focus and Product Type on Internet Purchase Decisions *Senior Capstone Project for Chad Ryan*

students because they are fun and exciting. It can be argued that purchasing a video game is risky because a student could have purchased a movie which may have been more enjoyable than the video game. In addition, hedonic products may be more exciting, because a consumer might not know what to expect from them. This further increases the level of risk. To continue with the example, students may experience risk when purchasing a video game, because they may expect it to be fun and exciting and it may not meet their expectations.

It has been argued that shopping online is riskier than shopping in a store and that purchasing hedonic products is riskier than purchasing utilitarian products. In addition, previous literature has identified a relationship between product type (i.e., hedonic and utilitarian) and the importance attributed to online versus sources of information (Cheema 2008). Consumers view offline sources of information as more important when purchasing hedonic products, but view online sources of information as more important when purchasing utilitarian products. This suggests that purchasing hedonic products online is riskier than purchasing utilitarian products online. Therefore, when shopping online:

Hypothesis 3: Consumers will perceive more risk when purchasing hedonic versus utilitarian products.

Furthermore, because purchase attitudes and intentions decrease with increased risk (Fiegenbaum & Thomas 1988), and given that purchasing hedonic products online is riskier versus purchasing utilitarian products online, it is expected that when shopping online:

Hypothesis 4a: Consumers will exhibit more positive attitudes towards purchasing utilitarian versus hedonic products.

Hypothesis 4b: Consumers will exhibit greater intentions to purchase utilitarian versus hedonic products.

Regulatory Focus and Product Type

There is evidence that a relationship exists between a consumer's regulatory focus and product type. Arousal from hedonic products has a positive effect on pleasantness (i.e., the consumer is more satisfied), when a consumer has a chronic promotion focus (Kaltcheva 2006). Alternatively, arousal from hedonic products has a negative effect on overall satisfaction for prevention-focused consumers. Furthermore, previous studies have indicated that promotion-focused messages are more effective for hedonic than utilitarian products, and

Effects of Chronic Regulatory Focus and Product Type on Internet Purchase Decisions *Senior Capstone Project for Chad Ryan*

prevention-focused messages are more effective for utilitarian than hedonic products (Micu 2010). Given these relationships, it is expected that when shopping online:

Hypothesis 5a: Promotion-focused consumers will exhibit more positive attitudes towards purchasing hedonic versus utilitarian products.

Hypothesis 5b: Prevention-focused consumers will exhibit more positive attitudes towards purchasing utilitarian versus hedonic products.

Hypothesis 6a: Promotion-focused consumers will exhibit greater intentions to purchase hedonic versus utilitarian products.

Hypothesis 6b: Prevention-focused consumers will exhibit greater intentions to purchase utilitarian versus hedonic products.

METHODS

Pretest

A pre-test, completed by a representative sample of 18 Bryant University students, was conducted to determine which items commonly purchased online are considered to be practical (utilitarian) or fun (hedonic). Participants were asked to rate a list of products (textbook, movies, iTunes, protein shakes, shoes, novels, jewelry, posters, and bedding) on a six-point scale (1 = practical product and 6 = fun product). In addition, participants were asked to list up to five other products that they would normally purchase online and then rate the products on the scale described above. Finally, individuals were asked to report their gender and year of birth.

Results of a one-sample *t*-test revealed that books were viewed as a utilitarian product ($t(17) = -2.39, p < .001$). Free responses of the 18 participants revealed that clothing was viewed as the most hedonic product. Therefore, textbooks and clothing were selected for the manipulation of product type in the main study.

Experimental Design

The hypotheses were tested in a 2 (chronic focus: promotion, prevention) x 2 (product type: hedonic, utilitarian) between-subjects design. Chronic focus was a measured variable and product type was manipulated by creating scenarios in which participants were asked to imagine themselves.

Effects of Chronic Regulatory Focus and Product Type on Internet Purchase Decisions *Senior Capstone Project for Chad Ryan*

Participants

Participants were one hundred and eighty-five undergraduate students at Bryant University (51.9% female, 61.5% born in 1991) who received partial course credit for their participation in the study.

Procedure

The study began with a measure of chronic regulatory focus. Participants completed the General Regulatory Focus Measure (GRFM; Lockwood, Jordan, & Kunda 2002) as part of a battery of other tests. Approximately three weeks later they completed phase two of the study. During phase two, participants were randomly assigned one of two experimental conditions. One-half of the participants read a scenario that asked them to imagine themselves purchasing a utilitarian product (i.e., textbook). The other half of the participants read a scenario that asked them to imagine themselves purchasing a hedonic product (i.e., designer clothing). Participants were then asked to respond to a number of questions to assess their perceived risk, purchase attitudes, and purchase intentions. The questionnaire concluded with demographic questions. Participants were thanked for their participation and excused.

Measures

Independent Variables

Chronic Regulatory Focus. Chronic regulatory focus was measured with the GRFM. The GRFM consists of eighteen nine-point scale items. Of these, nine items measure promotion focus, and nine items measure prevention focus. The scale assesses individuals' perceptions of the person they would ideally like to be (promotion focus), or the person they think they ought to be (prevention focus). Analyses revealed that the scales for promotion and prevention were reliable (Cronbach's $\alpha_{\text{promotion}} = .84$, Cronbach's $\alpha_{\text{prevention}} = .71$) and not significantly correlated ($p > .10$). The items were then averaged to form indices of promotion and prevention focus.

Participants were assigned to regulatory focus groups based on a median split of the difference between GRFM promotion and prevention scores (Cesario et al., 2004; Zhao & Pechmann, 2007). Individuals whose difference score was at or above the median (2) were assigned to the promotion-focused group and those whose difference score was below the

Effects of Chronic Regulatory Focus and Product Type on Internet Purchase Decisions *Senior Capstone Project for Chad Ryan*

median were assigned to the prevention-focused group. This resulted in equal numbers of participants as either promotion- or prevention-focused.

Product Type. Two scenarios were created to distinguish shopping for hedonic versus utilitarian products. In the hedonic condition, participants read the following: “Please imagine yourself in the following situation. You have to buy new designer clothing. You have \$150 to spend on this clothing. What would you do?” In the utilitarian condition participants read the following information: “Please imagine yourself in the following situation. You have to buy a new textbook for a class and no used or rental copies of the book are available. You have \$150 to spend on this text. What would you do?”

Dependent Variables

Purchase Attitudes. Attitudes toward purchasing hedonic and utilitarian products on line were measured with four seven-point items ending with *Very negative (1)/very positive (7)*; *Unfavorable (1)/favorable (7)*; *Not very enjoyable (1)/ very enjoyable (7)*; *Foolish (1)/wise (7)*.

Purchase Intentions. Intentions to purchase products online were assessed using three seven-point items, from a previously published scale (Putrevu 1994), and anchored with online (1) and in a store (7). The items included: *It is very likely that I will purchase the text book; I will definitely purchase the text book; The next time I purchase a text I will purchase it.*

Perceived Risk. Risk associated with making purchases online was measured with two seven-point items. The items included: *Considering the investment associated with the purchase of a textbook ONLINE, how risky would you say purchasing a textbook online would be; I think that the purchase of the textbook ONLINE would lead to financial risk for me.* These items ended with *Not at all risky (1)/Very risky (7)*; *Strongly disagree (1)/Strongly agree (7)*, respectively. Risk associated with making purchases in-store were measured using the same two seven-point items.

Covariates

Participants reported their gender for consideration as a possible covariate (Garbarino & Strahilevitz 2004).

ANALYSIS AND RESULTS

Hypothesis 1 predicted that consumers would perceive online shopping as more risky than shopping in a store, and was tested using a paired sample *t*-test. This test revealed significant differences between the perceived risk of shopping in a store versus shopping online. ($M_{in\ store} = 2.38$, $SD_{in\ store} = 1.29$, $M_{online} = 4.08$, $SD_{online} = 1.69$; $t(1,185) = 13.1$, $p < .001$). As expected, consumers perceive greater risk when shopping online than when shopping in a store. Therefore, Hypothesis 1 was supported (see Figure 1).

Figure 1 – Risk of Online versus In-Store Shopping

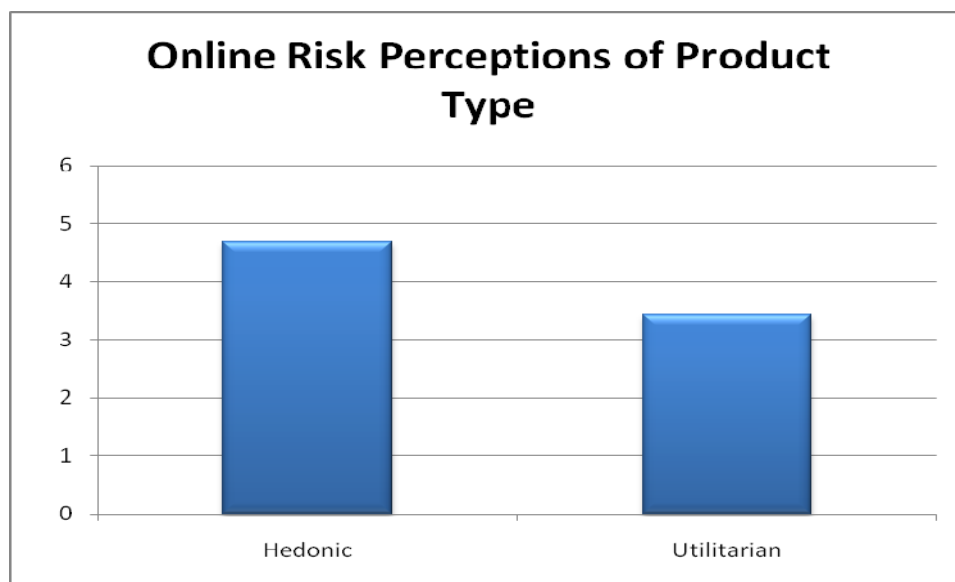


Hypothesis 2a predicted that promotion-focused consumers would exhibit more positive attitudes towards purchasing products online than prevention-focused consumers. Hypothesis 2b predicted that promotion-focused consumers will exhibit greater intentions to purchase products online than prevention-focused consumers. These hypotheses were tested using separate one-way Analyses of Variance (ANOVA) with chronic focus as the independent variable and purchase attitudes and purchase intentions as the dependent variables. The analyses revealed no differences between promotion-focused and prevention-focused consumers with respect to purchase attitudes ($p = .52$) or intentions ($p = .96$). Thus, Hypotheses 2a and 2b were not supported.

Effects of Chronic Regulatory Focus and Product Type on Internet Purchase Decisions *Senior Capstone Project for Chad Ryan*

Hypothesis 3 predicted that consumers would perceive more risk when purchasing hedonic products versus utilitarian products. This hypothesis was tested using an ANOVA with product type as the independent variable and risk as the dependent variable. This test revealed that, as expected, consumers perceived that purchasing hedonic products online was riskier than purchasing utilitarian products online ($M_{\text{hedonic}} = 4.67$, $M_{\text{utilitarian}} = 3.43$, $F(1,184) = 28.1$, $p < .001$). Thus, Hypothesis 3 was supported (see Figure 2).

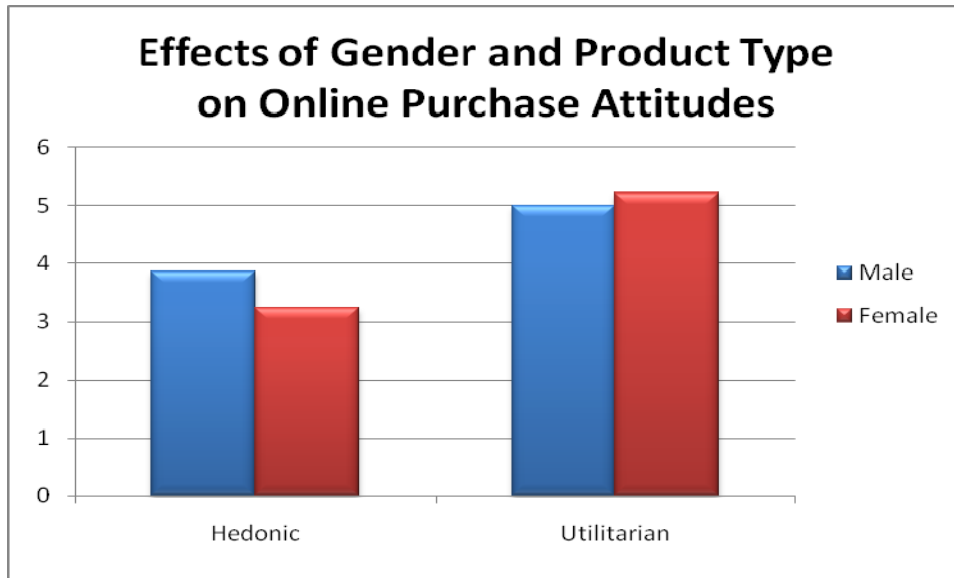
Figure 2 – Online Risk Perceptions of Product Type



Hypothesis 4a predicted that consumer will have more positive attitudes toward purchasing utilitarian products than hedonic products online. This hypothesis was tested using an ANOVA with product type as the independent variable, gender as the covariate, and purchase attitudes as the dependent variable. This test revealed a significant interaction effect of product type and gender on purchase attitudes ($F(1,181) = 3.92$, $p < .05$) (see Figure 3). There was no main effect for gender on purchase attitudes. As expected, a main effect of product type on purchase attitudes was evident ($M_{\text{hedonic}} = 3.55$, $M_{\text{utilitarian}} = 5.10$, $F(1, 184) = 52.2$, $p < .001$). Attitudes regarding online purchasing were more positive for utilitarian than hedonic products. Thus, Hypothesis 4a was supported.

Effects of Chronic Regulatory Focus and Product Type on Internet Purchase Decisions
Senior Capstone Project for Chad Ryan

Figure 3 – Effects of Gender and Product Type on Online Purchase Attitudes



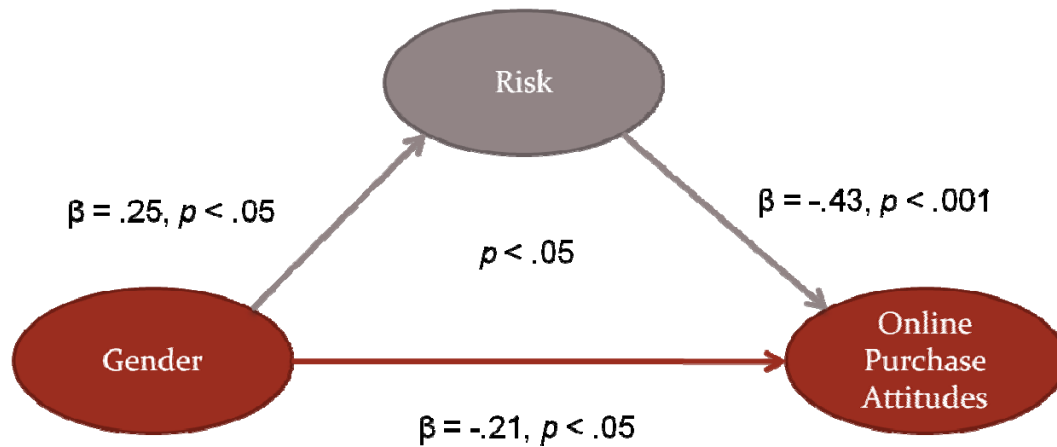
A follow-up ANOVA with gender as the independent variable and purchase attitudes as the dependent variable revealed that when products are hedonic, males have more positive purchase attitudes than females regarding online purchasing ($M_{\text{males}} = 3.87$, $M_{\text{females}} = 3.24$, $F(1,95) = 4.44$, $p < .05$). There were, however, no differences for utilitarian products ($p > .10$).

Given that a relationship between risk and gender has previously been identified (Garbarino & Strahilevitz 2004) and given these results which establish a relationship between gender and purchase attitudes for hedonic products, a follow-up analysis was conducted to determine if risk mediates the effect of hedonic product and gender on purchase attitudes. Using Baron and Kenny's (1986) procedure, a series of regression analyses were conducted. In the first equation, dummy-coded gender (male = 0, female = 1) was regressed on online purchase attitudes and the relationship was significant ($\beta = -.21$, $t(95) = 2.11$, $p < .05$). In the second equation, dummy-coded gender (male = 1, female = 0) was regressed on risk and the relationship was significant ($\beta = .25$, $t(95) = 2.55$, $p < .05$). In the third equation, risk was regressed on online purchase attitudes and the relationship was significant ($\beta = -.43$, $t(96) = 4.71$, $p < .001$). In the final test, dummy-coded gender was regressed on risk and purchase attitudes; gender was no longer significant ($\beta = .11$, $t(94) = 1.12$, $p = n.s.$), whereas the influence of risk remained significant ($\beta = -.42$, $t(95) = 4.37$, $p < .001$). Sobel's tests

Effects of Chronic Regulatory Focus and Product Type on Internet Purchase Decisions
Senior Capstone Project for Chad Ryan

confirmed the full mediation (Sobel's $t = 2.24, p < .05$). These results indicate that the perceived risk of purchasing products online completely mediated the influence of gender on online purchase attitudes for hedonic products (see Figure 4).

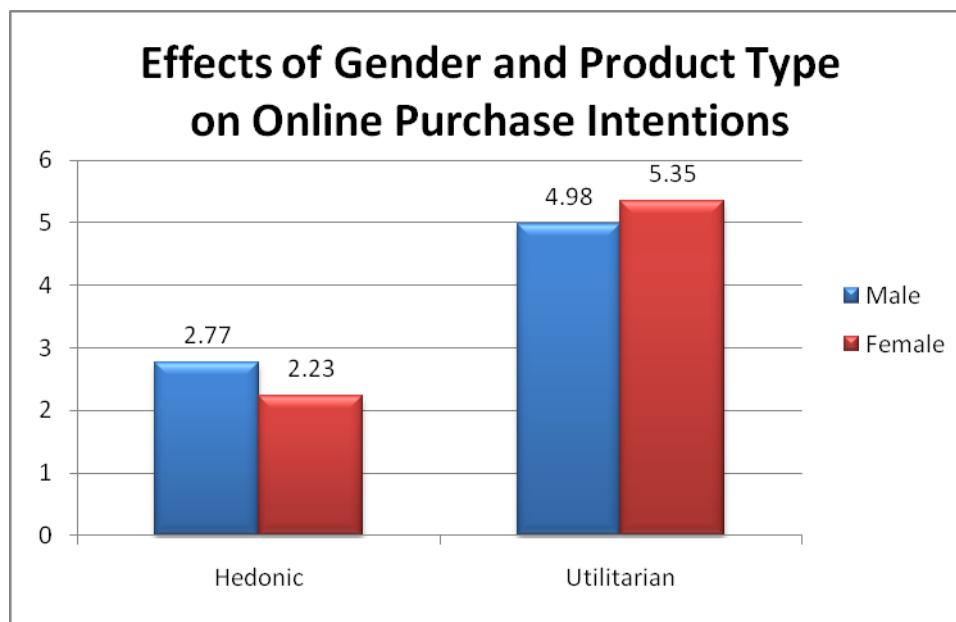
Figure 4 – Risk Mediates Gender on Online Purchase Attitudes for Hedonic Products



Hypothesis 4b predicted that consumers will have greater intentions to purchasing utilitarian products than hedonic products online. This hypothesis was tested using an ANOVA with product type as the independent variable, gender as the covariate, and online purchase intentions as the dependent variable. This test revealed that the interaction effect of product type and gender on purchase intentions was marginally significant ($F(1,181) = 3.41, p < .10$) and that there was no main effect for gender ($p = .73$) (see Figure 5). As expected however, a main effect of product type on purchase intentions was evident ($M_{\text{hedonic}} = 2.5, M_{\text{utilitarian}} = 5.17, F(1,184) = 120, p < .001$). Consumers reported greater intentions to purchase utilitarian than hedonic products online. Therefore, Hypothesis 4b was supported.

Effects of Chronic Regulatory Focus and Product Type on Internet Purchase Decisions Senior Capstone Project for Chad Ryan

Figure 5 – Effects of Gender and Product Type on Online Purchase Intentions



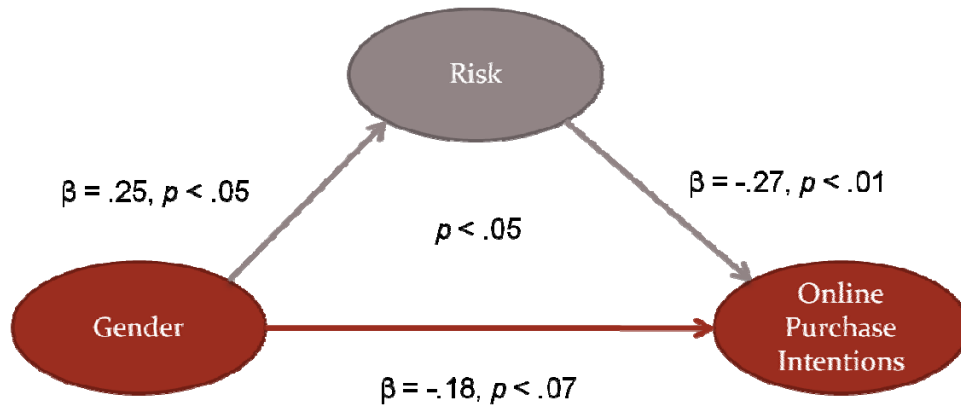
A follow-up ANOVA with gender as the independent variable and online purchase intentions as the dependent variable revealed that when products are hedonic, males have marginally greater purchase intentions than females regarding online purchasing ($M_{\text{males}} = 2.29$, $M_{\text{females}} = 1.87$, $F(1,95) = 3.26$, $p = .07$). There were, however, no differences for utilitarian products ($p > .10$).

Again, using Baron and Kenny's (1986) procedure, a series of regression analyses were conducted. In the first equation, dummy-coded gender (male = 1, female = 0) was regressed on online purchase intentions and the relationship was marginally significant ($\beta = -.18$, $t(95) = 1.81$, $p < .07$). In the second equation, dummy-coded gender (male = 1, female = 0) was regressed on risk and the relationship was significant ($\beta = .25$, $t(95) = 2.55$, $p < .05$). In the third equation, risk was regressed on online purchase intentions and the relationship was significant ($\beta = -.27$, $t(96) = 2.79$, $p < .01$). In the final test, dummy-coded gender was regressed on risk and purchase intentions; gender was no longer significant ($\beta = .12$, $t(94) = 1.18$, $p = n.s.$), whereas the influence of risk remained significant ($\beta = -.25$, $t(94) = 2.44$, $p < .05$). Sobel's tests confirmed the full mediation (Sobel's $t = 1.88$, $p < .06$). These results

Effects of Chronic Regulatory Focus and Product Type on Internet Purchase Decisions
Senior Capstone Project for Chad Ryan

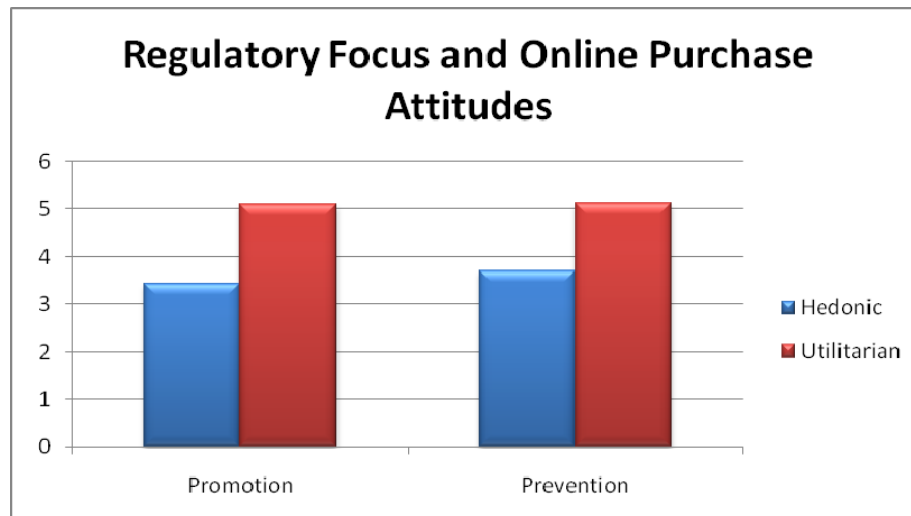
indicate that the perceived risk of purchasing products on line completely mediated the influence of gender on online purchase intentions for hedonic products (see Figure 6).

Figure 6 – Risk Mediates Gender on Online Purchase Intentions for Hedonic Products



Hypothesis 5a predicted that promotion-focused consumers would have more positive attitudes when purchasing hedonic versus utilitarian products online. This hypothesis was tested using an ANOVA with product type as the independent variable and on line purchase attitudes as the dependent variable. This test revealed that promotion-focused consumers had more positive attitudes regarding purchasing utilitarian rather than hedonic products online ($M_{\text{hedonic}} = 3.42$, $M_{\text{utilitarian}} = 5.10$, $F(1,87) = 27$, $p < .001$). Therefore, Hypothesis 5a was not supported (see Figure 7).

Figure 7 – Regulatory Focus and Online Purchase Attitudes



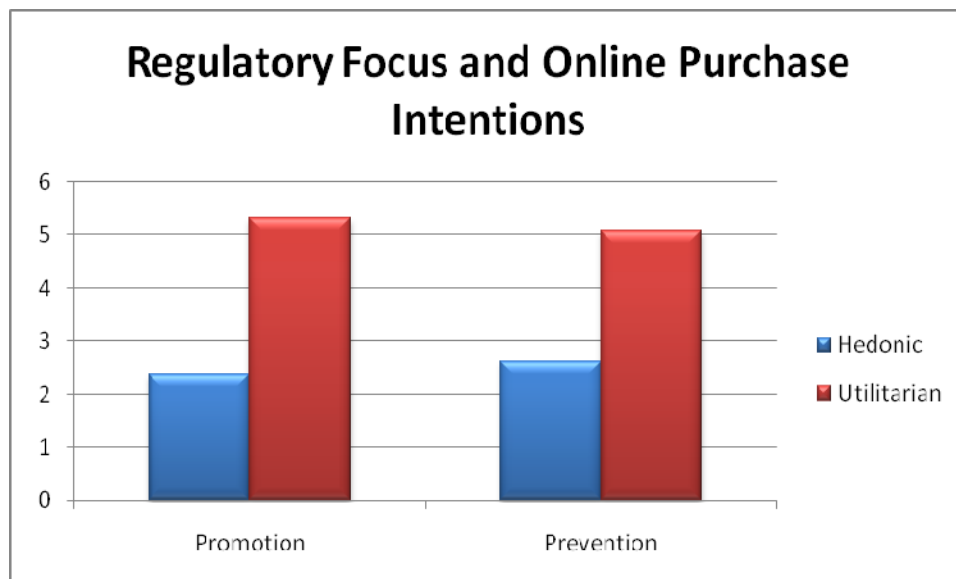
Effects of Chronic Regulatory Focus and Product Type on Internet Purchase Decisions

Senior Capstone Project for Chad Ryan

Hypothesis 5b predicted that prevention-focused consumers would have more positive attitudes when purchasing utilitarian versus hedonic products online. This hypothesis was tested using an ANOVA with product type as the independent variable and online purchase attitudes as the dependent variable. This test revealed that prevention-focused consumers had more positive attitudes regarding purchasing utilitarian rather than hedonic products online ($M_{\text{hedonic}} = 3.69$, $M_{\text{utilitarian}} = 5.12$, $F(1,95) = 24.3$, $p < .001$). Therefore, Hypothesis 5b was supported (see Figure 7).

Hypothesis 6a predicted that promotion-focused consumers would have greater intentions to purchase hedonic versus utilitarian products online. This hypothesis was tested using an ANOVA with product type as the independent variable and online purchase intentions as the dependent variable. This test revealed that promotion-focused consumers had greater intentions to purchase utilitarian products rather than hedonic products online ($M_{\text{hedonic}} = 2.38$, $M_{\text{utilitarian}} = 5.30$, $F(1,87) = 86$, $p < .001$). Therefore, Hypothesis 6a was not supported (see Figure 8).

Figure 8 – Regulatory Focus and Online Purchase Intentions



Hypothesis 6b predicted that prevention-focused consumers would have greater intentions to purchase utilitarian versus hedonic products online. This hypothesis was tested using an

Effects of Chronic Regulatory Focus and Product Type on Internet Purchase Decisions *Senior Capstone Project for Chad Ryan*

ANOVA with product type as the independent variable and purchase intentions as the dependent variable. This test revealed that as expected, prevention-focused consumers had greater intentions to purchase utilitarian products rather than hedonic products online ($M_{\text{hedonic}} = 2.61$, $M_{\text{utilitarian}} = 5.06$, $F(1,95) = 44.6$, $p < .001$). Therefore, Hypothesis 6b was supported (see Figure 8).

GENERAL DISCUSSION OF RESULTS

As expected, this study revealed that consumers perceive online shopping as risky. Also, as expected, hedonic products are perceived as being riskier than utilitarian products. The results also showed that consumers perceive buying hedonic products online as riskier than purchasing utilitarian products online. Additionally, consumers have more positive online purchase attitudes and greater online purchase intentions regarding utilitarian versus hedonic products.

Interestingly, the results of this study revealed an interaction effect of gender and product type on online purchase attitudes and intentions. When purchasing hedonic products, males reported lower online risk perceptions, more positive online purchase attitudes, and greater online purchase intentions than females. However, no differences between males and females were evident when purchasing utilitarian products. It was determined that risk mediated these relationships.

Finally, contrary to expectations, chronic regulatory focus did not have an effect on online purchase attitudes and intentions.

CONCLUSION

Theoretical Implications

The results of this study confirm the results of previous studies; that is, consumers perceive online shopping as risky. In addition, the results of this study make several contributions to theory. The type of product being purchased plays a role in consumers' online purchase attitudes and intentions. Consumers perceive greater risk when purchasing a hedonic versus a utilitarian product.

Effects of Chronic Regulatory Focus and Product Type on Internet Purchase Decisions *Senior Capstone Project for Chad Ryan*

This study has also confirmed the relationship between gender and risk. Males are more risk-seeking and females are more risk-averse with respect to online shopping. Additionally, this study has revealed an interaction between gender and product type. When products are hedonic, males have more positive online purchase attitudes and greater online purchase intentions than females. Males and females do not differ however with respect to purchasing utilitarian products online. Finally, gender differences, with respect to online purchase attitudes and intentions for hedonic products are fully mediated by risk perceptions.

Managerial Implications

The results of this study are important for marketing managers. Considering that an inverse relationship exists between risk and online attitudes or intentions and that online shopping is perceived as risky, managers must look for ways to mitigate risk. If risk is lowered, then the likelihood of a consumer purchasing a product from a website increases.

Since the type of product affects consumers' online purchase attitudes and intentions, online retailers should carefully consider online advertising strategies. For example, online retailers who sell hedonic products could use advertising to mitigate the level of risk consumers perceive. Conversely, online retailers offering utilitarian products, (e.g., textbooks) do not need to focus as much on mitigating risk, because consumers do not perceive purchasing utilitarian products online as risky.

In addition, the target market being pursued by online retailers should be considered. One of the easiest ways to separate target markets is on gender. As shown from the results of this study, males are more likely than females to shop online. Therefore, much like the situation above, online retailers targeting males will not have to focus as much on mitigating the perceived level of risk associated with their website. However, online retailers targeting females will have to create an environment that is perceived as less risky in order for females to feel more comfortable about purchasing their products online.

Limitations and Future Research

One limitation associated with this particular study is the use of chronic regulatory focus. By testing for chronic regulatory focus, the range of foci was limited, meaning that few

Effects of Chronic Regulatory Focus and Product Type on Internet Purchase Decisions *Senior Capstone Project for Chad Ryan*

individuals were primarily promotion-focused or primarily prevention-focused. The fact that few individuals were extreme cases of either focus may have had an effect on the relationships that were tested involving regulatory focus as an independent variable.

Additionally, the population that was tested was skewed towards being more promotion-focused. The fact that Bryant University is perceived as a competitive business school might draw more promotion-focused students. Also, college students might have an inherently higher promotion focus because they actively pursue a desired goal. Therefore, future research could manipulate participants' regulatory focus so that it is situationally-induced. This would control for the skewed population of participants, as well as generate more extreme cases of promotion focus and prevention focus.

Another limitation of this study is that other variables may have an effect on consumers' attitudes and intentions to purchase products online. Possible variables to look at in the future would be the amount of time an individual spends on a particular website. Another possible extension of this study would be to look at a different categorization of products. For instance, promotion products versus prevention products could be studied. Tanning lotion could be considered to be a promotion product because the consumer is actively trying to get a tan, whereas sun screen could be considered to be a prevention product, because the consumer is still trying to get a tan, but doing so by avoiding getting sunburn. Finally, another variable to consider for further research would be consumers' preferences for websites over others. For example, consumers might prefer Amazon over eBay, and this would affect their attitudes and intentions for purchasing products online.

This study has provided marketing research with a better understanding of factors that influence consumers to buy products online. Based on the results of this study, the type of product being purchased significantly affects consumers' decisions concerning whether they will purchase the product online. This study has also shown that chronic regulatory focus is not a relevant factor in the consumers' online purchase attitudes and intentions. This study has also provided a basis for further research to be conducted in order to test other factors that

Effects of Chronic Regulatory Focus and Product Type on Internet Purchase Decisions
Senior Capstone Project for Chad Ryan

may affect consumers' online purchase decisions. As such, it has made a contribution to marketing theory and practice.

Effects of Chronic Regulatory Focus and Product Type on Internet Purchase Decisions
Senior Capstone Project for Chad Ryan

APPENDICES

Effects of Chronic Regulatory Focus and Product Type on Internet Purchase Decisions
Senior Capstone Project for Chad Ryan

Appendix A – Example of the Pretest Survey

Please circle the number that best represents your point of view. 1 indicates an extremely practical product and 6 indicates an extremely fun product. Imagine that you are purchasing these products in an online setting.

	<u>Practical Product</u>				<u>Fun Product</u>	
• Textbook	1	2	3	4	5	6
• Movies	1	2	3	4	5	6
• iTunes	1	2	3	4	5	6
• Protein shakes	1	2	3	4	5	6
• Shoes	1	2	3	4	5	6
• Novels	1	2	3	4	5	6
• Jewelry	1	2	3	4	5	6
• Posters	1	2	3	4	5	6
• Bedding (comforters/sheets)	1	2	3	4	5	6

Please indicate up to five (5) other products that you regularly purchase online. Please circle the appropriate ratings from the above scale.

_____	1	2	3	4	5	6
_____	1	2	3	4	5	6
_____	1	2	3	4	5	6
_____	1	2	3	4	5	6
_____	1	2	3	4	5	6

Please circle your gender Male Female

Please indicate the year you were born _____

Thanks for taking the time to complete this survey.

Effects of Chronic Regulatory Focus and Product Type on Internet Purchase Decisions

Senior Capstone Project for Chad Ryan

Appendix B

The questionnaire was created and administered in Medialab (a software program specially designed for experimental research). Following is the questionnaire for the utilitarian condition.

Introduction:

- Thank you for participating in this study.
- Please answer all questions as honestly and accurately as possible.

Product manipulation:

- We are interested in your thoughts and feelings about online and in store shopping experiences.
- Please imagine yourself in the following situation.
- You have to buy a new textbook for a class and no used or rental copies of the book are available. You have \$150 to spend on this text.

Instructions:

- Thinking about yourself in the situation above, please respond to the following questions.

Purchase intentions:

- It is very likely that I will purchase the text book: online (1)...in a store (7)
- I will definitely purchase the text book: online (1)...in a store (7)
- The next time I purchase a text I will purchase it: online (1)...in a store (7)

Purchase attitudes:

- For me, purchasing a text book ONLINE is
 - Very negative (1)...very positive (7)
 - Favorable (1).....unfavorable (7)
 - Not very enjoyable (1) very enjoyable (7)
 - Foolish (1)...wise (7)
- For me, purchasing a text book ONLINE is
 - Very negative (1)...very positive (7)
 - Favorable (1).....unfavorable (7)
 - Not very enjoyable (1) very enjoyable (7)
 - Foolish (1)...wise (7)

Risk associated with buying

- Considering the investment associated with the purchase of a textbook ONLINE, how risky would you say purchasing a textbook online would be? Not at all risky (1)Very risky (7)
- I think that the purchase of the textbook ONLINE would lead to financial risk for me. Strongly disagree (1)Strongly agree (7).

Effects of Chronic Regulatory Focus and Product Type on Internet Purchase Decisions
Senior Capstone Project for Chad Ryan

- Considering the investment associated with the purchase of a textbook IN A STORE, how risky would you say purchasing a textbook online would be? Not at all risky (1)Very risky (7)
- I think that the purchase of the textbook IN A STORE would lead to financial risk for me. Strongly disagree (1)Strongly agree (7).

Demographics

- Please indicate your gender.
- Please indicate the year you were born

Effects of Chronic Regulatory Focus and Product Type on Internet Purchase Decisions
Senior Capstone Project for Chad Ryan

REFERENCES

- Arnold, M. J., & Reynolds, K. E. (2009). Affect and Retail Shopping Behavior: Understanding the Role of Mood Regulation and Regulatory Focus. *Journal of Retailing*, 85 (3), 308-320.
- Babin, B. J., Darden, W. R., & Griffin, M. (1994). Work and/or Fun: Measuring Hedonic and Utilitarian Shopping Value. *Journal of Consumer Research*, 20, 644-656. .
- Camacho, C. J., Higgins, 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 (3), 498-510.
- Cheema, A., & Papatla, P. (2008). Relative Importance of Online Versus Offline Information for Internet Purchases: Product Category and Internet Experience Effects. *Journal of Business Research*, 63, 979-985.
- Crowe, E., & Higgins, T. (1997). Regulatory Focus and Strategic Inclinations: Promotion and Prevention in Decision-Making. *Organizational Behavior and Human Decision Processes*, 69 (2), 117-132.
- Fiegenbaum, A., & Thomas, H. (1988). Attitudes toward Risk and the Risk-Return Paradox: Theory Explanations. *Academy of Management*, 31 (1), 85-106.
- Florack, A., Ineichen, S., & Bieri, R. (2009). The Impact of Regulatory Focus on the Effects of Two-Sided Advertising. *Social Cognition*, 27 (1), 37-56.
- Garbarino, E., & Strahilevitz, M. (2004). Gender Differences in the Perceived Risk of Buying Online and the Effects of Receiving a Site Recommendation. *Journal of Business Research*, 57, 768-775.
- Hartman, J. B., Shim, S., Barber, B., & O'Brien, M. (2006). Adolescents' Utilitarian and Hedonic Web-Consumption Behavior: Hierarchical Influence of Personal Values and Innovativeness. *Journal of Psychology and Marketing*, 23 (10), 813-839.
- Kaltcheva, V. D., & Weitz, B. A. (2006). When Should a Retailer Create an Exciting Store Environment? *Journal of Marketing*, 70, 107-118.
- Micu, C. C., & Chowdhury, T. G. (2010). The Effect of Message's Regulatory Focus and Product Type on Persuasion. *Journal of Marketing Theory and Practice*, 18 (2), 181-190.
- Putrevu, S., & Lord, K.R. (1994). Comparative and Non-comparative Advertising: Attitudinal Effects Under Cognitive and Affective Involvement Conditions. *Journal of Advertising*, 23 (June), 77-90.

Effects of Chronic Regulatory Focus and Product Type on Internet Purchase Decisions
Senior Capstone Project for Chad Ryan

- Semin, G. R., Higgins, T., de Montes, L. G., Estourget, Y., & Valencia, J. F. (2005). Linguistic Signatures of Regulatory Focus: How Abstraction Fits Promotion More Than Prevention. *Journal of Personality and Social Psychology* , 89 (1), 36-45.
- Srinivasan, S. S., Anderson, R., & Ponnayolu, K. (2002). Customer Loyalty in E-Commerce: An Exploration of its Antecedents and Consequences. *Journal of Retailing* , 78, 41-50.
- Van Noort, G., Kefkorf, P., & Fennis B. M. (2008). The Persuasiveness of Online Safety Cues: The Impact of Prevention Focus Compatibility of Web Content on Consumers' Risk Perceptions, Attitudes, and Intentions. *Journal of Interactive Marketing* , 89 (4), 58-72.