Risse, Bernhard

2003

Relational orientation in consumer purchase intentions: brick-and-mortar vs. e-commerce shopping environments

https://hdl.handle.net/10133/576

Downloaded from OPUS, University of Lethbridge Research Repository
RELATIONAL ORIENTATION IN CONSUMER PURCHASE INTENTIONS:
BRICK-AND-MORTAR VS. E-COMMERCE SHOPPING ENVIRONMENTS

BERNHARD RISSE
Dipl. Kaufmann (FH)
Fachhochschule der Wirtschaft, Paderborn, Germany
2002

A Research Project
submitted to the School of Graduate Studies
of the University of Lethbridge
in partial Fulfillment of the
Requirements for the Degree

MASTER OF SCIENCE IN MANAGEMENT

Faculty of Management
The University of Lethbridge
LETHBRIDGE, ALBERTA, CANADA

© Bernhard Risse, 2003
RELATIONAL ORIENTATION IN CONSUMER PURCHASE INTENTIONS:
BRICK-AND-MORTAR VS. E-COMMERCE SHOPPING ENVIRONMENTS

BERNHARD RISSE

Approved:

__________________________________________                ______________________
Supervisor: Michael Basil, Ph.D. Date

__________________________________________                ______________________
Co-supervisor: Jay Handelman, Ph.D. Date

__________________________________________                ______________________
External Examiner: Krystyna Aune, Ph.D.
University of Hawaii at Manoa, Honolulu Date

__________________________________________                ______________________
Chairperson: Robert Loo, Ph.D. Date
Without dreams
where would our goals come from?

And just where would we be now
if we didn't have a dream that got us here?

With this in mind, this is dedicated to my parents for giving me the opportunity to realize my dreams, and to all my family for their love and support
Abstract

Building lasting customer relationships is a central goal for companies in today’s business world. While numerous studies deal with the construct of relationship as objective it has also been suggested that relationships are very subjective and based on individual perceptions. This study puts the emphasis on the concept of relational orientation as an individual difference that influences the customers’ view of relationships. The study compares individual preferences and influences across the two shopping environments, Brick & Mortar and E-Commerce. Relational Orientation was found to be a moderating factor in the relationship development process, mainly influencing the effects of trust.
Acknowledgments

Completing this project was a new, exiting and rewarding experience. My horizon was expanded, new knowledge was gained and above all, new friendships were won. For the completion of this project and for making this year an unforgettable experience, I want to thank a number of people without whom this would not have been such a fun, rewarding and successful experience.

First of all I want to thank Dr. Michael Basil, my supervisor in this research project. Your dedication to this project and inspirational ideas all along the way made this thesis what it is now. Your calming advice, direction and feedback kept me on track, helped me manage every unexpected and disturbing situation one faces when conducting research, and inspired me to constantly try my best. Thank you Mike.

Secondly I want to thank Jay Handelman, my co-supervisor, who helped shaping this project from the beginning. Taking your class and discussing my project outside of class always triggered new ideas and helped in some crucial steps along the way. Your expertise and time was invaluable for this project, and is appreciated more than you know.

Thirdly, I want to thank my cohort who helped in so many ways that I can only highlight some. A thank you goes to the whole group for keeping up the good spirit and bringing fun into our days and weekends, and of course for their participation in my pilot test. I want to extend a special thank you to Grant Massie, who sat next to me in our office, always supported me and who became a good and close friend. Thank you for your great friendship and support.

Finally I would like to extend my appreciation to Dr. Krystyna Aune, who graciously took on the role of external examiner for this project. Your commitment and involvement was an honor and greatly appreciated.
# Table of Contents

Abstract iv  
Acknowledgments v  
Table of Contents vi  
List of Tables viii  
List of Figures ix  
List of Abbreviations x  

## CHAPTER ONE: Introduction
- Research Question and Objectives 3  
- Importance of Study 4  

## CHAPTER TWO: Literature Review and Research Model
- The Term Relationship 6  
- Relationship Marketing – The Consumer Perspective 9  
- Personality and Personal Traits 13  
- Dependant Variables 14  
  - Purchase Intention 14  
  - Price Sensitivity 15  
- Independent Variables and Hypotheses 16  
  - Relational Orientation 16  
  - Trust 18  
  - Price 22  
- The Research Model 24  

## CHAPTER THREE: Research Methodology 25  
- Overview of the Research Procedure 25  
- Pilot Test 25  
- Pre-Test #1 28  
- Pre-Test #2 31  

## CHAPTER FOUR: Main Study 35  
- The Research Design 35  
- Subjects and Procedure 36  
- Data Analysis 37  
- Manipulation check 38  
- Experimental Results 41  
  - RO Scale and General Data 41  
  - Hypothesis #1a 42  
  - Hypothesis #1b 42  
  - Hypothesis #2a 42  
  - Hypothesis #2b 43  
  - Hypothesis #2c 45  

vi
<table>
<thead>
<tr>
<th>Hypothesis #2d</th>
<th>46</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis #3a</td>
<td>46</td>
</tr>
<tr>
<td>Hypothesis #3b</td>
<td>48</td>
</tr>
<tr>
<td>Post-hoc Analysis ‘E-commerce Experience’</td>
<td>49</td>
</tr>
<tr>
<td>Hypothesis #1a</td>
<td>51</td>
</tr>
<tr>
<td>Hypothesis #2c</td>
<td>52</td>
</tr>
<tr>
<td>Hypothesis #3a</td>
<td>54</td>
</tr>
<tr>
<td>Summary of Findings</td>
<td>55</td>
</tr>
</tbody>
</table>

**CHAPTER FIVE: Discussion and Conclusion**  
57

- Discussion  
  - Discussion of Relational Orientation  
  - Discussion of Trust  
  - Discussion of Price  
  - Discussion of Post-hoc Findings  
- Conclusion  
- Limitations of Research  
- Directions for Future Research  

References  
72

Appendix A: Factor Analysis for Pilot Test  
Appendix B: Research Questionnaire  
Appendix C: Experiment Scenarios  
Appendix D: Scree Plot for SRO and PRO Items in Main Experiment  
Appendix E: Trust Ratings across Scenarios and RO  
86
List of Tables

Table  | Page
--- | ---
Table 1: Factor Analysis on Trust Items | 29
Table 3: Rotated Component Matrix for SRO and PRO Items | 33
Table 4: Cell Sizes in Research Design | 37
Table 5: Trust Manipulation Items | 38
Table 6: Rotated Component Matrix for SRO and PRO Items | 41
Table 7: Percentage of E-commerce Shoppers over RO and Trust | 45
Table 8: Percentage of E-commerce Shoppers over Trust and Price | 47
Table 9: RO by E-comm. Experience Data | 51
Table 10: Summary of Research Findings | 56
# List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1. Customer and Product Influences on Relationship Potential</td>
<td>8</td>
</tr>
<tr>
<td>Figure 2. The Hourglass of Relationship Development</td>
<td>12</td>
</tr>
<tr>
<td>Figure 3. Hypothesis #2c</td>
<td>21</td>
</tr>
<tr>
<td>Figure 4. Hypothesis #2d</td>
<td>21</td>
</tr>
<tr>
<td>Figure 5. Hypothesis #3b</td>
<td>23</td>
</tr>
<tr>
<td>Figure 6. Research Model</td>
<td>24</td>
</tr>
<tr>
<td>Figure 7. Experimental Design</td>
<td>35</td>
</tr>
<tr>
<td>Figure 8. Trust Development for Scenario #1</td>
<td>39</td>
</tr>
<tr>
<td>Figure 9. Trust Development for Scenario #2</td>
<td>40</td>
</tr>
<tr>
<td>Figure 10. Interaction effect of Trust and Price on PI</td>
<td>47</td>
</tr>
<tr>
<td>Figure 11. Interaction Effect of RO and Price</td>
<td>49</td>
</tr>
<tr>
<td>Figure 12. Interaction Effect of RO and E-commerce Experience</td>
<td>52</td>
</tr>
<tr>
<td>Figure 13. Interaction of RO, Trust, and E-comm. Experience on Purchase Intention</td>
<td>53</td>
</tr>
<tr>
<td>Figure 14. Interaction of Price, Trust, and E-comm. Experience on PI</td>
<td>54</td>
</tr>
</tbody>
</table>
**List of Abbreviations**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>B&amp;M</td>
<td>brick-and-mortar</td>
</tr>
<tr>
<td>E-Comm.</td>
<td>E-Commerce</td>
</tr>
<tr>
<td>H</td>
<td>Hypothesis</td>
</tr>
<tr>
<td>PI</td>
<td>Purchase Intention</td>
</tr>
<tr>
<td>PS</td>
<td>Price Sensitivity</td>
</tr>
<tr>
<td>PRO</td>
<td>Personal Relational Orientation</td>
</tr>
<tr>
<td>RO</td>
<td>Relational Orientation</td>
</tr>
<tr>
<td>SRO</td>
<td>Shopping Relational Orientation</td>
</tr>
</tbody>
</table>
CHAPTER ONE

Introduction

Charles R. Schwab brings it to the point when he says that we live in an era of rapid change (Siebel & House, 1999). The growing competition and transparency of the markets through globalization, along with the high comparability of products lead to an ever growing power of the customer and ultimately higher demands on companies. The rapid development of the internet over the last years played a big part in this growing competition and transparency. The companies’ reactions to this new market were to give more attention to the customer and the development of relationships with the customer and to structure the organization in a way that puts the customer at the centre of it.

Statistics show that U.S. companies lose half of their customers within five years and that this disloyalty can account for stunting corporate performance by 25% to 50% (Reichheld & Teal, 1996). Because of these findings, building lasting customer relationships has become the central goal of many companies. As Hennig-Thurau and Hansen (2000b) note, managing relationships is at the core of marketing today. Since the focus on the customer developed, significant research has been done on developing consumer trust, loyalty and eventually consumer relationships. ‘Customer Relationship Management’ or ‘Relationship Marketing’ are two of the new concepts companies are applying to develop lasting relationships with their customers. Building trust, loyalty and a relationship with consumers is considered one of the most important activities in marketing today because long term, loyal customers potentially create long term profits.

For companies, this approach means to target their activities towards customers who frequently shop at their store, require their service and generally create a high turnover of inventory for the company. An underlying assumption of this is that all the customers who
frequently shop at one store already have or potentially want to have a relationship with the store. It is the company which can initiate and maintain a relationship with a consumer. Conversely, it is assumed that it is not necessary to establish relationships with customers who do not shop regularly at one store and only create modest turnover. This approach does not reflect individual differences in shopping patterns though. It can be assumed that different customers value a relationship with the same store differently (Bendapudi & Berry, 1997). Therefore trying to engage frequent customers into a relationship while disregarding non-frequent customers, might or might not be the most efficient way to loyalty and high turnover creation. In this context, it is of great value to determine differences which lead some customers to value a relationship and others not to.

Ganesh, Arnold, and Reynolds (2000) state that although there is an increasing awareness that not all customers are alike, little is known about how or why they differ. This is also the case in relationship building. As an explanation for differences in relationship value prior research suggests factors like perceptions of quality, dissatisfaction or service encounter failures (Ganesh et al., 2000). These factors however can be manipulated by the company and are not intrinsic to the customer. Nonetheless, support exists that personal traits play a role in the differences in relationship building. As Ganesh et al. (2000) suggest, even the most satisfied and loyal customers might switch companies they do business with for reasons beyond the control of the firm. In this context, little attention has been given to factors intrinsic to the consumer. For example personal traits have only been given as an explanation by very few studies. One example is Garbarino and Johnson’s (1999) study on the different roles of satisfaction, trust and commitment in customer relationships. In addition to the factors mentioned by Ganesh et al. (2000), Garbarino and Johnson (1999) identified a customer’s orientation to relationships as an important factor, treating this
orientation as an intrinsic variable. This orientation of customers is of great importance since it potentially influences a customer’s purchase decision. McAdams (2001) suggests that personality traits are one important factor that has to be studied to understand what kind of consumer a person is. In general, personality traits have to be considered more closely in the literature on marketing relationships.

This research will follow McAdams’ suggestion and further study the influence of personality traits on the development of marketing relationships. It will examine the influences of customer differences in relationship building, by refining the concept of ‘relational orientation’ introduced by Garbarino and Johnson (1999). By expanding on the concept of relational orientation in the marketing context, this study will further the understanding of the effects of customer differences in relationship building.

**Research Question and Objectives**

The main objective of this study is to further the research on individual differences of customers for a better understanding of the needs and goals of today’s consumer. As McAdams (2001) suggests, personality traits (or personal traits) are an important anchor to understanding these differences in consumer behaviour. Specifically, this research examines the impact of one personal trait – Relational Orientation – on the consumer purchase decisions. Since relationship marketing is employed by a growing number of companies, it is of value to study relational orientation of consumers. Looking at marketing as a courting relationship, it is important to establish whether or not both parties desire a relationship. Relational orientation is the concept representing the customer’s desire to build relationships. It is expected, that relational orientation will impact where consumers make their purchases (purchase intention) and how price sensitive consumers are in a purchase
situation. To study the impact on purchase intention this project will compare the choice between brick-and-mortar and e-commerce environments. Determining factors that drive the decision between these two environments is of special interest, considering the rapid growth and increasing competition between brick-and-mortar and e-commerce. Therefore, the main research question that will be addressed is: Does relational orientation have an effect on purchase intention and price sensitivity in a purchase decision between brick-and-mortar and e-commerce?

With the influence of relational orientation, trust and price are also expected to be of importance. Relational Orientation is somewhat related to trust, by reflecting the importance of trust. Also, price is expected to have an influence due to risk perceptions associated with product price. Therefore, this project will also address a second research question, which is:

Do trust and price have direct and/or indirect effects on purchase intention and price sensitivity?

Importance of Study

Bendapudi and Berry’s (1997) statement on the perceived value of relationships was one of the motivations for this study. Bendapudi and Berry (1997) stated that different customers value a relationship to a store differently. Research so far dealt with the effects of relationships in the marketing area, and the factors that determine relationships, like trust, commitment and loyalty. The focus has not been on what drives customers to build relationships and value them. As Hennig-Thurau and Hansen (2000a) notice, relationship marketing theory so far has focused primarily on the suppliers’ perspective, and generally neglects the customers’ perspective and the willingness of customers to engage in relationships. These two perspectives of the supplier and the customer can be viewed as two
sides of the same coin. It is the difference of asking “How can we retain our frequent customers?” and “What makes this customer a frequent customer and what does the customer want?”. Focusing on the customer’s perspective to find out what factors make a customer a frequent customer and why some customers prefer having relationships while others do not is at the heart of this research project.

Hennig-Thurau and Hansen (2000a) also state that the motives of customers with regard to relationships and the willingness to engage in relationships have only been analyzed implicitly, creating a need for future research on a variety of topics. These include factors that block relationship development (relational barriers) and the customer’s individual interest in relational benefits.

This research suggests the concept of relational orientation as an explanation for the willingness to engage in relationships and for the individual differences in the value of relationships and their benefits. Crosby, Evans and Cowles (1990) conclude that the literature has identified the need to expand the focus on buyer-seller interaction to include relational properties. Relational orientation is one approach to follow this suggestion. It is also following McAdams’ (2001) suggestion, that studying personal traits is of great importance to understand consumers. To tie the relational orientation concept into the existing literature on relationships, trust which is one of the most mentioned and studied concepts, is included in the research design. ‘Price’ is also included in the research design, and the effects of relational orientation, trust and price on purchase intention and price sensitivity are studied.
CHAPTER TWO
Literature Review and Research Model

The Term Relationship

For the purpose of this research, it is essential to first define the term ‘relationship’. Generally, Bagozzi (1995) found that the word relationship is poorly defined both operationally and theoretically. Hunt (Hunt, 1983) uses the term relationship in his conceptualization of the domain of marketing when he states that ‘exchange relationships’ are the primary focus of marketing. The term ‘relationship’ in a marketing context is indeed based on the exchange concept. Unfortunately, ‘exchange’ among the social sciences is lacking a central definition (Bagozzi, as cited in Toyne, 1989). For the purpose of this project it is useful to draw from the economists’ view of exchange where it is described as a transfer of money for a product or service (Toyne, 1989). Exchange itself describes single transactions. In spite of the importance of the exchange concept, marketing has mostly neglected the relationship aspect of buyer-seller interaction (Dwyer, Schurr, & Oh, 1987).

A relationship develops over a series of exchanges. Storbacka et al. (1994) state that a relationship is created through a series of episodes, so that in the shopping situation at least two encounters are required before a relationship exists. In fact, the concept of relationships has been conceptualized as a continuum based on the number of interactions (Barnes, 2000).

The literature suggests three key constructs that are of importance in relationship building, namely satisfaction, trust and commitment (Hennig-Thurau & Hansen, 2000a). Storbacka’s definition of the term relationship was further developed by Barnes (1997), who suggests that before a relationship truly exists, both parties must mutually perceive that the relationship exists and the relationship must be characterized by a special status. Supporting Barnes statement Bendapudi and Berry (1997) claim, that it makes sense that a certain
interaction may be perceived by some people as a relationship, while others perceive the same situation as merely an interaction. Also, Christy, Oliver and Penn (1996) state that some customers may have a general belief that relationships normally offer better value, while others believe that better value can be obtained by seeking single transactions. These two facts on the interpretation of interactions and the value of relationships show, that the concept of a relationship is highly subjective and based on perceptions of both parties (Wong & Sohal, 2002). Barnes (2000) suggests that this subjectivity is due to different individual relationship thresholds. He also states that because of these individual thresholds, a relationship will only exist in the mind of the customer regardless of whether a marketer feels that a relationship has been created. What passes as a relationship under many relationship marketing programs is not likely a relationship at all in the customer’s eye for it is mostly one-sided (Barnes, 2000). Another view that reflects this notion of subjectivity is the concept of interdependence. Fournier (1998) states that before a relationship truly exists interdependence between the partners must be evident, meaning that partners must collectively affect, define and redefine the relationship. Berscheid (Berscheid, 1996) states that one aspect that reflects interdependence is the frequency with which partners influence each other. Christy et al. (1996) developed a relationship matrix based on two factors: customer relationship orientation and product field.
This matrix shows that the number of relationships in a market depends on the customer’s relational orientation. The outcome of relationships is an increased probability of future transactions between the two parties in a relationship (Christy et al., 1996).

Although researchers seem to agree on this perception based subjective view of relationships, the reasons why those differences exist remain an under-explored area. In general, research found that the attributes of interpersonal relationships can be usefully employed to describe exchange relationships in a business context (Morgan & Hunt, 1994). The attributes of interpersonal relationships might therefore be useful to explain why individual differences exist in the perception of relationships.

The purpose of this research project is to explore and establish a concept of individual difference that impacts the perceptions of relationships and describes a customer’s ‘need for relationship’.

Figure 1. Customer and Product Influences on Relationship Potential

<table>
<thead>
<tr>
<th>Customer / Segment</th>
<th>Relationship-indifferent</th>
<th>Relationship-welcoming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low relationship potential</td>
<td>Transactions dominate</td>
<td>Few natural relationships</td>
</tr>
<tr>
<td>High relationship potential</td>
<td>Few natural relationships</td>
<td>Relationships dominate</td>
</tr>
</tbody>
</table>
Relationship Marketing – The Consumer Perspective

Twenty years have gone by since the concept of relationship marketing was first mentioned in the literature by Berry (as cited in Hennig-Thurau & Hansen, 2000a). Today, the concept is not only up-to-date, but probably more popular than ever and its popularity is still growing. Christy, Oliver and Penn (1996) state, that the relationship marketing discussion in the academic and professional press has been a prominent part of a re-evaluation of the role and direction of development of marketing. Relationship marketing has even been called a paradigm change for marketing theory itself by some authors (Hennig-Thurau & Hansen, 2000a), while others refute this saying that relationship marketing does not meet the conditions necessary to be called a paradigm shift (Backhaus, as cited in Hennig-Thurau & Hansen, 2000a). Mostly academic scholars refute that relationship marketing is a new concept, suggesting that buyer-seller relationships are an old-fashioned way of doing business (Sheth & Parvatayar, 1995). Although it seems to be clear that relationship marketing is not a paradigm shift or a totally new approach, it certainly gave the marketing field both for academics and for practitioners a new boost and lead somewhat to a refreshing discussion of the field itself.

The development of the relationship-oriented approach in marketing was a response to the constraints of the transaction-oriented approach (Rapp, 2000). In the transaction-oriented approach, an interaction ends with the sale. The relationship-oriented approach takes the sale as a beginning of a long-term relationship. The traditional or transaction-oriented marketing approach has long been the core of the marketing function combining the four P’s of the marketing mix. The perfect combination of the four p’s product, price, place, and promotion, was what drove the marketing function (Bowen, 1998). The focus was on the transaction and the processes for efficiency, and on the acquisition of new customers.
Today, the four p’s although still valid and functional, have somewhat outlived their usefulness (English, 2000). The shift towards a relational approach has added a whole new dimension. Now the focus of relationship-oriented marketing is to retain already existing customers by building and maintaining relationships with them. Hansen (2000) concludes that the theoretical development of relationship marketing began in the late sixties and early seventies with a market-oriented and customer-focused marketing approach. During this time period, more emphasis was given to satisfy the customer with factors outside the actual product or service. Marketers began to develop relationships with customers on both a collective and an individual level.

Throughout the nineties relationship marketing was at its peak. Drawing from the lifecycle theory, Hennig-Thurau and Hansen (2000a) state that relationship marketing as a concept reached its maturity stage during that time. As mentioned by Veloutsou, Saren, and Tzokas (2002) many academics tried to conceptualize relationship marketing and define its scope in the early nineties. Diller (as cited in Diller, 2000) for example developed a framework of six general principals in relationship marketing, which he called the six i’s. His six i’s information, investments, individuality, interaction, integration and intention refer to the necessary company activities needed to establish relationships with customers. The 6 i’s mean that a company needs information about its customers, it needs to invest in the relationship to the customer, it has to respect the customers individuality and offer individualized service, it needs to foster continuous interaction with the customer, it needs to integrate the customer and it needs the intention to build and maintain a relationship to the customer. Incorporating all these different aspects according to Diller is the key to a successful relationship marketing initiative.
Research in the area of relationship marketing has mainly focused on industrial and services marketing (Christy et al., 1996), potential benefits of the companies (Hansen, 2000), activities of companies (Diller, 2000), and not on consumer markets, benefits for consumers or generally relationship marketing from a consumer perspective. This was due to the fact that it was almost unthinkable in the early nineties, to incorporate the relational approach into mass consumer markets, mainly because of missing technology. Highly relevant to the development and the popularity of relationship marketing especially in the consumer market were the technological advancements made during the mid and late nineties. Software that allowed businesses to maintain customer databases that stored a customer’s personal information, interactions and purchases, enabled large organizations to develop the kind of one-to-one relationships which small organizations had with their customers in the past. These relationships meant more profit from the frequent customers, and they held a large hidden potential for today’s large organizations. This technological development made relationship marketing a feasible strategy in consumer markets (Christy et al., 1996; Sheth & Parvatayar, 1995).

Although researchers put more emphasis on relationship marketing in consumer markets, researching relationship marketing from a consumer perspective still remains an under-explored area. One point that is brought up again and again in the literature is, that ultimately, a relationship does not depend solely on the companies activities but on the consumers willingness to engage in such a relationship, asking the question what it is that motivates customers to engage in relationships (Hansen, 2000; Hennig-Thurau, Gwinner, & Gremler, 2002; Sheth & Parvatayar, 1995). This aspect of what motivates consumers to engage in retail (marketing) relationships is the primary motive of this study. Outcomes of relationships like trust, commitment or loyalty have been studied extensively in the literature,
but what is the main drive for consumers and how does it fit into the existing models and the conceptualization if relationship marketing and customer retention? O’Malley and Tynan (2000) broadly categorize the existing literature in the area into conceptual developments, operational issues, implementation, relevance and nature of relationships. Some work has been done to integrate some of these areas into one model, like Diller’s 6 i’s of relationship marketing (Diller, 2000) which I believe is a good combination of conceptual development, operational issues, and implementation. Nonetheless, the model is also lacking the customer perspective which I think is necessary to complete his conceptualization. I have used Diller’s model to envision a new framework incorporating the nature of relationships and the missing customer perspective. This framework is depicted in Figure 2.

![Figure 2. The Hourglass of Relationship Development](image)

This framework is referred to as “The hourglass of relationship development” as it describes the company-customer relationship development as a frame of actions and

---

1 Extension of Diller’s "6 i’s" of relationship marketing (Diller, 2000)
reactions. The framework is initiated top-down with the reactions following bottom-up, meeting at the middle point. This narrow part of the hourglass that allows actions to ‘flow’ and create reactions, resembles the natural barriers which are on both sides, of company and customer, the intentions to engage in a relationship. In this instance, it is not only the companies’ but also the customers’ intention to engage in a relationship that is of importance. The concept of the customer’s intention to engage in relationships, called relational orientation is understood as a personal trait. This concept is developed in a later chapter in this thesis.

**Personality and Personal Traits**

Unfortunately, researchers do not agree on a general definition of the term ‘personality’ (Kassarjian, 1973). Kleinmuntz (1967) defines Personality as “the unique organization of factors which characterize an individual and determine his pattern of interaction with the environment” (p. 9).

By the very nature of retail shopping, any shopping situation potentially includes a personal contact with both the store in general and its salespeople in specific. In this personal contact, the interaction of salesperson and customer is influenced by each of their personalities. Studies on service providers show this influence of personality (Hurley, 1998) from a salesperson perspective. In general though, personality research in the consumer context has been neglected for a long time (Baumgartner, 2002). This could partly be due to the existence of competing schools of thought (Hurley, 1998). Personality research in the psychology discipline is done for the interest in personality traits with a desire to understand characteristics of humans. While personality research in a management and specifically marketing context is done to somewhat predict behaviour. The value of studying personality
to predict behaviour is what the competing schools argue about. Although some researchers favour personality as a predictor of behaviour, the dominant view has been that personality is less relevant than a person’s capacity to adapt and the influence of situational variables (Hurley, 1998).

This lack of personality research in the consumer context and the negligence of personality as a predictor of behaviour is somewhat surprising considering that over the last two decades personality research has been a popular topic in psychology (Baumgartner, 2002).

Today personality research is dominated by trait theories (Cervone, 2000). Trait theories explain a person’s tendency towards one type of behaviour by conceptualizing personality in terms of ‘individual-difference’ constructs (Cervone, 2000). This means that the ‘individual-difference’ constructs manifest themselves in behavioural tendencies that are not domain specific. Dabholkar and Bagozzi (2002) state that “variation in consumer differences arising from personality traits is of greater interest than demographic or psychographic factors because such variation is at the heart of consumer attitude formation and behavioural intentions” (p. 187).

**Dependant Variables**

*Purchase Intention*

This research project includes two dependant variables. The first one is purchase intention (PI). Consumer purchase intention in this project is conceptualized as the participant’s choice of purchase environment. In particular, research participants have to choose between the two environments of a local retail store (brick-and-mortar) and an online retailer (e-commerce) in a purchase situation. The focus is to determine factors that
influence consumer purchase decisions between the brick-and-mortar and e-commerce environments because the competition between these two environments is growing continually. There are no attributes of the stores mentioned other than the ‘trust manipulation’. Therefore when participants make a choice between two stores they are indirectly choosing between two environments. Purchase Intention will be directly measured by asking participants which store they would buy from (choice of purchase environment) in the given situation. In this research, the ‘choice of purchase environment’ and purchase intention are synonymously used terms.

**Price Sensitivity**

The second dependant variable is price sensitivity. For the purpose of this research project, price sensitivity is defined as the importance of price in a purchase situation. Low price sensitivity reflects that price is not of great importance in a given situation, while high price sensitivity means that price is important and savings could lead a consumer to switch the store they buy from. The concept of price sensitivity is also conceptualized as price tolerance (Delgado-Ballester & Munuera-Alemán, 2001). Price tolerance also reflects the importance of price but follows the opposite direction. High price tolerance means that consumers are more willing to tolerate a high price (Delgado-Ballester & Munuera-Alemán, 2001).

To measure price sensitivity, I chose to go with a simple one item measure by asking participants to state a needed price difference (savings) to switch purchase environments. In other words what the price at the e-commerce store would have to be to make a participant switch from the brick-and-mortar store to e-commerce. Measuring price sensitivity with one question of needed savings is consistent with Sirvanci’s (1993) approach to the concept.

15
Sirvanci (1993) also measure price sensitivity by one question, asking participants for needed savings.

**Independent Variables and Hypotheses**

**Relational Orientation**

Relational Orientation (RO) as used in this research is defined as a person’s preference to relationship building. In accordance to the social psychology literature (Snell & Finney, 1993; Swap & Rubin, 1983) RO in a purchase situation (consumer-company relationship) is viewed as a personal trait. A concept in the existing literature that is closely related to RO is commitment. Commitment is described as a customer’s orientation towards long-term relationships with specific stores (Hennig-Thurau & Hansen, 2000a). Geyskens, Steenkamp, Scheer and Kumar (1996) split the concept of commitment into affective commitment, based on emotional bonds, and calculative commitment based on the rational reasoning that higher benefits are gained by remaining in a relationship. Affective commitment as described by Geyskens et al. (1996) is very closely related to the concept of RO. There is one important difference though. Commitment is situation specific, meaning that one person can have different levels of commitment to different stores or in different shopping situations. RO on the other hand is understood as an overall, predominant attitude that leads a customer to show consistent behaviour in any shopping situation.

In their research on a non-profit professional theatre company, Garbarino and Johnson (1999) segmented the customer base according to responsiveness to transactional and relational marketing. They established three categories of RO; high, medium and low. They did not measure RO, but based it on the behavioural indicator of ticket purchase. According to this behavioural indicator, frequent subscribers were considered high, non-
frequent subscribers medium, and individual ticket buyers low in RO. Addis and Holbrook (2001) interpret Garbarino and Johnson’s approach, as having demonstrated that the customers’ orientation determines the kind of relationship they want to build with a firm. The customer’s relational orientation not only determines the kind of relationship, it also determines if the customer wants to build a relationship to begin with.

RO originally stems from the social psychology literature and the area of interpersonal-relationships. Concepts related to RO are relational-preoccupation and interpersonal orientation (Snell & Finney, 1993; Swap & Rubin, 1983) from the social psychology literature. As stated earlier, research found that the attributes of interpersonal relationships can be usefully employed to describe exchange relationships in a business context (Morgan and Hunt, 1994). Since the concept as described has not been measured in the marketing literature, the first objective was to determine its existence and influence in the purchase decisions of consumers. In this project, only two categories of RO (low and high) were used versus the three categories used by Garbarino and Johnson. A median split into two categories seemed to be more reasonable for this project and was possible because no theory exists that defines the three categories of RO. From previous research (Garbarino & Johnson, 1999) it can be predicted, that RO will have a direct effect on purchase intention. More personal contact and therefore higher relational approach will lead consumers with high RO to prefer to shop at a local store, therefore I hypothesize the following:

\( H_1: \) RO will have a relationship with purchase intention such that people with high RO are more likely to choose a local retailer over an online store than people with low RO.

It is also expected that RO will have a direct effect on price sensitivity. Previous research found, that relationships (commitment and loyalty) may decrease price sensitivity.
Since RO is the importance of relationships it is likely to have a similar effect. This can be explained by Bendapudi and Berry’s (1997) and Barnes’ (1997) findings that a relationship is highly subjective and Christy’s et al. (1996) finding, that relationships are viewed as beneficial by some people while other perceive relationships in a business-to-consumer context as detrimental. Based on these findings, I am concluding that RO will impact price sensitivity. Since relationships in general are found to impact price sensitivity, RO – the need for and value of a relationship – should also impact price sensitivity. It can be expected, that people with high RO, who value a relationship, will register lower price sensitivity, because price is not as important to the consumer as the relationship is. Formally stated:

\[ H_{1b}: \text{People with high RO will have a lower price sensitivity than people with low RO.} \]

Trust

Trust develops over time from exchanges by keeping promises, hence trust arises from an exchange experience as a long-term asset (Addis & Holbrook, 2001). Trust has been explored and defined in many ways. As Doney and Cannon (1997) state, trust has been studied in the fields of social psychology, sociology, economics and marketing. For this study, the focus of trust will be in the marketing field using its definitions and findings.

Morgan and Hunt’s (1994) article is one example of the study of trust in the marketing literature and probably one of the most cited ones. Morgan and Hunt (1994) define trust as existing when one party has confidence in an exchange partner’s reliability and integrity. Reliability and integrity in this definition are associated with qualities such as consistency, competency, honesty, fairness, responsibility, and helpfulness. Walter, Mueller and Helfert (2000) define trust as a customer’s belief in the supplier’s benevolence, honesty,
and competence to act in the best interest of the relationship to the customer. Although different, both definitions reflect the same core factors for trust. It is the belief of a customer that a company will act in his/her best interest. It is beyond the scope of this study to discuss the different conceptualizations of trust in greater depth. For a good overview of the existing studies on trust, its conceptualizations and measures or manipulations, see Gefen, Karahanna and Straub’s (2003) study.

A considerable amount of research has been done to examine the role of trust in relationship development particularly within distribution channels (Nicholson, Compeau, & Sethi, 2001). Different studies showed the influence of trust on future purchase intention of customers. Ganesan (1994) states the importance of trust in purchase intentions by showing that trust is a necessary factor for a long-term orientation. Morgan and Hunt (1994) demonstrate the importance of trust by showing that it is negatively related to propensity to leave. Gefen (2000) found that trust directly influences purchase intentions. Based on these findings, trust is expected to directly influence a customers purchase intentions. Therefore, I propose the following:

\[ H_2a: \text{ Trust will have a direct positive effect on purchase intention. } \]

Literature shows that trust also reduced the perceived risk of a purchase (Morgan & Hunt, 1994). Delgado-Ballester et al. (2001) found that trust indirectly creates lower price sensitivity by leading to higher commitment which in turn leads to lower price sensitivity (or higher price tolerance as they use it). Lemmink and Mattsson (2002) studied the effects of trust in service encounters, more specifically the benevolence and honesty aspects of trust. They found that there is a significant relationship between the benevolence aspect of trust
and willingness to pay more. Based on their finding, it can be concluded that trust will directly affect price sensitivity. Formally stated:

$$H_{2b}: \text{Trust will be negatively associated with price sensitivity.}$$

The definition of trust as the belief of a customer that a company acts in his/her best interest and the concepts mentioned in the definitions are of long term value for a relationship between customer and company. As Henning-Thurau, Gwinner and Gremier (2002) found that trust positively influences commitment which is understood as an enduring desire to maintain a valued relationship (Garbarino & Johnson, 1999). Supporting this direct relation of trust to relationship Ganesan (1994) found that trust enables parties to focus on the long-term benefits of a relationship. Because of this long term value of trust and its influence on commitment and the relationship, it can be expected, that trust will vary in importance to customers depending on their intention to engage in a relationship with a company or not. Also Gefen (2000) found that trust increases purchase intentions directly and indirectly. In other words, as an indirect influence trust will moderate how RO will affect purchase intention. Formally stated,

$$H_{2c}: \text{Trust will moderate the effect of RO on purchase intention such that people with high RO are more likely to choose a store they trust over one they do not trust than are people with low RO.}$$
The previous trust hypotheses lead into another, which is the moderating effect of trust on price sensitivity. As stated, trust will be valued differently by people with high and low RO. It is the perceived trust that results from the two concepts of trust and RO, that is important. Because of this connection of ‘RO and trust’, and the hypothesized direct influence of trust on price sensitivity, it is expected that trust will moderate the effect of RO on price sensitivity. Potentially, consumers with low RO will put less emphasis on trust and more on price, therefore leading to higher price sensitivity. Formally stated:

$H_{2d}$: Trust will moderate the effect of RO on price sensitivity such that people with low RO will be less price sensitive when trust differs between purchase environments.
Price

The third independent variable is price. Basil (2001) proposes price as one of three variables that are important in the purchase decision between e-commerce and local retailers. I suggest that the price variable can be split up into two aspects of price. First is the actual product price which will determine if a product is judged as being high or low priced. The actual product price is likely to be important in the choice of purchase environment. The second price aspect is the relative product price which shows the difference in price between different shopping environments or stores. This relative product price can be expressed in percentage savings, and it can be viewed as price threshold to switch between shopping environments or stores. The relative product price is reflected in the research model in the dependent variable price sensitivity.

To reflect the actual product price the scenarios for the experiment differ between a low and a high price product. Price has been shown in the literature to influence a consumers risk perception of a purchase (Olson, 1977). The consensus among the literature on the effects of price is that consumers perceive more risk with higher priced purchases (Bearden & Shimp, 1982). Because of the higher perceived risk on the product, it is expected, that consumers will try to minimize or even eliminate other risk factors of the purchase situation. As shown in previous studies buying over the internet involves numerous risks for consumers outside of the risks of the transaction process itself (Grabner-Kraeuter, 2002). Reichheld and Schefter (2000) found that risk in an e-commerce environment is generally high. Therefore, trying to minimize risk, customers will be less likely to purchase a high price product online than at a brick-and-mortar store. It is therefore expected, that price will have a main effect on purchase intention. Formally stated:
$H_3$: For high priced products people will prefer to purchase from a brick-and-mortar retailer.

The same reasoning leads us to expect that price will moderate the effect of RO on price sensitivity. The fact that e-commerce is generally perceived as a purchase environment with higher risk than brick-and-mortar, together with the higher perceived risk with high price product purchases, it is likely, that people with high and low RO will react differently to different prices. Consumers with low RO are likely to register only slight differences in needed savings between high and low price products, because they are less risk sensitive and more driven by price. In contrast, high RO consumers are likely to register substantially higher needed savings for a high price product than for a low price product, because of the high associated risk. Formally stated:

$H_{3b}$: Price will moderate the effect of relational orientation on price sensitivity such that people with high RO will have higher differences in price sensitivity than people with low RO.

![Figure 5. Hypothesis #3b](image-url)
The Research Model

Figure 6 depicts the complete research model used in this project. All hypotheses are shown by the arrows between the independent variables of relational orientation, trust and price and the dependent variables of purchase intention and price sensitivity. Arrows directly connected to other arrows are to be understood as a moderating effect on the relationship depicted by the main arrow it connects to.

In summary, the RO hypotheses predict the main effect of RO on purchase intention (H1a) and price sensitivity (H1b). The trust hypotheses predict the effect of trust on purchase intention (H2a), on price sensitivity (H2b), and the interaction effect of RO and trust on purchase intention (H2c) and price sensitivity (H2d). The price hypotheses predict the main effect of price on purchase intention (H3a) and the interaction effect of RO and price on price sensitivity (H3b).
CHAPTER THREE
Research Methodology

Overview of the Research Procedure

This study was conducted in four stages. First, a pilot study was conducted to test items for the RO scale. The second stage was a pre-test of the experimental scenarios that were to be used in the main experiment. The objective was to manipulate trust between the two shopping environments of brick-and-mortar and e-commerce. The initial pre-test of the scenarios was followed up by a second pre-test which was done to test the revised scenarios and the new RO scale. Finally the main study was conducted as an experiment on shopping situations including a manipulation of trust and price. Participants completed the 7-item RO scale, read a short shopping situation scenario and then were asked to state their purchase intention and rate their price sensitivity. The relationships hypothesized in the research model (see Figure 6) were then tested. All aspects of this study were approved by the Faculty of Management Research & Ethics Committee and were found to follow the ethical guidelines and standards as described in the Tri-Council Policy Statement for ethical conduct of research involving humans.

Pilot Test

An initial pilot test was conducted to develop the measurement for RO. The purpose of this pilot test was to determine the existence, variability and reliability of the RO concept. For the initial questionnaire 12 items were developed to measure RO. The items were written using a number of scales as a guide and inspiration (Garbarino & Johnson, 1999; Swap & Rubin, 1983). In the relationship marketing literature, commitment has widely been acknowledged to be an integral part of any long-term business relationship (Walter et al.,
Garbarino and Johnson (1999) capture commitment in their research as ‘belonging’ and ‘attachment’. Because of the importance of commitment in relationships Garbarino and Johnson’s (1999) approach was followed and questions relating to ‘attachment’ and ‘belonging’ were included in the RO questionnaire. Because of the unknown nature of the RO concept and its exact boundaries, other questions relating to the concepts of trust and relationships in general were also added.

Generally, a customer can have a relationship in purchase situations with a store and/or its salespeople. This is why the items also related to both a store and the salespeople. A five point Likert scale was used with “strongly agree” and “strongly disagree” as anchors. To make it easier for participants to state their overall preferences in the RO scale without bias from certain shopping situations, they were asked to think of all their shopping for Christmas gifts. This was done to ensure that responses were not based on some specific shopping situation like grocery shopping. The Christmas shopping was chosen because of the proximity of the test date to Christmas. A question was included that asked participants to state what kind of products they bought, to compare the shopping mix.

The questionnaire was administered to 26 University students and employees by way of hallway intercepts. The question on products bought for Christmas showed a good variance. It included products like books, CD’s, car parts, clothing, sports equipment, toys, perfume, and beauty products. A factor analysis on the items was performed by using principal components with a varimax rotation which is the recommended method in personality measurement (Comrey, 1988: as cited in Hurley, 1998). Criteria consistent with those recommended by Hair, Anderson, Tatham, and Black (Hair, Anderson, Tatham, & Black, 1998) was used, specifically the scree plot and the eigenvalue-greater-than-one criterion. Evaluation based on both of these criteria showed that four factors were present
(Eigenvalues of 3.47, 2.32, 2.11, and 1.23, respectively). One of these factors contained the 
relational questions and was titled ‘relational orientation’. The analysis also showed that the 
relationship to salespeople and the relationship to a store were clearly separated factors with 
items on ‘trusting salespeople’, ‘liking salespeople’ and ‘preferring to get offered assistance’ 
in the Salesperson factor (factor loadings of .72, .85, and .86 respectively). Using the 
definition of the RO concept given in this project, the concept was narrowed to the 
relationship to stores and relationships to salespeople were not included. This is consistent 
with Iacobucci and Ostrom’s (1996) finding that differences exist between the levels of 
relationships to stores and salespeople.

The RO factor contained three items with factor loadings between .734 and .781. The items related to ‘sense of belonging, ‘emotional attachment’ and ‘relationships’. None of 
the three RO items cross-loaded significantly (see Appendix A for complete factor analysis). 
A reliability analysis of the RO items was conducted giving a reliability coefficient for the 
scale of .74. This reliability coefficient was calculated using Coefficient Alpha, which is 
recommended for reliability tests for any multiple-item scale (Carmines & Zeller, 1979).

It should be mentioned, that the main objective of this pre-test was to test the 
relationship of the items and their construct domain RO. The test was performed to 
establish content validity, and to determine if the concept of RO, as defined in this research 
project, existed, and if it could be measured. The clear separation of relationships with a 
store and with the salespeople also provided some construct validity. This result clearly 
separated RO from the concept ‘need for interaction’ (Dabholkar, 1996) which is related to 
the factor ‘relationship to salespeople’.

Three additional items from the relational-preoccupation and the interpersonal 
orientation scale (Snell & Finney, 1993; Swap & Rubin, 1983) were included to further test if
the concepts are closely related. Additionally one more item for RO was developed and added for further testing.

**Pre-Test #1**

After the initial pilot test of items for the RO scale, two pre-test were conducted to further test the revised RO scale and the experimental scenarios. To manipulate trust, concepts that were shown in previous studies to be direct antecedents of trust were used: ‘Previous experience’ (Doney & Cannon, 1997), and ‘satisfaction’ (Delgado-Ballester & Munuera-Alemán, 2001; Selnes, 1998). To manipulate trust according to these antecedents, the scenarios stated that the participants had experience with one store and were always satisfied and that they had no experience with the other store. The product chosen for the test was a camera because a camera can be both a high and a low priced product. Also, most of the population are familiar with the product and have some kind of experience using it.

To manipulate price, a high and a low price camera were used. The price of the low price camera was $50, the price of the high priced camera was $300. Mardian (2002) sees the hundred-dollar point as an appropriate middle dollar amount to distinguish low and high priced products. Certainly, price perceptions differ between different populations. In his study though, the same population as in Mardian’s study was used. The sample population was therefore likely to have the same characteristic in price perceptions. Following his findings, the prices of $50 and $300 were chosen to have a clear separation of the two categories low and high. Using the same product category for the high and low priced product assured minimal influence of other external factors. In a study of pricing and internet shopping, Ancarani (2002) has shown, that online prices were always lower than prices at brick-and-mortar stores. Following this study and the fact that online retailers do
not have the expenses a brick-and-mortar store has, it was reasonable to assume that consumers expect to get a lower price when shopping online. Because if this fact, it was decided to include a minor price difference in the scenario to make the situations more realistic. The price for the camera was always 5% lower for e-commerce. The prices for the low and high priced camera were $45 and $270 at the online retailer respectively. Since there are always shipping costs associated with an online purchase, it was stated in the scenario, that the price at the e-commerce store includes shipment to the customer’s door.

Trust can be related to a variety of concepts so the manipulation check included questions on ‘overall trust’, ‘trust in expertise’ (Doney & Cannon, 1997), ‘trust in price’, and ‘trust in delivery’. The manipulation check was measured using a 5 point Likert-type scale (1 = Not at all, 5 = Very much). The first pre-test was administered to 24 university students during class. Participants were each given one written scenario and were asked to rate their trust on each of the trust dimensions based on the scenario. A factor analysis was conducted with the trust items. The results of this analysis are shown in Table 1.

Table 1: Factor Analysis on Trust Items

<table>
<thead>
<tr>
<th></th>
<th>Component 1</th>
<th>Component 2</th>
<th>Component 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>trust in B&amp;M</td>
<td>.306</td>
<td>.774</td>
<td></td>
</tr>
<tr>
<td>price trust B&amp;M</td>
<td>-.205</td>
<td>.714</td>
<td>.187</td>
</tr>
<tr>
<td>expert. trust B&amp;M</td>
<td>.791</td>
<td>.783</td>
<td>-.220</td>
</tr>
<tr>
<td>trust in e-comm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>price trust e-comm</td>
<td>.725</td>
<td>.177</td>
<td>-.227</td>
</tr>
<tr>
<td>expert trust e-comm</td>
<td>.771</td>
<td>-.154</td>
<td></td>
</tr>
<tr>
<td>delivery trust B&amp;M</td>
<td>.523</td>
<td>.107</td>
<td>-.702</td>
</tr>
<tr>
<td>delivery trust e-comm</td>
<td>.191</td>
<td></td>
<td>.893</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
Note: Only results greater than .1 are reported in table.
The analysis showed that the ‘trust in delivery’ dimension was not related to the other dimensions of expertise and price. The results clearly indicated that ‘trust in delivery’ is only of relevance in an e-commerce shopping situation. Consequently, the delivery dimension was excluded and not used to determine the overall trust. To determine the overall store trust an aggregate mean of the three items on ‘overall trust’, ‘price trust’, and ‘expertise trust’ was used for both brick-and-mortar and e-commerce. The manipulation check of the scenarios showed that the trust manipulation overall was not significant, since the trust differences between brick-and-mortar and e-commerce were not high enough. The results of the manipulation check are shown in Table 2.

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Mode</td>
<td>.547</td>
<td>1</td>
<td>.547</td>
<td>1.446</td>
<td>.242</td>
</tr>
<tr>
<td>Intercept</td>
<td>347.455</td>
<td>1</td>
<td>347.455</td>
<td>918.393</td>
<td>.000</td>
</tr>
<tr>
<td>Trust</td>
<td>.547</td>
<td>1</td>
<td>.547</td>
<td>1.446</td>
<td>.242</td>
</tr>
<tr>
<td>Error</td>
<td>8.323</td>
<td>22</td>
<td>.378</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>356.444</td>
<td>24</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>8.970</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

T-tests were conducted for manipulation checks on the individual scenarios. The t-tests showed that trust was effectively manipulated for the ‘trust brick-and-mortar scenario’ with a trust mean for brick-and-mortar of 3.97 and for e-commerce of 3.18 (t = 2.61, p < .05). Trust was not effectively manipulated for the ‘trust e-commerce scenario’ with a trust mean for brick-and-mortar of 3.67 and a trust mean for e-commerce of 3.15 (t = 1.78, p = .10). These results also showed that the effect has the wrong direction. A conclusion from the results was that there is a clear tendency for higher levels of trust for the brick-and-mortar environment than for the e-commerce environment. Even in the ‘trust e-commerce’
scenario, the trust ratings for brick-and-mortar were still higher than the trust ratings for e-commerce. These results were inadequate and the scenarios were changed and tested through a second pre-test.

*Pre-Test #2*

The problem with the trust manipulation was that levels of trust for e-commerce seemed to generally be lower than for brick-and-mortar. The goal was therefore to increase trust in e-commerce. To accomplish that, the scenario text was rearranged. In the previous scenario the brick-and-mortar environment was always mentioned first. This was changed to always have the trusted environment first. That way, the attention could be directed to the trusted environment. As Reichheld and Schefter (2000) found the limited web-interface does not allow consumers to judge trustworthiness the same way as they judge it in a brick-and-mortar environment; therefore making it more difficult for consumers to establish trust in an e-commerce environment. This finding might have been partially responsible for the insignificant manipulation. Consequently it was decided to also include trust manipulations that are specific to the e-commerce environment. Factors of fraudulent charges on credit cards and spam emails were included in the trust manipulation for the e-commerce environment, by stating that the participant never experienced any problems with fraudulent charges or unwanted e-mails.

These new scenarios were tested again with a sample of 29 university students collected by hallway intercepts. T-tests were conducted to test the manipulations. As in the first pretest, the brick-and-mortar manipulation was shown to be successful with a trust mean for brick-and-mortar of 4.31 and for e-commerce of 2.64 (t = 7.17, p < .001, respectively). The trust manipulation for the trust e-commerce scenario was still not
successful with a trust mean for brick-and-mortar of 3.48 and for e-commerce of 3.83 (t = -1.63, p = .128, respectively). The added manipulation for the e-commerce trust proved to be valuable, because the direction of the manipulation was correct in this pre-test. Based on the previous efforts to manipulate trust, it was decided that the best way to increase the difference of trust levels between e-commerce and brick-and-mortar in the trust e-commerce scenario, was to degrade the brick-and-mortar environment.

Next to the trust manipulation, the RO scale was also tested again. In both pre-tests the RO scale was included and not changed. It was decided after the pilot-test that it was to restricting to ask participants to think of their Christmas gift shopping experience when answering the RO questions. Although a large variety of products were named in the pilot test, the variety per individual was still relatively low. Therefore, for these pre-tests respondents were asked to answer the scale thinking about all their shopping experiences during the Christmas holiday season.

The scale was made up of seven items, four in the RO scale and three that were added from the relational-preoccupation and the interpersonal orientation scale (Snell & Finney, 1993; Swap & Rubin, 1983), to test for correlation between the constructs. Following Hair et al.’s (1998) recommendation for ten cases per item for a factor analysis, a minimum of 70 cases was needed in order to have enough power. To reach this number the RO scale was administered to an additional 20 participants. The RO data of the pre-tests were then combined. This was possible because the RO scale was not changed in any way and it was always administered first, before the scenarios. The change of scenarios therefore had no influence on the results of the RO scale. The total number of cases for the analysis of the RO scale was 73 sufficing for Hair’s recommendation of ten cases per item included.
First a factor analysis with a varimax rotation was conducted. Evaluation based on the eigenvalue-greater-than-one criterion (Hair et al., 1995) confirmed that two factors were present as expected, showing clear separation of the RO-items (also called Shopping Relational Orientation = SRO) and the interpersonal-orientation-items (Personal Relational Orientation = PRO). The rotated component matrix is shown in Table 3.

Table 3: Rotated Component Matrix for SRO and PRO Items

<table>
<thead>
<tr>
<th></th>
<th>Component 1</th>
<th>Component 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>emotional attachment</td>
<td>.753</td>
<td></td>
</tr>
<tr>
<td>sense of belonging</td>
<td>.898</td>
<td>.146</td>
</tr>
<tr>
<td>relationships</td>
<td>.805</td>
<td></td>
</tr>
<tr>
<td>1 store comes to mind</td>
<td>.660</td>
<td>.321</td>
</tr>
<tr>
<td>thinking of intim rel.</td>
<td></td>
<td>.852</td>
</tr>
<tr>
<td>closeness to people</td>
<td>.208</td>
<td>.738</td>
</tr>
<tr>
<td>thinking of intim2</td>
<td></td>
<td>.888</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
Note: Only results greater than .1 are reported in table.

Item four which was added after the pilot test was the only one that loaded on both factors, but with the RO factor as dominant and the interpersonal orientation as minor loading. Following the factor analysis the reliability of the RO scale was assessed using the recommended Coefficient Alpha (Carmines & Zeller, 1979). The reliability of the scale with all four items was .79. All alpha-if-item-deleted measures were lower than .79 suggesting that deleting any item, especially the fourth, would not improve the reliability of the scale. Based on these conflicting results, item four was kept for the main experiment. A decision on whether the item should or should not be included in the RO scale could then be made based on the large sample of the main experiment.
A correlation analysis between the SRO and PRO scale showed that the two constructs were significantly correlated ($r = .22, p < .05$) as was expected. Based on the factor and reliability analysis it was decided to keep the four SRO items and the three PRO items.
CHAPTER FOUR
Main Study

The Research Design

The hypotheses were tested with an experiment. To measure RO participants had to complete the questionnaire that was developed through the pre-tests, prior to starting the experiment (see Appendix B for complete research questionnaire). While the questionnaire was used to measure relational orientation of the participants, the following experiment was used to determine the influence of RO and the moderating effect of trust and price on purchase intention and price sensitivity.

The experimental design was a 2x3x2 between subjects factorial design, with the two categories of relational orientation, the three trust conditions, and low price versus high price products.

<table>
<thead>
<tr>
<th>Manipulations for low and high Relational Orientation group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust brick-and-mortar</td>
</tr>
<tr>
<td>Low price</td>
</tr>
<tr>
<td>High price</td>
</tr>
</tbody>
</table>

Figure 7. Experimental Design

For the experiment, trust was manipulated by stating that people had previous purchase experience and were always satisfied. For the ‘trust e-commerce’ scenario the manipulation also included a statement about ‘no negative experience with fraudulent credit card transactions or unwanted emails’. Also in the ‘trust e-commerce’ scenario, the manipulation included a negative statement on the brick-and-mortar store, specifying that the participant heard negative comments on the particular store from friends who shopped
there before. The product was only classified by high and low price stating the price of $50 or $300 respectively. To control for any product effects other than price, no details were mentioned on features or technical specifics. Also, the same product was used for all scenarios.

Subjects and Procedure

A 2 x 3 x 2 research design was used to collect data from undergraduate students at a major university in southern Alberta. In total 283 university students from a variety of summer courses participated in the study. The students were solely undergraduates from a variety of faculties and fields of study, including management, sociology, psychology and environmental sciences. Courses ranged from first year to senior year classes. None of the subjects had participated in the pre-tests. The sample was gathered in classes on the main campus and the two satellite campuses of the same university.

Professors were asked to allow 20 minutes of their class time for the experiment. With this prior permission from the instructors, the main researcher went to the classes and students were given the opportunity to participate in the study. Participation was not a class requirement and completely voluntary. As an incentive to participate a chance to win one of two $25 gift certificates was offered. Each student was given an instruction letter that explained what participants were asked to do. The letter also contained contact information for the primary researcher and information about ethical guidelines. Students were asked to sign the letter, to show that they understood what was asked and as confirmation of their consent. The data collection was conducted over a four week period.

The whole experimental procedure took less than 15 minutes, with most students being done after 10 minutes. While handing out the cover letter students were told that they
were part of a study on retail shopping. Participants were randomly assigned to one of the six scenarios. The sample was dominated by women with a percentile of 39% males. The subjects ranged from 18 to 54 years of age, with an average of 24.4. Across the treatments of trust and price, cell sizes were almost equal with minimal differences for the different conditions. The cell size statistics are shown in Table 4.

**Table 4: Cell Sizes in Research Design**

<table>
<thead>
<tr>
<th></th>
<th>Count</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product Price</strong></td>
<td><strong>low</strong></td>
<td><strong>high</strong></td>
</tr>
<tr>
<td>Trust in store</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust in B&amp;M</td>
<td>47</td>
<td>16.6%</td>
</tr>
<tr>
<td></td>
<td>47</td>
<td>16.6%</td>
</tr>
<tr>
<td>Trust in E-Comm</td>
<td>48</td>
<td>17.0%</td>
</tr>
<tr>
<td></td>
<td>46</td>
<td>16.3%</td>
</tr>
<tr>
<td>No Trust</td>
<td>48</td>
<td>17.0%</td>
</tr>
<tr>
<td></td>
<td>47</td>
<td>16.6%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>143</td>
<td>50.5%</td>
</tr>
<tr>
<td></td>
<td>140</td>
<td>49.5%</td>
</tr>
</tbody>
</table>

The participants had to make a choice of shopping either at a local retail store or over the internet. Participants also had to rate their trust towards the two stores to measure the manipulation. Finally participants were asked to state their price sensitivity and answer some questions used for control purposes, like e-commerce experience, age and gender.

**Data Analysis**

For the data analysis the statistical software package SPSS version 10.0 was used. The major tools used to analyze the hypotheses were the one-way ANOVA, Chi-Square and Logistic Regression. Also Factor Analysis and reliability tests using Chronbach’s alpha were used to test the RO scale, the interpersonal orientation scale and the correlation between the different trust manipulation questions.
**Manipulation check**

A check of the trust manipulation was conducted to test for significant trust differences among the purchased environments. The trust manipulation was adjusted through the two consecutive pre-tests and a final revision was done for the main experiment. Both pre-tests showed that the trust manipulation was not significant. The final change for the main experiment was to degrade the brick-and-mortar store in the ‘trust e-commerce’ scenario. This was done by inserting a statement on negative word-of-mouth. The items used in the manipulations can be seen in Table 5 (emphasis added).

**Table 5: Trust Manipulation Items**

<table>
<thead>
<tr>
<th>Trust Brick-and-Mortar</th>
</tr>
</thead>
<tbody>
<tr>
<td>• you have purchased a product three times already,</td>
</tr>
<tr>
<td>• have always been happy and satisfied with the merchandise and never had a problem</td>
</tr>
<tr>
<td>• and compared to your friends, who have shopped at other places, you believe that</td>
</tr>
<tr>
<td>you always got a better deal.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trust E-Commerce</th>
</tr>
</thead>
<tbody>
<tr>
<td>• You have purchased products at this store three times already,</td>
</tr>
<tr>
<td>• have always been happy and satisfied with the merchandise</td>
</tr>
<tr>
<td>• and compared to your friends, who have shopped at other places, you believe that</td>
</tr>
<tr>
<td>you always got a better deal.</td>
</tr>
<tr>
<td>• You have never had any problems, you were never billed with fraudulent charges on</td>
</tr>
<tr>
<td>your credit card</td>
</tr>
<tr>
<td>• and you have never received any unwanted emails.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No Trust Brick-and-Mortar</th>
</tr>
</thead>
<tbody>
<tr>
<td>• where you have never shopped before,</td>
</tr>
<tr>
<td>• have no prior experience with,</td>
</tr>
<tr>
<td>• and have no prior knowledge about.</td>
</tr>
<tr>
<td>• In the past you heard some negative comments about the store.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No Trust E-Commerce</th>
</tr>
</thead>
<tbody>
<tr>
<td>• where you have never shopped</td>
</tr>
<tr>
<td>• have no prior experience with,</td>
</tr>
<tr>
<td>• and have no prior knowledge about.</td>
</tr>
</tbody>
</table>
The complete final experiment scenarios can be seen in Appendix C.

Factor analysis on the pre-tests showed that the items on trust - overall, price, and expertise together gave an accurate trust rating. A factor analysis on the items with the main experiment data again supported this with factor loadings of the brick-and-mortar items of .83 (overall trust), .82 (price), .85 (expertise). All e-commerce items loaded at .80, correspondingly. Also the delivery trust items were shown in this main experiment, to clearly load on the brick-and-mortar (.67) and on the e-commerce factor (.79). Subsequently a reliability analysis was conducted to see if it was valuable to include the delivery items. The reliability analysis confirmed the pre-test results, by showing that the alpha-if-item-deleted for the delivery item was higher than the alpha of the scale ($\alpha = .83$ and $\alpha = .80$, respectively). Consequently the delivery items were not included. The overall trust was therefore determined by three items (overall, price and expertise trust). Figure 8 and Figure 9 illustrate the development of the trust ratings based on these items over the pre-tests and the main experiment.

![Scenario 1 - Trust in B&M](image)

Figure 8. Trust Development for Scenario #1
Figure 9 nicely shows the difficulty of the trust manipulation in e-commerce and the effects of the modifications. Pre-test one was based on equal manipulations for both scenarios. In pre-test two a positive manipulation, increasing trust, for e-commerce was added, which turned the effect in the right direction. Finally for the main experiment the brick-and-mortar environment was degraded, resulting in the degradation of the brick-and-mortar trust curve from the second pre-test to the main experiment (see Figure 9). To calculate the significance of the trust manipulation, the trust difference of brick-and-mortar and e-commerce was used. An ANOVA on this trust differential across the scenarios showed that the manipulation was significant \( F = 93.81 \) \((1, 283), p < .001\).

There was no manipulation check conducted for the price manipulation. In previous research (Mardian, 2002) the price manipulation was shown to work for the same sample population as used in this research. Additionally, the price manipulation was of a practical nature meaning that it was included to see if price matters, but there was no need for participants to necessarily perceive a price as high or low.
Experimental Results

RO Scale and General Data

In total 283 students participated in the experimental study with cell sizes almost equal across the six scenarios. To verify the RO scale, a factor analysis and a reliability analysis were conducted on all SRO and PRO items. Using the varimax rotation and employing the eigenvalue-greater-than-one criterion, the factor analysis showed that two factors were present, separating the SRO and PRO items. The scree plot also confirmed a two factor solution (see Appendix D for scree plot).

Table 6: Rotated Component Matrix for SRO and PRO Items

<table>
<thead>
<tr>
<th></th>
<th>Component 1</th>
<th>Component 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>emotional</td>
<td>.822</td>
<td>.115</td>
</tr>
<tr>
<td>attachment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sense of</td>
<td>.813</td>
<td>.180</td>
</tr>
<tr>
<td>belonging</td>
<td></td>
<td></td>
</tr>
<tr>
<td>relationships</td>
<td>.786</td>
<td>.107</td>
</tr>
<tr>
<td>1 store comes to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mind</td>
<td>.803</td>
<td></td>
</tr>
<tr>
<td>thinking of</td>
<td>.141</td>
<td>.861</td>
</tr>
<tr>
<td>intim2 rel.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>closeness to</td>
<td>.153</td>
<td>.600</td>
</tr>
<tr>
<td>people</td>
<td></td>
<td></td>
</tr>
<tr>
<td>thinking of</td>
<td>.837</td>
<td></td>
</tr>
<tr>
<td>intim2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
Note: Only results greater than .1 are reported in table.

The reliability analysis on the four SRO items confirmed the results, producing alpha-if-item-deleted values lower than the alpha of the scale with all four items (α = .83).

Subsequently, a Kolmogorov-Smirnov test was conducted which showed that the RO distribution was normal (Z = 2.14, p < .001). Overall, there was a slight tendency towards the upper part of the scale. To determine the high-low categories of RO, a median split was used, resulting in a cut off at 3.25. RO results between 1 and 3.25 (including) were
coded as low and results between 3.26 and 5 were coded as high RO. This split led to a cell size of 143 participants in the low RO and 140 participants in the high RO group.

**Hypothesis #1a**

Hypothesis 1a stated that RO has a main effect on purchase intention. To test this hypothesis, a Chi-square test was used, since both variables are categorical. This hypothesis was not supported ($\chi^2 = .113, p = .42$). Contrary to the prediction, relational orientation does not have a direct influence on consumer purchase intentions between the brick-and-mortar and e-commerce environments. This hypothesis was based on the relational differences between the two environments, meaning that e-commerce shopping naturally involves less personal contact. The results show that this difference does not impact purchase intentions.

**Hypothesis #1b**

Hypothesis 1b predicted a direct relationship between relational orientation and price sensitivity. More specifically, it predicted that people with high RO would register a lower price sensitivity than people with low RO. To test this hypothesis a one-way ANOVA was conducted using the continuous variable price sensitivity as dependant and the categorical variable relational orientation an independent. This main effect was not supported by the findings ($F_{(1, n=230)} = 1.21, p > .05$). Contrary to the prediction, relational orientation does not influence a consumer’s price sensitivity.

**Hypothesis #2a**

To test hypothesis 2a a Chi-square test was conducted, using the categorical trust manipulation and the categorical variable purchase intention. This hypothesis predicted a main effect of trust on purchase intention. More specifically, it was expected, that higher trust will lead to higher purchase intentions. For the analysis one case had to be excluded because of a missing value, leaving an effect size of 282. This hypothesis was supported and the main effect was found to be significant ($\chi^2_{(2, n=282)} = 74.49, p < .001$). As predicted,
customers are more likely to purchase at a store they trust than at one they do not trust. Interestingly, there is also a high difference in purchase intentions in the no trust scenario. Even though no aspect about trust was mentioned and it was stated that no experience exists with the brick-and-mortar store or the e-commerce store, customers tended to choose the brick-and-mortar environment \((n = 77)\) over the e-commerce environment \((n = 18)\). This is consistent with the finding that consumers tend to trust the brick-and-mortar environment more than e-commerce (see Figure 9).

**Hypothesis #2b**

Hypothesis 2b predicted a main effect of trust on price sensitivity. In specific, it was expected, that price sensitivity will differ between e-commerce and brick-and-mortar trust scenarios. To test this hypothesis a one-way ANOVA was run, comparing the price sensitivity over the categorical trust variable. For this ANOVA, 53 cases had to be excluded because of missing values for the price sensitivity. The results showed, that the main effect of trust on price sensitivity was significant \((F_{(2,n= 230)} = 11.440, p < .001)\).

Additionally post-hoc tests were run to compare the differences between the individual scenarios. The results showed that all differences were significant at the \(p < .001\), except for the difference between the ‘trust brick-and-mortar’ scenario and the no-trust scenario. The needed savings means for both of these scenarios were very close (difference of percent savings \(= 1.6\%\)) and both relatively high, indicating a low price sensitivity. This can be explained by the trust ratings of the scenarios. Both the trust brick-and-mortar and the no-trust scenario had very similar trust ratings, indicating a high initial tendency of trusting brick-and-mortar stores in a purchase situation of no experience and supporting the findings of the pre-tests that people tend to trust brick-and-mortar stores more. Because of this higher trust towards brick-and-mortar and the similarity of the two scenarios, it makes
sense, that purchase intentions are also similar between the two scenarios. Thus the
difference between the trust brick-and-mortar and no-trust scenario in purchase intention is
not significant.

As expected, it was found that price sensitivity was lower (higher needed savings) when trust in brick-and-mortar was present. Accordingly, people reported needed saving of 33% in the trust brick-and-mortar scenario and 19% in the trust e-commerce scenario. To look at price sensitivity across trust and purchase intention was also of interest, to see if price sensitivity is lower when a trusted store is chosen. For this analysis only the trust brick-and-mortar scenario could be used. This was due to the nature of the question for price sensitivity. It was asked what participants needed to save to switch to e-commerce rather then purchasing at brick-and-mortar. It was not asked however, what participants needed to save to switch to brick-and-mortar rather than purchasing at e-commerce. The trust e-commerce scenario was therefore excluded, as was the no-trust scenario. To test this effect, an ANOVA was run. The ANOVA produced significant results ($F_{(1, n=87)} = 18.536, p < .001$). The needed savings were 35% for brick-and-mortar and 8% for e-commerce. This indicates that price sensitivity is lower when a trusted store is chosen than when a store that is not trusted is chosen.

Another interesting effect was the difference of price sensitivity across the trust brick-and-mortar scenario and the trust e-commerce scenario if the purchase intention was brick-and-mortar. It was expected that the price sensitivity would be higher in the trust e-commerce scenario when the purchase intention was brick-and-mortar. An ANOVA was run to test this effect. Only those cases were selected that were in either the trust brick-and-mortar or the trust e-commerce scenario and had a purchase intention of brick-and-mortar. The test produced significant results ($F_{(1, n=109)} = 5.247, p < .05$), indicating that the effect was
present. The direction was as predicted with needed savings means of .35 for the trust brick-and-mortar scenario and .27 for the trust e-commerce scenario. It can be concluded therefore that if trust exists in a store which is not chosen, people are more price sensitive in the purchase situation.

**Hypothesis #2c**

Hypothesis 2c predicted a two-way interaction between trust and relational orientation on purchase intention. More specifically, it was expected that people with high RO are more likely to choose a store they trust over one they do not trust than are people with low RO. This hypothesis was tested with a logistic regression because it allows for both independent and dependant categorical variables. Purchase intention was used as the dependant variable and trust and relational orientation as independent variables. Both main effects and the interaction were included in the model. The interaction of trust and relational orientation was found to be non significant (\(Wald_{(1, n=282)} = .597, p = .440\)). Subsequently the logistic regression was repeated testing for the interaction only because of the highly significant main effect of trust. This time the interaction was significant for the difference of the trust e-commerce scenario compared to the trust brick-and-mortar and no trust scenarios (\(Wald_{(1, n=282)} = 15.938, p < .001\)), thus indicating that the interaction was weak compared to the main effect of trust on purchase intention (see Table 7).

**Table 7: Percentage of E-commerce Shoppers over RO and Trust**

<table>
<thead>
<tr>
<th>Trust</th>
<th>Relational Orientation</th>
<th>B&amp;M</th>
<th>E-Comm</th>
<th>No Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low RO</td>
<td>17%</td>
<td>63%</td>
<td>18.4%</td>
</tr>
<tr>
<td></td>
<td>High RO</td>
<td>10.6%</td>
<td>72.3%</td>
<td>19.6%</td>
</tr>
</tbody>
</table>

Note: Different subscripts indicate significant difference.
Hypothesis #2d

Hypothesis 2d predicted a two-way interaction effect of trust and relational orientation on price sensitivity. Trust differences will have a lesser effect on price sensitivity for people with high relational orientation than for people with low relational orientation. To test this hypothesis a new variable was computed that had the value of one for consumers who chose a trusted store and a value of two for consumers who chose a store they did not trust. A one-way ANOVA was used to test the significance of this effect. For this analysis 53 cases were excluded because of missing values for price sensitivity. This hypothesis was not supported as the price sensitivity showed no differences ($F_{(1, n=229)} = .127, p = .72$).

Subsequently another ANOVA was run, excluding all cases that reported needed savings of 100%, because these consumers would never shop online. Again, the effect was found to be non significant ($F_{(1, n=218)} = .715, p = .40$).

Hypothesis #3a

Hypothesis 3a predicted a direct effect of price on purchase intentions. More specifically, it was expected that consumers are more likely to purchase a low price than a high price product in an e-commerce environment. To test this effect, a Chi-square test was used, with the categorical variable of price and the categorical purchase intention. This effect was found to be non significant ($\chi^2_{(1, n=282)} = .113, p = .417$). This finding is somewhat surprising and it indicates, that e-commerce is a practical purchase environment not only for low priced but also for high priced items.

Post-hoc tests were conducted to include trust as an independent variable. This was done because of two reasons. First, the highly significant and dominant main effect of trust could have masked the effect of price. Secondly, because of the existing literature that suggests the main effect of price on purchase intentions in the purchase decision between brick-and-mortar and e-commerce environments. It was therefore decided to test for an
interaction effect of price with trust. It would be expected that trust is more important in a high-price product purchase than in a low-price product purchase. Therefore consumers should be more likely to choose a trusted store than a non trusted store when shopping for a high-price product. To test this interaction a logistic regression was run on the full factorial model, including price and trust main effects and the interaction. In this model the price-trust interaction was found to be non significant ($Wald_{(2, n=282)} = 3.794, p = .15$). This interaction was tested for again, excluding the main effects from the analysis. This time the interaction was found to be significant for the difference of the trust e-commerce scenario compared to the brick-and-mortar and no trust scenario ($Wald_{(1, n=282)} = 15.42, p < .001$).

Table 8: Percentage of E-commerce Shoppers over Trust and Price

<table>
<thead>
<tr>
<th>Product Price</th>
<th>Low Price</th>
<th>High Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>B&amp;M</td>
<td>19.1%&lt;sub&gt;b&lt;/sub&gt;</td>
<td>8.5%&lt;sub&gt;b&lt;/sub&gt;</td>
</tr>
<tr>
<td>E-Comm.</td>
<td>61.7%&lt;sub&gt;b&lt;/sub&gt;</td>
<td>73.9%&lt;sub&gt;b&lt;/sub&gt;</td>
</tr>
<tr>
<td>No Trust</td>
<td>16.7%&lt;sub&gt;b&lt;/sub&gt;</td>
<td>21.3%&lt;sub&gt;b&lt;/sub&gt;</td>
</tr>
</tbody>
</table>

Note: Different subscripts indicate significant difference.

![Figure 10. Interaction effect of Trust and Price on PI](image)

The interaction followed the predicted pattern, indicating that consumers are more likely to buy a high price than a low price product at a store they trust. This was due to the
higher importance of trust in a purchase for a high price than for a low price product. This was unexpectedly not the case though for the no trust scenario. Because trust was still higher for brick-and-mortar in this scenario, it was expected that purchase intentions would follow the same pattern as in the trust brick-and-mortar scenario. Therefore higher purchase intentions in brick-and-mortar for the high price product than for the low price product were expected. Contrary to this expectation, purchase intentions in brick-and-mortar were lower for the high price than for the low price product.

Hypothesis #3b

Hypothesis 3b predicted an interaction effect of RO and price. In specific it was expected that consumers with high RO will have a lower price sensitivity for high priced product purchases than consumers with low RO. This interaction was tested by an ANOVA, testing the full factorial model including the main effects of price and RO. The interaction was marginally significant ($F_{(1, n=230)} = 3.063, p < .1$) in this full model. The effects may have been constrained by price sensitivity outliers. As reported before, some participants reported to never want to shop online and therefore gave needed savings of 100%. It makes sense to exclude these cases for the analysis on price sensitivity. Consequently, another ANOVA was run on the full model, with all cases that reported 100% needed savings excluded. This time the interaction effect was found to be significant ($F_{(1, n=219)} = 4.403, p < .05$).
The interaction followed the predicted pattern with the addition that the effects of the low and high price products cross for high and low RO consumers. This crossing interaction could indicate that there are two different decision processes used by the high and low RO groups. It seems as though risk is a more important factor for people with high RO. In the high price situation, this group needs more savings to compensate for the higher price risk. On the other hand, low RO people seem to base their decision on some kind of price rationale, going by the actual savings in dollar amount rather then by the relative savings (percentage). Because of this, low RO consumers report lower needed savings in percentage for the high than for the low price product.

Post-hoc Analysis ‘E-commerce Experience’

The variable which was of special interest for all post-hoc analyses was e-commerce experience. Previous research found that e-commerce experience indirectly influences purchase intentions (Miyazaki & Fernandez, 2001). Therefore, e-commerce experience can to some extent be used as a surrogate for a customer’s future willingness to engage in e-commerce. In this research, 41% of participants reported previous e-commerce experience, a
size large enough to test for its effect. As a surrogate for a customer’s willingness to engage in e-commerce, main effects of e-commerce experience on purchase intention and price sensitivity were tested.

As Miyazaki and Fernandez (2001) found, e-commerce experience leads to lower perceived risk towards online shopping in general, which in turn leads to higher purchase intention in e-commerce. This effect could also be expected for this research project. Based on this finding, it was considered likely that previous e-commerce experience would influence consumer purchase decisions. As a main effect, it would be expected that e-commerce experience would lead to higher e-commerce purchase intentions (PI). This main effect was found to be significant ($\chi^2 = 11.557, p < .05$). As expected, purchase intentions in e-commerce were higher when e-commerce experience was present (PI (E-Comm.) = 54, 44.3%) than when no previous e-commerce experience existed (PI (E-Comm.) = 40, 25.0% respectively).

Also additional post-hoc analyses were conducted to test for a main effect of e-commerce experience on price sensitivity. An ANOVA was run to test for this effect. It was found that previous e-commerce experience had a main effect on price sensitivity ($F_{(1, n=229)} = 6.221, p < .05$), just like it did on PI. As with the previous ANOVA run to test H2d, the test was repeated excluding the cases of needed savings of 100%. This lead to an even stronger result, clearly showing the direct influence of e-commerce experience on price sensitivity ($F_{(1, n=218)} = 11.702, p < .001$)

Although this effect was not predicted in the hypotheses, it makes sense that previous experience with the e-commerce environment reduces price sensitivity toward e-commerce. As mentioned before, the question was asking for needed savings to switch to e-commerce. The expected direction therefore was that previous experience leads to lower needed savings, meaning higher price sensitivity when choosing between the brick-and-
mortar and e-commerce shopping environments. The results supported this direction with
needed savings of 25% with e-commerce experience and 32% without e-commerce
experience. Because of these significant main effects, post-hoc analyses for the hypotheses
were conducted including the e-commerce experience variable in the effects.

Hypothesis #1a

Because of Miyazaki and Fernandez (2001) findings of the direct effect of e-
commerce experience on purchase intention, it was decided to control for e-commerce
shopping experience in the hypothesized effect of RO on PI. A logistic regression was run
to test for this effect. Both the main effect of e-commerce experience and the interaction
were included in the model. The main effect was again found to be significant. The
interaction effect of RO and e-commerce experience deemed not to be significant when
included in the full model for the logistic regression ($\text{Wald}_{(1, n=282)} = .104, p = .747$).

Subsequently, a logistic regression was run testing only for the interaction effect of RO and
e-commerce experience on PI. This regression showed that a significant interaction between
RO and e-commerce experience existed ($\text{Wald}_{(1, n=282)} = 5.088, p < .05$). Table 9 shows the
percentage of people who chose to purchase from the online retailer (e-commerce) for the
two variables of RO and e-commerce experience. Figure 12 shows a graphic representation
of this interaction effect.

Table 9: RO by E-comm. Experience Data

<table>
<thead>
<tr>
<th></th>
<th>% of choosing e-commerce</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>no experience</td>
</tr>
<tr>
<td>Low RO</td>
<td>23.7%</td>
</tr>
<tr>
<td>High RO</td>
<td>25.7%</td>
</tr>
</tbody>
</table>
The fact that the interaction was not detectable in the full model might have been due to the strong main effect of e-commerce experience and the relative weakness of the interaction effect in comparison. Figure 12 illustrates this relative weakness of the interaction (slightly different slopes) compared to the large main effect (distance between the no experience and experience lines). Surprisingly, the interaction does not lead to a higher ‘main effect’ of RO, meaning that the direction is the same only stronger. Contrary to this, no e-commerce experience leads to higher purchase intention in e-commerce for high RO consumers.

Hypothesis #2c

For hypothesis 2c, additional post hoc tests were run. Of special interest was impact of previous e-commerce experience. As e-commerce experience was already found to have a main and interaction effect with RO on purchase intention, it was considered likely, that it might also moderate the effects of trust on PI. E-commerce experience was therefore included to test for a three-way interaction of trust, RO and e-commerce experience. This interaction was tested for using a logistic regression and the full factorial model and it was found to be significant (Wald$_{(2,n=282)} = 6.004$, p = .05). Subsequently, the logistic regression was repeated, excluding the RO outliers. Excluded as outliers, were all cases with an RO
outside of the range of plus/minus two standard deviations from the mean. This led to a more significant result ($\text{Wald}_{(2, n=266)} = 6.651, p < .05$) thus supporting the three-way interaction effect (see Figure 13).

Figure 13. Interaction of RO, Trust, and E-comm. Experience on Purchase Intention

The interaction effect turned out as would be expected for the e-commerce experience situation. In that case, purchase intention for B&M was higher for high RO consumers than for low RO consumers in the trust brick-and-mortar and lower for high RO consumers in the trust e-commerce scenario, indicating, that high RO consumers are more likely to purchase at a store they trust over one they do not trust, than are low RO consumers. Also as expected in the no trust scenario, purchase intention for brick-and-mortar is higher for high RO than for low RO consumers. This can be explained by the still significant positive trust difference towards brick-and-mortar, therefore also showing that high RO consumers are more likely to purchase at a store they trust than are low RO consumers. In other words, trust is more important to high RO than to low RO consumers.

In the case of no previous e-commerce experience however, this did not hold. The effects were the same for the trust brick-and-mortar and trust e-commerce scenarios.
therefore showing the existence of the two-way interaction of trust and RO. However, the effect was different for the no trust scenario. Contrary to the effects in the e-commerce experience situation, high RO consumers are less likely to purchase in the brick-and-mortar environment than are low RO consumers in the no trust scenario.

*Hypothesis #3a*

Again, post-hoc analyses were conducted for hypothesis #3a, to include previous e-commerce experience as variable. This was done, because e-commerce experience was already found to have a main effect on purchase intention. A logistic regression was run testing for a three-way interaction of price, trust and e-commerce experience. The model was tested for including the main effects of price, trust and e-commerce experience, the two-way interaction of trust and price and the three-way interaction between price, trust and e-commerce experience. This three-way interaction was found to be significant ($\text{Wald}_{(2, n=282)} = 9.243, p < .05$).

![Interaction for no e-comm. experience](image1)

![Interaction for e-comm. experience](image2)

**Figure 14. Interaction of Price, Trust, and E-comm. Experience on PI**

While the two-way interaction showed the overall effect (see Figure 10), the three-way interaction breaks the effect down over the e-commerce experience. Figure 14 shows,
that the found two-way interaction effect is the dominant effect in the case with previous e-commerce experience. The difference is found in the no e-commerce experience case. Figure 14 shows that there was almost no difference between the low and high price product brick-and-mortar purchase intentions for the trust e-commerce scenario when no e-commerce experience existed. Compared to the e-commerce experience case the brick-and-mortar purchase intentions overall leveled out. This makes sense, since the brick-and-mortar purchase intentions were generally higher for consumers without e-commerce experience compared to the intentions for consumers that did have e-commerce experience. For the trust brick-and-mortar scenario, the effect was the same with or without e-commerce experience, but with generally higher brick-and-mortar purchase intentions (vertical line movement) without e-commerce experience. In the no trust scenario, the effect changed depending on the experience. Without e-commerce experience brick-and-mortar purchase intentions were almost the same for low and high price products.

**Summary of Findings**

In the previous sections, the findings of this project were discussed in order of the Hypotheses with separate sections of additional findings. To integrate the results and for a better overall understanding, all findings were combined in Table 10. This table follows the outline of the analysis section by presenting the results in order of the hypotheses and post-hoc tests. Table 10 provides a complete overview and reference for the following discussion of the findings.
Table 10: Summary of Research Findings

<table>
<thead>
<tr>
<th>H</th>
<th>Effect</th>
<th>Variables</th>
<th>n</th>
<th>DF</th>
<th>Statistical Value</th>
<th>p-value</th>
<th>Evaluation</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>Main Effect</td>
<td>RO on PI</td>
<td>282</td>
<td>1</td>
<td>χ² = .113</td>
<td>.417</td>
<td>Not significant</td>
<td></td>
</tr>
<tr>
<td>1b</td>
<td>Main effect</td>
<td>RO on PS</td>
<td>230</td>
<td>1</td>
<td>F = 1.21</td>
<td>.273</td>
<td>Not significant</td>
<td></td>
</tr>
<tr>
<td>2a</td>
<td>Main Effect</td>
<td>Trust on PI</td>
<td>282</td>
<td>2</td>
<td>χ² = 74.49</td>
<td>&lt; .001</td>
<td>at p&lt;.001</td>
<td></td>
</tr>
<tr>
<td>2b</td>
<td>Main Effect</td>
<td>Trust on PS</td>
<td>230</td>
<td>2</td>
<td>F = 11.44</td>
<td>&lt; .001</td>
<td>at p&lt;.001</td>
<td></td>
</tr>
<tr>
<td>2c</td>
<td>Interaction</td>
<td>Trust x RO on PI</td>
<td>282</td>
<td>1</td>
<td>Wald = .597</td>
<td>.440</td>
<td>Not significant</td>
<td>in Full Model</td>
</tr>
<tr>
<td></td>
<td>Interaction</td>
<td>Trust x RO on PI</td>
<td>282</td>
<td>1</td>
<td>Wald = 15.94</td>
<td>&lt; .001</td>
<td>at p&lt;.001</td>
<td>separate</td>
</tr>
<tr>
<td>2d</td>
<td>Interaction</td>
<td>Trust x RO on PS</td>
<td>229</td>
<td>1</td>
<td>F = .127</td>
<td>.720</td>
<td>Not significant</td>
<td></td>
</tr>
<tr>
<td>3a</td>
<td>Main Effect</td>
<td>Price on PI</td>
<td>282</td>
<td>1</td>
<td>χ² = .113</td>
<td>.417</td>
<td>Not significant</td>
<td></td>
</tr>
<tr>
<td>3b</td>
<td>Interaction</td>
<td>RO x Price on PS</td>
<td>216</td>
<td>1</td>
<td>F = 4.403</td>
<td>.037</td>
<td>at p&lt;.05</td>
<td></td>
</tr>
</tbody>
</table>

### Post-hoc Findings

<table>
<thead>
<tr>
<th>Effect</th>
<th>Variables</th>
<th>n</th>
<th>DF</th>
<th>Statistical Value</th>
<th>p-value</th>
<th>Evaluation</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Effect</td>
<td>E-Comm. on PI</td>
<td>282</td>
<td>1</td>
<td>χ² = 11.557</td>
<td>.001</td>
<td>at p&lt;.05</td>
<td></td>
</tr>
<tr>
<td>Main Effect</td>
<td>E-Comm. on PS</td>
<td>229</td>
<td>1</td>
<td>F = 6.224</td>
<td>.013</td>
<td>at p&lt;.05</td>
<td></td>
</tr>
<tr>
<td>(1a) Interaction</td>
<td>RO x E-Comm. on PI</td>
<td>282</td>
<td>1</td>
<td>Wald = 5.088</td>
<td>.024</td>
<td>at p&lt;.05</td>
<td></td>
</tr>
<tr>
<td>(2c) Interaction</td>
<td>Trust x RO x E-Comm. on PI</td>
<td>282</td>
<td>2</td>
<td>Wald = 6.651</td>
<td>.036</td>
<td>at p&lt;.05</td>
<td></td>
</tr>
<tr>
<td>(3a) Interaction</td>
<td>Price x Trust on PI</td>
<td>282</td>
<td>2</td>
<td>Wald = 3.794</td>
<td>.150</td>
<td>Not significant</td>
<td>in Full Model</td>
</tr>
<tr>
<td></td>
<td>Interaction</td>
<td>Price x Trust on PI</td>
<td>282</td>
<td>2</td>
<td>Wald = 15.42</td>
<td>&lt; .001</td>
<td>at p&lt;.001</td>
</tr>
<tr>
<td></td>
<td>Interaction</td>
<td>Price x Trust x E-Comm. on PI</td>
<td>282</td>
<td>2</td>
<td>Wald = 9.243</td>
<td>.014</td>
<td>at p&lt;.05</td>
</tr>
</tbody>
</table>
CHAPTER FIVE
Discussion and Conclusion

Discussion

The main goal of this research project was to further the research on marketing relationships and to determine the influence of the personal trait ‘relational orientation’ in purchase situations. It was asked if the concept of relational orientation could describe the importance of relationships and if it could be tied into the existing relationship literature and the existing relationship building models and concepts. Although the results are not strong, they seem to support the existence of the concept of relational orientation and its influence in the purchase decision of consumers, in specific the purchase decision between brick-and-mortar and e-commerce environments.

The theoretical contributions of this study to the literature are twofold. First the development of a measure for and the introduction of the concept relational orientation are important for the relationship literature. The concept was introduced as a variable describing a need for relationships and therefore may explain factors determining consumer choice. To integrate the concept into the existing literature it was tested in a purchase decision together with trust and price. The second contribution is the application of brick-and-mortar versus e-commerce environments. In specific this project examined the purchase intentions and price sensitivity of consumers in the purchase situation between brick-and-mortar and e-commerce.

Overall the results supported some of the original hypotheses and the model, while others were not supported. Additionally, some results were found that were not hypothesized in the research model, but made intuitive sense. In general, trust was found to
be largely significant in the purchase decision while relational orientation was found to be significant in interactions only.

**Discussion of Relational Orientation**

The first hypothesis, stating that high RO will lead to higher purchase intentions in the brick-and-mortar environment was not supported. This finding is contrary to what was suggested by the existing research (Garbarino & Johnson, 1999). This finding shows that RO is not as important a factor in a purchase situation as was originally hypothesized. It also suggests that trust might be the more important factor in a purchase situation. If trust is the main factor influencing purchase intentions it could override the effects of RO.

Hypothesis #1b which predicted a main effect of RO on price sensitivity was not supported. This finding is contrary to what the existing literature suggests as effect of relationships (Delgado-Ballester & Munuera-Alemán, 2001; Diller, 2000). There is no literature though, that directly studied this effect, due to the fact that RO has not been studied yet. The hypothesis was inferred from the existing literature that looked at the effects of relationships, which found that people are willing to pay more for a trusted relationship (Reichheld & Schefter, 2000). Again, the finding shows that RO does not seem to be a major decisive factor in purchase situations. Overall, a relationship seems to be an additional value for consumers in a purchase situation that comes into play when other basic factors like trust are fulfilled. The primary focus of a purchase seems to be the success of the exchange itself. A relationship between store and consumer lies beyond the immediate success of the exchange.

**Discussion of Trust**

Hypothesis #2a which predicted a main effect of trust on purchase intention was supported and found to be significant. This finding supports the trust manipulation again which, in this way, was not used in any other research yet. By supporting the trust effect on
purchase intention which was found by so many other studies, it is clear, that the trust manipulation based on experience, satisfaction, and word-of-mouth worked. The finding is consistent with Gefen’s (2000) results who also found a direct influence of trust on purchase intentions. A possible explanation of this effect of trust can be the concepts of uncertainty and risk. Trust is the customer’s belief in the benevolence, integrity and ability of another party (Ganesan, 1994), thus reducing any uncertainty or risk perceptions the customer might have. This finding also shows how important trust is in any purchase situation.

Hypothesis #2b which predicted a main effect of trust on price sensitivity was supported. As was expected, price sensitivity was higher when trust in brick-and-mortar than when trust in e-commerce was present. Interestingly, post hoc tests showed that there was no significant difference in price sensitivity between the trust brick-and-mortar and the no trust scenarios. This seems to indicate, that people tend to trust the brick-and-mortar environment more than the e-commerce environment. This finding is consistent with Reichheld and Schefter (2000) statement, that it is harder for consumers to trust the e-commerce environment because the limited web interface does not allow them to judge trustworthiness. Also Gefen, et al. (2003) state that brick-and-mortar stores build consumer trust because of the perceived normality, while stores that are not normal, like e-commerce, erode consumer trust. The finding that there is no significant difference in price sensitivity between the trust brick-and-mortar and the no trust scenarios therefore makes theoretical sense, because consumers trust brick-and-mortar almost equally in both scenarios.

Next to the overall effect of trust on price sensitivity between the brick-and-mortar and e-commerce environments, the trust influence was also tested for the case when a trusted store was chosen. Because of the nature of the price sensitivity question, this analysis could only be done for the trust brick-and-mortar scenario. It was found that this effect was
also significant with higher reported needed savings (lower price sensitivity) when a trusted store was chosen. Also the effects between the trust brick-and-mortar and trust e-commerce were tested for people who chose the brick-and-mortar environment. The effect was found to be significant with higher price sensitivity for people who chose the brick-and-mortar environment in the trust e-commerce scenario than in the trust brick-and-mortar scenario. This suggests that people who prefer to shop at brick-and-mortar stores are more price sensitive once they have experience with and trust in an e-commerce store. Although these people could not be convinced to buy online by the presence of trust alone, they did become more price sensitive in their purchase decision, and therefore needed less savings to switch. This deems to be an important finding for the e-commerce environment, because it proves that the best advantage of e-commerce, which is price, works best, if efforts are taken to build consumer trust. Efforts to make payment safer, to provide more product information and to securely store personal information, are a right step in this direction.

Overall, this research project contributed to the literature by finding the following direct effects of trust:

- Trust influences the price sensitivity in the purchase decision between the brick-and-mortar and e-commerce environment. There seems to be a tendency towards trusting brick-and-mortar.
- Trust in a chosen store leads to a lower price sensitivity compared to the price sensitivity when no trust exists.
- When trust in another store than the one chosen exists, price sensitivity in the purchase situation is higher than when only the chosen store is trusted.

Hypothesis #2c which predicted an interaction effect of trust and RO on purchase intention was not supported in the full factorial model. Specifically, the prediction was that
consumers with high RO were more likely to choose a store they trust. Since this direction could be seen in a tabular comparison of purchase intention the interaction was tested alone without main effects. This time the interaction was significant. It was therefore concluded, that the interaction does seem to be present.

The existing literature does not directly address the interaction effect of RO and Trust on PI. Trust has been found to have both direct and indirect effects on purchase intention (Gefen, 2000), but has not been studied as having a two way interaction effect. The results support the assumption that different consumers value trust in a purchase situation differently. Because of the interaction with RO it can be assumed that this value difference is due to the customer’s intention to engage in a relationship or not. This also provides support for the Extension of Diller’s 6 i’s of relationship marketing (Diller, 2000) to the “Hourglass of Relationship Development” (see Figure 2). Clearly there is a ‘natural barrier’ at work that prohibits the development of trust or the realization of the value of such in a business-to-consumer context.

Hypothesis #2d, which predicted a two-way interaction effect of trust and RO on price sensitivity, was not supported. Contrary to the prediction the effect of RO on price sensitivity is not influenced by trust. This result seems to indicate that RO is not important for consumer price sensitivity since there was also no main effect of RO on price sensitivity found.

Discussion of Price

Hypothesis #3a which predicted a main effect of price on purchase intention was not significant. Contrary to the predictions, price does not have a direct effect on the purchase decision between brick-and-mortar and e-commerce. This is somewhat surprising. Because of the higher risk associated with e-commerce it would have made empirical sense
that consumers are more likely to purchase low price than high price products online. One of the reasons that this effect could not be found, seems to be an overestimation of the price effect, since price was found to have interaction effects. First a two-way interaction between trust and price was discovered, showing that the effect of price reverses across the trust variable.

The results show that consumers are more likely to purchase a high price product at a store they trust than a low price product. Thus, consumers are more likely to purchase a high price than a low price product from a brick-and-mortar store when trust in that brick-and-mortar store is present. Accordingly, consumers are more likely to buy a high price than a low price product online when trust in e-commerce is present. This interaction deems to be an important and interesting result. As the main effect of trust found that consumers are more likely to purchase at a store they trust over one they do not trust, considering the interaction this seems to be more so the case for high price product purchases. In fact the interaction indicates that trust is more important in a high price than a low price purchase situation. Interestingly, in the no trust scenario, consumers are also more likely to purchase a high than a low price product in the e-commerce environment. Since trust ratings in brick-and-mortar were still higher for the no trust scenario, it would have been expected that consumers report higher purchase intentions in brick-and-mortar for high price than for low price products. This effect could indicate that price is the dominant and decisive factor when no trust exists. Since the absolute savings in e-commerce were higher for the high price product than for the low price product, purchase intentions in e-commerce were higher. Why this phenomenon is present cannot be explained at this point and an adequate rationale has yet to be found.
Hypothesis #3b which predicted an interaction effect of RO and price on price sensitivity was supported. The predicted interaction pattern was found. In addition the effects for low and high price product crossed for low and high RO consumers (see Figure 11). This suggests that there are two different decision processes used by the high and low RO subjects. Risk seems to be a decisive factor for people with high RO. In the low price situation, risk perceptions are relatively low thus needed savings to switch to e-commerce are relatively low. In the high price situation however, risk perceptions are based on the possible loss. Therefore people with high RO need more savings to compensate for the higher price risk. Low RO people on the other hand seem to follow a more rational decision making model based on the monetary outcome. This group does not look at savings as a relative figure, meaning as a percentage of the product price. Rather they seem to judge their savings by the actual savings in dollar amount. This results in the lower needed savings for the high price product and the higher needed savings of the low price product.

Discussion of Post-hoc Findings

The analysis of the data showed that one important variable, which was e-commerce experience had major influences on the results. As it was not included in the research design, no effects of e-commerce experience were hypothesized. Based on Miyazaki and Fernandez’s (2001) finding that e-commerce experience influences purchase intentions, it made sense that general previous experience with the e-commerce environment influences consumers in this simulated purchase situation. The following section will discuss the findings related to the e-commerce experience variable following the order of Table 10.

First, main effects on e-commerce experience on the two dependant variables purchase intention and price sensitivity were tested. The main effect of e-commerce experience on PI was found to be significant. This is consistent with Schoenbachler and
Gordon’s (Schoenbachler & Gordon, 2002) proposition that experience (familiarity), especially with the internet, will influence purchase behaviour through risk perceptions. Although there was a direct main effect of experience found in this research, as Schoenbachler and Gordon (2002) found risk might also be a mediating factor. The results suggest that additional to the indirect effect proposed by Schoenbachler and Gordon (2002), there is also a direct effect of experience on purchase intentions.

The main effect of e-commerce experience on price sensitivity was also found to be significant. Although not hypothesized, this makes intuitively sense and is corresponding with previous research. An explanation for this effect is the tendency of consumers to trust a store only if the situation is considered normal (Gefen et al., 2003). Situational normality is an assessment that the transaction will be a success based on how “customary” a situation appears to be (Baier 1986, as cited in Gefen et al., 2003). Thus, if a situation is not normal, consumers do not know what to expect and therefore tend to not engage in such a transaction. Previous e-commerce experience allows consumers to judge the situational normality, while no experience leads the consumers to consider the situation as not normal. This judgment of abnormality then leads them to register higher needed savings (lower price sensitivity) to make up for the unknown expectations.

Because of Garbarino and Johnson’s (1999) results consecutive analysis were conducted for H1a. E-commerce experience was again of special interest, since it was already found to have main effects on both dependant variables. E-commerce experience was included in the analysis and an interaction between RO and e-commerce experience on consumer purchase intentions was found. This effect was rather small since it could not be found in the full factorial model with main effects and the interaction of the independent variables on purchase intention. The interaction turned out to be significant though when
tested for separately. Although it seemed reasonable that previous e-commerce experience would moderate how RO influences the channel choice between brick-and-mortar and e-commerce, the direction of the interaction was certainly unexpected. In general it was expected that low RO people would have higher e-commerce purchase intentions than people with high RO. This was true for people with e-commerce experience. On the other hand, if no experience exists, than people with high RO are more likely to purchase online. A possible explanation of this could be that people with high RO not only value the relationship and trust, but therefore also previous experience more than people with low RO.

E-commerce experience was also included in analysis for H2c. Next to the two-way interaction of RO and trust on PI, a three-way interaction was found between RO, trust and e-commerce experience. This three-way interaction supported the hypothesized effect of the two-way interaction in the case of previous e-commerce experience, but did raise some questions for the case of no previous e-commerce experience. As could be expected, the difference of choosing brick-and-mortar between low and high RO consumers for the two trust scenarios levelled out when no previous e-commerce experience exists. In other words less people chose to purchase online. Interestingly though, consumers with high RO were more likely to purchase online than low RO consumers when no trust existed in the case of no e-commerce experience. This result was contrary to what was expected. To explain this result, trust ratings of the two groups with and without e-commerce experience were compared. The trust ratings however did not help to explain this reversed effect. As would be expected for the no trust scenario, consumers with no previous e-commerce experience rate the trust in brick-and-mortar higher (mean diff. = .18) and trust in e-commerce lower (mean diff. = -.54) than consumers with previous experience. Differences in trust ratings,
therefore the perceptions of trust, are not an explanatory factor for this inverse effect that e-commerce experience creates in the no trust scenario. An adequate explanation for this phenomenon has yet to be found.

The final analysis that included e-commerce experience was the post-hoc analysis for H3a. Next to the interaction effect of trust and price, with the general effect as described, it was found that e-commerce experience moderates this interaction effect, leading to a three-way interaction of trust, price and e-commerce experience. The found two-way interaction was present for the case of previous e-commerce experience, even stronger than in the two-way interaction. In the case of no e-commerce experience however, the effect could not be seen. Purchase intentions in e-commerce went down in the no e-commerce experience case leaving almost no difference in brick-and-mortar purchase intentions between low and high price products when trust in e-commerce is present. This direction could be expected, since e-commerce experience was already found to have a main effect on purchase intention, leading to higher e-commerce purchase intentions when e-commerce experience is present.

Conclusion

Relationship marketing as a strategy has become more and more important in recent years, especially once it expanded into the consumer markets (Christy et al., 1996). The development of relationships is therefore an important area of research. This study contributes to this stream of research by testing existing theory and incorporating the redefined concept of relational orientation in relationship building models. The results show that RO, although present, does not have as large of an effect as was expected.

The primary goal and one of the major findings of this study is the existence of the proposed concept ‘relational orientation’. Although no main effects were found, overall, RO
as a concept seems to hold. The high reliability of the scale ($\alpha = .83$) and the found interaction effects support this. Contrary to the hypotheses, RO does not have a main influence in purchase decisions. Rather it seems that RO moderates the effects of trust.

As in previous research (Morgan & Hunt, 1994), trust was found to be a major factor in consumer purchase situations, influencing both the purchase intention and price sensitivity. In fact trust seems to be the major driver in purchase decisions in this project. In summary, trust is of great importance in consumer purchase decisions between the brick-and-mortar and e-commerce environments. Consumers tend to buy at a store they trust, and it does not matter if this is an online or a brick-and-mortar store. This shows how important it is for e-commerce to establish a trustworthy environment. Relational orientation seems to be the factor that explains the importance of trust for consumers in the purchase decision.

The results indicate that high RO consumers tend to put more emphasis on trust than low RO consumers. This is an interesting finding that shows that the e-commerce environment can even succeeds with high RO consumers, if it manages to address and solve the issue of general low trust levels towards e-commerce. All in all, a relationship seems to be an additional value which companies can offer that will influence consumer purchase intentions once other basic ‘needs’, like trust, are fulfilled. Therefore Relational orientation when compared to trust is of secondary importance in consumer purchase intentions. The interaction effect that was found between RO and trust is evidence of this.

**Limitations of Research**

As most studies have, this study has some characteristics that limit the generalizability of the results and that need to be considered when evaluating the findings and their applicability to the population. While I tried to address some possible limitations in
the research design, some were not specifically attended to. These limitations, although restricting for this study, do provide suggestions and opportunities for future research in this area, to critically assess and develop the new ideas presented in this study and to further the generalizability.

The first limitation is the concept of relational orientation itself, because as a concept it is hard to capture. As was described, the concept of RO is understood as a personal trait and captures an overall preference to relationship building. That is asking for research participants to answer the RO questions thinking of all their shopping experiences, to capture this overall preference. For this project, it was concluded that is not feasible to ask respondents to think of all their shopping experiences. Rather participants were told to answer the RO questions thinking of all their shopping experiences over the last 12 months. Overall though, it could not be controlled if participants answer the questions trying to think generally, like was intended or if they had a specific situation in mind when answering the questions. By giving the participants a time frame to think of all their shopping experiences over a year, the researcher believes, that the best compromise was found between a situation that was too general in nature and one that was too specific.

Secondly, previous e-commerce experience turned out to be a crucial factor for the generalizability. It was expected, that e-commerce experience might introduce a bias into the results. E-commerce experience was not included in the research model though, since the effects were not estimated to be significant enough. In the analysis however, e-commerce experience was found to be a crucial factor in the model and the purchase decision between brick-and-mortar and e-commerce. Since e-commerce was treated as another independent variable, which was not manipulated, the sample size should have been bigger. In fact, it should have been double the size used in this research project to ensure power of the results. For
this project it was concluded, that there was no power deficit because all interactions were found to be significant.

The third limitation is the predominant manipulation of trust. Trusting one and not the other store might lead consumers to act according to a socially desirable behaviour. The order of the experiment and questions might also have influenced and triggered this ‘expected’ behaviour. Participants had to read the experiment, answer the trust manipulation questions and then indicate their purchase intention. If participants realize the importance of trust, this ordering might be influential for the purchase intention. Such an effect is a common threat in any experiment though. Generally, it is a criticism of experiments that the experimental setting with the artificial environment might lead to biases because of the effects of stimulations. In this case the experimental design was chosen for control purposes (no certain brand or store chain in purchase situation) and I believed to have more advantages than disadvantages for this study.

The fourth characteristic that might limit the generalizability of the results is the use of a student sample for this study. Considerable literature has been written on the use of students to represent different populations. Although there is no general consensus, the literature does agree that students can sometimes be used as a representative sample for consumers. This is only the case though, if the described situation is one that students can imagine themselves in or are familiar with. In this study, students were asked to imagine themselves in a purchase situation for a camera, which should have made it a plausible situation, because the product is one that most people are familiar with and it is in an acceptable price range for students. Nonetheless, it would enhance the results of this study to repeat it with a sample of non-university adults.
Another limitation is the product used in this project. Although the use of a camera as product provided a number of advantages, it could also have introduced a possible bias into the results. First of all the experience with cameras might lead customers to assign different weights on decision factors, like trust and price, which are of crucial importance in this study. The same reaction could result from the technical nature of the product. In the same way that a purchase situation for a car is different from a grocery purchase, it might be the case that a camera purchase is not representative.

**Directions for Future Research**

Next to supporting existing theory and testing for the concept of RO, this study also raises a lot of interesting questions that require further research. Although the concept of RO was generally found to exist, little can be said about its exact effects in the purchase situation from this one study. Further research in the area of consumer behaviour should include studies on the following suggested topics:

- Study RO together with risk perceptions. Risk perceptions seem to be another big issue in the purchase decision and need to be studied together with RO to distinguish between the two concepts.

- Study the decision processes of the two RO groups. This project raised the possibility that high and low RO consumers use different decision processes to make their purchase choice. This is an interesting finding, that needs to be explored further since this project could only suggest this difference and not actually show it.
• Study the effects of RO on purchase intentions between two brick-and-mortar stores rather than in the decision between two environments to eliminate the external influences regarding e-commerce.

• Study the influence of RO on the purchase of specific products. The advantages of such a study are twofold. On the one hand it would be possible to compare the effects or RO on different purchases for one consumer (internal comparison). On the other hand, it would be possible to compare RO effects for one product across consumers (external comparison – “Product RO”).

• Study RO in a real setting with a sample of non university adults. As suggested in the limitations, university students could potentially create different results than a non student sample would. Also to overcome the negative effects of an artificial experimental setting, a study should be done in actual purchase situations.

Overall, this study is only a small step in the development and establishment of the relational orientation concept. This study was an effort to establish the RO concept and its effect and it will realize its value only if further consumer behaviour studies examine this concept. As such this research provides a framework for future studies for both theoretical and applied development. Although the conclusions on RO that can be drawn from this study are limited, its general existence was supported. Therefore future consumer behaviour studies on purchase intention should include the RO concept next to other established concepts like trust, commitment and satisfaction. As a result, the RO concept can be a valuable addition to the existing consumer behaviour literature both in theory and practice.
References


Appendix A: Factor Analysis for Pilot Test

<table>
<thead>
<tr>
<th>Component</th>
<th>1 Salesperson</th>
<th>2 Familiar</th>
<th>3 Rel. Orientation</th>
<th>4 Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>know shops</td>
<td>.880</td>
<td>.114</td>
<td>.132</td>
<td></td>
</tr>
<tr>
<td>shopped before</td>
<td>.871</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>trust store</td>
<td>.353</td>
<td>.114</td>
<td>-.371</td>
<td>.740</td>
</tr>
<tr>
<td>trust over price</td>
<td>.434</td>
<td>-.537</td>
<td>.123</td>
<td>.457</td>
</tr>
<tr>
<td>assistance</td>
<td>.722</td>
<td>.208</td>
<td>-.355</td>
<td>-.102</td>
</tr>
<tr>
<td>atmosphere</td>
<td>.365</td>
<td>.708</td>
<td>.286</td>
<td>.307</td>
</tr>
<tr>
<td>trust salesperson</td>
<td>.846</td>
<td></td>
<td>.391</td>
<td></td>
</tr>
<tr>
<td>like salespeople</td>
<td>.863</td>
<td></td>
<td>.271</td>
<td>.163</td>
</tr>
<tr>
<td>emotional attach.</td>
<td>.247</td>
<td>.132</td>
<td>.781</td>
<td>.141</td>
</tr>
<tr>
<td>accompany</td>
<td>.122</td>
<td>-.118</td>
<td></td>
<td>-.894</td>
</tr>
<tr>
<td>belonging</td>
<td>-.122</td>
<td></td>
<td>.734</td>
<td></td>
</tr>
<tr>
<td>relationship</td>
<td>.344</td>
<td></td>
<td>.767</td>
<td>-.201</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
Note: Only results greater than .1 are reported in table.
Appendix B: Research Questionnaire

Questionnaire – Part 1

The results of this survey will be anonymous and confidential.

Did you ever buy any products online: □ yes □ no

When answering the following questions, please think about all of your shopping experiences over the last 12 months.

Please indicate by circling the appropriate number how much you agree or disagree with each of the following statements.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I get emotionally attached to stores.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. I have a sense of belonging to stores I shop at.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. I feel that I have relationships with stores that I shop at.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. When I think about purchasing a product, a certain store I feel attached to comes to mind.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

When answering the following questions, please think about your personal relationships.

Please indicate by circling the appropriate number how much you agree or disagree with each of the following statements.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. I think about intimate relationships a great deal of the time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. When people tell me personal things about themselves, I find myself feeling close to them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. I think about intimate relationships all the time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

When you answered all questions on this page, please flip over to the next page and carefully read the text describing a shopping situation.
Part 2

How much do you trust the described local retail store in the situation?

Not at all  1         2        3        4        5  Very much

How much do you trust the described online store in the situation?

Not at all  1         2        3        4        5  Very much

Please rate how much you trust the local retail store in the situation described on the following dimensions:

**Price:** Not at all  1         2        3        4        5  Very much

**Expertise:** Not at all  1         2        3        4        5  Very much
(Expertise to help you choose the right product)

**Delivery:** Not at all  1         2        3        4        5  Very much

Please rate how much you trust the online store in the situation described on the following dimensions:

**Price:** Not at all  1         2        3        4        5  Very much

**Expertise:** Not at all  1         2        3        4        5  Very much
(Expertise to help you choose the right product)

**Delivery:** Not at all  1         2        3        4        5  Very much

Please indicate at which of the two stores you would buy the product in the situation described. (*only check one*)

☐ Local retail store  ☐ Online store

Think again about the product you are about to purchase and the described situation. What would be the **minimum savings** you would need to make you buy the product at the described online retailer rather than the local retail store? *(If you already chose the online store to purchase from, please indicate only, if the minimum savings are lower than the 10% which are already in the experiment. **State answer in percentage**)*

Needed savings: _____________%
Part 3

Have you ever bought a product from an online retailer? *(if answer is no, skip to part 4)*

☐ yes  ☐ no (skip to part 4)

How many times have you shopped online so far? *(only check one)*

☐ 1  ☐ 2-5  ☐ 6-20  ☐ More than 20

Have you ever had a negative experience with an online retailer? *(only check one)*

☐ yes  ☐ no

Have you ever bought a product from the online marketplace ‘E-Bay’? *(only check one)*

☐ yes  ☐ no

When you bought online, did you ever use a third person payment method like ‘Paypal’? *(only check one)*

☐ yes  ☐ no

Part 4

Please indicate your gender.

☐ Male  ☐ Female

Please state your age.

Age: ________

If you want to be entered into the draw for 1 of 2 $25 gift certificates from Earls Restaurant, please provide your email address below:

Email: ______________________________
Appendix C: Experiment Scenarios

Scenario 1

Imagine that you would really like to have your own new camera.
To determine which model would be appropriate for you, you begin to shop around.
The first place you go to is a local camera retailer.
At this local camera retailer,
- you have purchased a product three times already,
- have always been happy and satisfied with the merchandise and never had a problem
- and compared to your friends, who have shopped at other places, you believe that you always got a better deal.

This local retailer suggests a certain model for your needs.
The price for the camera at this store is $300. The product can be returned for a full refund if you are not completely satisfied.

You also search the internet for an appropriate model.
In your search you find an online electronics store
- where you have never shopped
- have no prior experience with,
- and have no prior knowledge about.

On the website you state your needs based on different criteria. Based on these needs, the online store suggests a different model than the local retailer, but with very similar features and of the same quality. The online retailer offers this model for $270, $30 (10%) less than the model the local store suggested. This price includes shipment to your door and payment can be made COD (Cash on delivery) or by credit card. The product can be returned for free if you are not completely satisfied.

With this information in mind you now make your final decision about where to purchase your new camera.

Scenario 2

Imagine that you would really like to have your own new camera.
To determine which model would be appropriate for you, you begin to shop around.
The first place you go to is a local camera retailer.
At this local camera retailer,
- you have purchased a product three times already,
- have always been happy and satisfied with the merchandise and never had a problem
- and compared to your friends, who have shopped at other places, you believe that you always got a better deal.

This local retailer suggests a certain model for your needs.
The price for the camera at this store is $50. The product can be returned for a full refund if you are not completely satisfied.
You also search the internet for an appropriate model. In your search you find an online electronics store - where you have never shopped - have no prior experience with, - and have no prior knowledge about.

On the website you state your needs based on different criteria. Based on these needs, the online store suggests a different model than the local retailer, but with very similar features and of the same quality. The online retailer offers the model for $45, $5 (10%) less than the model the local store suggested. This price includes shipment to your door and payment can be made COD (Cash on delivery) or by credit card. The product can be returned for a full refund if you are not completely satisfied.

With this information in mind you now make your final decision about where to purchase your new camera.

Scenario 3

Imagine that you would really like to have your own new camera. To determine which model would be appropriate for you, you begin to shop around. You start your search at an online electronics store.

- You have purchased products at this store three times already,
- have always been happy and satisfied with the merchandise
- and compared to your friends, who have shopped at other places, you believe that you always got a better deal.
- You have never had any problems, you were never billed with fraudulent charges on your credit card
- and you have never received any unwanted emails.

On the website you state your needs based on different criteria. Based on these needs, the online store suggests a certain model. The online retailer offers the model for $45. This price includes shipment to your door and the payment doesn’t have to be made until the product actually arrives at your door. The product can be returned for a full refund if you are not completely satisfied.

You also decide to search at a local camera retailer,

- where you have never shopped before,
- have no prior experience with,
- and have no prior knowledge about.
- In the past you heard some negative comments about the store.

Based on your needs, this retailer suggests a different model than the online camera retailer, but with very similar features and of the same quality. This local retailer offers the suggested model for $50, $5 (10%) more than the model the online camera retailer suggests. The product can be returned for a full refund if you are not completely satisfied.

With this information in mind you now make your final decision about where to purchase your new camera.
Scenario 4

Imagine that you would really like to have your own new camera.
To determine which model would be appropriate for you, you begin to shop around.
You start your search at an online electronics store.
- You have purchased products at this store three times already,
- have always been happy and satisfied with the merchandise
- and compared to your friends, who have shopped at other places, you believe that you always got a better deal.
- You have never had any problems, you were never billed with fraudulent charges on your credit card
- and you have never received any unwanted emails.

On the website you state your needs based on different criteria. Based on these needs, the online store suggests a certain model. The online retailer offers the model for $270. This price includes shipment to your door and the payment doesn't have to be made until the product actually arrives at your door. The product can be returned for a full refund if you are not completely satisfied.

You also decide to search at a local camera retailer,
- where you have never shopped before,
- have no prior experience with,
- and have no prior knowledge about.
- In the past you heard some negative comments about the store.

Based on your needs, this retailer suggests a different model than the online camera retailer, but with very similar features and of the same quality. This local retailer offers the suggested model for $300, $30 (10%) more than the model the online camera retailer suggests. The product can be returned for a full refund if you are not completely satisfied.

With this information in mind you now make your final decision about where to purchase your new camera.

Scenario 5

Imagine that you would really like to have your own new camera.
To determine which model would be appropriate for you, you begin to shop around.
The first place you go to is a local camera retailer,
- where you have never shopped before,
- have no prior experience with,
- and have no prior knowledge about.

The retailer suggests a certain model based on your needs.
The price for the camera at this store is $50. The product can be returned for a full refund if you are not completely satisfied.

You also search the internet for an appropriate model.
In your search you find an online electronics store
where you have never shopped before,
- have no prior experience with,
- and have no prior knowledge about.

On the website you state your needs based on different criteria. Based on these needs, the online store suggests a different model than the local retailer, but with similar features.
The online retailer offers this model for $45, $5 (10%) less than the model the local store suggested. This price includes shipment to your door and the payment doesn't have to be made until the product actually arrives at your door. The product can be returned for a full refund if you are not completely satisfied.
With this information in mind you now make your final decision about where to purchase your new camera.

Scenario 6

Imagine that you would really like to have your own new camera
To determine which model would be appropriate for you, you begin to shop around.
The first place you go to is a local camera retailer,
- where you have never shopped before,
- have no prior experience with,
- and have no prior knowledge about.
The retailer suggests a certain model based on your needs.
The price for the camera at this store is $300. The product can be returned for a full refund if you are not completely satisfied.

You also search the internet for an appropriate model.
In your search you find an online electronics store
- where you have never shopped before,
- have no prior experience with,
- and have no prior knowledge about.
On the website you state your needs based on different criteria. Based on these needs, the online store suggests a different model than the local retailer, but with similar features.
The online retailer offers this model for $270, $30 (10%) less than the model the local store suggested. This price includes shipment to your door and the payment doesn't have to be made until the product actually arrives at your door. The product can be returned for a full refund if you are not completely satisfied.
With this information in mind you now make your final decision about where to purchase your new camera.
Appendix D: Scree Plot for SRO and PRO Items in Main Experiment

![Scree Plot](image-url)
### Appendix E: Trust Ratings across Scenarios and RO

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Trust in B&amp;M</th>
<th>Trust in E-Comm</th>
</tr>
</thead>
<tbody>
<tr>
<td>RO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low RO</td>
<td>Trust e-comm total</td>
<td>2.77</td>
</tr>
<tr>
<td></td>
<td>Trust B&amp;M total</td>
<td>3.91</td>
</tr>
<tr>
<td>High RO</td>
<td>Trust e-comm total</td>
<td>2.74</td>
</tr>
<tr>
<td></td>
<td>Trust B&amp;M total</td>
<td>4.04</td>
</tr>
</tbody>
</table>