

THE ROLE OF FIRM RESOURCE DEMAND  
IN SHOPPERS' SERVICE EXPERIENCES

by

V. MYLES LANDERS

LENITA M. DAVIS, COMMITTEE CHAIR  
SHARON E. BEATTY  
DAVID L. MOTHERSBAUGH  
K. MICHELE KACMAR  
CECIL ROBINSON

A DISSERTATION

Submitted in partial fulfillment of the requirements  
for the degree of Doctor of Philosophy  
in the Department of Management and Marketing  
in the Graduate School of  
The University of Alabama

TUSCALOOSA, ALABAMA

2013

Copyright V. Myles Landers 2013  
ALL RIGHTS RESERVED

## **ABSTRACT**

Firms are using more customer resources to increase the economic value of the service exchange. However, positive outcomes for a firm are not solely based on demanding more resource inputs from customers. In order to achieve a satisfactory service encounter for the firm and the customer, a firm must understand how a customer views the resource demands placed on them. This dissertation examines the conditions under which differing levels of firm resource demand improve or diminish the customer value through the customer's perceived effort, the equitability of the service exchange, and the overall satisfaction with the service experience. A number of boundary conditions built around customers' intrinsic and extrinsic motivations are expected to influence these relationships, including the customers' shopping enjoyment, the customers' value shopping orientation, and the firm provided rewards. In order to better understand how customers react to the demands firms place upon them, two studies are conducted. The first study uses a critical incident technique survey to explore the different demands placed on customers during a service encounter and the customers' reactions to those demands. The results from study one indicates that firms demand the use of a number of customer resources to complete a service encounter. Three main resource categories (financial, time, and knowledge) and a number of subcategories emerged from the data. The second study, a scenario-based experiment, examines the hypotheses developed from previous literature and the first study. The findings from study two provide managers' actionable insights into the costs

and benefits of increasing the input demand placed on customers. Theoretically, the findings provide scholars with information about the psychological and behavioral reactions of customers to differing input demand levels.

## LIST OF ABBREVIATIONS AND SYMBOLS

<i>AIC</i>	Akaike information criterion
<i>AVE</i>	Average variance explained
<i>CFI</i>	Comparative fit index
<i>CIT</i>	Critical incident technique
<i>CMV</i>	Common method variance
<i>df</i>	Degrees of freedom
<i>e.g.</i>	Exempli gratia: for example
<i>et al.</i>	Et alia: and others
<i>F</i>	Fisher's <i>F</i> ratio: a ratio of two variances
<i>H</i>	Hypothesis
<i>i.e.</i>	Id est: that is
<i>M</i>	Mean: the sum of a set of measurements divided by the number of measurements in the set
<i>MANOVA</i>	Multivariate analysis of variance
<i>n</i>	Sample size
<i>p</i>	Probability associated with the occurrence under the null hypothesis of a value as extreme as or more extreme than the observed value
<i>RMSEA</i>	Root mean square error of approximation
<i>SRMR</i>	Standard root mean square residual
<i>t</i>	Computed value of <i>t</i> test

<i>Std Dev</i>	Standard Deviation
<i>WOM</i>	Word of mouth
$\beta$	Beta: the estimated path loading
$\eta^2$	Eta squared: effect size: the proportion of variance in the dependent variable due to the independent variable.
$\chi^2$	Chi-square: measure of the significance between statistical values
<i>-2 LL</i>	-2 Log likelihood
<	Less than
>	Greater than
=	Equal to

## **ACKNOWLEDGMENTS**

I am pleased to have the opportunity to thank a number of individuals who made this journey possible. While there are too many individuals to thank here, a number of people stand out for their help.

First, I would like to thank Dr. Lenita Davis, the chair of my dissertation, for her advice and work. Lenita spent countless hours helping me conceptualize and providing feedback on the many different drafts of this dissertation. Lenita has also been a great mentor during my five years in the doctoral program. She has always provided guidance and encouragement when I needed it most. I will be forever thankful for her help and support.

I would also like to thank the members of my dissertation committee. I truly appreciate the feedback, advice, and input provided throughout this process. I would like to thank my committee members for the following: Dr. Sharon Beatty for her support and direction; Dr. David Mothersbaugh for his support and provision of insightful ideas for the development of the dissertation model; Dr. Micki Kacmar for her comments and help, as well as, for everything she has taught me about data analysis that was extremely valuable to the completion of my dissertation; and Dr. Cecil Robinson for his excellent comments and advice throughout the entire dissertation process. Without the guidance and advice of my committee this dissertation would not have been possible.

I would also like to express my gratitude to my doctoral coordinator, Dr. Sharon Beatty. Sharon has provided me with guidance and motivation throughout the doctoral program. She truly cares about each one of her doctoral students and their success. I could not have asked for a better doctoral coordinator than Sharon.

I would also like to thank my fellow doctoral students. However, I owe a very special thanks to my cohort mates – Frank Adams, Stephanie Gillison, Hyunju Shin, Woojung Chang, and Tim Butler. Without the five of them I would not have had the chance to succeed. They have all had a very big impact on me and my time at Alabama, and I am proud to call all of them friends. I look forward to many years of working together, and most importantly a lifetime of friendship.

I would also like to send a huge thank you to my first mentor, Dr. Nancy Albers-Miller. Dr. Miller inspired me as an undergraduate student to pursue this career. She has helped me too many times to count, and without her I would have surely not chosen this path. Everything that I accomplish is in part because of Nancy and her help. I consider myself extremely lucky to have had such a great teacher and mentor as Nancy in my life.

Finally, I would like to thank my family. I am grateful to my parents for always pushing me in my pursuits in life. They have shown me that some things are not easy, but these things can be accomplished with hard work and diligence. I would like to especially thank my wife, Elissa Landers. Without Elissa this would not have been possible. She has been with me through the rollercoaster that is a doctoral program. Her guidance, encouragement, support, and love is the reason that I have come this far. I will forever be indebted to her for all that she has done.

## TABLE OF CONTENTS

<b>ABSTRACT</b> .....	<b>ii</b>
<b>LIST OF ABBREVIATIONS AND SYMBOLS</b> .....	<b>iv</b>
<b>ACKNOWLEDGMENTS</b> .....	<b>vi</b>
<b>LIST OF TABLES</b> .....	<b>xi</b>
<b>LIST OF FIGURES</b> .....	<b>xiv</b>
<b>CHAPTER ONE: INTRODUCTION</b> .....	<b>1</b>
1.0 Introduction .....	1
1.1 Purpose and Contribution of Dissertation .....	2
1.2 Overview of Research Methodology.....	4
1.3 Overview of the Model and Hypotheses .....	4
1.4 Organization of Dissertation .....	9
<b>CHAPTER TWO: LITERATURE REVIEW</b> .....	<b>10</b>
2.0 Introduction .....	10
2.1 Service Dominant Logic.....	10
2.1.1 Value Creation .....	11
2.1.2 Co-Production.....	13
2.2 Customer Participation .....	14
2.3 Customer Resources .....	18
<b>CHAPTER THREE: STUDY 1</b> .....	<b>21</b>
3.0 Introduction .....	21
3.1 Study 1: Firm Resource Demand Critical Incident Study.....	21
3.1.1 Pre-test .....	22
3.1.2 Primary Data Collection .....	23
3.1.3 Data Collection Procedure .....	23
3.1.4 Results .....	27
3.1.5 Positive Service Experiences.....	30

3.1.6 Negative Service Experiences .....	38
3.2 Discussion .....	48
<b>CHAPTER FOUR: MODEL AND HYPOTHESIS DEVELOPMENT .....</b>	<b>50</b>
4.0 Introduction .....	50
4.1 Hypothesis Development .....	50
4.1.1 Firm resource demand and perceived effort .....	50
4.1.2 Perceived effort and perceived fairness .....	51
4.1.3 Perceived effort and perceived fairness, and emotional response .....	53
4.1.4 Perceived Fairness, emotional response, and consequences .....	56
4.1.5 The moderating role of experience .....	59
4.1.6 The moderating role of intrinsic and extrinsic rewards .....	60
4.2 Summary .....	64
<b>CHAPTER FIVE: PRE-TEST.....</b>	<b>65</b>
5.0 Introduction .....	65
5.1 Procedure.....	65
5.2 Data Collection.....	66
5.3 Manipulation Check Results .....	67
5.4 Realism Check Results.....	75
5.5 Demand Check .....	76
5.6 Conclusion.....	76
<b>CHAPTER SIX: STUDY 2 .....</b>	<b>77</b>
6.0 Introduction .....	77
6.1 Research Design.....	77
6.2 Sample Characteristics .....	79
6.3 Measures.....	81
6.4 Manipulation Checks.....	88
6.4.1 Firm Resource Demand Manipulation .....	89
6.4.2 Experience Manipulation.....	90
6.4.3 Firm Provided Reward Manipulation .....	91
6.4.4 Confounding Check .....	92
6.5 Perceived Realism of the Scenarios .....	96

6.6 Demand Check .....	96
6.7 Measurement Validity .....	97
6.8 Common Method Variance .....	102
6.9 Test of Hypotheses .....	103
6.9.1 Structural Model Estimation.....	105
6.9.2 Linear Effects .....	106
6.9.3 Interactive Effects.....	107
6.9.4 Alternative Model Comparison .....	108
6.9.5 Alternative Model Linear Effects .....	111
6.9.6 Alternative Model Interactive Effects .....	112
6.11 The Role of Perceived Effort .....	120
6.12 Overview .....	120
<b>CHAPTER SEVEN: DISCUSSION, IMPLICATIONS, LIMITATIONS, AND FUTURE RESEARCH .....</b>	<b>122</b>
7.0 Introduction .....	122
7.1 Study One Discussion .....	122
7.2 Study Two Discussion.....	124
7.3 Theoretical Implications.....	128
7.4 Managerial Implications.....	132
7.5 Limitations and Future Research.....	134
<b>REFERENCES.....</b>	<b>137</b>
<b>APPENDIX A: INSTRUCTIONS AND E-MAIL SENT BY STUDENTS TO RECRUIT PARTICIPANTS.....</b>	<b>147</b>
<b>APPENDIX B: CUSTOMER RESOURCE INTEGRATION SURVEY .....</b>	<b>148</b>
<b>APPENDIX C: STUDENT RECRUITING INSTRUCTIONS .....</b>	<b>161</b>
<b>APPENDIX D: PROPOSED SCALES .....</b>	<b>163</b>
<b>APPENDIX E: STUDY 2 SURVEY .....</b>	<b>165</b>
<b>APPENDIX F: STUDY 2 SURVEY .....</b>	<b>167</b>
<b>APPENDIX G: IRB APPROVAL DOCUMENT .....</b>	<b>175</b>

## LIST OF TABLES

1. Description of Data Collection (1.1) .....	4
2. Variable Definitions (1.2) .....	8
3. Study 1: Demographics (3.1) .....	24
4. Study1: Service Providers Represented (3.2) .....	25
5. Categorization of Critical Incident Data (3.3) .....	29
6. Positive Critical Incident – Joint-Service (3.4) .....	35
7. Positive Critical Incident – Self-Service (3.5) .....	37
8. Negative Critical Incident – Joint Service (3.6) .....	44
9. Negative Critical Incident – Self-Service (3.7) .....	46
10. Manipulation Check by Cell (5.1) .....	66
11. Firm Resource Demand Manipulation Check (5.2) .....	69
12. Firm Resource Demand Manipulation Results (5.3) .....	69
13. Experience Manipulation Check (5.4) .....	70
14. Experience Manipulation Results (5.5) .....	70
15. Firm Provided Reward Manipulation Check (5.6) .....	72
16. Firm Provided Rewards Manipulation Results (5.7) .....	72
17. Tukey HSD Post Hoc Test: Firm Provided Rewards (5.8) .....	72

18. MANOVA Manipulation Check (5.9) .....	74
19. Realism Check: Realism Items and Means (5.10) .....	76
20. Demographic Characteristics of the Sample (6.1) .....	80
21. The Perceived Effort Items (6.2) .....	81
22. The Frustration Items (6.3) .....	82
23. The Pleasure Items (6.4) .....	83
24. The Perceived Fairness Items (6.5) .....	84
25. The Positive Word-of-Mouth Items (6.6) .....	85
26. The Desire to Switch Items (6.7) .....	85
27. The Satisfaction Items (6.8) .....	86
28. The Shopping Enjoyment Items (6.9) .....	87
29. The Value Shopping Orientation Items (6.10) .....	87
30. Manipulation Check by Cell (6.11) .....	88
31. Firm Resource Demand Manipulation Check Items (6.12) .....	89
32. Firm Resource Demand Manipulation Results (6.13) .....	89
33. Experience Manipulation Check Items (6.14) .....	90
34. Experience Manipulation Results (6.15) .....	90
35. Firm Provided Reward Manipulation Check Items (6.16) .....	91
36. Firm Provided Reward Manipulation Results (6.17) .....	91
37. MANOVA Confounding Check (6.18) .....	94
38. Realism Check: Realism Items and Means (6.19) .....	96
39. Confirmatory Factor Analysis (6.20) .....	99

40. Means, Standard Deviations, and Correlations (6.21) .....	101
41. Common Method Variance Results (6.22) .....	103
42. Hypotheses Tested (6.23) .....	105
43. Hypotheses Tested and Results (6.24) .....	114
44. Model Comparison Results (6.25) .....	115
45. Hypotheses Tested and Support (6.26) .....	121

## LIST OF FIGURES

1. A Model of Firm Resource Demand (1.1) .....	7
2. A Model of the Hypotheses (4.1) .....	54
3. A Model of the Tested Hypotheses (6.1) .....	104
4. Alternative Model (6.2) .....	110
5. Interaction Effect of Value Shopping Orientation on the Relationship between Firm Resource Demand and Perceived Effort (6.3) .....	117
6. Interaction Effect of Firm Provided Reward on the Relationship between Firm Resource Demand and Perceived Fairness (6.4) .....	119

# CHAPTER ONE

## INTRODUCTION

### 1.0 Introduction

Firms are continually demanding that customers integrate resources into the service encounter. For example, the yogurt retail chain Yogurt Mountain presents a self-service concept where customers choose their yogurt flavors and toppings. The final price is determined by the total weight of the customer's yogurt creation. At Yogurt Mountain, customers must walk into the store, decide what type of yogurt they want, dispense the desired amount of yogurt, pick toppings, and then pay. During this service exchange, the customer is the primary integrator of resources, which leads to a reduction in labor cost for the firm and produces favorable outcomes for the customers through customization of the final product. Firms are not only utilizing the customers' preference knowledge, they are also utilizing customer tools (i.e. phones). Scan and pay systems are currently being tested in the United Kingdom where shoppers can enter a grocery store and scan items with a smart phone as they shop. Customers can also pay for the items scanned with their phones, use coupons, and make recommendations to other users with their mobile application. From these examples it is evident that firms are asking their customers to contribute different levels of resources during the service encounter. Therefore, firms must actively balance their demand for customer resources with the value that the customer receives from the service exchange.

Actively balancing resource demand and value is a tricky proposition. A firm that takes on the majority of the resource demand loses value that could be gained if that firm moved some

resource demand to the customer. However, when trying to maximize its own value, a firm can place too great a resource demand on the customer. This level of resource demand can then decrease customer value to a point that a customer will no longer engage in the service due to the lack of value obtained. Therefore, the demand of resources placed on customers can both co-create and co-destroy value. Value is co-created when the customer and the firm both find that the appropriate level of value is derived from the service exchange. Value is co-destroyed when one of the partners, either the customer or the firm, finds that there was not enough value acquired during the service exchange.

During a service exchange the firm and the customer are trying to maximize their value. In a traditional service experience the firm puts in more resource input, thus lowering their value – due to increase in labor cost - and raising the value for the customer. With a shift to a customer labor strategy, firms can then demand more resources from the customer, thus increasing firm value. However, the value for the customer may start to diminish when more resources are demanded. Thus it is important to gain an understanding about the appropriate level of firm resource demand. It should be the goal of the firm to maximize its value while also giving the customer enough value from the service exchange that the customer will not leave the service provider.

### **1.1 Purpose and Contribution of Dissertation**

The objective of this dissertation is to gain a better understanding of customer reactions to different levels of firm resource demand and how the differing levels of demand contribute to the customers' service experiences. This research contributes to two areas in the customer labor literature.

First, this dissertation contributes to the service-dominant logic research stream. Specifically, the areas of co-production and co-creation of value are emphasized. Research into customer co-production focuses on how customers react to specific types of service production. However, researchers have failed to look into how different levels of firm resource demand affect the customers' service experiences. This dissertation fills this gap by examining the impact that differing levels of firm resource demand has on the customers' service experiences. Exploring the effects of different resource demand levels placed upon customers will provide insights into how customers view the tradeoff between the value gained from the service experience and the amount of labor required to complete the experience.

The second area of contribution is in the customer participation literature stream. The literature concerning customer participation has gained traction, and many articles discuss the importance of having customers participate during a service encounter. However, researchers focus primarily on the positive outcomes of customer participation and ignore the potential negatives associated with participation. Given the lack of attention to the negative consequences of customer participation, this dissertation seeks to examine how different levels of firm resource demand can initiate a negative service experience. It is plausible that not all customers want to participate in the service exchange. Thus when these customers are forced to participate, value is co-destroyed due to the firm forcing participation.

Given the research gaps discussed above, three research questions were developed and will be addressed in this dissertation: 1) What are the categories of customer resources that firms can leverage during a service encounter? 2) How do customers respond to differing levels of firm resource demand? 3) What motivates a customer to participate in these service encounters?

## 1.2 Overview of Research Methodology

This dissertation includes multiple data collections (described in Table 1.1). The first data collection in this dissertation (Study 1) was a critical incident study focusing on the types of resources demanded from customers during service encounters. The purpose of Study 1 was to answer research question 1 (What are the available customer resources that firms can leverage during service encounters?). Study 1 established a list of customer resources demanded by firms during the service encounter. This data collection also provided insights into the effects that different levels of demand have on customers and the customer-firm relationship. Thus, Study 1 contributed to the development of the hypothesized model and the experimental scenarios. The next data collection is a pre-test of the scenario-based experiment. Participants for the pretest are a student-recruited sample of non-students. Finally, Study 2 tests the hypotheses using a scenario-based experiment.

**Table 1.1**

<b>Description of Data Collection</b>
Study 1: Critical incident technique (CIT) and content analysis of customer resources demanded by firms. Status: Completed
Pre-test: Pre-test of manipulations. Manipulation and realism check with a student-recruited non-student sample. Status: Completed
Study 2: Scenario-based experiment with a non-student sample (using a Qualtrics consumer panel). Status: Completed

## 1.3 Overview of the Model and Hypotheses

Figure 1.1 shows the hypothesized model. Definitions for each variable can be found in Table 1.2. Two levels of firm resource demand are included in the model. In the low firm resource demand condition, the firm actively participates with the customer, thus lowering the overall demand placed on the customer during the service process. In the high resource demand condition, the firm does the bare minimum participation requirement, thus requiring the customer

to fully participate in every aspect of the service process. The customers' perceptions of effort will be determined by the differing levels of firm resource demand. The customers' perceptions of effort will influence the customers' equitability and emotional responses. The equitability of the service process and the customers' emotional responses will directly affect consequences for the firm. Finally, there exist a number of boundary conditions that are expected to affect the previously mentioned relationships. Specifically, I expect that customers' internal and external rewards will moderate the relationship between firm resource demand and customers' perceptions of effort. It is also expected that customers' previous experiences with the service process will moderate the same relationship.

Given the description above and the model illustration, the following hypothesized relationships are expected:

**H1:** A positive relationship exists between firm resource demand and perceived effort; such that, as resource demand increases, perceived effort increases.

**H2:** A negative relationship exists between perceived effort and perceived fairness; such that, as perceived effort increases, perceived fairness decreases.

**H3:** Perceived effort is positively related to frustration (H3a) and negatively related to pleasure (H3b); such that, as perceived effort increases, frustration increases and pleasure decreases.

**H4:** Perceived fairness is positively related to frustration (H4a) and negatively related to pleasure (H4b); such that, as perceived fairness increases, frustration increases and pleasure decreases.

**H5:** Frustration is negatively related to positive word-of-mouth (H5a) and satisfaction (H5b) and positively related to desire to switch (H5c); such that, as frustration increases, positive word of mouth and satisfaction decrease, and desire to switch increases.

**H6:** Pleasure is positively related to positive word-of-mouth (H6a) and satisfaction (H6b) and negatively related to desire to switch (H6c); such that, as pleasure increases, positive word of mouth and satisfaction increase, and desire to switch decreases.

**H7:** Perceived fairness is positively related to positive word-of-mouth (H7a) and satisfaction (H7b) and negatively related to desire to switch (H7c); such that, as perceived fairness increases, positive word-of-mouth and satisfaction increase, and desire to switch decreases.

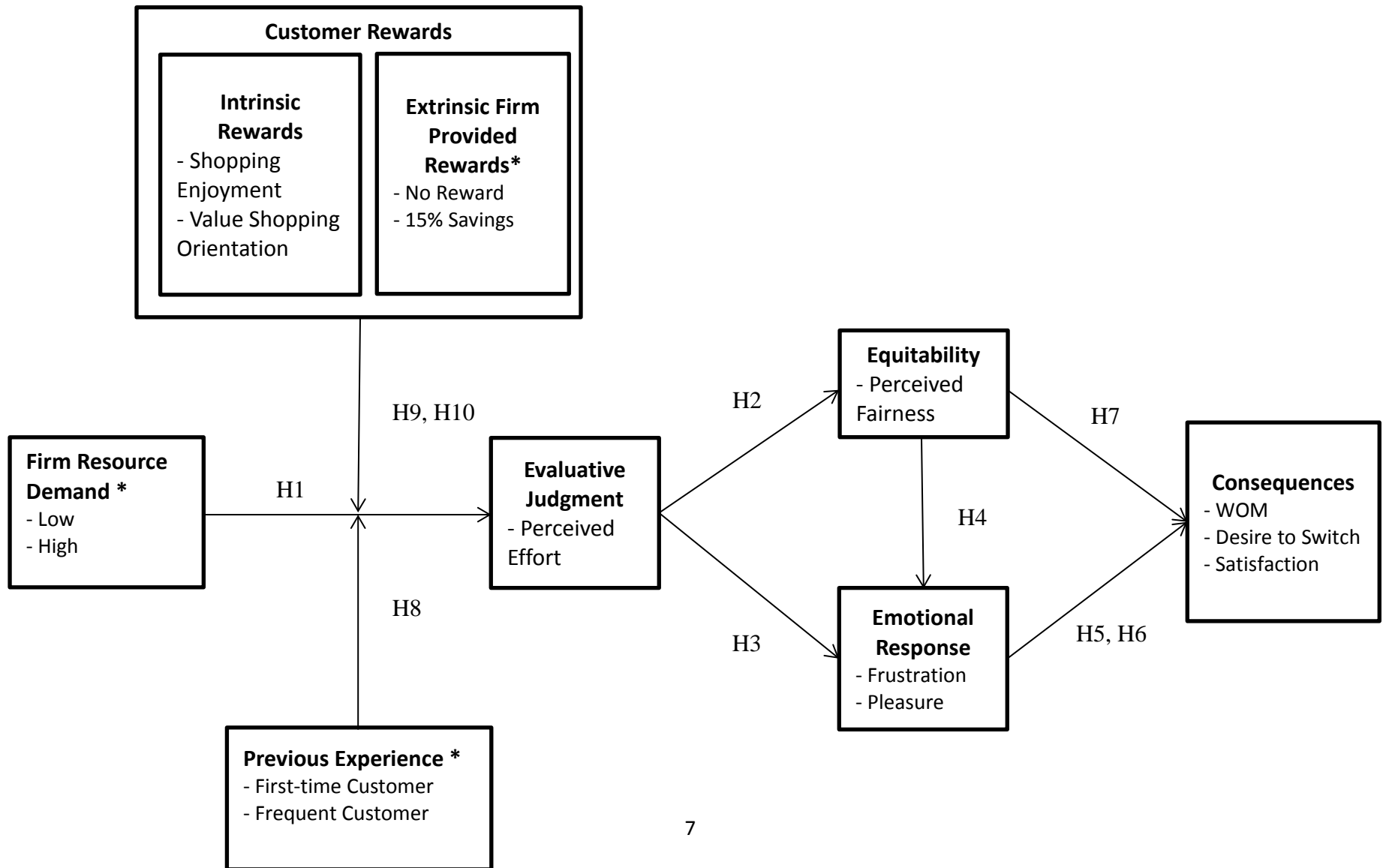
**H8:** Previous experience with the service process will moderate the relationship between firm resource demand and perceived effort. Specifically, as experience increases, the positive relationship between firm resource demand and perceived effort will decrease.

**H9:** Intrinsic rewards will moderate the relationship between firm resource demand and the perceived effort. Specifically, as shopping enjoyment (H9a) and value shopping orientation (H9b) increase, the positive relationship that exists between firm resource demand and perceived effort will decrease.

**H10:** Firm provided extrinsic rewards will moderate the relationship between firm resource demand and the customer's perceived effort. Specifically, as firm provided rewards increase, the positive relationship that exists between firm resource demand and perceived effort will increase.

Figure 1.1

A Model of Firm Resource Demand



\* Manipulated Variable

**Table 1.2****Variable Definitions**

<b>Variable Name</b>	<b>Variable Components</b>	<b>Definition</b>
Firm Resource Demand	Low	The amount of resources required by the firm for the customer to participate in the service encounter.
	High	
Previous Experience	First-time Customer	A customer that has never been through the service provider's service process.
	Frequent Customer	A customer that has been through the service provider's process multiple times.
Extrinsic Firm Provided Rewards	No Reward	The monetary reward that customers receive when participating in a service encounter.
	5% Savings	
	15% Savings	
Evaluative Judgment	Perceived Effort	The perceived amount of resources put into a service encounter.
Equitability	Perceived Fairness	The degree to which the customer believes the firm's requirements during the service process are reasonable given the outcomes received (Van Yperen 1996).
Intrinsic Rewards	Shopping Enjoyment	The pleasure one obtains in the shopping process (Beatty and Ferrell 1998).
	Value Shopping Orientation	An individual's orientation towards shopping for sales, looking for discounts, and hunting for bargains (Arnold and Reynolds 2003).
Emotional Response	Frustration	An emotion aroused by the blocking of ongoing instrumental behavior that has in the past led to a reward (Berkowitz 1962).
	Pleasure	An assessment of the environment as happy, pleased, hopeful, joyful, and contented (Foxall and Yani-de-Soriano 2005).

**Table 1.2 (Continued)**

**Variable Definitions**

<b>Variable Name</b>	<b>Variable Components</b>	<b>Definition</b>
Consequences	Positive Word-of-Mouth	Making others aware that one does business with a service provider and making positive recommendations to others about the company (Brown, Barry, Dacin, and Gunst 2005).
	Desire to Switch	A customer's longing to receive the service from a different provider (Bougie, Pieters, and Zeelenberg 2003).
	Satisfaction	The overall evaluation of performance based on all prior experiences with a firm (Bitner and Hubbert 1994).

**1.4 Organization of Dissertation**

This dissertation proposal contains seven chapters. Chapter 2 reviews the relevant literature. Chapter 3 presents Study 1 of the dissertation. Study 1 is a qualitative study; the results of which were used to help in the formation of the hypothesized model. Chapter 4 presents the model and the rationale behind the resulting hypotheses. Chapter 5 explains the research design and results from the pretest of the scenario-based experiment. Chapter 6 outlines the research, method, data analysis, and results from Study 2. Finally, Chapter 7 provides a general discussion of the findings, theoretical and managerial implications, and limitations and future research directions.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

This chapter reviews the literature relevant to customer labor. Customer labor includes all of the active roles that customers play in the service exchange (Cova and Dalli 2009). Customer labor focuses on a number of research streams including the following: customer participation, service-dominant logic, customer resources, consumption experience, customer resistance, consumer empowerment, consumer agency, and consumer tribes (Cova and Dalli 2009). In the context of this dissertation, customer participation, service-dominant logic, and customer resources are of particular importance. Therefore, this chapter will focus on these three underlining customer labor research streams.

Chapter 2 is ordered as follows. First, the dissertation is grounded in a service dominant logic framework with an emphasis given to value creation and co-production literature. Second, the relevant customer participation literature is examined. Finally, the relevant research concerning customer resources is presented.

#### **2.1 Service Dominant Logic**

The service-dominant logic provides a foundation in which customer resource integration can be examined (Payne, Storbacka, and Frow 2008; Vargo and Lusch 2004a). The service dominant logic views service as the common denominator exchange (Vargo and Lusch 2004b). This provides a shift away from the goods-dominant logic that viewed the customer and the

company as separate entities (Moeller 2008; Vargo and Lusch 2004a). Inherent in the service-dominant logic is the idea that the customer is both a co-producer and co-creator. This suggests that both the company and the customer are collaborators in the production of goods or services and in the creation of value. Therefore, the value is only created through the co-production of the service. The next two subsections discuss the literature streams in connection with value creation and co-production.

### **2.1.1 Value Creation**

Understanding how value is formed and interpreted has been a key issue to marketers. The extant literature distinguishes between two different categories of value formation. The traditional view is one of non-interactive value formation. During non-interactive value formation, value is produced by firms and consumed by customers (Hunt 1976, Bagozzi 1975). In this view firms and customers have distinct roles. The firm produces the products and the customer consumes the products. Therefore, scholars who view value from a non-interactive lens believe that the firm generates value for the customer (Prahalad and Ramaswamy 2004). The non-interactive view of value represents an exchange view of value. That is, value is found in the products or services offered by the firm and are then expressed by the price associated with the product or the service. Recent scholars have theorized that the non-interactive view of value is lacking and that value cannot be dialed down to a monetary value, but must be viewed as a holistic entity (Gronroos and Voima 2012; Vargo and Lusch 2004a). In keeping with this view, the service-dominant logic highlights the interactive role of the customer in deciding value.

However, recently this traditional view is being challenged by scholars who believe that value is formed in the interaction of the customer and firm (Gronroos and Voima 2012). During interactive value formation value is co-created through the interaction of the firm and the

customer (Prahalad and Ramaswamy 2004; Vargo and Lusch 2004b). A central foundational premise of the service dominant logic is that customers are always the co-creator of value and all economic and social actors (e.g., individuals, households, firms, nations, etc.) are resource integrators during a service exchange (Vargo and Lusch 2008). Value creation then takes place within and between the integration of these actors' available resources. That is, the resources exchanged create a basis with which each party evaluates the overall value proposition. Within this view, no one entity can account for all of the value creating processes (Vargo and Lusch 2008). Thus, the company and the customer are two distinct entities that are independent; the company and the customer need the other to use their resources in order to complete a transaction. Therefore, according to the service-dominant logic, value can only be formed through the interaction of firm and customer.

Expanding on the views of the service-dominant logic, Gronroos and Voima (2012) argue that value is not just co-created by the customer, but that value is determined by the customer through usage. This conceptualization of value indicates that the customer is the value creator and that value is not always co-created. In fact, the firm cannot create value by itself. The firm can only provide potential value for the customer. The customer can only create real value. For example, a customer who buys a hammer has little initial value, but value rises as the customer uses the hammer. Therefore, value is determined through use and experience with the firm and the firm's products. While the authors argue that value is uniquely determined by the customer, there is potential for value to be co-created. Value can be co-created when the firm engages in the customer value creation process. The key to co-creation of value is that the customer has to agree to the value creation offering. For example, when a service provider's processes interact with the customer's resources, co-creation of value is possible; however, the customer has to

agree to the interaction. If the customer does not see value in the interaction then they will not participate. As this example illustrates, a firm's attempt to co-create value can actually backfire and result in value destruction for the firm and customer (Gronroos and Voima 2012; Echeverri and Skalen 2011).

The recent work by Gronroos and Voima (2012) provides new paths of discovery for authors seeking to study value formation. First, the authors provide a more actionable way to view value formation. By looking at value from the customers' perspectives, specifically by looking at value-in-use, it is possible to understand how firm strategies affect value formation. Secondly, the authors build on the work of Echeverri and Skalen (2011) to conceptually explain how value can be co-destroyed when firms try to co-create value. This dissertation begins to address both of these gaps by addressing the effects that consumer labor has on value formation. Specifically, it seeks to provide a foundation for understanding how consumer labor practices can either co-create or co-destroy value.

### **2.1.2 Co-Production**

Another central theme in the service-dominant logic is that the customer can be a co-producer with the firm. Co-production is defined as the customer's degree of participation during a service exchange (Meuter and Bitner 1998; Bendapudi and Leone 2003). Co-production entails that customers participate in various activities and encompasses all cooperation formats between the firm and the company (Etgar 2008).

Research on service co-production is relatively sparse. The work that has been done is concentrated around the service production continuum outlined by Meuter and Bitner (1998). The authors' work on self-service technologies distinguished three different types of service production: firm production, joint production, and customer production. Each type of service

production characterizes a different level of customer participation. Firm production is a method of service delivery where the service is produced entirely by the company. Joint production is a method of service delivery where both the customer and company participate in service delivery. Customer production, or self-service, is a method of service delivery where the customer performs all aspects of the service encounter. Meuter and Bitner (1998) argue that the three forms of service production lie on a continuum ranging from customer production to firm production with all variants in-between.

The majority of research that has been conducted on service co-production has focused primarily on one form of production, with the majority of these being on the self-service end of the continuum (Meuter et al. 2000). One notable exception is the work conducted by Bendapudi and Leone (2003). In studying the psychological implications of customer participation in co-production, the authors examined how psychological responses vary between firm production and joint production. The authors found having a choice between firm production and joint production can mitigate self-serving bias.

This dissertation seeks to address the lack of attention paid to understanding how customers are affected by different co-produced service encounters. Specifically, one of the purposes of this research is to understand how consumers react differently to different customer labor levels.

## **2.2 Customer Participation**

Existing literature on customer participation has three common themes (Dong, Evans, and Zou 2008). The first theme is viewing the customer as an invaluable working asset that can be used to gain a competitive advantage over competitors. This work focuses on the monetary benefits to the firm. The second line of research focuses on managing the customer participation

process. This work focuses on the customer as a partial employee to the firm (Bendapudi and Leone 2003). The final theme emphasizes the customer's reasons for participating in the service encounter and the customer's response to participation.

There is a long tradition of viewing customer participation as an integral strategy to gaining a competitive advantage over competitors (e.g. Mills and Moberg 1982). Lovelock and Young (1979) first discussed the idea that customers can be a source of productivity gains. The authors argue that involving customers in the production process will allow firms to deliver services in a more efficient manner. The increase in efficiency would then equate to financial gains for the service provider due to the increase in productivity. They do warn, however, that implementing a customer participation strategy should be taken with caution. In order to avoid customer mistakes and backlash, managers should make the participation process as foolproof as possible. Furthermore, customer inputs to a firm need to be monitored and assessed just as a company would monitor and assess their employees (Mills, Chase, and Margulies 1983). Mills and Moberg (1982) state that customer input in a service context comes in the form of information and effort; therefore, managers must use strategies that encourage proper information sharing and effort expenditure.

Extending upon the idea of using the customer as a source of productivity gains, researchers began discussing the gains that can arise from viewing the customer as a partial employee (Mills, Chase, and Margulies 1983; Fitzsimmons 1985). There have been a number of studies that have addressed the positive consequences of viewing the employee as a partial employee. Viewing the customer as a partial employee can decrease the cost of providing a service by allowing the customer to perform labor for a firm (Mills et. al 1983). The cost of labor can also be decreased by substituting customer labor for provider labor (Fitzsimmons

1985). However, companies cannot just substitute labor. Managers must actively manage their customers as they would their employees. Applying traditional employee management models can increase customer productivity. Bowers, Martin, and Luker (1990) suggest that customer productivity can be increased to a greater extent if companies actively train and provide reward systems for their customers. Song and Adams (1993) note the importance of not just viewing the customer as a cost-minimizing strategy. Customer participation not only has a direct effect on the bottom line of the firm; customer participation can also be valuable to employees. Training customers to take some of the workload from employees provides the employees with more time to focus on technical tasks that customers cannot perform. This ability to free up employees will lead to higher levels of employee productivity and performance (Kelley, Donnelly, and Skinner 1990). Customer participation can also be a management tool used to differentiate products and services offered to customers (Song and Adams 1993). Allowing customers to participate in unexpected ways allows firms to differentiate their services from other firms. For example, some restaurants are now marketing the unique opportunity to cook your own food when visiting. In this case the restaurants are offering a unique opportunity for customers to participate which can lead to an increase in economic gains for the firm (Song and Adams 1993). Research regarding viewing customers as partial employees is concerned with how the customer can be used to gain labor and economic benefits for the firm. This research stream ignores customer related consequences and customer motivations for participating in service encounters. The third research stream regarding customer participation addresses this gap by focusing on customer motivations for participating in the service and the resulting customer related consequences.

The final theme of customer participation has two distinct dimensions. The first dimension concerns the customer's motivation for participation, while the second dimension focuses customer related consequences, such as satisfaction with the company and psychological consequences associated with customer participation. While trying to understand the motivations behind self-service consumers, Bateson (1985) found that some individuals will participate in do-it-yourself services versus participating in a service encounter where they are served even when there is no incentive offered to encourage the do-it-yourself service. More recently, Meuter, Bitner, Ostrom, and Brown (2005) examined the key antecedents to the initial trial of self-service technologies, focusing on situations in which the consumer has a choice between a self-service technology and a different service option. The authors find that the trial of self-service technologies is affected by the consumer's readiness to use the technology. Further, the research found that consumer readiness is a stronger predictor of self-service technology trial than innovation characteristics of the technology or individual differences.

Czepiel (1990) was the first author to address how customer participation can affect satisfaction with the company. Customer participation and the satisfaction associated were shown to have an effect on the customer's overall satisfaction with the company. Focusing on self-service technologies, Meuter et al. (2000) found that customers who use self-service technologies are satisfied when the technology satisfies an intensified need and when the technology performs as expected. However, dissatisfaction with the self-service technology occurs when the self-service technology has a technology failure, process failure, poor design, or when a customer driven failure takes place. Moving beyond satisfaction, Bendapudi and Leone (2003) explored the psychological consequences of customer participation. The authors found that self-serving bias can be reduced by providing customers a choice to participate in the

service. Minimizing self-service bias will result in the customer taking more responsibility for the success or failure of the service encounter. When customers are not given a choice to participate or not participate, the customer will experience lower levels of satisfaction as compared to when they are offered a choice.

Although these papers have focused on important areas concerning customer participation, they have generally focused on the positive outcomes associated with customer participation. Little research has examined what leads to the success or failure of a service encounter that involves customer participation. The work that does exist has been exploratory in nature and does not specifically address the interaction between customer and firm resources.

### **2.3 Customer Resources**

Customer resources are viewed as the resources that can be integrated into company processes (Moeller 2008). Research directly addressing customer resources is in its infancy. The majority of the work on customer resources to date has been conceptual, focusing on defining and outlining future possibilities and propositions relating to customer resource research.

Employing a service-dominant logic framework, Arnould, Price, and Malshe (2006) classify customer resources into both operant and operand resources. Operand resources are resources in which an operation or act is performed to produce an effect (Vargo and Lusch 2004a). Customer operand resources include income, food stamps, coupons, vouchers, credit, etc. Operant resources are resources which are employed to act on operand resources (Vargo and Lusch 2004a). Operant resources include the physical, social, and cultural resources available to the customer. Arnould et al. (2006) theorize that customers possess both operant and operand resources in which they call upon during service encounters.

The majority of conceptual work that has addressed customer resources has focused generally on the advantages of using customer resources. It has been theorized that customer resources will improve the perceived quality of a firm's products and services, which will lead to a competitive advantage over competitors (Legnick-Hall 1996). Exploring the role of customer integration to the implementation of service provision, Moeller (2008) concludes that the key to the service provision lies in the transformation of resources from either the company or the customer. In this perspective the company or the customer can be the prime integrator of resources. In this framework, the customer and firm both receive benefit from the integration of resources.

Moving beyond the advantages associated with customer resources, Ple and Caceres (2010) present a conceptual paper that examines the possibility of customer resource integration being a source of value co-destruction. Value co-destruction is defined as "an interactional process between service systems that results in a decline in at least one of the systems' well-being" (p. 431). The authors suggest that value co-destruction results from a misuse of customer resources during the interaction between different service systems. The misuse of resources can be either accidental or intentional. Accidental resource misuse is caused by incongruence between the resources demanded by the company and the resources available to the customer. Intentional misuse of resources occurs when the customer purposefully misuses their resources for a gain, which in turn hurts the company. Accidental resource misuse is closely aligned with the idea of resource match/mismatching in service encounters. When a negative consequence occurs due to a mismatch of resources, the authors conclude that there is accidental resource misuse. However, authors do not discuss how positive outcomes can also be attributed to a mismatch of resources.

The past research regarding customer resources has provided important insights. The majority of these papers address customer resources' positive consequences to companies and customers (Moeller 2008; Legnick-Hall 1996), with very few papers addressing the potential negative impacts (Ple and Caceres 2010). In recognition of this gap, this dissertation seeks to develop an understanding of how customer resources can lead to both positive and negative outcomes for customers and companies. Further, this paper seeks to answer a call for research presented by Arnould et al. (2006), in which the authors note a need for a better understanding of the interplay of consumers' and firms' operant and operand resources.

## **CHAPTER THREE**

### **STUDY 1**

#### **3.0 Introduction**

This chapter contains information about the data collections and findings from a critical incident study, Study 1. The goal of the critical incident study was to gain a better understanding of the resources required in different service environments and the customers' reactions to using different levels of resources. The results ascertained in Study 1 provided the foundation for the conceptual model tested in Study 2.

#### **3.1 Study 1: Firm Resource Demand Critical Incident Study**

Given that the overall goal of this dissertation is to understand how customers react to the labor requirements placed on them in a service encounter, it makes sense that the first step of the dissertation needs to explore the different types of resources that firms require of customers during a service encounter. Study 1 utilizes the critical incident technique (CIT) in order to address research question one – What are the available resources that firms can leverage during a service encounter? This technique content analyzes memorable incidents with the goal of uncovering patterns or themes across incidents (Bitner, Booms, and Tetreault 1990). CIT has been shown to be a valuable method when trying to understand the basics of a new or underdeveloped phenomenon (Bitner et al. 1990). CIT provides researchers with large sample sizes and data that are more detailed than many other methods (Gremler 2004). The implementation of customer resources in service environments is an underdeveloped area of

research that requires a deeper understanding. Therefore, the CIT is an appropriate starting point for researching this phenomenon.

### **3.1.1 Pre-test**

Before the primary data collection, a pre-test was conducted with students from an undergraduate marketing class. Students were given extra credit for their participation in the survey. After gathering the pre-test data, the responses were examined for potential flaws in the survey. In addition to examining the responses for potential problems, the students were asked to give feedback on the survey. Students were asked to fully describe two service experiences where they interacted with employees (one positive and one negative) and two self-service experiences (one positive and one negative). After describing each incidence, the students were asked to explain what made this a positive or negative service experience. The self-service experience is representative of low firm resource demand and constitutes a greater load of labor shifted onto the customer. The joint-service (the customer interacts with an employee) is representative of high firm resource demand and constitutes a share of labor between the firm and the customer. Following this question, the students reported the percentage of labor that they felt they contributed to the service encounter and the percentage of labor that the company/employee contributed to the service encounter. Finally, the students reported who they felt was responsible for the success or failure of the service encounter. Given the responses and the feedback, a couple of the initial questions required rewording to improve clarity. However, every question was adequately answered in the pre-test, so this was a precautionary measure to ensure thorough answers in Study 1.

### **3.1.2 Primary Data Collection**

In order to better understand what customer resources are required during service encounters and how the uses of these resources affect customers, I conducted a larger CIT data collection.

### **3.1.3 Data Collection Procedure**

Because this dissertation focuses on individuals' responses to differing levels of demand in the entire service process, the sample of respondents needed to have experience with service encounters in which the amount of customer labor required was both high and low. In particular, the respondents needed to have experience with service situations in which they are required to have a high level of input in the service process and situations in which the service employees actively participate in the service process, thus lowering the required level of customer input. Given that a large majority of individuals have experience with both levels of the service process and that students satisfactorily participated in the pre-test, a student sample was once again recruited for this data collection. However, in order to gain a more representative sample, a snowball sampling procedure was employed in which the student was asked to fill out the survey and recruit non-students.

Students from two undergraduate marketing classes were asked to recruit participants for this study. The students received one extra credit point per person who finished the survey. A maximum of five extra credit points could be earned. The students were allowed to be one of the participants. The other four participants had to be non-students above the age of 19 (See Appendix A for the recruitment document). One hundred eighty-seven individuals shared 374 distinct incidents. Sixteen incidents were dropped from the survey due to a participant describing a joint-service experience (an experience in which the customer interacted with an

employee) in the self-service survey or due to describing a self-service experience in a joint-service experience. Table 3.1 shows all demographics and Table 3.2 lists all of the service providers represented in the CIT study.

**Table 3.1**  
**Study 1: Demographics**

<b>Gender</b>	
Male	49%
Female	51%
<b>Age</b>	
19-25	52%
26-34	5%
35-54	27%
55-64	14%
65+	2%
<b>Education</b>	
Less than High School	0%
High School / GED	7%
Some College	34%
2-Year College Degree	11%
4-Year College Degree	32%
Master's Degree	12%
Doctorate or Professional Degree	4%
<b>Race</b>	
White/Caucasian	91%
African American	4%
Hispanic	1%
Asian	3%
Native American	1%
Other	1%

**Table 3.2**

**Study 1: Service Providers Represented**

<b>Self-Service Service Providers</b>	
In-Store Retail	28%
Online Retail	17%
Online Banking	14%
Airline	13%
Gas Station	12%
Vending Machine	3%
Car Wash	3%
Cable Provider	3%
Online DVD Rental	2%
Laundry Mat	2%
Mobile Device	1%
Online Car Insurance	1%
Online Bill Pay	1%
Movie Kiosk	1%
Hotel	1%
Credit Card Company	1%
<b>Joint-Service Service Providers</b>	
Retail	38%
Restaurant	17%
Airline	7%
Home Maintenance	4%
Hotel	3%
Doctor	3%
Hairdresser	3%
Apartment/Landlord	3%
Bank	2%
Nail Salon	2%
Car Maintenance	2%
Dry Cleaners	2%
Car Rental	2%
Cable Provider	2%
Other (Tanning Salon, Gas Station, Tuxedo Rental, etc.)	15%

Respondents recruited to participate in the CIT study were given the link to an online survey. Once the respondents were at the secure website, they were asked to describe two memorable experiences that they have had while interacting with an employee (one positive and one negative) or two memorable self-service experiences (one positive and one negative). The participants were shown examples of different services where they might interact with employees as well as examples of different services that have self-service options. See Appendix B for the CIT survey.

When student participation in online surveys is linked to extra credit, it is important to control for the possibility of students not recruiting participants and personally taking the survey multiple times. To circumnavigate this problem I asked for participants' email addresses, and I randomly emailed 25% of the respondents to ask if they took the survey. All emails sent were answered with 100% acknowledging that they filled out the survey.

### ***Data Categorization***

The critical incident classification system recommended by Bitner et al. (1990) was used to develop categories for the customer integration data. This categorization process "consists of repeated, careful readings and sorting of incidents into groups or categories according to similarities in the reported experiences" (Bitner et al. 1990, p. 74). Incidents are continually sorted and resorted until all incidents in one category are more similar to each other than the incidents in other categories. A total of 249 incidents are coded for types of resources. All other incidents did not specifically state what caused the bad incidence, but they were kept and coded for other areas of interest for this study.

Two coders were recruited to participate in the categorization process. The initial coder, first independently coded the 249 incidents. After the initial coding, a second coder was

recruited to code the data in order to increase the trustworthiness of categories (Lincoln and Guba 1985). A detailed set of coding rules and definitions were provided to the second coder, which helped increase the reliability of judgments (Kolbe and Burnett 1991; Perreault and Leigh 1989). The initial list of codes was provided to the second coder. The coder had the authority to create new codes or recode specific incidents when they felt it was necessary. Interjudge reliability was 92%. This falls well within the interjudge reliability boundaries outlined by Gremler (2004). Disagreements in codes were discussed until an agreement was reached.

### **3.1.4 Results**

There are two overarching themes in which subcategories were grouped: operant resources and operand resources. Eighty-three percent of incidents were classified as dealing with customer operant resources, and 17% of incidents were classified as dealing with customer operand resources. Operant and operand resources are common in service dominant logic literature for distinguishing among different groups of resources (Vargo and Lusch 2004a; Arnould et al. 2006). As previously defined, customer operand resources are resources in which an operation or act is performed to produce an effect, and customer operant resources are resources which are employed to act on operand resources (Vargo and Lusch 2004a). Two subcategories of customer operant resources are identified, and one subcategory of operand resource is identified. Operant resources consist of the customer's knowledge and time. These are the higher level resources that are required when participating in the service process. The operand resource is the financial resources available to the customer. This classification of customer resources is analogous to the classification laid out by Arnould et al. (2006). The different subcategories are further categorized into distinct subcategories. See Table 3.3 for the

final list of subcategories. The subcategories of the positive experiences are discussed first, followed by a discussion of the negative experiences.

**Table 3.3**

**Categorization of critical incident data  
n=243**

<i>Operant Resources (83%)</i>	<i>Definition/Explanation</i>	<i>Categories of Customer Resource /Firm Resource Demand Interaction</i>
<i>Knowledge (31%)</i>	Knowledge refers to the amount of information a person has available to them to complete a task.	<ol style="list-style-type: none"> <li>1. Product</li> <li>2. Product Location</li> <li>3. Process</li> <li>4. Personal</li> <li>5. Technology</li> <li>6. Service Failure</li> </ol>
<i>Time (52%)</i>	Time refers to the amount of time a person has available to complete a service encounter.	<ol style="list-style-type: none"> <li>1. Saves Time</li> <li>2. Slow</li> <li>3. Speed of Service</li> <li>4. Effort</li> </ol>
<i>Operand Resources (17%)</i>	<i>Definition/Explanation</i>	<i>Subcategories</i>
<i>Financial (17%)</i>	Financial resources are the exchange resources available to the consumer that allow the consumer to participate in the service exchange.	<ol style="list-style-type: none"> <li>1. Discount</li> <li>2. Price Differential</li> <li>3. Service Recovery</li> <li>4. Cost</li> <li>5. Service Cost</li> <li>6. High Price</li> <li>7. Unexpected Charge</li> <li>8. Payment Method</li> </ol>

### **3.1.5 Positive Service Experiences**

Three categories of resources were developed by the judges: knowledge, time, and financial resources. Eleven distinct subcategories emerged under the positive self and joint-service experiences. Five subcategories were listed under operant resources: product, product location, process, personal, and save time. Four subcategories were listed under operand resources: discount, price differential, service failure, and cost. The following is a description of each category and subcategory for the positive service experiences. Examples of each subcategory of positive joint-service and self-service experiences can be found in Tables 3.3 and 3.4.

Category 1: Knowledge. Of the positive experiences, 56% of the positive joint-service experiences were due to knowledge, and 15% of the positive self-service experiences were due to knowledge. These positive experiences were attributed to the shifting of cognitive labor from the customer to the service provider. In the joint-service incidents, participants talked about needing the knowledge of the sales associates because they lacked the knowledge to make an informed decision. The sales associate's knowledge filled the participant's knowledge gap, allowing the participant to make an informed decision. In the self-service incidents, participants used their existing knowledge to make a decision. Participants discussed how they do not need a sales associate's help because they can adequately come to a decision without another individual's help.

Subcategory 1A: Product. For the positive joint-service experiences, 32% of the experiences attributed the positive outcome to product knowledge as compared to only 13% in self-service experiences. Product knowledge refers to the knowledge that the customer or the sales associate has about the product the customer is looking to purchase. In the joint-service

experiences, customers used the product knowledge of the sales associates to help make a decision. In the self-service experiences, customers did not need assistance from the sales associates because they possessed the appropriate amount of product knowledge that is needed to complete the service encounter.

Subcategory 1B: Product Location. In the joint-service experiences, 14% of participants discussed knowledge about the product's location in the positive incidents. During these incidents, participants did not know where to find the product in the store. Therefore, they needed the sales associate's knowledge about the location of the product to finish the service encounter.

Subcategory 1C: Process. Eleven percent of joint-service incidents discussed knowledge about the service process during positive service experiences. Knowledge about the service process refers to customers' knowledge about the procedures that customers are required to go through during the service encounter. During these incidents, participants were unaware of the procedure that they had to go through in order to participate during the service encounter. Many times the participants reported feelings of frustration and nervousness when they did not have the knowledge about the service process. In the positive joint-service experiences, the sales associates alleviated any negative feelings by explaining the process to the participants.

Subcategory 1D: Personal. Two percent of respondents in the self-service positive incidents reported personal knowledge as being critical to their experience. Personal knowledge is the knowledge that an individual has about his or her own likes and dislikes. These participants reported having a positive self-service experience because they do not like

interacting with sales associates. They reported not needing the help of the sales associates because they know what they like and dislike so they do not need a sales associates help to make a purchase decision.

Category 2: Time. Of the positive experiences, 16% of joint-service experiences were due to time, and 75% of self-service experiences were due to time. Time refers to the amount of available time allocated for the service encounter. During the positive service encounters, joint-service and self-service, participants reported time as being a crucial factor in determining the perceived success or failure of the encounter. The respondents in the joint-service experiences and the respondents in the self-service experiences attributed their positive experience to saving time during the service. Time is seen as a cost for customers. Service experiences that saved time were seen as an increase in value for the customer. In the joint-service incidents, participants reported that sales-associates were cognizant of the participants' time constraints and the sales associates made sure that the participants were finished with the service encounter in the allocated amount of time. In the self-service experiences, participants reported that the major reason of participating in this type of service process is the amount of time saved.

Category 3: Financial. Of the positive experiences, 28% of joint-service experiences were due to financial reasons, and 10% of self-service experiences were due to financial reasons. In the financial category positive experiences were attributed to discounts, price differentials, financial service failure compensation, and overall cost. Financial savings is important to gain value during service encounters. Financial savings often times serves as metric in which value can be perceived.

Category 3A: Discount. Eighteen percent of the positive joint-service experiences were attributed to the participants receiving a discount on the service. Participants that discussed a

discount as a driver of their positive service experiences reported that the discount is not a common discount that every customer receives. The discounts were unexpected and involved receiving a coupon or a group discount. Therefore, the participants did not spend all of the money they allocated to buy the product or service. By offering the discount, the service providers enhanced the participants' experiences.

Category 3B: Price Differential. In 7% of the positive joint-service experiences participants reported a price differential as being a driving force behind their positive experience. Price differential refers to the customer paying a price that is different from their expectations. This difference can come in unexpected savings due to unforeseen policy breaks or from unexpected price points. The unexpected price point is driven by the customer coming in with an a priori idea of what the service or product's price should be due to past information searches or past experiences. Participants who reported these price differential savings reported that the primary driver of their positive experience was the unexpected savings they received.

Category 3C: Service Recovery. Four percent of the positive joint-service experiences were due to the service provider's monetary reaction to a service failure. Participants reported positive service experiences even after a service failure occurred. However, in each of these positive experiences the service provider offered the participants a discount on their total cost due to the service failure. The main factor in this positive experience was the participants saving money on the service.

Category 3D: Cost. Ten percent of the positive self-service experiences were due to the cost savings in participating in the service. In the self-service incidents, participants reported that the reason that they put in the effort during a self-service encounter is the savings usually attributed to self-service encounters. The major self-service cost savings were found when

shopping online and in do-it-yourself activities. Interestingly, some respondents mentioned saving money due to using a self-service but they did not mention a price comparison.

Therefore, some individuals seemed to infer the amount of savings that they received during the service.

**Table 3.4**

**Positive Critical Incident – Joint-Service**

<i>(1) Operant Resource (72%)</i>	<i>Subcategory</i>	<i>Example Incident</i>
<i>Knowledge (56%)</i>	Product (32%)	One time I was trying to buy the laptop in BestBuy. I do not know very much about computers and was very lost at first. The Apple representative that helped me was very informative. He asked what I would be using it for, and explained a lot to me about memory, the hard drive, etc. He showed me how some things worked and gave me some tips for using it. It was a very positive experience.
	Product Location (14%)	While at target, I was looking for a sewing kit, but could not find it anywhere. After searching about half of the store, I encountered a target team member that was able to tell me exactly where it was (on the other side of the store, aisle #.) It was very helpful to have this team member know where all items in the store are located.
	Process (11%)	I went to get a spray tan, which I had never done before. I didn't want to look like I had gotten one (a tan) so I asked lots of questions... When it was time to be sprayed in the booth, she took me all the way to the room. She then explained everything to me step-by-step making sure to tell me the tiniest details as this tan was for my daughter's wedding and I really wanted it to look good, and she could tell that. She asked if I had any questions before she left the room. When I was finished she asked if I was pleased and thanked me for coming in.
<i>Time (16%)</i>	Save Time (16%)	A waiter knew we were in a hurry to catch a show after dinner. So he brought out our checks as soon as possible and also separated them, even after he told us he could not at the beginning of the meal.

**Table 3.4 (Continued)**

**Positive Critical Incident – Joint-Service**

<b><i>2) Operand Resource (28%)</i></b>	<b><i>Subcategory</i></b>	<b><i>Example Incident</i></b>
<b><i>Financial (28%)</i></b>	Discount (18%)	I just moved and I needed to find a dry cleaners. Well I pulled up to a random dry cleaners and the lady working the store met me in the parking lot to help me carry my clothes. While she was ringing me up, she asked me how my day was and how I found out about them. When she found out I just moved into town she gave me her seamstress and a discount card to get my pants taken up.
	Price Differential (7%)	I purchased a "smart phone" from a retailer. The sales person helped me actually pay less money with retroactive savings on my usage plans and set me up with another employee who gave me an on the spot 20 minute tutorial on the use of the phone.
	Service Recovery (4%)	I went to a restaurant and the appetizer came after the food and the waitress provided the appetizer for us free of charge for having to wait so long for it.

**Table 3.5**

**Positive Critical Incident – Self-Service**

<b><i>(1) Operant Resource (90%)</i></b>	<b><i>Subcategory</i></b>	<b><i>Example Incident</i></b>
<i>Knowledge (15%)</i>	Product (13%)	I am just as knowledgeable as an insurance agent when it comes to car insurance, and I find it to be an easier task online. You do not even have to write a check, and you can print your proof of insurance online. No agent! It's fantastic.
	Personal (2%)	I online shopped and fully enjoyed my experience. I was able to choose what I wanted and what sizes I wanted. There was no hassling with sales associates.
<i>Time (75%)</i>	Save Time (75%)	A few weekends ago, I flew to Dallas, Texas for the weekend. My[airline] flight was scheduled to take off at 12:20 pm from the Birmingham Airport. I ended up leaving Tuscaloosa for the airport a little bit later than I had planned. I was very nervous pulling into the airport at noon that I would not make my flight. When I ran inside to check in, I was pointed right to a self-check-in screen where all I had to do was push my credit card into the machine and it printed out my boarding pass. The process took all of about 45 seconds. I was very relieved to have just made my flight, something that might not have happened without [airline's] self-service features.
<b><i>2) Operand Resource (10%)</i></b>	<b><i>Subcategory</i></b>	<b><i>Example Incident</i></b>
<i>Financial (10%)</i>	Cost (10%)	One time when I was online shopping I ran across a website where I found tons and tons of great coupons. I ended up getting 25% off my total purchase in addition to getting free shipping. I really enjoy shopping online because you don't have to deal with the hassles of waiting in line or messy stores. I also feel like there are better deals and discounts online and you also have the luxury of shopping around to find better offers or shopping in stores that are not located near you.

### **3.1.6 Negative Service Experiences**

For the negative service experiences, the main three categories are the same as the positive service experiences: knowledge, time, and financial. The following discussion gives the percentages of the main categories and breaks down subcategories found under each of the three main categories. Examples of each subcategory can be found in Tables 3.6 and 3.7.

Category 1: Knowledge. Of the negative experiences, 26% of the negative joint-service experiences were due to knowledge, and 29% of the negative self-service experiences were due to knowledge. Participants who did not have enough knowledge about different aspects of the service encounters and who could not find a sales associate with proper knowledge reported having negative experiences. The participants reported that the primary driver of their negative experiences was lack of knowledge about the product, product location, service process, technology, and service failure.

Category 1A: Product. Seventeen percent of the joint-service respondents and 8% of the self-service respondents reported a negative service encounter due to a lack of product knowledge. In the joint-service incidents, respondents conveyed that the negative service encounter was due not only to a lack of knowledge on the participant's part, but also a lack of knowledge of the sales associates. Participants discussed the need to have an employee's help, but the employee was incapable of helping because they lacked the knowledge about the specific product leading to either the participant's abandonment of the service encounter or the participant's uncertainty about the purchase. During the self-service encounters, the participants reported that not having the appropriate amount of product knowledge lead to feelings of uncertainty. These respondents discussed how it is critical to have the appropriate amount of product knowledge because sales associates are not available to provide their input.

Category 1B: Product Location. Six percent of the joint-service encounters discussed product location as being a driver of the negative service experience. When describing these incidents participants discussed their lack of knowledge about the location of the product for which they are shopping. Not knowing the location of the product, the respondents sought out the help of sales associates. In a number of incidents, the respondents could not find a sales associate to help them find the location of the product. When they did find a sales associate, the sales associate also had no idea where the product was located in the store. Both of these scenarios lead to a negative service evaluation from the respondents.

Category 1C: Process. Four percent of the joint-service encounters attributed the negative service experience to a lack of knowledge about the service process. During these incidents respondents did not understand the service process. Many times the respondents asked questions about what was going on or how to complete the process, and these questions went unanswered. This led to confusion for the participants, and a number of the respondents commented that they would not use these service providers again.

Category 1D: Technology. Eighteen percent of the negative self-service experiences were due to the participants' lack of knowledge about the technology used during the self-service encounter. The technologies used during self-service encounters included airline ticket kiosks, DVD rental kiosks, gas pumps at self-service gas stations, self-service checkout lanes in grocery stores, etc. In describing these incidents, respondents reported being frustrated due to not knowing how to operate the self-service technology. These frustrations were due to the lack of knowledge on the participant's part in each example the self-service technology was operating correctly. Thus, the failure of the service experience was due to the participant's lack of knowledge.

Category 1E: Service Failure. Three percent of self-service respondents reported a negative service experience because of a service failure. In the majority of these service failures, the failure was due to a malfunction in the self-service technology. When the technology failed to perform adequately, the respondents did not know how to fix the situation. Many times the respondents did not know who to contact in order to fix the problem. This left the respondents feeling frustrated about the service.

Category 2: Time. Of the negative experiences, 57% of the negative joint-service experiences were due to time, and 56% of the negative self-service experiences were due to time. Participants reported that time constraints were a leading factor that drove their negative service experience. The joint-service experience respondents attributed their negative service experiences to slowness of the overall experience (not just the service) and the speed of service. The self-service experience respondents attributed their negative service experiences to the amount of effort involved to complete the service.

Category 2A: Slow. Fifty-seven percent of negative joint-service experiences were due to the slowness of the service. During these experiences the respondent reported that the service employees exceeded the respondent's expectations about the appropriate amount of time the service should last. In many of the incidents, the respondents reported allocating a certain amount of time to service. For example, if an individual wants to eat before a movie, then they might allocate one hour to eat at a restaurant. If the restaurant's service is slow and lasts longer than that hour, then a negative service experience is likely to occur.

Category 2B: Speed of Service. Forty percent of negative self-service experiences were due to the speed of the self-service. Speed of service refers to the amount of time it takes an individual to complete a self-service encounter. Firm employees do not have a direct effect on

the speed of service. The speed of service is directly affected by the technology used during the service. Participants reported that these service encounters are negative because the service takes up time from doing more enjoyable tasks.

Category 2C: Effort. Sixteen percent of self-service respondents reported that their negative service experience was due to the effort that was required. Effort refers to the lengthening of time to the service encounter due to the number of steps that a customer must complete before finishing the service encounter. During these service encounters the respondents reported feelings of frustration due to the number of steps that they had to complete in order to finish the service. Respondents attributed the amount of effort they put into the service as wasting time.

Category 3: Financial. Of the negative experiences, 17% of the negative joint-service experiences were due to financial reasons, and 15% of the negative self-service experiences were due to financial concerns. Participants reported that the cost of the service, overall high prices, unexpected charges, and the type of payment method contributed to the participants' negative experiences.

Category 3A: Service Cost. Nine percent of joint-service respondents reported that their negative service experience was directly attributed to the cost of the service. The cost of the service refers to a charge that the firm requires of a customer in order to participate in the service. For example, many companies charge service fees when you call their customer service hotlines. These unexpected fees left the participants feeling like the firm is trying to take advantage of the participants' problems. This extra fee leads to a negative service experience when interacting with the firm, and this negative experience leads to a desire to change service providers in the future.

Category 3B: High Price. Eight percent of the negative joint-service experiences were due to an unexpected high price associated with the service. These participants discussed how they went into the service encounter with a certain expectation of the price that the service would cost. When the service was more expensive than they expected, the respondents reported being angry and confused about the price. This anger and confusion lead to a negative evaluation of the service and the firm.

Category 3C: Unexpected Charge. Eight percent of the negative self-service encounters attributed their problem to an unexpected charge. An unexpected charge refers to an extra charge that was not expected by the customer. These charges arise from hidden service charges, multiple charges of the same product, and from the wrong price being charged. For example, some of the respondents reported scanning in items at a self-checkout lane. The items were supposed to be on sale but the non-sale price was charged. Some of the respondents reported not seeing this error until after they left the store. In this instance, they felt that they wasted money on the item and would not have bought the item for the original price. They attributed the error to the store even though they were the ones in control of the checkout process and felt that the store should have a better system in place to handle potential pricing problems.

Category 3D: Payment Method. Of the negative self-service incidents, 6% were due to the payment method involved in the service encounter. Payment method refers to the forms of payment that a service provider accepts. For example, some service providers will only accept credit cards, debit cards, and cash. These providers do not accept checks. Respondents reported feeling frustrated when a service provider did not accept the form of payment that they wanted to

use. They discussed balancing their payment methods to save money or earn points. When a service provider did not accept the payment method that the respondents wanted to use, the respondents reported negative feelings towards the firm.

**Table 3.6**

**Negative Critical Incident – Joint-Service**

<i>(1) Operant Resource (83%)</i>	<i>Subcategory</i>	<i>Example Incident</i>
<i>Knowledge (26%)</i>	Product (17%)	I was in [a grocery store] trying to find birthday balloons and the only person available to help me was very difficult. I was at the balloon section and politely asked her about prices of balloons. She said she had no idea.
	Product Location (6%)	The last time I went shopping at a grocery store, the store was too big and the products were not presented well. I got lost to find what I wanted. I tried to find an available employee to show me the way but everyone was busy. I left the grocery store unhappy and with half of what I wanted.
	Process (4%)	A heating/air conditioning repair man came to work on our home unit. He only spoke with a hello and then wanted to know where the door to the basement was. I showed him where the door was-he did not say thank you or anything. He did his work and when he was finished he said to me from the foyer that "I'll have to come back another day to finish." He continued walking out the door and out on to the porch when I caught up with him to ask what was wrong that he could not finish. He just said "I have to work on the filter." He said this as he was walking away from me. He really did not want to give me any information!
<i>Time (57%)</i>	Slow (57%)	I was at dinner with a friend. The waitress was very nice but service was so slow. The manager came over to ask how dinner was but it had not yet arrived. The waitress said that dinner would be there shortly, but it was another 15 minutes before it arrived. The entire dinner took over 1 1/2 hours.

**Table 3.6 (Continued)**

**Negative Critical Incident – Joint-Service**

<b><i>2) Operand Resource (17%)</i></b>	<b><i>Subcategory</i></b>	<b><i>Example Incident</i></b>
<i>Financial (17%)</i>	Service Cost (9%)	I was having trouble with a certain electronic device made by a very popular company. I called customer service and it was terrible. They wanted me to pay to talk to a representative about my problem. This really made me mad.
	High Price (8%)	I recently had car trouble and had to take my car to the shop. The shop charged me more than expected.

**Table 3.7**

**Negative Critical Incident – Self-Service**

<i>(1) Operant Resource (85%)</i>	<i>Subcategory</i>	<i>Example Incident</i>
<i>Knowledge (29%)</i>	Technology (18%)	I chose the self-service checkout line at the neighborhood grocery store for convenience. When I got to the self-checkout, the sensor did not register that I had bagged lighter items. It would not let me continue scanning my items until all were "bagged". Since the item was already bagged but I needed to continue, I selected the "do not bag this item". After having to do this several times to continue because of the sensor errors, the self-checkout shut down and would not let me proceed without clerk assistance. So much for self-checkout.
	Product (8%)	Trying to order products for my business online is a hassle. There is not a person to deal with when I have questions about the product.
	Service Failure (3%)	A negative self-service experience is checking in at an airport. We used the virtual kiosks and it was printing out wrong information and we weren't sure what to do. We finally had to go and get an employee to help us but it was hard to find an employee that could help.
<i>Time (56%)</i>	Speed of Service (40%)	Going to a laundry mat and having to do all my laundry myself. This was a tedious process that took up too much of my time while waiting for my clothes to wash and then having to dry them.
	Effort (16%)	The worst self-service experience I have had has been from [company]. The customer service of [company] is horrible. This is specifically because of their self-service features that are connected to their customer service number. When you call, the phone is answered by an automated person that takes you through a menu of options. If you can even find what you are looking for among the options offered, the automated person then tries to guide you through fixing the problem. The worst part is that this automated person never tells you an option to speak to an operator or a real person. It took us forever to figure out how to reach an operator. We were on hold for at least 45 minutes. It ended up taking over an hour.

**Table 3.7 (Continued)**

**Negative Critical Incident – Self-Service**

<b><i>2) Operand Resource (15%)</i></b>	<b><i>Subcategory</i></b>	<b><i>Example Incident</i></b>
<i>Financial (15%)</i>	Unexpected Charge (8%)	Grocery Shopping with Self-Check Out is usually very beneficial but sometimes it can be a pain. One time while checking out, an item scanned itself three times and I was completely unaware until after I completed the purchase and left the store.
	Payment Method (6%)	I recently went to a gas station where the card-reader would not accept my card although I did have sufficient funds. This led to the attendant inside being very rude to me and thus leading me to have to go to another gas station.

### **3.2 Discussion**

In Study 1, the different types of resources that firms require of customers are explored by conducting a CIT study. To gain a holistic understanding of the types of resources required of customers, two distinct service encounter levels of firm resource demand are explored: self-service and joint-service encounters. The final objective of this study is to gain an understanding of how different resources contribute to positive and negative service encounters. The results of Study 1 indicate that there are three main categories of resources used during service encounters: customers' knowledge, customers' time, and customers' financial resources. Each of these categories has a number of distinct subcategories that contribute to both positive and negative joint and self-service encounters.

The results of Study 1 provide a deeper understanding about how firm resource demand and customer resources interact. Examining the different levels of firm resource demand, the results suggest that customers compare the value received in the service exchange with the amount of labor required during the service exchange. If the customer does not perceive a fair value then negative experiences are likely to occur. On the other hand, if the customer perceives the value as being fair then a positive experience is likely to occur. Firms should focus on creating resource demands that not only provide financial benefits for the firm, but also provide value for the customer. For example, one reason that self-service gas stations are successful is that they save time over full-service stations. Saving time is seen as being valuable, so customers are happy to provide more labor for the extra value. However, if the firm shifts the resource demand too far, customers will begin to lose value and will not perform the task assigned to them by the firm. For example, if the cognitive labor load is too high, the customer will not be willing to put forth the effort to finish the service exchange.

These results provide a foundation for the development of the conceptual model and hypotheses discussed in Chapter 4. In examining the results it is evident that customers make fairness examinations when looking at the tradeoff between labor cost and value. Most importantly, these value tradeoffs were both driven by money and driven and driven by individual characteristics (i.e. how much time the customer had available). The fairness perceptions, which arise from the labor cost value tradeoff, drive customer quality perceptions – whether it was a positive or negative experience. All of these findings are beneficial in developing the model in Chapter 4.

## **CHAPTER FOUR**

### **MODEL AND HYPOTHESIS DEVELOPMENT**

#### **4.0 Introduction**

Chapter 4 presents the research model and hypotheses. In this chapter I provide the rationale for each hypothesis by integrating theory and past research findings. Finally, the theoretical contribution of the model is discussed in detail.

#### **4.1 Hypothesis Development**

##### **4.1.1 Firm resource demand and perceived effort**

Based on the review of the previous literature and the results of the CIT study, a conceptual model of firm resource demand was developed. Figure 4.1 displays the firm resource demand model. Firm resource demand is defined as the amount of resources that a customer is expected to contribute during the service encounter. Two different levels of firm resource demand are represented in the conceptual model. In the low resource demand level, the customer contributes minimum resources during the service encounter. In the high resource demand level, the customer is responsible for completing a majority of the task, thus contributing more resources, during a service encounter.

Perceived effort level has previously been defined as the amount of energy a customer puts into a service encounter (Mohr and Bitner 1995). When using this definition one assumes that energy is the physical exertion put forth. However, the perception of energy used during a service encounter is not restricted to physical exertion, rather it could be caused by cognitive

exertion or other constraints placed upon the customer. Therefore, for this dissertation perceived effort level refers to the perceived amount of resources put into the service encounter. This definition allows perceived effort to encompass all forms of resource exertion beyond physical exertion that a customer might encounter.

Researchers suggest that perceived effort will vary depending on the amount of labor required during the co-production process (Bitner et al. 1997). Bitner and colleagues (1997) developed three levels of customer co-production: low, moderate, and high. In a low co-production scenario, the customer's presence is all that is required during the service delivery (e.g. motel stay). In moderate co-production the customer must provide inputs during service creation (e.g. hair cut). During high co-production the customer actively participates in the service or product (e.g. personal training). In each of these the customer's perception of effort used will vary. Thus, the higher the demand placed upon the customer by the firm, the more effort he or she is likely to perceive. Stated formally,

**H1:** A positive relationship exists between firm resource demand and perceived effort; such that, as resource demand increases, perceived effort increases.

#### **4.1.2 Perceived effort and perceived fairness**

Perceived fairness is the degree to which the customer believes the firm's requirements during the service process are reasonable given the outcomes received Van Yperen (1996). After a customer finishes the service encounter, the customer appraises the service process. The customer evaluates if the degree of participation is equitable given the amount of inputs they are forced to put into the service process. The equitable/inequitable comparison is similar to the same process that a firm's employees go through when evaluating worker effort-reward fairness. Most authors have examined effort-reward fairness through an equity theory lens. Equity theory argues that individuals judge an outcome as fair when the ratio of inputs and outputs equals the

ration of inputs and outputs of others (Messick and Sentis 1983). However, the evaluative process is more complicated than suggested by many widely used theories – i.e. equity theory and other distributive justice theories (Van Den Bos, Lind, Vermunt, and Wilke 1997). These theories emphasize the importance of making social comparisons when evaluating outcomes. Many times a direct comparison cannot be made between customers (Van Den Bos et al. 1997). For example, when shopping we do not always know what discounts and inputs other customers have to put into a service encounter. Therefore, individuals make comparisons with information that is readily available. Many times this is the customer's past experience with the service provider or similar service providers. Therefore, the equitability comparison is not made against the fairness as compared to other customers; rather, the comparison is made between different service provider processes.

In a service context, customers pay more attention to the actions of service providers if they believe that outcomes of the service are not distributed fairly or if they are uncertain about the trustworthiness of the service provider (Diekmann, Barsness, and Sondak 2004). Customers generally do not have information about the outcomes related to other customers – distributive concerns – or information concerning the trustworthiness of the service firm (Kivetz and Simonson 2003). According to fairness heuristic theory (Van Den Bos et. al 1997), given a lack of an ability to compare directly to other customers and given the lack of knowledge about the trustworthiness of the service provider, customers use information that is available for fairness comparisons. It could be that when trying to make a fairness perception of a service process, customers are likely to make a comparison with similar service categories. For example, if a customer finishes a service encounter with a new bookstore, then they are likely to make fairness

comparisons based on a comparison of past bookstore service experiences. Therefore, customers tend to pay greater attention to the fairness of the service process and the outcomes related to that process as compared to similar processes and outcomes.

It is predicted that when a customer perceives a high level of effort in a service encounter, he or she feels that the service encounter was unfair. Fairness is central to the exchange relationship (Bettencourt and Brown 1997; Organ 1990). Extant literature on workplace fairness provides empirical support for the negative relationship that exists between effort and fairness perceptions (Janssen 2001; Janssen 2000; Bettencourt and Brown 1997). Therefore, it is predicted that when a customer perceives a high degree of effort, they will be more likely to report the service process and outcome as unfair. Stated formally,

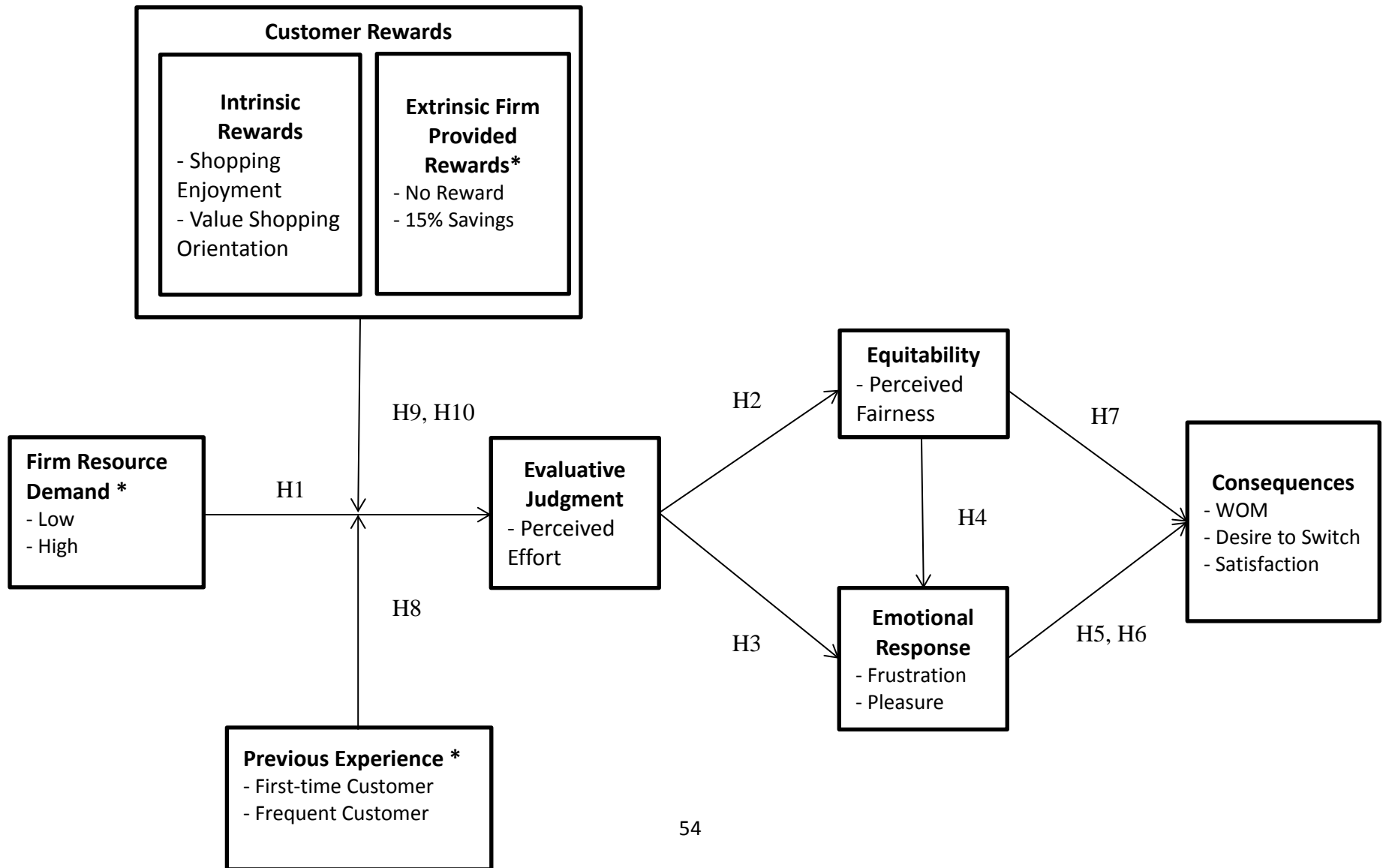
**H2:** A negative relationship exists between perceived effort and perceived fairness; such that, as perceived effort increases, perceived fairness decreases.

#### **4.1.3 Perceived effort and perceived fairness, and emotional response**

Perceived effort is expected to lead to an emotional response. According to appraisal theorists (e.g., Roseman, Spindel, and Jose 1990; Scherer 1988; Weiner 1985; Lazarus 1968; Arnold 1960), evaluations and interpretations of events determine whether an emotion will be felt. The elicitation of an emotion is dependent upon the appraisal of the situation (Lazarus 1991). Distinct emotions carry separate behavioral intentions which lead individuals to act in a specific manner (Roseman 1984). Specific emotions are elicited by specific patterns of cognitive appraisal of events (Zeelenberg and Pieters 2006).

Figure 4.1

A Model of the Hypotheses



Roseman (1979) proposed that five appraisals influence emotions: (1) motivational state, (2) situational state, (3) probability, (4) legitimacy, and (5) agency. A motivational state is whether an individual's motive in a given situation is driven by the avoidance of a punishment or the desire to seek a reward. A situational state is whether an individual's motivational state is present or absent during the given situation. Probability is whether the outcome of the situation is either known or unknown. Legitimacy is whether the positive or negative outcome of the situation is deserved. Finally, agency is whether the outcome of the situation is caused by the self, another person, or an impersonal circumstance.

Roseman (1979, 1984) argued that these different appraisals will interact and provoke distinct emotions. For example, frustration occurs from the absence of a reward or presence of a punishment that is caused by the circumstance of the situation when a positive outcome is deserved. In contrast, joy results from the presence of a reward that is caused by a certain circumstance when a positive outcome or a negative outcome is deserved.

Frustration and pleasure are the two emotions chosen for this dissertation. Frustration is defined as an emotion that is aroused by the blocking of ongoing instrumental behavior that has in the past led to a positive reward (Berkowitz 1962). Past research has focused on negative emotions (anger, disappointment, anxiety, etc.) and has looked at how these emotions are elicited when there is a failure to obtain a goal (Muller, Tse, and Venkatasubramaniam 1991). In contrast, frustration is elicited by obstructions of an individual's experience during a certain process. This obstruction is seen as a barrier to the satisfactory completion of the service encounter.

Strauss, Schmidt, and Schoeler (2005) argue that in business relationships, frustration is triggered by the refusal of a reward, reduction of a reward, or the postponement of a reward. For

example, in a service setting, if a customer has to wait longer than expected for a meal then frustration is likely to occur due to the postponement of the reward – the meal in this scenario. Customers who perceive putting forth a lot of effort during the service are likely to see the extra effort as delaying the receipt of their reward, which is finishing the service encounter. The cognitive appraisal of the postponement of finishing the service will then elicit feelings of frustration.

Pleasure is defined as an assessment of the environment as happy, pleased, hopeful, joyful, and contented (Foxall and Yani-de-Soriano 2005). Pleasure has been found to be elicited by environmental stimuli (Baker, Levy, and Grewal 1992). For example, if a customer views a retail environment in a positive manner, then pleasure with the environment is likely to occur. Previous studies on customer resources support the positive relationship between resource use and pleasure (Babin and Darden 1995; Hui and Bateson 1991; Dawson, Bloch, and Ridgway 1990). Given previous research, it is expected that when customers perceive the service process as requiring a high level of effort, then the customer will report low levels of pleasure. Stated formally,

**H3:** Perceived effort is positively related to frustration (H3a) and negatively related to pleasure (H3b); such that, as perceived effort increases, frustration increases and pleasure decreases.

#### **4.1.4 Perceived Fairness, emotional response, and consequences**

Following affect control theory, perceived fairness is expected to influence both frustration and pleasure. Affect control theory has three basic principles. First, individuals behave in such a way that their emotions are appropriate to the situation. Customers who feel that they put too much effort given their rewards may express negative emotions. Second, individuals who cannot express the appropriate emotion will modify their perceptions.

Customers may downplay their emotions when they feel that it is not appropriate to display their emotions. Finally, individuals create events that confirm the sentiments that they have about the current situation (Chebat and Slusarczyk 2005; MacKinnon 1994; Heise 1979). Customers may leave the firm or spread negative word-of-mouth to maintain their sentiments about the firm.

One type of event that elicits these emotions is situations in which individuals are treated fairly or unfairly. For example, Rupp and Spencer (2006) find that a feeling of interactional injustice is an antecedent to negative emotions. Similarly, Weiss, Suckow, and Cropanzano (1999) find that when individuals perceive the procedure as being unfair, negative emotions are elicited. Krehbiel and Cropanzano (2000) find that anger is elicited when individuals are treated unfairly and happiness is elicited when individuals are treated fairly. Given previous results and following affect control theory, it is predicted that customers' perceptions of fairness or unfairness will lead to positive and negative emotions. Specifically, customers who perceive a service process as unfair (fair) will have low (high) levels of pleasure and high (low) levels of frustration.

**H4:** Perceived fairness is positively related to frustration (H4a) and negatively related to pleasure (H4b); such that, as perceived fairness increases, frustration increases and pleasure decreases.

Following affect control theory, it is predicted that customers' emotional responses directly affect customers' word-of-mouth intentions, satisfaction with the service provider, and desire to switch. According to affect control theory, individuals act in a way that the impressions acquired from an event are confirmed by their sentiments (Heise 1979; MacKinnon 1994). The feeling of satisfaction and their choice of action – positive word-of-mouth and desire to switch – are the mechanisms used to confirm their feelings towards the situation. For example, when a customer is frustrated with a service provider, that customer is likely to confirm their frustration

by switching service providers. Thus customers will seek to perform specific behaviors in order to regain control over their situation (Chebat and Slusarczyk 2005). Therefore it is hypothesized that,

**H5:** Frustration is negatively related to positive word-of-mouth (H5a) and satisfaction (H5b) and positively related to desire to switch (H5c); such that, as frustration increases, positive word of mouth and satisfaction decrease, and desire to switch increases.

**H6:** Pleasure is positively related to positive word-of-mouth (H6a) and satisfaction (H6b) and negatively related to desire to switch (H6c); such that, as pleasure increases, positive word of mouth and satisfaction increase, and desire to switch decreases.

The customers' perceptions of fairness directly affect customers' positive word-of-mouth intentions, satisfaction with the service provider, and desire to switch. Positive word-of-mouth communication is defined as making others aware that one does business with a service provider and making positive recommendations to others about the company (Brown, Barry, Dacin, and Gunst 2005). Word-of-mouth communication is a major predictor of company growth (Reicheld 2003) and customers' future intentions (Zeithaml, Berry, and Parasuraman 1993). Satisfaction refers to the overall evaluation of performance based on all prior experiences with a firm (Bitner and Hubbert 1994). Customers who are not satisfied with their service encounter are more likely to tell individuals about their service experience as compared to satisfied customers (Anderson 1998). Customers' desire to switch refers to customers' longing to receive the service from a different provider (Bougie, Pieters, and Zeelenberg 2003). Keeping customers from switching firms can have a major impact on firms' bottom lines. Customer retention increases firms' market shares and has a significant impact on firm profits (Reicheld and Sasser 1990).

Following fairness heuristic theory, it is expected that when an individual finds a process as being fair they will be satisfied with the process. Consistent with fairness heuristic theory, several researchers have found a significant relationship between fairness and satisfaction

(Maxham 2001; Seiders and Berry 1998; Clemmer and Schneider 1996). Building upon fairness heuristic theory, it is expected that when a service process is viewed as fair, customers will report high levels of positive word-of-mouth intentions and low levels of desire to switch intentions. A number of scholars have suggested that when a process is viewed as fair, then customers will be likely to engage in positive word-of-mouth (Blodgett, Granbois, and Walters 1993; Blodgett, Hill, and Tax 1997). Finally, past research has suggested a significant relationship between fairness and the desire to switch service providers (Anton, Camarero, and Carrero 2007). Based on the previous argument, I posit,

**H7:** Perceived fairness is positively related to positive word-of-mouth (H7a) and satisfaction (H7b) and negatively related to desire to switch (H7c); such that, as perceived fairness increases, positive word-of-mouth and satisfaction increase, and desire to switch decreases.

#### **4.1.5 The moderating role of experience**

It is expected that customers' previous experiences with the service process will moderate the relationship between firm resource demand and perceived effort. For the purpose of this dissertation, previous experience is broken into a dichotomy of a first time customer or a frequent customer. A first time customer is a customer who is going through the service process for the first time. In contrast, a frequent customer is a customer that has been through the service process multiple times.

The theory of resource allocation provides an explanation about how customers' previous experiences with the service process will moderate the relationship between firm resource demand and perceived effort. The theory of resource allocation states that during initial process exposure, high level of demand is placed upon individuals (Kanfer and Ackerman 1989; Kanfer et. al 1994). The high level of demand is due to the allocation of cognitive effort that is required to complete the task. As individuals acquire skills in the task, the processes of the task become

automated, thus reducing the demands placed upon them. It is expected that a customer with a greater level of service process experience will be able to handle a greater firm resource demand, and consequently the customer will perceive the service process as less effortful. In contrast, a customer with a lower level of service process experience will not be as equipped to handle a high level of firm resource demand, which will subsequently result in the customer perceiving the service process as highly effortful.

**H8:** Previous experience with the service process will moderate the relationship between firm resource demand and perceived effort. Specifically, as experience increases, the positive relationship between firm resource demand and perceived effort will decrease.

#### **4.1.6 The moderating role of intrinsic and extrinsic rewards**

As shown in the model, customers' intrinsic rewards and the firm provided extrinsic rewards are expected to moderate the relationship between firm resource demand and customers' perceived effort levels. Intrinsic and extrinsic rewards have long been held as important factors in determining individuals' motivation to complete a task, and understanding the theoretical implication of motivations has been a major concern to researchers (Gagne and Deci 2005). Most motivational theories treat motivation as a unitary concept that differs in the amount of motivation (Moller, Ryan, and Deci 2006). However, there is a need for researchers to not only understand the implications in the differences in the amount of motivation, but there is a need to "differentiate between the types of motivation that differ in the degree to which they represent autonomy and control" (Moller et al. 2006). Self-determination theory (Deci and Ryan 1985; Ryan and Deci 2000) is a macro theory of motivation that places an emphasis on autonomy and control.

Self-determination theory differentiates intrinsic and extrinsic motivation. Intrinsic motivation means doing something because the activity itself is enjoyable, interesting, and

satisfying. For example, hobbies are usually intrinsically motivated. Individuals usually pursue hobbies that they find enjoyable, interesting, and satisfying. Whereas, extrinsic motivation is doing some task because it is influential to some separable consequence. Working to attain a bonus is an example of extrinsic motivation.

Self-determination theory additionally distinguishes between autonomous actions and actions that are controlled by external forces. Individuals are autonomous when they participate in something that they find interesting and important. For example, if a person cuts grass because they enjoy the work and finds the outcome important, they are acting autonomously. In contrast, individuals are controlled when they participate in an activity because there is pressure to do so. For example, if a person cuts the grass because of pressure from the home owners association, they are acting in a controlled manner. When individuals are controlled their motivation can be very high, but their quality of the experience is not as good as when individuals are autonomous (Moller et al. 2006; Deci and Ryan 2000).

In a services context, intrinsic rewards are the intrinsic motivational factors that contribute to the enjoyment of a service. The intrinsic rewards are the drivers of autonomous participation in a service. I chose to use shopping enjoyment and value shopping orientation as the focal internal rewards for this dissertation.

Shopping enjoyment is defined as the pleasure that an individual obtains from the shopping process (Beatty and Ferrell 1998). Shopping enjoyment is a customer trait in which some customers enjoy shopping more than other customers (Arnold and Reynolds 2003; Reynolds and Beatty 1999). For high shopping enjoyment customers, shopping is seen as a leisure activity. These individuals experience a number of psychological rewards from their participation in the service process (Guiry, Magi, and Lutz 2006).

Value shopping orientation is defined as an individual's orientation towards shopping for sales, looking for discounts, and hunting for bargains (Arnold and Reynolds 2003). Investigating why customers like shopping, Cox, Cox, and Anderson (2005) find that 74.2% of their respondents reported bargain hunting as an important reason for why customers like shopping. Customers high in value shopping orientation enjoy shopping for discounts more than other customers.

Intrinsic motivations (shopping enjoyment and value shopping orientation) are expected to diminish the positive relationship between firm resource demand and perceived effort. According to self-determination theory, intrinsic motivations are autonomous actions that individuals enjoy. Shopping enjoyment and value shopping orientation are similar to recreational-oriented motivation discussed by Babin, Darden, and Griffin (1994). Recreational-oriented motivation refers to consumers who engage in shopping because they receive a high level of satisfaction from the shopping process. Vankenhova, De Wulf, and Vanwaterschoot (1999) find that recreational-oriented consumers enjoy being under the influence of shopping stimuli. These customers view the shopping process as being fun and do not focus on task completion. Thus, even when the service provider places a high level of demand on the customer, the customer who is high in shopping enjoyment or high in value shopping orientation will not be disturbed by the extra demand. Given the previous argument,

**H9:** Intrinsic rewards will moderate the relationship between firm resource demand and the perceived effort. Specifically, as shopping enjoyment (H9a) and value shopping orientation (H9b) increase, the positive relationship that exists between firm resource demand and perceived effort will decrease.

The extrinsic rewards that customers receive during a service encounter are expected to moderate the relationship between firm resource demand and perceived effort. The firm provided rewards examined in this dissertation are the perceived financial rewards gained from

participating in the service encounter. Saving money is one of the primary reasons customers form relationships with service providers (Peterson 1995). Price reductions and customer savings have become a major firm goal (Denison 2003). In order to achieve a better cost for customers, firms are seeking to remove steps in the service production steps to reduce overall cost. One strategy firms are using to reduce the cost to customers is viewing customers as employees and demanding them to contribute more to the service process. The motivation literature maintains that financial rewards influence the behaviors of organizational members (Yilmaz and Hunt 2001).

In a service context, financial rewards can be thought of as the savings that a customer receives for participating in a service encounter with one service provider over another. For example, a customer who chooses to shop at one retail location because prices are lower than another is presumably doing so because of the financial rewards gained by using the cheaper retailer. According to self-determination theory, extrinsic motivations are controlled actions that customers participate in because there is pressure to do so (Deci and Ryan 2000). Individuals who engage in a service encounter in order to receive the firm provided rewards are participating in the service encounter because of the outside pressure to save money. These individuals are highly motivated to participate, but their enjoyment of the service process is going to be low. This low enjoyment in the service process will act as an amplifier to the work that has to be done in order to gain the desired goal. Thus, when a firm provided financial reward is present, the relationship between firm resource demand and effort will be enhanced. That is, the firm provided reward will cause an individual to become aware of the level of control placed upon them by the firm. Stated formally,

**H10:** Firm provided extrinsic rewards will moderate the relationship between firm resource demand and the customer's perceived effort. Specifically, as firm provided rewards increase, the positive relationship that exists between firm resource demand and perceived effort will increase.

## **4.2 Summary**

Chapter 4 has proposed a framework to address how firm resource demand affects customers' perceptions of the service process. In addition, important boundary conditions were discussed. The proposed model addresses a number of important hypotheses that have will provide valuable insight into the services literature.

## **CHAPTER FIVE**

### **PRE-TEST**

#### **5.0 Introduction**

Given that the main study of this dissertation is an experiment using scenario-based manipulations, it is essential to conduct a pre-test of the manipulations before moving onto the main study. The goals of the pre-test are to determine if the manipulations are working properly, if there are any demand effects, and if the manipulations are realistic. Therefore, each of these critical criteria is assessed in Chapter 5.

#### **5.1 Procedure**

Using the results of Study1 as a guide, I chose the context of grocery shopping for the manipulations. Grocery shopping provides scenarios in which it is realistic for customers to encounter multiple levels of firm resource demand. For example, a person can shop at specialty grocery stores where employees actively participate in the service. An individual can also shop at discount stores where employees do not actively participate in the service. After the completion of the scenarios, the scenarios were placed into the Qualtrics online survey software. I sought feedback from graduate students and non-students, asking them to look for any issues with the scenarios or questions. They were specifically asked about the clarity of the scenarios and realism of the scenarios. Based on the feedback from five people, the scenarios were refined to improve clarity. Specifically, the firm provided reward levels were adjusted to provide a more accurate representation of the discounts customers receive. After the scenario refinement, there

are a total of 12 different scenarios (2 firm resource demand levels x 2 experience levels x 3 firm provided reward levels). Table 5.1 provides a list of the manipulations in each of the 12 cells.

Table 5.2 displays the different manipulations tested.

**Table 5.1**  
**Manipulation Check by Cell**

<b>Cell Number</b>	<b>Manipulation</b>
1	Low Firm Demand x Low Experience x Low Reward
2	Low Firm Demand x High Experience x Low Reward
3	Low Firm Demand x Low Experience x No Reward
4	Low Firm Demand x High Experience x No Reward
5	Low Firm Demand x Low Experience x High Reward
6	Low Firm Demand x High Experience x High Reward
7	High Firm Demand x High Experience x High Reward
8	High Firm Demand x Low Experience x High Reward
9	High Firm Demand x High Experience x Low Reward
10	High Firm Demand x Low Experience x Low Reward
11	High Firm Demand x High Experience x No Reward
12	High Firm Demand x Low Experience x No Reward

## **5.2 Data Collection**

I used the snowball sampling technique (i.e. asking participants to pass along the survey to others) to find the participants for the pre-test. The initial participants were students in an upper level marketing course. The students were awarded extra credit for taking the survey and passing it along to four of their acquaintances. A total of 84 participants were recruited. After dropping 8 participants for incomplete data, 78 completed surveys remained. The sample was comprised of 50% males and 50% females, 90% Caucasian/white, and 69% under 30 years of age.

### 5.3 Manipulation Check Results

In the first six cells, the participants saw the low firm demand manipulation. In the low firm demand manipulation, the participants read about shopping in a grocery store scenario where they are not expected to provide a high level of participation. The low firm demand manipulation is as follows:

When you enter the grocery store, you see a sign that says "Offering A Good Value For Your Money." At the bottom of the sign you see stickers for MasterCard, Visa, AMEX, and even PayPal indicating that they accept all forms of payment.

Next, a store employee approaches you and asks if you need a cart. You thank them and take the cart and begin shopping. This store has employees who work the floor so they assist you in finding the items on your list.

After shopping, you go to check out. As the cashier checks you out, another store employee places your groceries in bags for you. The store employee who bagged your groceries pushes your cart to the car for you and loads the groceries into the car. No tip is accepted. The store employee says "Thank you" and takes the cart back to the store.

In the last six cells, the participants saw the high firm demand manipulation. In the high demand manipulation, participants read about shopping in a grocery store scenario where they are expected to provide a high level of participation. The high firm demand manipulation is presented as:

When you enter the grocery store, you see a sign that says "Offering a Good Value for Your Money." At the bottom of that sign it says "Only Accepting Cash and Debit Cards." You need cash to pay for your groceries so you go to the ATM located in the store and you withdraw the cash that you need.

After getting money from the ATM, you make your way to the carts. To use a cart you must put in a quarter and you must return the cart to get your quarter back. You need to use a cart, so you pay the quarter and begin shopping. This grocery store does not have employees that work the floor so you have to look around and find all of the products on your own. You make your way around the store and pick up the products on your shopping list.

After shopping you go to check out. You make your way over to a bagging area where you have to bag your own groceries. When you finish bagging your items, you push the cart back to the store and place it in the cart return area to get your quarter back.

After participants read the scenario they answered three manipulation check questions regarding the level of demand placed upon them. Table 5.2 presents the firm resource demand manipulation check items. SPSS 18.0 was used to average the three manipulation check items to form the manipulation check scale. Once the scale was formed, I conducted an independent sample t-test on the means of the low and high demand manipulations. The results of the firm resource demand manipulation are shown in Table 5.3. The mean for the high resource demand manipulation is significantly larger than the mean for the low resource demand manipulation, indicating that the manipulation works.

**Table 5.2**

**Firm Resource Demand Manipulation Check**

<b>Variable</b>	<b>Items</b>
<b>Firm Resource Demand</b> $\alpha = .95$	1. The grocery store demanded a lot from me.
	2. The grocery store requested a lot from me.
	3. The grocery store expected a lot from me.

**Table 5.3**

**Firm Resource Demand Manipulation Results**

<b>Variable</b>	<b>Mean</b>	<b>t-value (independent sample t-test)</b>
<b>Low Firm Resource Demand</b>	2.08	$t = 8.99$ $p < .001$
<b>High Firm Resource Demand</b>	5.05	

In six of the cells the participants saw a low experience manipulation. In the low experience manipulation, the participants were told that they do not have experience with the service process. The following is the low experience manipulation:

It is Saturday morning and you decide to go to a new grocery store to buy groceries. You have never been to this store before so you do not know the procedure for finding and buying merchandise.

In the remaining six scenarios, participants read the high experience manipulation. In the high experience manipulation, the participants were told that they have had been to the store before and that they know the service process. The following is the high experience manipulation:

It is Saturday morning and you decide to go to your usual grocery store to buy groceries. This is your usual grocery store so you know the procedure for finding and buying merchandise.

After participants read the scenario they answered three manipulation check questions regarding experience level. Table 5.4 presents experience manipulation check items. I conducted an independent sample t-test on the means of the low and high experience manipulations. The results of the experience manipulation are shown in Table 5.5. The mean for the high experience manipulation is significantly larger than the mean for the low experience manipulation, indicating that the manipulation works.

**Table 5.4**

**Experience Manipulation Check**

<b>Variable</b>	<b>Items</b>
<b>Experience</b> $\alpha = .94$	1. I have been to this grocery store before.
	2. This is not my first time visiting this grocery store.
	3. This is my usual grocery store.

**Table 5.5**

**Experience Manipulation Results**

<b>Variable</b>	<b>Mean</b>	<b>t-value (independent sample t-test)</b>
<b>Low Experience</b>	2.67	$t = 5.78$ $p < .001$
<b>High Experience</b>	5.14	

The final manipulations deal with the firm provided rewards that the participants receive in the scenarios. Three levels of rewards were given in the scenarios. In the no reward scenario, the participants read that the final purchase price of their products was about what they would receive if they shopped at another grocery store.

When the cashier hands you the receipt, you look at the receipt and see that the total bill for shopping at this grocery store is comparable to other grocery stores in your area.

In the low firm provided reward scenario, the participants read about receiving a 5% discount.

The following is the low firm provided reward scenario:

When the cashier hands you the receipt, you look at the receipt and see that your items are about 5% cheaper than the prices you find at other grocery stores in your area.

In the high firm provided reward scenario, the participants received a 15% discount. The high reward scenario was worded as follows:

When the cashier hands you the receipt, you look at the receipt and see that your items are about 15% cheaper than the prices you find at other grocery stores in your area.

After participants read the scenario, they answered two manipulation check questions regarding the firm provided reward level. Table 5.6 presents the firm provided reward manipulation check items. Using SPSS 18.0, I conducted an analysis of variance test (ANOVA). I used an ANOVA to test for the difference between the levels of firm provided rewards. The results of the firm provided reward manipulation are shown in Table 5.7. The results indicate a difference between the groups. However, to better understand the difference, a post hoc test must be examined. Tukey HSD post hoc test was used to examine the differences between the three levels of firm provided rewards. The results of the Tukey HSD test are provided in Table 5.8. The results indicate that there is a significant difference in the means when comparing the high firm provided reward condition to both the no firm provided reward and the low firm provided reward. However, there is not a significant difference between the no firm provided reward manipulation and the low firm provided reward manipulation. The lack of statistical significance indicates that the participants did not differentiate between these scenarios.

**Table 5.6**

**Firm Provided Reward Manipulation Check**

<b>Variable</b>	<b>Items</b>
<b>Firm Provided Reward</b> <i>r</i> = .81	1. Thinking about this trip, I saved a lot of money.
	2. Thinking about this trip, I received a large discount.

**Table 5.7**

**Firm Provided Rewards Manipulation Results**

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>Between Groups</b>	24.95	2	12.48	5.35	.007
<b>Within Groups</b>	174.14	75	2.32		
<b>Total</b>	199.09	77			

**Table 5.8**

**Tukey HSD Post Hoc Test: Firm Provided Rewards**

<b>Manipulation</b>		<b>Mean Difference</b>	<b>Std. Error</b>	<b>Sig.</b>
<b>No Reward</b>	Low Reward	.28	.43	.793
	High Reward	1.31	.43	.009
<b>Low Reward</b>	No Reward	.28	.43	.793
	High Reward	1.03	.41	.039
<b>High Reward</b>	No Reward	1.31	.43	.009
	Low Reward	1.03	.41	.039

In order to test for confounding effects between the different manipulations, I ran a multivariate analysis of variance (MANOVA). MANOVA allows me to test the direct effects of the manipulations on the manipulation checks, as well as, check for any interaction effects that might exist between the different manipulations. The results of the MANOVA can be found in Table 5.9.

The main effects show that firm resource demand has a direct effect on the firm resource demand manipulation check ( $F = 75.97, p < .001$ ) and not on any of the other manipulation checks. The main effects for experience show that experience has a direct effect on the experience manipulation check ( $F = 28.85, p < .001$ ) and not on any of the other manipulation checks. Finally, the main effects for firm provided reward displayed a direct effect on the firm provided reward manipulation check ( $F = 5.76, p < .01$ ) and not on any of the other manipulation checks. All two-way and three-way interactions were insignificant. These results provide further support for the manipulations.

**Table 5.9**

**MANOVA Manipulation Check**

<b>Source</b>	<b>Dependent Variable (Manipulation Check)</b>	<b>Type III Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Corrected Model	Firm Demand	188.40	11	17.13	7.85	.000
	Experience	146.24	11	13.30	3.59	.001
	Firm Provided Reward	48.78	11	4.43	1.95	.049
Intercept	Firm Demand	957.75	1	957.75	439.00	.000
	Experience	1179.03	1	1179.03	318.35	.000
	Firm Provided Reward	912.48	1	912.48	400.64	.000
Firm Demand	<b>Firm Demand</b>	<b>165.75</b>	<b>1</b>	<b>165.75</b>	<b>75.97</b>	<b>.000</b>
	Experience	.49	1	.49	.13	.717
	Firm Provided Reward	3.48	1	3.48	1.53	.221
Experience	Firm Demand	1.64	1	1.64	.78	.390
	<b>Experience</b>	<b>106.85</b>	<b>1</b>	<b>106.85</b>	<b>28.85</b>	<b>.000</b>
	Firm Provided Reward	3.00	1	3.00	1.32	.255
Reward	Firm Demand	6.89	2	3.45	1.58	.214
	Experience	2.87	2	1.44	.39	.680
	<b>Firm Provided Reward</b>	<b>26.25</b>	<b>2</b>	<b>13.13</b>	<b>5.76</b>	<b>.005</b>
Demand * Experience	Firm Demand	.06	1	.06	.03	.870
	Experience	.37	1	.37	.10	.753
	Firm Provided Reward	2.71	1	2.71	1.19	.279
Demand * Reward	Firm Demand	3.04	2	1.52	.70	.502
	Experience	19.22	2	9.61	2.60	.082
	Firm Provided Reward	1.83	2	.91	.40	.671
Experience * Reward	Firm Demand	3.58	2	1.79	.82	.445
	Experience	3.63	2	1.82	.49	.615
	Firm Provided Reward	13.15	2	6.57	2.89	.063
Demand * Experience * Reward	Firm Demand	1.95	2	.97	.45	.642
	Experience	.20	2	.10	.03	.973
	Firm Provided Reward	.45	2	.22	.10	.906

**Table 5.9 (Continued)**

**MANOVA Manipulation Check**

<b>Source</b>	<b>Dependent Variable (Manipulation Check)</b>	<b>Type III Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Error	Firm Demand	143.99	66	2.18		
	Experience	244.44	66	3.70		
	Firm Provided Reward	150.32	66	2.28		
Total	Firm Demand	1366.44	78			
	Experience	1599.00	78			
	Firm Provided Reward	1179.25	78			
Corrected Model	Firm Demand	332.39	77			
	Experience	390.68	77			
	Firm Provided Reward	199.09	77			

**5.4 Realism Check Results**

Participants responded to three questions about the realism of the scenario. Table 5.10 lists the three realism items with the means for each item that participants were asked to answer. Participants responded to the realism question on a 7-point scale ranging from strongly disagree to strongly agree. All of the means are above 3.5 indicating that participants believe that the scenario is plausible. When looking at the frequencies of the answers to each item, only seven respondents rated the realism items as not being believable, further providing support for the use of the scenarios.

**Table 5.10**

**Realism Check: Realism Items and Means**

<b>Item</b>	<b>Mean</b>
1. I could see this situation happening to me.	5.35
2. This situation is realistic.	5.50
3. This situation is believable.	5.38

**5.5 Demand Check**

The last question that participants answered was concerning the purpose of the study. Participants were given three choices as to the purpose of the study. The first choice was that the study addresses “how customers react to service encounters,” the second choice was “I don’t know,” and the final choice was “other.” In the “other” choice, the participants are asked to specify what they believe the study is about. The 77 (99%) participants picked one of the first two choices, which is incorrect. The one person who specified “other,” also did not answer correctly. Therefore, all responses were kept and there providing no evidence of a demand effect.

**5.6 Conclusion**

This pre-test provides evidence that the scenarios and manipulations are ready for the main dissertation data collection. However, due to the pretest finding no discernible difference between the no reward manipulation and the 5% discount manipulation (See Table 5.8 for the results), there will only be two levels of firm provided reward for the main study. The two reward levels used in Study 2 are no reward and 15% discount. Study 2 will test the proposed hypotheses discussed in Chapter 4. In Study 2, participants will be randomly assigned to a scenario and they will answer items that make up the constructs proposed in the conceptual model.

## **CHAPTER SIX**

### **STUDY 2**

#### **6.0 Introduction**

The main study, Study 2, is the scenario based experiment that was pre-tested in Chapter 5. The purpose of this chapter is to test the hypotheses previously outlined in Chapter 4. Given the results of the pre-test, I made changes and improvements to the manipulations and to the measures in Study 2.

#### **6.1 Research Design**

In order to test the proposed hypotheses, a scenario-based experiment is used. The scenario-based experiment manipulates three variables: the level of resource demand placed upon the customer, the customers' experience with the company, and the level of firm provided rewards. Because there are three variables being manipulated at two levels each, a 2X2X2 factorial design is being implemented. Based on the rule of thumb of twenty observations per experimental cell, a minimum of 120 observations are needed (Hair et al. 2006). However, to move beyond the rule of thumb, an a priori power analysis was conducted in G\*Power 3 to determine the sample size needed based on the number of predictors in the model, an estimated effect size, and an estimated power level. The total number of predictors possible (this includes all items and covariates) is 53. An effect size of .20 was tested as the baseline effect size, with a power equal to .95. The results indicated that a total sample size of 259 respondents would adequately test the hypothesized model plus any additional alternative models.

The experiment was posted to the survey website Qualtrics and completed by respondents online. The respondents for this survey were recruited for participation by undergraduate marketing students. The use of student recruiters has been used successfully in prior research (i.e. Bitner, Booms, and Tetreault 1990; Wallendorf and Arnould 1991; Keaveney 1995; Jones, Reynolds, Mothersbaugh, and Beatty 2007; Gremler and Gwinner 2008; Holloway and Beatty 2008). The students received one course bonus point for every individual they recruited. A maximum of six bonus points per student was allowed.

To ensure proper recruitment, students were given in-class training before recruitment began. An email outlining proper recruitment was also sent to students (see Appendix C for the recruitment document). Students were instructed to ask individuals who are over the age of 19 and are non-college students to participate. Students only supplied the respondents with a short paragraph outlining the study and the study URL.

The data collection took fourteen business days. A total of 384 participants took the survey. In order to ensure the results from cheating and not reading thoroughly, three attention filters were added to the survey. Twenty participants were dropped due to inaccurate answers of the first attention filter (i.e. "Thinking about this grocery store shopping trip, how much money did you save on this trip?"). Thirty-three participants were dropped due to carelessly responding to the second attention filter (i.e. "Please select somewhat agree."). Nine respondents were dropped due to carelessly answering the third attention filter (i.e. "Please select disagree."). Finally, I checked to see if any respondents sped through the survey (i.e. it took the respondent fewer than six minutes to complete the entire survey) or straight-lined answers (i.e. 1, 1, 1, 2, 2, 2). Thirteen respondents were dropped due to speeding, and 16 respondents were dropped due to straight-lined answers.

In order to make sure that the student recruiters did not take the survey multiple times, the recruited participants were asked to provide their email addresses at the end of the survey. Fifty percent of respondents were randomly chosen using a random number generator. These respondents were contacted by email and asked to reply if they completed the survey themselves. This procedure is used to help validate the sample and the responses. No problems were detected during the validation process. Therefore, no responses were eliminated due to recruiting concerns. All of the aforementioned checks resulted in a final sample size of 293 participants.

## **6.2 Sample Characteristics**

The demographic characteristics of the participants appear in Table 6.1. About 56% of the participants are female. The majority of participants in this study are between the ages of 19 – 34 (49%), with 47% between the ages of 35 – 64. Over half of the participants hold a college or graduate degree (69%), with 25 % having some college experience. Forty-two percent of the respondents are single with no children, while 39% reported being married with children. Fifty-five percent of respondents reported a salary range of \$0 - \$50,000, with 26% reporting a salary range of \$50,001 - \$100,000. The majority of respondents are white (84%) or African American (11%), with the other races making up the remaining 5%.

**Table 6.1****Demographic Characteristics of the Sample**

	Frequency	Percentage
<b>Gender</b>		
Male	130	44.4
Female	163	55.6
<b>Age</b>		
19-24	94	32.2
25-34	49	16.7
35-44	23	7.8
45-54	77	26.3
55-64	37	12.6
65 and older	13	4.4
<b>Family Structure</b>		
Single without children	121	41.6
Single with children	25	8.6
Married without children	24	8.2
Married with children	114	39.2
Life partner without children	6	2.1
Life partner with children	1	0.3
<b>Education</b>		
< HS diploma	1	0.3
HS or equivalent	17	5.8
Some college	72	24.7
College Degree	151	51.8
Graduate degree	51	17.4
<b>Salary</b>		
\$0 - \$25,000	91	33.0
\$25,001 - \$50,000	70	25.4
\$50,001 - \$75,000	52	18.8
\$75,001 - \$100,000	20	7.2
\$100,001 - \$150,000	17	6.2
\$150,001 - \$200,000	14	5.0
< \$200,000	12	4.3
<b>Race</b>		
White/Caucasian	244	83.8
Black/African-American	31	10.6
Hispanic/Latino	2	0.7
Asian	9	3.1
Pacific Islander	1	0.3
Other	4	1.4

### 6.3 Measures

All measures used in this study were available from previous studies, except for the manipulation checks which were developed to meet the needs of this study. Each of the constructs is discussed briefly below. A combined list of the measures can be found in Appendix D.

#### Perceived Effort

Perceived effort refers to the perceived amount of customer resources put into the service encounter. These resources include the physical resources and the cognitive resources expended during the encounter. Perceived effort is measured using a five-item scale adapted from Mohr and Bitner (1995). The perceived effort scale is presented in Table 6.2.

**TABLE 6.2**

**The Perceived Effort Items**

Dimension	Item	Anchors/Type	Code	
Perceived Effort	If this incident were to happen to you, how much would you agree with the following:	1 - 7 Strongly Disagree to Strongly Agree		
			1. I exerted a lot of energy.	eff1
			2. I was very persistent.	eff2
			3. I had to spend a lot of time to finish the service.	eff3
			4. I had to try hard to complete the service.	eff4
			5. I had to put a lot of effort into this service.	eff5

Frustration

Frustration is an emotion aroused by the blocking of ongoing instrumental behavior that has in the past led to a reward (Berkowitz). Frustration is measured with a three-item scale adapted from the work of Peters, O'Connor, and Rudolf (1980). The frustration measure is provided in Table 6.3.

**TABLE 6.3**  
**The Frustration Items**

Dimension	Item	Anchors/Type	Code
Frustration	If this incident were to happen to you, how much would you agree with the following:	1 - 7 Strongly Disagree to Strongly Agree	
	1. Trying to complete this service would be a very frustration experience.		frust1
	2. Being frustrated comes with this type of service experience.		frust2
	3. Overall, I would feel frustrated with this experience.		frust3

Pleasure

Pleasure is conceptualized as an assessment of the environment as happy, pleased, hopeful, joyful, and contented (Foxall and Yani-de-Soriano 2005). Pleasure was measured in this research employing a five-item scale developed by Babin and Dardin (1995). The pleasure scale is provided in Table 6.4.

**TABLE 6.4**

**The Pleasure Items**

Dimension	Item	Anchors/Type	Code
Pleasure	If this incident were to happen to you, how much would you feel the following:  1. Happy 2. Pleased 3. Hopeful 4. Joyful 5. Contented	1 - 7	
		Definitely	
		Will Not to	
		Definitely	
		Will	

Perceived Fairness

Perceived fairness is viewed as the degree to which the customer believes the firm's requirements during the service process are reasonable given the benefits received (Van Yperen 1996). The perceived fairness construct is measured by adapting the seven-item perceived fairness scale developed by Van Yperen (1996). The perceived fairness measure contains three items that represent fairness and four items that represent unfairness. The four items representing unfairness were reverse coded to align with the fairness items. The final perceived fairness scale is shown in Table 6.5.

**TABLE 6.5****The Perceived Fairness Items**

Dimension	Item	Anchors/Type	Code
Fairness	If this incident were to happen to you, please rate your agreement with the following items	1 - 7 Strongly Disagree to Strongly Agree	
	1. The benefits that I received from the grocery store were fair, given the time and hassle.		fair1
	2. Given the effort I put forth, the benefits I received from the grocery store were fair.		fair2
	3. The benefits that I received from the grocery store were fair.		fair3
	4. I worked hard considering the benefits that I received from the grocery store.		fair4
	5. The benefits that I received were not proportional to the work required during this grocery store visit.		fair5
	6. I put more energy into this grocery store visit than it is worth.		fair6
	7. I feel unfairly treated by the grocery store.		fair7

*Positive Word-of-Mouth*

Positive word-of-mouth represents the customer's intent to make others aware that they do business with a service provider and to make positive recommendations to others about the company (Brown, Barry, Dacin, and Gunst 2005). Positive word-of-mouth is measured using a three-item scale developed by Verhoef, Franses, and Hoekstra (2002). The three-item positive word-of-mouth scale is presented in Table 6.6.

**TABLE 6.6****The Positive Word-of-Mouth Items**

Dimension	Item	Anchors/Type	Code
Positive Word-of-Mouth	If this incident were to happen to you, how much would you agree with the following:	1 - 7 Strongly Disagree to Strongly Agree	
	1. I would say positive things about this service provider to people I know.		wom1
	2. I would recommend this service provider.		wom2
	3. I would encourage relatives and friends to do business with this service provider.		wom3

*Desire to Switch*

Desire to switch is conceptualized as a customer's desire to receive a service from a different service provider (Bougie, Pieters, and Zeelenberg 2003). The desire to switch measure used in this study is the three-item measure developed by Bougie et al. (2003). The three desire to switch items are presented in Table 6.7.

**TABLE 6.7****The Desire to Switch Items**

Dimension	Item	Anchors/Type	Code
Desire to Switch	Imagining that this situation happened to you, please rate your agreement with the following items:	1 - 7 Strongly Disagree to Strongly Agree	
	1. If I could, I would use another service provider.		switch1
	2. If I had the option, I would switch to a different service provider.		switch2
	3. I would like to switch to a different service provider.		switch3

### Satisfaction

Satisfaction is the customer's overall evaluation of performance based on their experience with the service provider (Bitner and Hubbert 1994). Satisfaction is measured with a five-item semantic differential scale developed by Agustin and Singh (2005). The five satisfaction items are presented in Table 6.8.

**TABLE 6.8**

#### **The Satisfaction Items**

Dimension	Item	Anchors/Type	Code
Satisfaction	My overall impression of the service provider is:	1-7 Semantic differential	
	1. Bad – Good		sat1
	2. Unfavorable – Favorable		sat2
	3. Unsatisfactory – Satisfactory		sat3
	4. Negative – Positive		sat4
	5. Disliked – Liked		sat5

### Shopping Enjoyment

Shopping enjoyment reflects the overall pleasure that an individual obtains from the shopping process (Beatty and Ferrell 1998). Shopping enjoyment is assessed with a five-item scale from Dawson, Bloch, and Ridgway (1990). The items of the shopping enjoyment measure are included in Table 6.9.

**TABLE 6.9****The Shopping Enjoyment Items**

Dimension	Item	Anchors/Type	Code
Shopping Enjoyment	Please answer the following questions about yourself as honestly as you can:	1 - 7 Strongly Disagree to Strongly Agree	
	1. I consider shopping a big hassle.		enjoy1
	2. When traveling, I enjoy visiting new and interesting shops.		enjoy2
	3. Shopping is generally a lot of fun for me.		enjoy3
	4. I enjoy browsing for things even if I cannot buy them yet.		enjoy4
	5. I often visit shopping malls or markets just for something to do.		enjoy5

*Value Shopping Orientation*

Value shopping orientation represents an individual's orientation towards shopping for sales, looking for discounts, and hunting for bargains (Arnold and Reynolds 2003). Value shopping orientation is measured using the three-item scale developed by Arnold and Reynolds (2003). The three value shopping orientation items are presented in Table 6.10.

**TABLE 6.10****The Value Shopping Orientation Items**

Dimension	Item	Anchors/Type	Code
Value Shopping Orientation	Please answer the following questions about yourself as honestly as you can:	1 - 7 Strongly Disagree to Strongly Agree	
	1. For the most part, I go shopping when there are sales.		vshop1
	2. I enjoy looking for discounts when I shop.		vshop2
	3. I enjoy hunting for bargains when I shop.		vshop3

Demographic/Control Variables

In addition to the above measures, the survey also assessed several demographic variables that could influence the hypothesized model. The demographic variables assessed in this study include gender, family structure, education level, and salary. Because these are not the focal variables of the study but could impact the findings, these variables will be included in the analyses.

**6.4 Manipulation Checks**

After validating the scales, I performed manipulation checks. There are a total of eight different scenarios (2 firm resource demand levels x 2 experience levels x 2 firm provided reward levels). Table 6.11 provides a list of manipulations in each of the six cells. A list of the manipulations can be found in Appendix E. An example of the survey can be found in Appendix F. The IRB approval document can be found in Appendix G.

**Table 6.11**

**Manipulation Check by Cell**

<b>Cell Number</b>	<b>Manipulation</b>
1	Low Firm Demand x Low Experience x No Reward
2	Low Firm Demand x High Experience x No Reward
3	Low Firm Demand x Low Experience x High Reward
4	Low Firm Demand x High Experience x High Reward
5	High Firm Demand x Low Experience x No Reward
6	High Firm Demand x High Experience x No Reward
7	High Firm Demand x Low Experience x High Reward
8	High Firm Demand x High Experience x High Reward

### 6.4.1 Firm Resource Demand Manipulation

I manipulated firm resource demand at two levels in Study 2: low firm demand (the customer is only required to have a low level of participation to complete the shopping experience) versus high firm demand (the customer is required to have a high level of participation to complete the shopping experience). After participants read the scenario they answered two manipulation check questions regarding the level of demand placed upon them. Table 6.12 presents the firm resource demand manipulation items. SPSS 18.0 was used to average the three manipulation check items to form the manipulation check scale. An independent sample t-test was conducted to determine if the participants reported a difference between the low and high firm resource demand manipulations. The results of the firm resource demand manipulations are shown in Table 6.13. The results indicate that the mean for high firm resource demand is significantly larger than the mean for the low firm resource demand manipulation, indicating that the manipulation works.

**Table 6.12**

**Firm Resource Demand Manipulation Check Items**

<b>Variable</b>	<b>Items</b>
<b>Firm Resource Demand</b> <i>r = .87</i>	1. The grocery store demanded a lot from me.
	2. The grocery store requested a lot from me.

**Table 6.13**

**Firm Resource Demand Manipulation Results**

<b>Variable</b>	<b>Mean</b>	<b>t-value (independent sample t-test)</b>
<b>Low Firm Resource Demand</b>	2.11	<i>t = 20.09</i> <i>p &lt; .001</i>
<b>High Firm Resource Demand</b>	4.81	

### 6.4.2 Experience Manipulation

There are two levels of customer experience that were manipulated. In the first manipulation the participant is told that they have never been to the store before. Therefore the participant is not experienced with the procedures of the store. In the second manipulation, the respondent is a frequent customer of the store. In this manipulation the respondent is told that they are a frequent customer who is aware of the store's procedures. After the participants read the scenario, they answered three questions pertaining to their experience with the store. The manipulation checks can be found in Table 6.14. To test for the difference between the two levels of experience, an independent sample t-test was conducted. The results of the t-test can be found in Table 6.15. The result indicates that the mean for high experience (frequent customer) is significantly larger than the mean for the low experience (new customer) manipulation, indicating that the manipulation works.

**Table 6.14**

#### Experience Manipulation Check Items

Variable	Items
Experience $\alpha = .93$	1. I have been to this grocery store before.
	2. This is not my first time visiting this grocery store.
	3. This is my usual grocery store.

**Table 6.15**

#### Experience Manipulation Results

Variable	Mean	t-value (independent sample t-test)
Low Experience (new customer)	2.42	$t = 15.89$ $p < .001$
High Experience (frequent customer)	5.34	

### 6.4.3 Firm Provided Reward Manipulation

Firm provided rewards were manipulated at two levels: no reward (the customer's total bill was comparable to what they would have paid at another store) versus high reward (the customer's total bill was about 15% less than what they would have paid at another store). After the participants read the scenario, they were asked to answer two firm provided reward manipulation check items. Table 6.16 displays the two firm provided reward manipulation check items. An independent sample t-test was conducted to determine if the firm provided reward manipulation check worked. The results of the independent sample t-test can be found in Table 6.17. The result of the independent sample t-test indicates that the mean for high firm provided reward (about 15% savings) is significantly larger than the mean for the no reward manipulation, indicating that the manipulation works.

**Table 6.16**

**Firm Provided Reward Manipulation Check Items**

Variable	Items
<b>Firm Provided Reward</b> <i>r = .92</i>	1. Thinking about this trip, I saved a lot of money.
	2. Thinking about this trip, I received a large discount.

**Table 6.17**

**Firm Provided Reward Manipulation Results**

Variable	Mean	t-value (independent sample t-test)
No Reward	2.48	<i>t = 17.56</i> <i>p &lt; .001</i>
High Reward (about 15% savings)	4.88	

#### 6.4.4 Confounding Check

In order to check for convergent and discriminant validity within and among the manipulations and manipulation checks, I conducted a multivariate analysis of variance (MANOVA). Conducting an MANOVA allows me to test the direct effects of the manipulations on the manipulation checks, as well as, check for any interaction effects that might exist between the different manipulations. A significant main effect between the manipulation and the manipulation check provides evidence of convergent validity for that particular manipulation. If significance is found between other manipulations and manipulation checks, discriminant validity is suspect. Therefore, whenever confounding checks are analyzed, the only “favorable outcome to the construct validity of the manipulations is that of statistically nonsignificant results for all main and interaction effects” (Perdue and Summers 1986, p. 322). The results for the MANOVA can be found in Table 6.18.

In order to determine convergent validity, I analyzed the main effect from the manipulation to the corresponding manipulation check. The results show that the firm resource demand manipulation has a significant direct effect on the firm resource demand manipulation check ( $F = 486.48, p < .001$ ). The experience manipulation also demonstrated a significant direct effect on the experience manipulation check ( $F = 591.75, p < .001$ ). Similarly, the results indicate that the firm provided reward manipulation has a significant direct effect on the firm provided reward manipulation check ( $F = 395.55, p < .001$ ). These results provide evidence of convergent validity of the manipulations.

To determine discriminant validity of the manipulations, the other main effects and the interaction effects were analyzed. In order for the manipulations to be discriminately valid, the other main effects and interaction effects need to be insignificant. For example, the firm

resource demand manipulation needs to have an insignificant main effect on the experience manipulation check. The results found in Table 6.18 indicate that none of the manipulations have a significant main effect on any of the non-corresponding manipulation checks. All two-way and three-way interactions are also insignificant. However, some of the results approached significance. Most notably, the direct effect between the experience manipulation and the firm resource demand manipulation check ( $F = 3.50, p = .062$ ), and the experience/firm reward interaction effect on the firm resource demand manipulation check ( $F = 3.82, p = .052$ ) is of concern.

In order to address the possible confounding effects, the strength of the effects is analyzed by evaluating the effect size of the troublesome relationships (Perdue and Summers 1986). If the magnitude of the effect size is close to zero, then the degree of confounding effects present in the study is not considered serious enough to impair the evaluation of the experiment. The results demonstrate that the direct effect between the experience manipulation and the firm resource demand manipulation check has an effects size close to zero ( $\eta = .012$ ). Similarly, the experience/firm reward interaction effect on the firm resource demand manipulation check has an effect size close to zero ( $\eta = .013$ ). These results indicate that the potential confounding effects are not strong enough to adequately impair the results of the main experiment. Thus, all of the manipulation checks and procedures find support for the manipulations and support for moving forward to evaluate the relationships of interest.

**Table 6.18**

**MANOVA Confounding Check**

<b>Source</b>	<b>Dependent Variable (Manipulation Check)</b>	<b>Type III Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Corrected Model	Firm Demand	533.37	7	76.20	58.98	.000
	Experience	635.03	7	90.72	37.13	.000
	Firm Provided Reward	438.27	7	62.61	46.41	.000
Intercept	Firm Demand	3296.42	1	3296.42	2551.68	.000
	Experience	4174.76	1	4174.76	1708.78	.000
	Firm Provided Reward	3721.44	1	3721.44	2758.74	.000
Firm Demand	<b>Firm Demand</b>	<b>486.48</b>	<b>1</b>	<b>486.48</b>	<b>376.57</b>	<b>.000</b>
	Experience	.30	1	.30	.13	.724
	Firm Provided Reward	.93	1	.93	.69	.406
Experience	Firm Demand	4.53	1	4.53	3.50	.062
	<b>Experience</b>	<b>591.75</b>	<b>1</b>	<b>591.75</b>	<b>242.21</b>	<b>.000</b>
	Firm Provided Reward	4.02	1	4.02	2.98	.085
Reward	Firm Demand	2.13	1	2.13	1.65	.200
	Experience	1.67	1	1.67	.68	.409
	<b>Firm Provided Reward</b>	<b>395.55</b>	<b>1</b>	<b>395.55</b>	<b>293.22</b>	<b>.000</b>
Demand * Experience	Firm Demand	1.19	1	1.19	.93	.337
	Experience	.76	1	.76	.31	.578
	Firm Provided Reward	.42	1	.42	.31	.578
Demand * Reward	Firm Demand	3.52	1	3.52	2.72	.100
	Experience	5.04	1	5.04	2.06	.152
	Firm Provided Reward	2.54	1	2.54	1.88	.171
Experience * Reward	Firm Demand	4.93	1	4.93	3.13	.052
	Experience	2.76	1	2.76	.90	.289
	Firm Provided Reward	3.89	1	3.89	1.59	.090
Demand * Experience * Reward	Firm Demand	4.05	1	4.05	3.13	.078
	Experience	2.20	1	2.20	.90	.344
	Firm Provided Reward	2.14	1	2.14	1.59	.209

**Table 6.18 (Continued)**

**MANOVA Confounding Check**

<b>Source</b>	<b>Dependent Variable (Manipulation Check)</b>	<b>Type III Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Error	Firm Demand	368.18	285	1.29		
	Experience	696.29	285	2.44		
	Firm Provided Reward	384.46	285	1.35		
Total	Firm Demand	4956.50	293			
	Experience	5536.44	293			
	Firm Provided Reward	4759.50	293			
Corrected Model	Firm Demand	901.55	292			
	Experience	1331.33	292			
	Firm Provided Reward	822.72	292			

## 6.5 Perceived Realism of the Scenarios

Participants responded to three questions about the realism of the scenario. Table 6.19 lists the three realism items with the means for each item. Participants responded to the realism questions on a 7-point scale ranging from strongly disagree to strongly agree. All of the means are above 3.5, indicating that participants found the scenarios realistic.

**Table 6.19**

### **Realism Check: Realism Items and Means**

<b>Item</b>	<b>Mean</b>
1. I could see this situation happening to me.	4.69
2. This situation is realistic.	4.85
3. This situation is believable.	4.99

## 6.6 Demand Check

Finally, I confirmed that there were not demand effects. Participants were asked what they thought the purpose of the study was. Participants had three options. The first option was that the study addresses “how customers react to service encounters.” The second option was “I don’t know what the study is about.” The final option was an “other” choice where the participants had to specify what they believe the study is about. A total of 258 (90%) respondents chose one of the first two incorrect choices. The 30 (10%) respondents who chose other also did not specify the true meaning of the study. Therefore, all respondents were kept for the remainder of the study.

## 6.7 Measurement Validity

A confirmatory factor analysis (CFA), using Mplus 6 (Muthén and Muthén 2010), was conducted to assess the reliability and validity of the scale items used in Study 2. The measurement model examined nine variables from the study: perceived effort, perceived fairness, frustration, pleasure, value shopping orientation, shopping enjoyment, positive word-of-mouth, desire to switch, and satisfaction.

A three stage process was used to examine the CFA. The first stage examined items for significance and strength of loadings. If an item was insignificantly loading onto the focal latent factor that item was dropped. Items were also dropped if they were found to be weak (path loading below .60). In the second stage, the model fit was examined to determine how well the observed and theorized covariance structures fit. This is done by examining a number of model fit indices. Finally, the modification indices were examined to see if the model could be improved by correlating error covariances or by removing problematic items.

The CFA was conducted in a number of iterations. All items in the initial model loaded significantly and possessed the appropriate strength for each factor loading. However, the model did display a poor fit. A careful examination of the path loadings and the modification indices revealed that the reverse coded items in the perceived fairness (fair4, fair5, fair6, and fair7) and shopping enjoyment scales (senjoy1) were causing complications. Specifically, the path loadings for these items were below .60, and the modification indices indicated a significant decrease in  $\chi^2$  if these items are removed. Subsequently, five more iterations of the CFA were conducted removing one reverse coded item at a time. Each iteration concluded that these items needed to be removed from the model. Therefore, in the final measurement model, all five of the reverse coded items were removed.

As seen in Table 6.20, all item loadings are positive and statistically significant, indicating unidimensionality and establishing convergent validity (Anderson 1987). Squared multiple correlations (SMC) for all of the observed variables, excluding VSHOP1, are greater than .50. While the SMC for VSHOP1 and PLEAS3 are lower than .50, the overall contribution of these observed variables are high enough to keep them in the model. The composite reliabilities (CR) are above the recommended minimum of .70, and the average variance extracted (AVE) of all latent variables is above the recommended minimum of .50 (Nunnally and Bernstein 1994). Finally, the overall fit of the CFA is satisfactory ( $\chi^2 = 1067.93$ ,  $df = 491$ ,  $p < .001$ ,  $\chi^2/d.f. = 2.17$ , standardized root mean square residual (SRMR) = .04, root mean square error of approximation (RMSEA) = .06, comparative fit index (CFI) = .95).

**Table 6.20**

**Confirmatory Factor Analysis**

<b>Construct</b>	<b>Items</b>	<b>Standardized Loadings</b>	<b>SMC</b>	<b>Cronbach's Alpha</b>	<b>CR</b>	<b>AVE</b>
Perceived Effort	EFF1	.88	.77	.95	.95	.80
	EFF2	.90	.82			
	EFF3	.89	.79			
	EFF4	.89	.79			
	EFF5	.90	.81			
Perceived Fairness	FAIR1	.89	.78	.92	.92	.81
	FAIR2	.96	.92			
	FAIR3	.84	.71			
Frustration	FRUST1	.93	.86	.93	.93	.82
	FRUST2	.84	.71			
	FRUST3	.95	.90			
Pleasure	PLEAS1	.86	.74	.90	.90	.64
	PLEAS2	.91	.83			
	PLEAS3	.67	.44			
	PLEAS4	.72	.52			
	PLEAS5	.82	.67			
Value Shopping Orientation	VSHOP1	.66	.44	.88	.89	.73
	VSHOP2	.94	.88			
	VSHOP3	.93	.86			
Shopping Enjoyment	SENJOY2	.81	.65	.88	.88	.65
	SENJOY3	.91	.82			
	SENJOY4	.79	.63			
	SENJOY5	.71	.50			
Positive Word-of-Mouth	WOM1	.88	.77	.95	.95	.87
	WOM2	.96	.92			
	WOM3	.96	.92			
Desire to Switch	SWITCH1	.97	.94	.98	.98	.94
	SWITCH2	.98	.97			
	SWITCH3	.96	.92			
Satisfaction	SAT1	.94	.89	.98	.98	.89
	SAT2	.95	.90			
	SAT3	.94	.88			
	SAT4	.94	.88			
	SAT5	.95	.90			

The scale means, standard deviations, and correlations are displayed in Table 6.21. Fornell and Larcker's (1981) test is used to evaluate the discriminant validity of the measures. Discriminant validity is found if the amount of variance within the scale is greater than the amount of variance between two variables. This procedure involves three steps. First the AVEs are determined using the standardized factor loadings from the measurement model. Next, the square roots of the AVEs are calculated and placed on the diagonal of the correlation matrix (Table 6.21). Finally, the square roots of the AVEs are compared to the correlations between the variables across both the row and column. If the square roots of the AVEs are greater than each corresponding correlation, discriminant validity is established. The square root of the AVEs proved to be higher than all of the corresponding correlations, demonstrating discriminant validity for each measure.

**Table 6.21**

**Means, Standard Deviations, and Correlations**

<b>Variable</b>	<b>Mean</b>	<b>Std Dev</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>
1. Perceived Effort	3.78	1.44	(0.89)								
2. Perceived Fairness	4.34	1.33	-0.16**	(0.90)							
3. Frustration	3.70	1.29	0.56***	-0.32***	(0.91)						
4. Pleasure	4.13	1.15	-0.46***	0.44***	-0.60***	(0.80)					
5. Shopping Enjoyment	4.06	1.42	-0.12*	-0.02	-0.02	0.02	(0.86)				
6. Value Shopping Orientation	4.68	1.34	0.05	-0.02	0.10	-0.10	0.41***	(0.81)			
7. Positive Word-of-Mouth	4.42	1.28	-0.43***	0.54***	-0.63***	0.72***	-0.01	-0.08	(0.93)		
8. Desire to Switch	4.05	1.51	0.50***	-0.38***	0.69***	-0.69***	0.07	0.10	-0.77***	(0.97)	
9. Satisfaction	4.67	1.45	-0.56***	0.44***	-0.69***	0.72***	-0.03	-0.07	0.83***	-0.78***	(0.94)

N = 293 \* (p<.05); \*\* (p<.01); \*\*\* (p<.001)

Note: square roots of the AVE are on the diagonal.

## 6.8 Common Method Variance

Study 2 incorporates a study design where some of the exogenous and endogenous variables are being collected at the same time, from the same source, using the same instrument. Given these conditions, common method variance (CMV) may inflate the relationships of interest (Podsakoff et al. 2003).

To test the degree to which common method bias might be problematic, four separate models were analyzed and compared. Model 1 is a null model where there are no factors underlying the data. Model 2 is a trait model in which the observed items are loaded onto their corresponding constructs. Model 3 is a method model where the observed items load onto a single factor. Finally, Model 4 is a method and trait model in which the method factor is added to the trait model.

To test whether CMV exists, the four models are analyzed and compared using a chi-square difference test. For CMV to exist the trait model would not have a significant improvement over the method model and the method-trait model would show a significant improvement over the trait model.

In the first test, the one factor model produced a chi-square of 5662.55 with  $d.f. = 495$  (See Method Factor in Table 6.22), and the trait model produced a chi-square of 1067.93 with  $d.f. = 491$ . A chi-square difference test was conducted to test for a significant improvement of fit. Results of the chi-square difference test reveal that the trait model is a significant improvement in fit over the method model ( $\Delta X^2 = 4594.62$ ,  $\Delta d.f. = 4$ ,  $p < .001$ ), suggesting that CMV is not a threat.

The second test, the trait-method model produced a chi-square of 962.50 with  $d.f. = 459$ . A chi-square difference test was conducted to test if the trait-method model produced a

significant improvement over the trait model. Results of the chi-square difference test indicate that the trait- method model is a significant improvement in fit over the trait model ( $\Delta X^2 = 105.43$ ,  $\Delta d.f. = 32$ ,  $p < .001$ ), suggesting that CMV does exist in the data. To test the degree to which CMV is present in the data, I calculated the average variance explained by the method factor. The method factor accounts for only 9% of the variance in the model. Given that Williams, Cote, and Buckley (1989) found that an average of 25% of the variance in the articles they examine was due to CMV, the 9% of CMV does not pose as serious of a threat to the results as has been previously seen in the literature.

**Table 6.22**

**Common Method Variance Results**

	$X^2$	d.f.	$\Delta X^2$	$\Delta d.f.$
Model 1: Null	11659.62	528	-	-
Model 2: Trait	1067.93	491	-	-
Model 3: Method (one-factor)	5662.55	495	-	-
Model 4: Trait Method	962.50	459	-	-
Model 1 vs. Model 3	-	-	5997.07***	30
Model 3 vs. Model 2	-	-	4594.62***	4
Model 2 vs. Model 4	-	-	105.43***	32

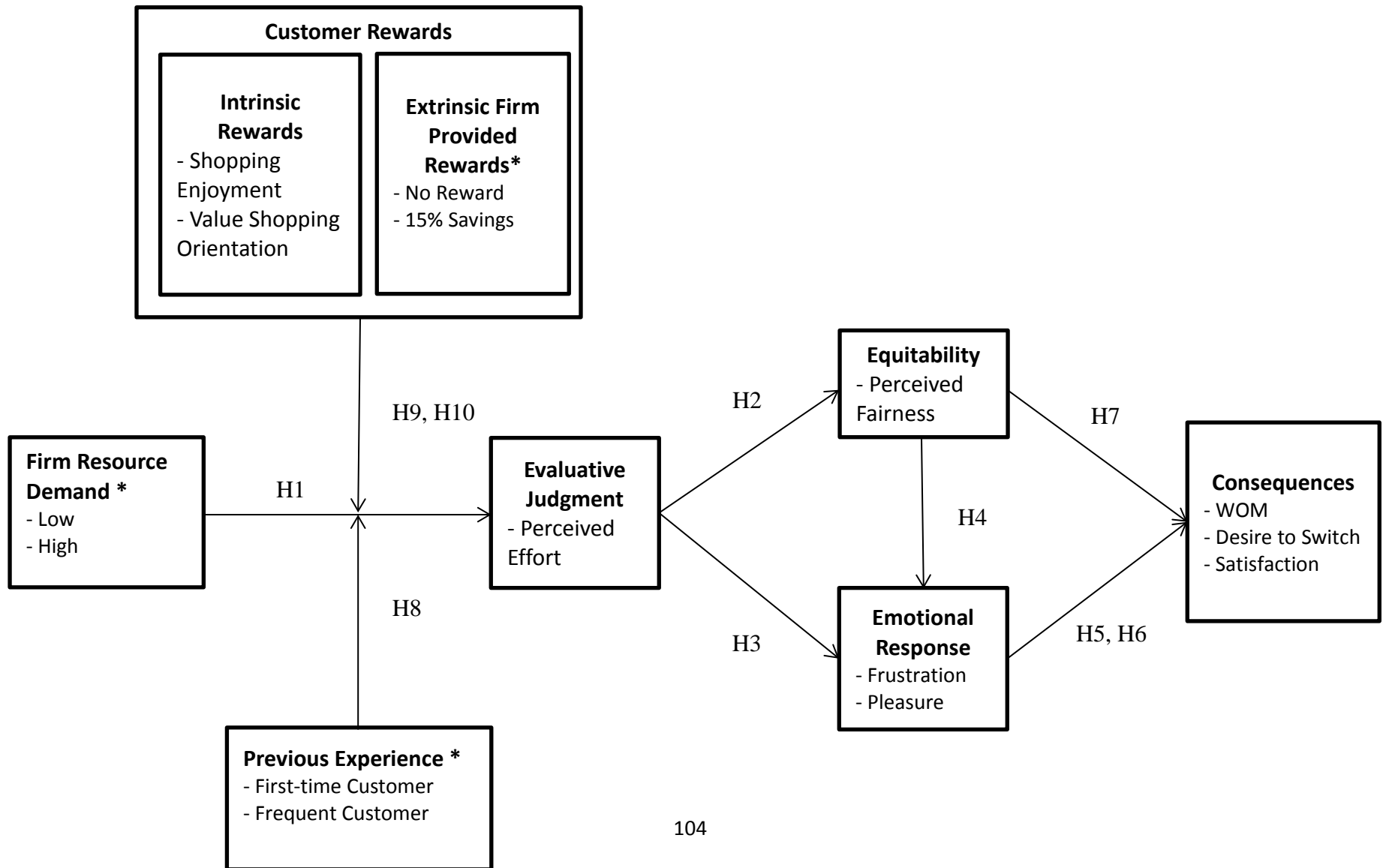
\*\*\*  $p < .001$

**6.9 Test of Hypotheses**

In this section I present the test results of the hypotheses. Figure 6.1 displays the conceptual model, and Table 6.23 presents the relationships tested.

Figure 6.1

A Model of the Tested Hypotheses



\* Manipulated Variable

**Table 6.23**

**Hypotheses Tested**

<b>Hypothesis</b>	<b>Relationship Tested</b>
H1	Firm Resource Demand → Perceived Effort
H2	Perceived Effort → Perceived Fairness
H3a	Perceived Effort → Frustration
H3b	Perceived Effort → Pleasure
H4a	Perceived Fairness → Frustration
H4b	Perceived Fairness → Pleasure
H5a	Frustration → Positive Word-of-Mouth
H5b	Frustration → Satisfaction
H5c	Frustration → Desire to Switch
H6a	Pleasure → Positive Word-of-Mouth
H6b	Pleasure → Satisfaction
H6c	Pleasure → Desire to Switch
H7a	Perceived Fairness → Positive Word-of-Mouth
H7b	Perceived Fairness → Satisfaction
H7c	Perceived Fairness → Desire to Switch
H8	Previous Experience X Firm Resource Demand → Perceived Effort
H9a	Shopping Enjoyment X Firm Resource Demand → Perceived Effort
H9b	Value Shopping Orientation X Firm Resource Demand → Perceived Effort
H10	Firm Provided Reward X Firm Resource Demand → Perceived Effort

**6.9.1 Structural Model Estimation**

The hypotheses were tested using structural equation modeling (SEM) techniques. SEM is the most appropriate technique for this study because it allows the researcher to test all of the variables simultaneously giving a more holistic picture of the relationships hypothesized. Given that one of the major objectives of this dissertation is to analyze moderating effects, Latent Moderated Structural Equation (LMS) analysis is implemented using Mplus 6 (Muthén and Muthén 2010) to test the model (Klein and Moosbrugger 2000). LMS uses the full raw data of indicator variables to estimate interactions. LMS estimators have been shown to be unbiased and asymptotically normally distributed (Schermelleh-Engel, Klein, and Moosbrugger 1998) and includes error terms for each interaction (Satorra 1992).

A two-stage process was implemented to analyze the data. First, a linear effects model was created to assess the hypothesized linear relationships (H1 – H7). The second step estimates the moderation hypotheses (H8 – H10). Tests concerning interactions have a reported high Type I error rate due to the non-normal distribution of interaction terms (Shrout and Bolger 2002). To alleviate this concern, LMS analysis generates interaction terms with means of zero and standard deviations of one (Muthén and Muthén 2010). For all steps, gender and salary were entered as covariates loading onto all endogenous latent variables. The results from the linear effects model are discussed below.

### **6.9.2 Linear Effects**

To begin the analysis I examined the linear effects model. As shown in Table 6.24, firm resource demand had a significant effect on perceived effort (H1:  $\beta = .68$ ;  $p < .001$ ). Perceived effort influenced perceived fairness (H2:  $\beta = -.16$ ;  $p < .01$ ), frustration (H3a:  $\beta = .59$ ;  $p < .001$ ), and pleasure (H3b:  $\beta = -.48$ ;  $p < .001$ ). Perceived fairness displayed a significant effect on frustration (H4a:  $\beta = -.26$ ;  $p < .001$ ) and pleasure (H4b:  $\beta = .41$ ;  $p < .01$ ). Frustration had a significant effect on positive word-of-mouth (H5a:  $\beta = -.23$ ;  $p < .001$ ), satisfaction (H5b:  $\beta = -.38$ ;  $p < .001$ ), and desire to switch (H5c:  $\beta = .42$ ;  $p < .001$ ). Likewise, pleasure significantly influenced positive word-of-mouth (H6a:  $\beta = .60$ ;  $p < .001$ ), satisfaction (H6b:  $\beta = .54$ ;  $p < .001$ ), and desire to switch (H6c:  $\beta = -.51$ ;  $p < .001$ ). Perceived fairness is significantly related to positive word-of-mouth (H7a:  $\beta = .19$ ;  $p < .001$ ); however, it is not related to satisfaction (H7b:  $\beta = .07$ ;  $p = .12$ ) or desire to switch (H7c:  $\beta = .01$ ;  $p = .88$ ).

Although not hypothesized, the direct effects of firm provided reward, previous experience, value shopping orientation, and shopping enjoyment on perceived effort were tested simultaneously with the previously discussed relationships. Results indicated that value

shopping orientation ( $\beta = -.05$ ;  $p = .39$ ), previous experience ( $\beta = .02$ ;  $p = .61$ ), and shopping enjoyment ( $\beta = -.04$ ;  $p = .53$ ) do not significantly influence perceived effort. However, firm provided reward ( $\beta = .13$ ;  $p < .01$ ) is positively related to perceived effort. To test overall model adequacy the fit statistics were analyzed. The fit statistics demonstrate that the model is a good fit to the data (RMSEA = .067, CFI = .92, TLI = .91, SRMR = .082).

### **6.9.3 Interactive Effects**

To test for interaction effects, a second model was analyzed. The interactive effects model incorporated the moderating influences of firm provided reward, previous experience, shopping enjoyment, and value shopping orientation on the relationship between firm resource demand and perceived effort. Previous experience (H8;  $\beta = .05$ ;  $p = .85$ ), shopping enjoyment (H9a;  $\beta = .11$ ;  $p = .28$ ), and firm provided rewards (H10;  $\beta = -.17$ ;  $p = .48$ ) did not influence the relationship between firm provided rewards and perceived effort. Value shopping orientation (H9b;  $\beta = .37$ ;  $p < .05$ ) did have a significant interactive effect on the relationship between firm provided reward and perceived effort. However, the significant influence was not in the hypothesized direction.

Since the linear effects model is nested within the interaction model, the two are compared using the -2 log-likelihood (-2 LL) statistic and the Akaike Information Criterion (AIC). The -2 log-likelihood statistic is chi-square distributed. Models can be compared using the -2 log-likelihood statistic by calculating the change in -2 log-likelihood and the change in degrees of freedom. Using the results of the change in -2 log-likelihood and change in degrees of freedom, a p-value can be calculated to determine if the hypothesized model is a significant improvement over the linear effects model (Marsh, Wen and Hau 2004). The AIC is a robust statistic for comparing models because fit worsens as parameters are added; therefore,

researchers are penalized for trying to over-fit models. Lower values of AIC indicate better model fit.

The AIC and -2 log-likelihood statistics provide conflicting results. Examination of the results revealed that the AIC for the hypothesized model (Model 2 in Table 6.25) was lower (AIC = 25295.72) than the AIC for the linear effects model (Model 1 in Table 6.25; AIC = 25301.95). However, the results of the change in -2 log-likelihood test reveal that the hypothesized model was not a significant improvement over the linear effects model ( $\Delta -2 LL = 7.12$ ,  $\Delta df = 4$ ,  $p = .12$ ). Looking at both statistics there is not enough conclusive evidence to support the hypothesized model over the linear effects model. Therefore, an alternative model will be suggested and analyzed.

#### **6.9.4 Alternative Model Comparison**

When conducting SEM analysis it is important to test your model against potential alternative models. Since there exist many potential alternative models, theory must be the driver behind which alternative models to pursue. However, for comparison purposes, all models must be nested, which means that at least one of the models has to be a subset of the other model (Tabachnick and Fidell 2007). Therefore, the only alternative model I considered for analysis is one that is theoretically sound and in which the previous linear effects and interaction effects models are nested.

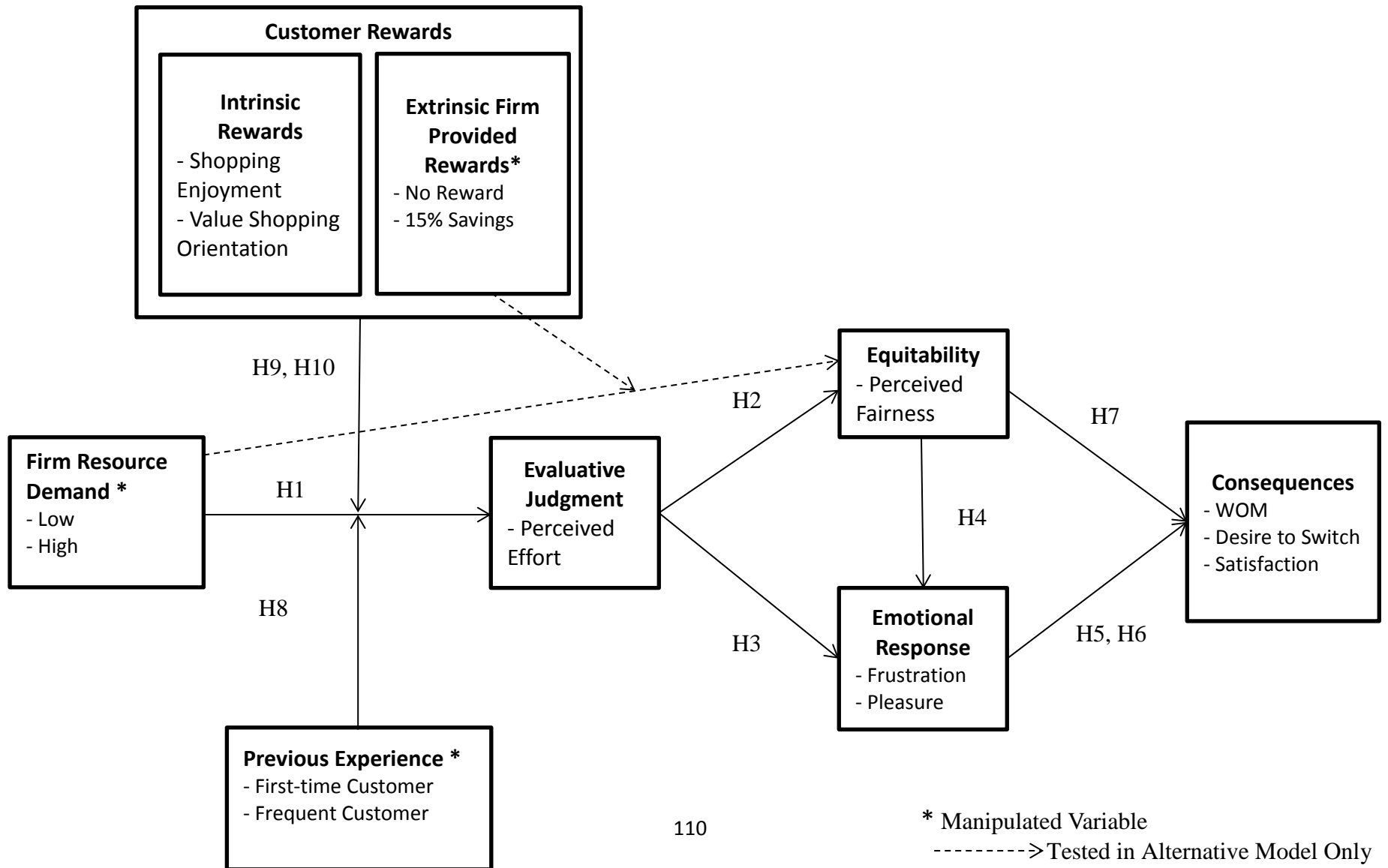
#### ***The Moderating Role of Firm Provided Rewards***

According to social exchange theory (Blau 1964), customer behavior can be captured by economic and social exchanges. Economic exchange refers to the formal transaction contract between the customer and service provider (Rousseau and Parks 1993). Social exchange involves the connection with the firm (Stanford 2008). The guiding principal behind social

exchange theory is that the outcome of a social exchange is derived from the reward being worth the cost put into the exchange. In social exchange theory, cost is seen as the discomfort an individual encounters during the exchange process (McDonnell, Strom-Gottfried, Burton, and Yaffe 2006). The rewards that an individual receives can be either economic or symbolic (McDonnell et al. 2006).

In a service context, the rewards that an individual receives can be thought of as the savings that the customer receives while participating in a service encounter. The cost that a customer experiences in a service context is the demand firms place upon them. According to social exchange theory, an equitability comparison is made between the cost and reward interaction (McDonnell et al. 2006). That is, a customer will judge an outcome as fair when the reward for participating in the service encounter outweighs the outputs. Given the above argument, the alternative model will test the moderating role of firm provided reward on the relationship between firm resource demand and perceived fairness. It is expected that when a firm provided reward is present, the relationship between firm resource demand and perceived fairness will be enhanced. The alternative model is displayed in Figure 6.2.

**Figure 6.2**  
**Alternative Model**



### 6.9.5 Alternative Model Linear Effects

To test the alternative model against the hypothesized model, a two-stage process was implemented to analyze the data. First, a linear effects model was created to assess the hypothesized linear relationships (H1 – H7). The second step estimates the moderation hypotheses (H8 – H10) and the newly added moderation path. For all steps, gender and salary were entered as covariates loading onto all endogenous latent variables.

To begin the analysis, I examined the linear effects model. As shown in Table 6.24, firm resource demand had a significant effect on perceived effort (H1:  $\beta = .58; p < .001$ ). Perceived effort did not have a significant influence on perceived fairness (H2:  $\beta = -.01; p = .90$ ). However, perceived effort did display a significant direct effect on frustration (H3a:  $\beta = .58; p < .001$ ) and pleasure (H3b:  $\beta = -.47; p < .001$ ). Perceived fairness displayed a significant effect on frustration (H4a:  $\beta = -.27; p < .001$ ) and pleasure (H4b:  $\beta = .42; p < .01$ ). Frustration had a significant effect on positive word-of-mouth (H5a:  $\beta = -.23; p < .001$ ), satisfaction (H5b:  $\beta = -.38; p < .001$ ), and desire to switch (H5c:  $\beta = .42; p < .001$ ). Likewise, pleasure significantly influenced positive word-of-mouth (H6a:  $\beta = .60; p < .001$ ), satisfaction (H6b:  $\beta = .54; p < .001$ ), and desire to switch (H6c:  $\beta = -.51; p < .001$ ). Perceived fairness is significantly related to positive word-of-mouth (H7a:  $\beta = .20; p < .001$ ); however, it did not have a direct effect on satisfaction (H7b:  $\beta = .07; p = .12$ ) or desire to switch (H7c:  $\beta = .01; p = .88$ ).

As in the previous analysis, the direct effects of firm provided reward, previous experience, value shopping orientation, and shopping enjoyment on perceived effort were tested simultaneously with the previously discussed relationships. Additionally, the direct effects of firm provided reward and firm resource demand on perceived fairness were analyzed. Results

indicated that value shopping orientation ( $\beta = -.05; p = .39$ ), previous experience ( $\beta = .02; p = .61$ ), and shopping enjoyment ( $\beta = -.04; p = .53$ ) do not significantly influence perceived effort. However, firm provided reward ( $\beta = .13; p < .01$ ) is positively related to perceived effort. Additionally, firm resource demand ( $\beta = -.31; p < .001$ ) and firm provided reward ( $\beta = .33; p < .001$ ) significantly influenced perceived fairness. To test overall model adequacy, the fit statistics were analyzed. The fit statistics demonstrate that the model is a good fit to the data (RMSEA = .066, CFI = .92, TLI = .91, SRMR = .070).

#### **6.9.6 Alternative Model Interactive Effects**

To test for interaction effects a second model was analyzed. The interactive effects model incorporated the moderating influences of firm provided reward, previous experience, shopping enjoyment, and value shopping orientation on the relationship between firm resource demand and perceived effort. Previous experience (H8;  $\beta = .05; p = .85$ ), shopping enjoyment (H9a;  $\beta = .11; p = .28$ ), and firm provided rewards (H10;  $\beta = -.17; p = .48$ ) did not influence the relationship between firm provided rewards and perceived effort. Value shopping orientation (H9b;  $\beta = .37; p < .05$ ) did have a significant interactive effect on the relationship between firm provided reward and perceived effort. However, the significant influence was not in the hypothesized direction. Furthermore, the non-hypothesized firm provided reward moderation of the relationship between firm resource demand and perceived fairness was analyzed. Firm provided reward did have a significant enhancing influence on the relationship between firm resource demand and perceived fairness ( $\beta = .63; p < .001$ ).

To test for a significant difference between the interactive effects alternative model and all other models, the change in -2 log-likelihood (-2 LL) statistic and the Akaike Information Criterion (AIC) is calculated and compared. Examination of the results reveals that the AIC for

the alternative moderation model (Model 4 in Table 6.25) is lower (AIC = 25,207.07) than the AIC for the alternative linear effects model (Model A in Table 6.25; AIC = 25253.49). The results of the change in -2 log-likelihood test reveals that the alternative moderation model is a significant improvement over the alternative linear effects model ( $\Delta -2 LL = 28.23$ ,  $\Delta df = 5$ ,  $p < .001$ ). To ensure that the alternative moderation model is superior to the hypothesized model, the -2 log-likelihood and AIC between these models were compared. The alternative moderation models AIC is lower than the AIC for the hypothesized model ( $25207.07 < 25295.72$ ) supporting the alternative moderation model. The results of the change in -2 log-likelihood test reveals that the alternative moderation model is a significant improvement over the hypothesized model ( $\Delta -2 LL = 47.33$ ,  $\Delta df = 3$ ,  $p < .001$ ). Given these results, support or rejection of the hypotheses will be based off of the alternative model.

Table 6.24

Hypotheses Tested and Results

Relationship Tested	Hypothesized Linear Effects Model	Hypothesized Interaction Effects Model	Alternative Linear Effects Model	Alternative Interaction Effects Model
H1: Firm Resource Demand → Perceived Effort	.68***	-	.58***	-
H2: Perceived Effort → Perceived Fairness	-.16**	-	-.01	-
H3a: Perceived Effort → Frustration	.59***	-	.58***	-
H3b: Perceived Effort → Pleasure	-.48***	-	-.47***	-
H4a: Perceived Fairness → Frustration	-.26**	-	-.27**	-
H4b: Perceived Fairness → Pleasure	.41**	-	.42**	-
H5a: Frustration → Positive Word-of-Mouth	-.23***	-	-.23***	-
H5b: Frustration → Satisfaction	-.38***	-	-.38***	-
H5c: Frustration → Desire to Switch	.42***	-	.42***	-
H6a: Pleasure → Positive Word-of-Mouth	.60***	-	.60***	-
H6b: Pleasure → Satisfaction	.54***	-	.54***	-
H6c: Pleasure → Desire to Switch	-.51***	-	-.51***	-
H7a: Perceived Fairness → Positive Word-of-Mouth	.19***	-	.20***	-
H7b: Perceived Fairness → Satisfaction	.07	-	.07	-
H7c: Perceived Fairness → Desire to Switch	.01	-	.01	-
H8: Previous Experience X Firm Resource Demand → Perceived Effort	-	.05	-	.05
H9a: Shopping Enjoyment X Firm Resource Demand → Perceived Effort	-	.11	-	.11
H9b: Value Shopping Orientation X Firm Resource Demand → Perceived Effort	-	.37*	-	.37*
H10: Firm Provided Reward X Firm Resource Demand → Perceived Effort	-	-.17	-	-.17
ALT1: Firm Provided Reward X Firm Resource Demand → Perceived Fairness	-	-	-	.63***

$n = 293$ ; \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

**Table 6.25****Model Comparison Results**

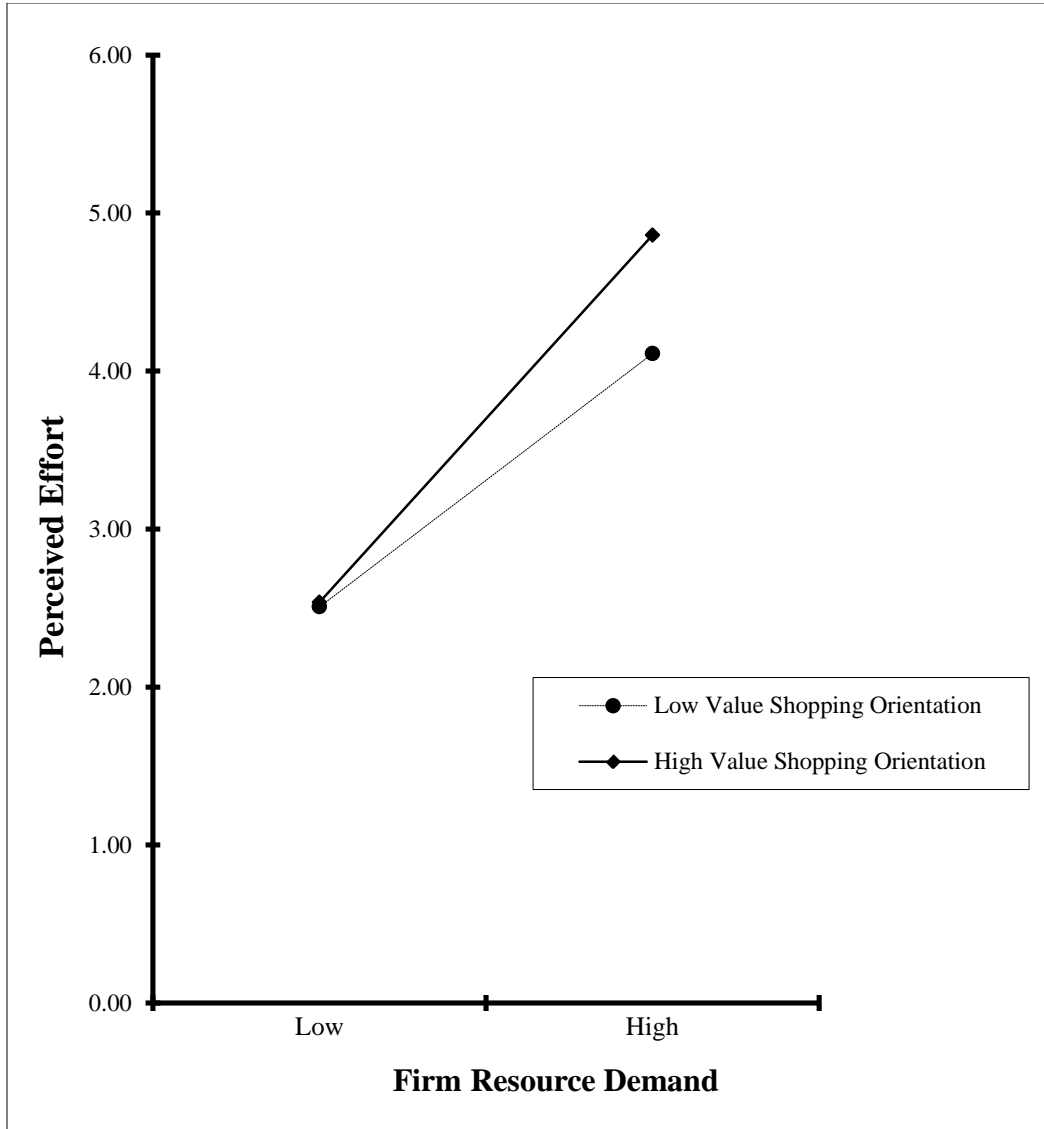
	<b>AIC</b>	<b>-2Loglikelihood</b>	<b>-2 LL Difference</b>	<b>Δ df</b>	<b>p-value</b>
Model 1: Hypothesized Linear Effects Model	25,301.95	-12,497.98	-	-	-
Model 2: Hypothesized Interaction Model	25,295.72	-12,490.86	-	-	-
Model 3: Alternative Linear Effects Model	25,253.49	-12,471.76	-	-	-
Model 4: Alternative Interaction Model	25,207.07	-12,443.53	-	-	-
Model 1 vs. Model 2	-	-	7.12	4	$p = .12$
Model 3 vs. Model 4	-	-	28.23	5	$p < .001$
Model 4 vs. Model 2	-	-	47.33	3	$p < .001$

Table 6.26 displays the results of the hypotheses test. The implications of the results will be discussed in the final chapter. Overall, the data and analyses support twelve of the fifteen direct effect hypotheses. None of the interaction hypotheses were supported. However, a value shopping orientation was found to significantly impact the relationship between firm resource demand and perceived effort, although this interaction was found in the opposite direction than previously hypothesized. Also, the alternative model found a previously non-hypothesized interaction effect. Specifically, firm provided reward was found to significantly mitigate the relationship between firm resource demand and perceived fairness. These interactions are looked at further below.

To interpret the nature of the two significant interactions, I plotted the interactions using the procedures recommended by Aiken and West (1991). Using the information from the alternative moderation model, I plotted the relationship between firm resource demand and perceived effort that corresponds to the low and high levels of value shopping orientation. The results using firm resource demand as the independent variable and perceived effort as the dependent variable appear in Figure 6.3. As the results indicate, the positive slope for firm resource demand was steepest for respondents who reported high levels of value shopping orientation.

Figure 6.3

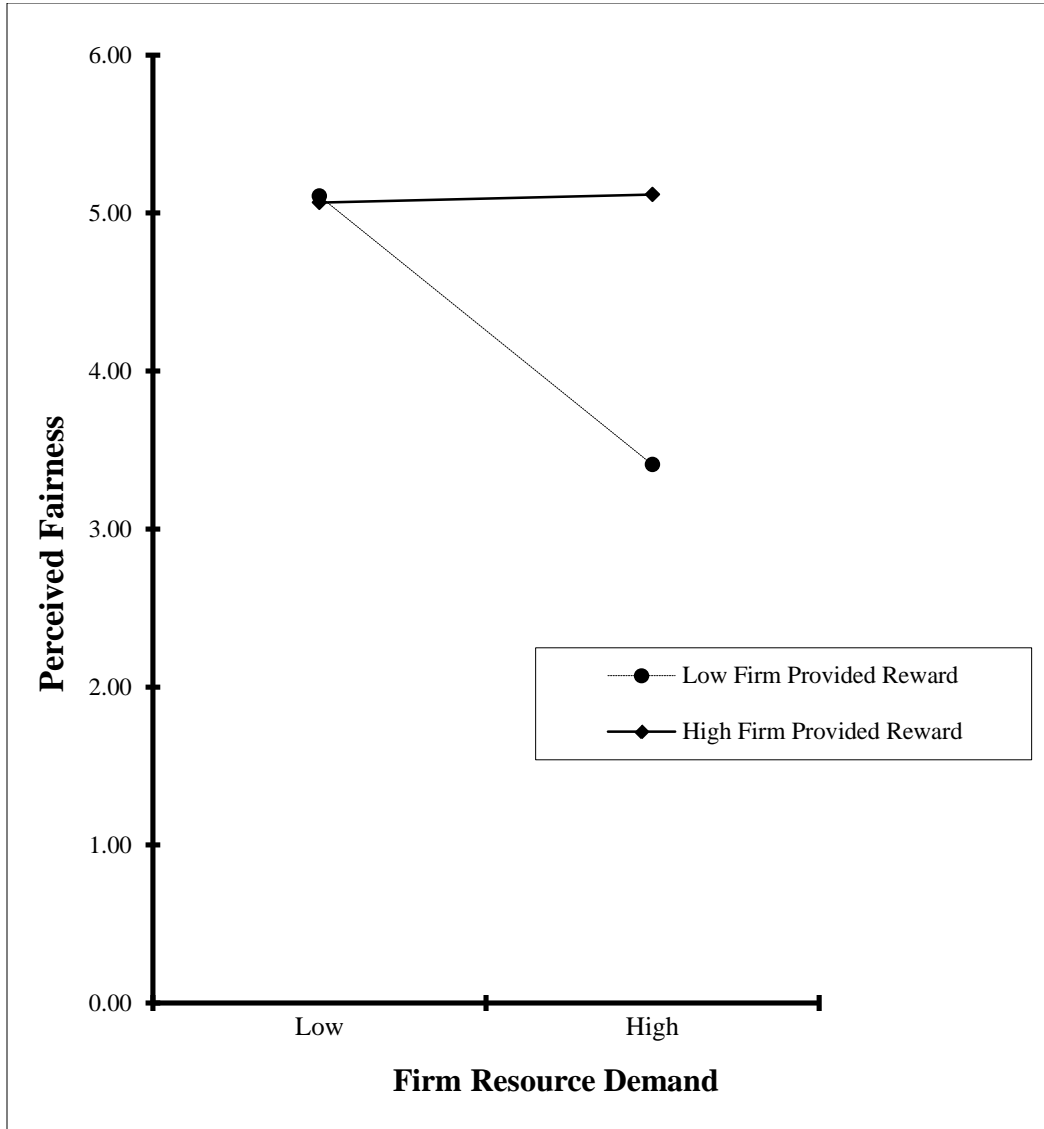
**Interaction Effect of Value Shopping Orientation on the Relationship between Firm Resource Demand and Perceived Effort**



Next, I plotted the relationship of firm resource demand and perceived fairness that corresponds to low and high levels of firm provided resource. The results using firm resource demand as the independent variables and perceived fairness as the dependent variable appears in Figure 6.4. As can be seen from Figure 6.4, the negative slope for firm resource demand was steepest for respondents who received low levels of firm provided rewards and flat for respondents who received high levels for firm provided rewards.

**Figure 6.4**

**Interaction Effect of Firm Provided Reward on the Relationship between Firm Resource Demand and Perceived Fairness**



## 6.11 The Role of Perceived Effort

The alternative model provided some unexpected results; mainly, perceived efforts insignificant direct effect on perceived frustration was surprising. This result leads to the question: Does perceived effort add value to the model? The main concern is that perceived effort is a proxy for the firm resource demand manipulation check and should be removed from the model. A three-stage process was undergone to determine if perceived effort adds value to the model. First, discriminant validity tests were employed to see if perceived effort is distinct from the firm resource demand manipulation check. The discriminant validity test did provide support for these being two separate constructs. Second, an indirect test was performed on the alternative linear effects model in Mplus to see if firm resource demand has a significant indirect effect on pleasure and frustration. The results of the indirect effects test revealed that firm resource demand does have a significant indirect effect on pleasure (indirect effect =  $-.14$ ,  $p < .01$ ) and frustration through perceived effort (indirect effect =  $.23$ ,  $p < .001$ ). Finally, I compared the alternative model to a new model that constrained all paths in which perceived effort is involved to zero. The models were compared using the change in  $-2$  log-likelihood ( $-2$  LL) statistic. The results indicate that the model with perceived effort unconstrained is better than the model with perceived effort constrained to zero ( $\Delta -2$  LL =  $83.94$ ,  $\Delta df = 8$ ,  $p < .001$ ). In combination, these results provide support for the inclusion of perceived effort in the model.

## 6.12 Overview

The primary purpose of Study 2 was to test the proposed hypotheses. Hypotheses were developed and tested using a scenario-based experiment. I present a summary of the hypothesis testing results for Study 2 in Table 6.26. The results show support for many of the hypothesized relationship. The results show the important role that firm resource demand plays in evaluating

the service experience and how specific intrinsic and extrinsic rewards can dampen or enhance this experience. Chapter 7 will provide more detail to the importance of these findings, as well as, present the implications and limitations of this research. Finally Chapter 7 will lay out some future research ideas that can be explored.

**Table 6.26**

**Hypotheses Tested and Support**

<b>Hypothesis</b>	<b>Relationship Tested</b>	<b>Supported?</b>
H1	Firm Resource Demand → Perceived Effort	Yes
H2	Perceived Effort → Perceived Fairness	No
H3a	Perceived Effort → Frustration	Yes
H3b	Perceived Effort → Pleasure	Yes
H4a	Perceived Fairness → Frustration	Yes
H4b	Perceived Fairness → Pleasure	Yes
H5a	Frustration → Positive Word-of-Mouth	Yes
H5b	Frustration → Satisfaction	Yes
H5c	Frustration → Desire to Switch	Yes
H6a	Pleasure → Positive Word-of-Mouth	Yes
H6b	Pleasure → Satisfaction	Yes
H6c	Pleasure → Desire to Switch	Yes
H7a	Perceived Fairness → Positive Word-of-Mouth	Yes
H7b	Perceived Fairness → Satisfaction	No
H7c	Perceived Fairness → Desire to Switch	No
H8	Previous Experience X Firm Resource Demand → Perceived Effort	No
H9a	Shopping Enjoyment X Firm Resource Demand → Perceived Effort	No
H9b	Value Shopping Orientation X Firm Resource Demand → Perceived Effort	No
H10	Firm Provided Reward X Firm Resource Demand → Perceived Effort	No

## **CHAPTER SEVEN**

### **DISCUSSION, IMPLICATIONS, LIMITATIONS, AND FUTURE RESEARCH**

#### **7.0 Introduction**

In this chapter the findings of both studies along with the implications, limitations, and areas of future research for this dissertation are discussed. First I discuss the findings of Study 1 and Study 2. Next I discuss the theoretical implications which discuss the findings in relation to previous research and theory. Then I discuss the managerial implications which discuss ways in which the findings of this dissertation can influence managerial decisions. Finally, I address some of the potential limitations of this dissertation and the future research possibilities.

#### **7.1 Study One Discussion**

The goal of this research was to determine how customers view different levels of firm resource demand and how firm resource demands influence the value the customer perceives from participating in the service encounter. There are very few studies that examine the value derived from participating in service encounters that require customers to contribute different levels of their own resources. Therefore, the first stage of the dissertation (Study 1) was an exploratory, qualitative research phase. The goals of Study 1 were to gain a better understanding of the resources required in different service encounters and to explore the customers' reactions to different levels of firm resource demand.

In Study 1, a critical incident technique (CIT) was conducted to explore the different types of resources that firms require of customers and how the different levels of resources contribute to positive and negative service encounters. The results of the CIT study indicate

that there are three main categories of resources used during service encounters: customers' knowledge, customers' time, and customers' financial resources. Each of these categories had a number of distinct subcategories that contribute to both positive and negative joint and self-service encounters that contributed to both positive and negative service encounters.

The results of Study 1 provide a deeper understanding about how firm resource demand influences the value customers perceive. This study provides support for the proposition that customers perceive their labor as a cost and that this cost can be offset by both intrinsic and extrinsic rewards. For example, Study 1 suggests that intrinsic rewards, such as the sense of satisfaction a customer receives for completing the service, can minimize the cost of labor to the customer which increases value. Results also suggest that the cost of labor can be offset by the available resources customers bring to a service exchange. For example, the more knowledge the customer has about the product, the lower the perceived cost of their labor. Finally, the CIT study gives evidence for how the tradeoff in value and labor can lead to a positive or negative service experience. For example, if the customer does not perceive a fair value, then negative experiences are likely to occur. Conversely, if the customer does perceive a fair value, then a positive experience is likely to occur.

The results of Study 1 allowed me to see the implications that firm resource demand has on the value the customer ascertains from the service encounter. Study 1 provided the foundation for the development of the conceptual model. The results were also beneficial in creating the scenarios used in Study 2.

## 7.2 Study Two Discussion

In this section I discuss the findings from the hypothesis testing in this study. Study 2 looks at customers' reactions to the demand firms place on them. Additionally, the role of firm provided rewards, previous experience, and the customers' intrinsic motivations are examined. I discuss the hypotheses in order, and then I discuss some of the interesting findings that were not originally hypothesized but found in additional analyses.

In Hypothesis 1, I proposed that firm resource demand would have a main effect on perceived effort. The analysis provided support for this hypothesis. This suggests that when firms ask customers to co-produce, the customers are aware that their level of participation is increasing above what is normally asked of them during a service encounter. Previous researchers have theorized that differing levels of co-production could influence the effort customers perceive (Bitner et al. 1997). This result provides support for the previously theorized link.

Hypothesis 2 proposed a direct effect of perceived effort on perceived fairness. The findings show no direct relationship between perceived effort and perceived fairness. This result is counter to the work on workplace fairness which has provided support for the relationship between effort and fairness (e.g. Janssen 2001). Fairness perceptions are driven by social comparisons customers make when evaluating outcomes (Van Den Bos et al. 1997). In a workplace setting, comparisons based on effort are easier to ascertain due to the proximity of the comparison group and skill awareness. In a retail setting you are not completely aware of the other customers' skill sets and knowledge. Hence in retail settings comparisons are made based on available information that customers obtain during the service experience. If the customer does not possess enough information, then a proxy comparison will be made. For example,

customers could base their comparison on similar service providers instead of the outcomes of other customers. Since it is improbable for customers to make comparisons based on others' effort, it is likely that customers seek an additional route to make fairness judgments.

Hypothesis 3 stated that perceived effort will influence both frustration and pleasure. The analysis confirmed this prediction. Specifically, perceived effort was found to have a significant positive influence on frustration. This finding is in line with Strauss and colleagues' (2005) view that frustration is elicited by the postponement of a reward. The extra effort put forth by customers during a service encounter postpones the reward of finishing the encounter. In contrast, perceived effort displayed a significant negative effect on pleasure. This finding is similar to Baker and colleagues' (1992) work that found pleasure to be a response to environmental stimuli. Thus, it appears that both frustration and pleasure are responses to customers' perceived effort levels.

Following affect control theory, I hypothesize that perceived fairness will impact frustration and pleasure (Hypothesis 4). I find that perceived fairness does negatively impact frustration while positively influencing pleasure. This finding supports prior research that shows perceived fairness influences both positive and negative emotions (e.g. Rupp and Spencer 2006; Weiss et al. 1999; Krehbiel and Cropanzano 2000).

In Hypothesis 5 and Hypothesis 6, I predicted that a customer's emotional response (frustration and pleasure) would influence various outcome variables of interest to service providers (positive word-of-mouth, satisfaction, and desire to switch). I find that frustration does positively impact desire to switch while negatively impacting positive word-of-mouth and satisfaction. In contrast, pleasure was found to have a negative impact on desire to switch while displaying a positive impact on positive word-of-mouth and satisfaction. These findings are in

line with Funches' (2007) work that found negative emotions lead to complaint behavior. In addition, this finding is similar to Westbrook's (1987) work which demonstrates positive and negative emotions influence word-of-mouth transmission.

Following fairness heuristic theory, I hypothesized that perceived fairness would impact positive word-of-mouth, satisfaction, and desire to switch. I find that perceived fairness did positively influence positive word-of-mouth. This result is consistent with the work of Blodgett and colleagues (1993; 1997) that finds when individuals view a process as fair they are more likely to engage in positive word-of-mouth. While previous research finds a significant relationship between perceived fairness, desire to switch, and satisfaction (Anton et al. 2007), I did not find support for the proposed relationships.

Following resource allocation theory, I hypothesized that the customer's previous experience with the service provider would moderate the relationship between firm resource demand and perceived effort (Hypothesis 8). I did not find a significant moderating effect of previous experience between firm resource demand and perceived effort. One potential reason that the hypothesis might not have worked is due to the manipulation of previous experience. According to resource allocation theory, as individuals become familiar with a task and acquire the necessary skills, the process of the task becomes automated, thus reducing the demand placed upon them. While the participants reported differing levels of experience, it is possible that since they did not actively learn the process, due to the experiment being scenario-based, their perception of demand stayed high resulting in the insignificant result.

In Hypothesis 9, I predicted that shopping enjoyment and value shopping orientation would moderate the relationship between firm resource demand and perceived effort. The analysis produced a result suggesting that value shopping orientation significantly moderates the

relationship between firm resource demand and perceived effort. However, this interaction effect is not in the hypothesized direction. More specifically, value shopping orientation enhanced the relationship between firm resource demand and perceived effort instead of mitigating the relationship. One potential reason for the opposite directional effect is that individuals who are high value shopping oriented may feel more controlled when firm resource demands increase. This sense of control will act as an amplifier to the work that has to be done (Deci and Ryan 2000), thus increasing the level of perceived effort. In contrast to value shopping orientation, I did not find that shopping enjoyment significantly moderated the relationship between firm provided rewards and perceived effort.

Hypothesis 10 stated that firm provided reward will enhance the relationship between firm resource demand and perceived effort. The results did not support this hypothesis. One potential reason for this is that firm resource demand outweighs the reward received when examining effort. That is, the reward received does not have any psychological advantages or disadvantages that would make the work an individual perceives as being less. For example, a customer who washes his/her car in a self-service car wash and saves ten dollars would likely report a similar perceived effort level if they had not saved the ten dollars. It is more plausible that firm provided reward would be used as an evaluative tool to say if participating in a particular service encounter was worth the extra firm resource demand.

In addition to analyzing the hypothesized relationships, I also examined the moderating impact of firm provided reward on the relationship between firm resource demand and perceived fairness. Following social exchange theory, I expected that firm provided reward would enhance

the relationship between firm resource demand and perceived fairness. The analysis did support the relationship suggesting that firms can curb the effects of increasing the demand on customers by offering discounts.

### **7.3 Theoretical Implications**

This research makes several contributions to existing literature. First, this dissertation contributes to the co-production literature by developing a framework for understanding how customers respond to differing levels of firm resource demand. The framework originated from the qualitative study where respondents reported satisfied and dissatisfied co-produced experiences. To my knowledge, no research in marketing examines how customers respond to differing levels of firm resource demand (co-production).

The second area of contribution is in the value creation literature stream. Understanding how value is formed and interpreted has been a key issue for marketers. The traditional view of value is one in which value is produced by the firm and consumed by the customer (Hunt 1976). However, a new view of value is being presented where value is co-created through interactions with the firm (Prahalad and Ramaswamy 2004). Gronroos and Voima (2012) argue that value should be looked at from the customers' perspectives. Thus, in this dissertation, the value of the service encounter is explored by examining the relationship between firm resource demand, effort, fairness, emotional responses, and consequences (positive word-of-mouth, desire to switch, and satisfaction).

The third area of contribution is in the customer participation and co-production literature streams. The customer participation literature is growing, and many articles discuss the importance of participation. However, researchers focus mostly on the positive outcomes of customer participation and ignore the potential negative outcomes. This literature on customer

participation to date has viewed customer participation as a win-win for both the customer and the firm. We know from the customer participation literature stream that as the firm shifts more production responsibilities onto the customer, the firm gains value. This increase in value for the firm comes in the form of decreased production and labor cost (Bendapudi and Leone 2003; Mills and Moberg 1982). However, there is not a clear understanding of how customers view co-production and if co-production always results in value creation for customers. This dissertation examines the value tradeoff by exploring different levels of firm resource demand. This allows us to better understand how customers react to different levels of co-production and to see how customers derive value from co-producing with a firm. Specifically, this study shows that in cases of high firm resource demand (high co-production), the customers perceive a loss of value (in the form of increased effort and frustration, and decreased fairness and pleasure). Further, when the customers perceive a loss of value they are more likely to not be satisfied with their experience and engage in harmful behaviors towards the firm (such as switching).

However, these results need to be examined within the current context. In the context of this paper, customer participation procedures were shown to have a potential negative effect. However, previous research has found that customers are satisfied with customer participation procedures when the procedures satisfy a need and work as expected (Meuter et al. 2000). One potential reason for these conflicting results is the type of service individuals are participating in and the customers' reasons for participating in the services. For example, in a self-service gas station context, the customer is asked to do more by the firm. Even though customers are asked to do more in this context, self-serving gas stations remain widely used and popular. The reason for this might be the offsetting of different rewards. In this example the customer's extra effort (i.e. pumping their own gas) could potentially be outweighed by the time saved by pumping their

own gas. Therefore, the positive or negative outcomes related to the use of customer participation strategies are dependent on a number of boundary conditions.

This research also builds on the customer resources literature stream. Specifically, this study answers a call for research by Arnould et al. (2006), in which the authors note a need for a better understanding of the interplay between customer and firm resources. This research answers Arnould et al.'s (2006) call for research by examining how the integration of customer resources into a service encounter affects the customer's evaluation of that encounter.

The results from Study 2 provide interesting insights into how customers evaluate the fairness of the service exchange. Fairness has been viewed as essential to the exchange relationship (Bettencourt and Brown 1997; Organ 1990). In the dissertation, I hypothesized that perceived effort has a significant direct effect on fairness. Interestingly, this direct effect was not found when taking the effect that firm resource demand has on perceived fairness into account. The significant effect of firm resource demand on perceived fairness is in line with the work produced by Janssen (2000; 2001), who found a significant direct effect of job demands on perceived fairness. To my knowledge, the relationship between firm resource demand and perceived fairness has not been examined in the marketing literature. Examining this relationship broadens our understanding of how firms can influence customers' fairness perceptions during exchange relationship.

Fairness heuristic theory states that when individuals view a process as fair they will be satisfied with that process. Further, previous research has found a significant direct effect between perceived fairness and satisfaction (e.g. Maxham 2001; Seiders and Berry 1998), between perceived fairness and positive word-of-mouth (Blodgett et al.1993), and between perceived fairness and desire to switch (Anton et al. 2007). Thus, theory and previous studies

would suggest that, when exploring the differing levels of firm resource demand, there would be a significant relationship between fairness and all of the aforementioned outcome variables. In line with previous research, a significant relationship was found between perceived fairness and positive word-of-mouth. However, perceived fairness did not have a significant influence on satisfaction or desire to switch. Therefore, while previous research shows that perceived fairness is a significant predictor of satisfaction and desire to switch (Anton et al. 2007, Blodgett et al. 1997), perceived fairness does not appear to influence these outcomes when examining different levels of firm resource demand.

A couple of important boundary conditions were found to influence participants' reactions to different levels of firm resource demand. First, value shopping orientation was found to moderate the relationship between firm resource demand and perceived effort. Self-determination theory posits that when individuals feel that they are being controlled, any work associated with the controlled task will be amplified (Deci and Ryan 2000). In line with self-determination theory, the results display that individuals who report high levels of value shopping orientation perceive more effort than individuals who report low levels of value shopping orientation. Conversely, at low levels of firm resource demand there was not a difference between the two levels of value shopping orientation. One explanation for this interaction is that individuals who enjoy shopping for discounts find that their shopping experience is interrupted when the firm demands a high level of participation from their customers. This interruption leads customers to be acutely aware of the work they are asked to perform during the service encounter. This extends self-determination theory into a previously unexplored area of marketing; it also helps build our knowledge about how customers' intrinsic motivations might hurt a firm that places a high level of resource demand on its customers.

Finally, firm provided resource was found to moderate the relationship between firm resource demand and perceived fairness. Social exchange theory shows us that individuals make equitability comparisons based on a cost/reward interaction (McDonnell et al. 2006). In agreement with social exchange theory, the results suggest that a customer's fairness evaluation of the overall outcome of the encounter was made by evaluating the amount of work demanded of them and the discount received for their participation. Specifically, when the participants received a discount in the high firm resource demand condition, they evaluated the service encounter as being fairer than when they did not receive a discount. This builds an understanding of how high firm resource demand effects can be managed by the firm offering rewards for customer participation.

#### **7.4 Managerial Implications**

The findings of this dissertation offer several implications for managers. First, the overall conclusion from this dissertation is that customers are not passive sheep who happily agree to perform high levels of work for the firm. It is shown that if a company increases the amount of work on customers without offering something in return, the customers will sense a loss of value and are likely to be less satisfied, less likely to spread positive word-of-mouth, and more likely to switch service providers. This shows how important it is for firms to seek advice from their customers and test market any new customer participation procedures. Actively talking with customers and pre-testing their procedures could save the firm the money of implementing costly new equipment and procedures.

Firms can help their chances of a successful customer participation program by offering the customer incentives. This research shows that customers who receive a discount are more likely to view the service encounter as fair versus customers who do not receive a discount.

Firms should make sure that they offer the customer a reward for their participation. This dissertation examines how a monetary savings can work to increase fairness perceptions; however, other non-monetary rewards might also increase fairness perceptions. When possible, firms should attempt to work with customers to develop customer rewards that make the extra demand placed upon the customers worth the effort.

This research also provides a better understanding as to when a firm might not want to implement customer participation procedures. In Study 2, it is shown that customers who are highly value shopping oriented will perceive higher levels of effort when there is a high level of firm resource demand. Therefore services that center on shoppers who enjoy bargain hunting should not implement customer participation procedures. The key for retailers is to make sure that their level of resource demands does not exceed other retailers in which they share a categorization. For example, retailers like Gilt that offer customers discounted prices on luxury products should make sure that their procedures match the procedures of other luxury discount stores.

Firms also need to be aware of the negative consequences of frustrating their customers. When customers perceive putting forth a high level of effort they are more likely to be frustrated with the process. This frustration leads the customers to be less satisfied with their experience and more likely to switch service providers. Thus, firms who have customer participation procedures that frustrate customers should focus on finding the areas of frustration and address the problem.

Firms should consider the impact that fairness perceptions have on their company. Customers' fairness perceptions appear to be a main driver of customers' intent to spread positive-word-of mouth. Word-of-mouth communication has been shown to be a major

predictor of company growth (Reichheld 2003) and customers' future intentions (Zeithaml et al. 1993). Therefore, firms should only implement customer participation procedures that result in the customers viewing the outcomes of the service encounter as fair.

Finally, firms should understand how the customers' perceptions of effort influences the customers' experiences. Perceived effort was shown to significantly impact both frustration and pleasure. Firms who have customer participation strategies need to find ways to minimize customers' perceptions of effort. This could be done in a number of ways. For example, firms that use self-service procedures can increase signage around the store and at checkout kiosks. This should reduce the amount of cognitive effort put forth by the customer. Firms can also ensure that the store layout is easy to follow and intuitive.

## **7.5 Limitations and Future Research**

As with all research, the studies presented in this dissertation do have limitations; however, these limitations provide avenues for future research. First, Study 2 only looks at the effect of firm resource demand in a grocery store context. Because Study 2 implements a scenario-based experiment to test the hypotheses, the context has to be limited. While grocery store shopping provides a good context for studying this phenomenon for the first time, a different context might provide different results. For example, when customers shop for hedonic products (unlike the utilitarian shopping in the grocery store context), the level of effort involved might be less than customers that shop for utilitarian products. In a utilitarian context, you also have to finish the service (which is one reason this dissertation uses a utilitarian context); however, in a hedonic shopping experience customers can abandon the service if they feel overwhelmed by the demands placed upon them. Therefore, future research should examine the effects of firm resource demand in a hedonic shopping experience scenario.

Secondly, while the use of scenario-based experiments is widely used in academic research, more meaningful results would be found using real-life situations. It would be beneficial to authenticate the findings with a field experiment. A field experiment would allow researchers to test these relationships over time and with “real” customers. This would provide results that are more externally valid.

There are many avenues for future research on the topic of firm resource demand. First, research should look into more levels of firm resource demand. This dissertation only examines firm resource demand from a low/high level. There are the potential differential effects that can exist in the middle. Particularly interesting would be the examination of possible curvilinear effects that arise from different levels of firm resource demand.

This dissertation looked at the multiple boundary conditions. However, only two of the moderators were found to have an influence in the model. Future research should consider new boundary conditions that might mitigate or enhance the effects of firm resource demand. For example, researchers might look to regulatory focus theory (Higgins 1997) to see how individuals who are promotion versus prevention focused differ in their evaluations of firms that employ different levels of firm resource demand.

Researchers could also examine how the use of different resources affects the customers’ experiences. While Study 2 of this dissertation focused on the additive effects of multiple resources being engaged, Study 1 found that the use of different resources can lead to both positive and negative experience. Future research should consider examining the effects of using different levels of the resources found in Study 1 while holding the others constant.

Future research should also examine what happens when a customer cannot match the resource demand required of them. For instance, researchers can explore how customers respond

if they do not have the knowledge to complete the service encounter. Understanding the effects of draining customer resources would provide firms with information about the possible effects of complicated procedures.

Researchers should reexamine the relationship between previous experience and firm resource demand. In the management literature, experience has been shown to mitigate effort (Kanfer et al. 1994). It is possible in this paper that manipulating previous experience did not convince respondents that they could adequately navigate the service encounter with a lower degree of effort. Future research should examine this relationship in a longitudinal study where participants have to actually complete the task. As the respondents acquire the skills associated with the task, the demands placed on them is likely to be reduced (Kanfer and Ackerman 1989).

Finally, the role of learning is not explored in this study. Future research could look at how customers learn participation procedures. Specifically, it would be interesting see what makes customers want to learn complicated procedures. Encouraging customers to learn new procedures could mitigate the negative effects of increasing resource demand.

## REFERENCES

- Agustin, Clara and Jagkip Singh (2005), "Curvilinear Effects of Consumer Loyalty Determinants in Relational Exchanges," *Journal of Marketing Research*, 42 (1), 96-108.
- Aiken, Leona S. and Stephen G. West (1991), "*Multiple Regression: Testing and Interpreting Interactions*," Newbury Park CA: Sage Publications.
- Anderson, Eugene W. (1998), "Customer Satisfaction and Word of Mouth," *Journal of Service Research*, 1 (1), 5-17.
- Antón, Carmen, Carmen Camarero and Mirtha Carrero (2007), "Analyzing Firms' Failures as Determinants of Consumer Switching Intentions: The Effect of Moderating Factors," *European Journal of Marketing*, 41 (1), 135-58.
- Arnold, M.B. (1960), *Emotion and Personality, Vol. 1 Psychological Aspects*, New York: Columbia University Press.
- Arnold, Mark J. and Kristy E. Reynolds (2003), "Hedonic Shopping Motivations," *Journal of Retailing*, 79 (2), 77-95.
- Arnould, Eric J., Linda L. Price, and Avinash Malshe (2006), "Toward Cultural Resource-Based Theory of the Customer," in *The Service Dominant Logic of Marketing*, R. F. Lusch and S. L. Vargo, eds. New York: M. E. Sharpe, 91-104.
- Babin, Barry J. and William R. Darden (1995), "Consumer Self-Regulation in a Retail Environment," *Journal of Retailing*, 71(1), 47-70.
- Babin, Barry J., William R. Darden and Mitch Griffin (1994), "Work and/or Fun: Measuring Hedonic and Utilitarian Shopping Value," *Journal of Consumer Research*, 20 (4), 644-56.
- Bagozzi, Richard P. (1975), "Marketing as Exchange," *Journal of Marketing*, 39, 32-39.
- Baker, Julie, Michael Levy and Dhruv Grewal (1992), "An Experimental Approach to Making Retail Store Environmental Decisions," *Journal of Retailing*, 68 (4), 445-60.
- Bateson, John E.G. (1985), "Self-Service Consumer: An Exploratory Study," *Journal of Retailing*, 61 (3), 49-76.

- Beatty, Sharon E. and M. Elizabeth Ferrell (1998), "Impulse Buying: Modeling Its Precursors," *Journal of Retailing*, 74 (2), 169-91.
- Bendapudi, Neeli and Robert P. Leone (2003), "Psychological Implications of Customer Participation in Co-Production," *Journal of Marketing*, 67, 14-28.
- Berkowitz, Leonard (1962), *Aggression. A Social Psychological Analysis*. New York: McGraw-Hill.
- Bettencourt, Lance A and Stephen W. Brown (1997), "Contact Employees: Relationships Among Workplace Fairness, Job Satisfaction and Prosocial Service Behavior," *Journal of Retailing*, 73 (1), 39-61.
- Bitner, Mary Jo, Bernard H. Booms, and Mary Tetreault (1990), "The Service Encounter: Diagnosing Favorable and Unfavorable Incidents," *Journal of Marketing*, 54 (1), 71-84.
- Bitner, Mary Jo, William T. Faranda, Amy R. Hubbert, and Valarie A. Zeithaml (1997), "Customer Contributions and Roles in Service Delivery," *International Journal of Service Industry Management*, 8 (3), 193-205.
- Bitner, Mary Jo and Amy R Hubbert (1994), "Encounter Satisfaction versus Overall Satisfaction Versus Quality," *Service Quality: New Directions in Theory and Practice*, CA: Sage Publication, Rust RT and Oliver RL, editors, 72-94.
- Blau, Peter M. (1964), *Exchange and Power in Social Life*, New York, New York: Wiley.
- Blodgett, Jeffrey G., Donna J. Hill and Stephen S. Tax (1997), "The Effects of Distributive, Procedural, and Interactional Justice on Postcomplaint Behavior," *Journal of Retailing*, 73, 185-210.
- Blodgett, Jeffrey G., Donald H. Granbois and Rockney G. Walters (1993), "The Effects of Perceived Justice on Complaints' Negative Word-of-Mouth Behavior and Repatronage Intentions," *Journal of Retailing*, 69, 399-428.
- Bowers, Michael R., Charles L. Martin, and Alan Luker (1990), "Trading Places: Employees as Customers, Customers as Employees," *The Journal of Services Marketing*, 4 (2), 55-69.
- Brown, Tom J., Thomas E. Barry, Peter A. Dacin, and Richard F. Gunst (2005), "Spreading the Word: Investigating Antecedents of Consumers' Positive Word-of-Mouth Intentions and Behaviors in a Retailing Context," *Journal of the Academy of Marketing Science*, 33 (2), 123-38.
- Bougie, Roger, Rik Pieters, and Marcel Zeelenberg (2003), "Angry Customers Don't Come Back, They Get Back: The Experience and Behavioral Implications of Anger and Dissatisfaction in Services," *Journal of the Academy of Marketing Science*, 31 (4), 377-93.

- Chebat, Jean-Charles and Witold Slusarczyk (2005), "How Emotions Mediate the Effects of Perceived Justice on Loyalty in Service Recovery Situations: An Empirical Study," *Journal of Business Research*, 58, 664-73.
- Clemmer, Elizabeth E. and Benjamin Schneider (1996), "Fair Service," in *Advances in Services Marketing Management*, Teresa A Swartz, David Bowen and Stephen W. Brown, Greenwich, CT: JAI Press Inc., 109-126.
- Cova, Bernard and Daniele Dalli (2009), "Working consumers: the next step in marketing theory?" *Marketing Theory*, 9, 315-39.
- Cox, Anthony D., Dena Cox and Ronald D. Anderson (2005), "Reassessing the Pleasure of Store Shopping," *Journal of Business Research*, 58 (3), 250-59.
- Czepiel, John A. (1990), "Service Encounters and Service Relationships: Implications for Research," *Journal of Business Research*, 20 (1), 13-21.
- Dawson, Scott, Peter H. Bloch and Nancy M. Ridgway (1990), "Shopping Motives, Emotional States, and Retail Outcomes," *Journal of Retailing*, 66, 408-27.
- Deci, Edward L. and Richard M. Ryan (2000), "The 'What' and 'Why' of Goal Pursuits: Human Needs and the Self-Determination of Behavior," *Psychological Inquiry*, 11 (4), 227-68.
- Deci, Edward L. and Richard M. Ryan (1985), "The General Causality Orientations Scale: Self-Determination in Personality," *Journal of Research in Personality*, 19 (2), 109-34.
- Denison D.C. (2003), "No Paper Clip Spared IN Bain's Hunt for Profits," *The Boston Globe*, 12.
- Diekmann, Kristina A, Zoe I. Barsness, and Harris Sondak (2004), "Uncertainty, Fairness Perceptions, and Job Satisfaction: A Field Study," *Social Justice Research*, 17 (3), 237-55.
- Dong, Beibei, Kenneth R. Evans and Shaoming Zou (2008), "The Effects of Customer Participation in Co-Created Service Recovery," *Journal of the Academy Marketing Science*, 36, 123-37.
- Echeverri, Per and Per Skalen (2011), "Co-creation and Co-destruction: A Practice-Theory Based Study of Interactive Value Formation," 11 (3), 351-73.
- Etgar, Michael (2008), "A Descriptive Model of the Consumer Co-Production Process," *Journal of the Academy of Marketing Science*, 36, 97-108.
- Fitzsimmons, James A. (1985), "Consumer Participation and Productivity in Service Operations," *Interfaces*, 15 (3), 60-67.

- Fornell, Claes and David F. Larcker (1991), "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error," *Journal of Marketing Research*, 18 (1), 39-50.
- Foxall, Gordon R. and M. Mirella Yani-de-Soriano (2005), "Situational Influences on Consumers' Attitudes and Behavior," *Journal of Business Research*, 58 (4), 518-25.
- Funches, Venessa (2007), "Consumer Anger, Attributions, and Negative Behaviors: An Examination within a Service Setting," University of Alabama.
- Gagne, Marylene and Edward L. Deci (2005), "Self-Determination Theory and Work Motivation," *Journal of Organizational Behavior*, 26, 331-62.
- Gremler, Dwayne D. (2004), "The Critical Incident Technique in Service Research," *Journal of Service Research*, 7 (1), 65-89.
- Gremler, Dwayne D. and Kevin P. Gwinner (2008), "Rapport-Building Behaviors Used by Retail Employees," *Journal of Retailing*, 84 (3), 308-24.
- Gronroos, Christian and Paivi Voima (2012), "Critical Service Logic: Making Sense of Value Creation and Co-creation," *Journal of the Academy of Marketing Science*, published online.
- Guiry, Michael, Anne W. Magi and Richard J. Lutz (2006), "Defining and Measuring Recreational Shopper Identity," *Journal of the Academy of Marketing Science*, 34 (1), 74-83.
- Hair, Joseph F., William C. Black, Barry J. Babin, Rolph E. Anderson, and Ronald L. Tatham (2006), *Multivariate Data Analysis* (6<sup>th</sup> ed.), Upper Saddle River, NJ: Pearson Education Inc.
- Heise, D.R. (1979), *Understanding Events: Affect and the Construction of Social Action*, New York: Cambridge University Press.
- Holloway, Betsy Bugg and Sharon E. Beatty (2008), "Satisfiers and Dissatisfiers in the Online Environment," *Journal of Services Research*, 10 (4), 347-64.
- Hui, Michael K. and John E.G. Bateson (1991), "Perceived Control and the Effects of Crowding and Consumer Choice on the Service Experience," *Journal of Consumer Research*, 18(2), 174-84.
- Hunt, Shelby D. (1976), "The Nature and Scope of Marketing," *Journal of Marketing*, 40 (3), 17-28.

- Janssen, Onne (2001), "Fairness Perceptions as a Moderator in the Curvilinear Relationships between Job Demands, Job Performance, and Job Satisfaction," *Academy of Management Journal*, 44 (5), 1039-50.
- Janssen, Onne (2000), "Job Demands, Perceptions of Effort-Reward Fairness and Innovative Work Behavior," *Journal of Occupational and Organizational Psychology*, 73 (3), 287-302.
- Jones, Michael A., Kristy E. Reynolds, David L. Mothersbaugh, and Sharon E. Beatty (2007), "The Positive and Negative Effects of Switching Costs on Relational Outcomes," *Journal of Business Research*, 59 (9), 974-81.
- Kanfer, Ruth, Phillip L. Ackerman, Todd C. Murtha, Brad Dugdale, and Leissa Nelson (1994), "Goal Setting, Conditions of Practice, and Task Performance: A Resource Allocation Perspective," *Journal of Applied Psychology*, 79 (6), 826-35.
- Kanfer, Ruth and Phillip L. Ackerman (1989), "Motivation and Cognitive Abilities: An Integrative/Aptitude-Treatment Interaction Approach to Skill Acquisition," *Journal of Applied Psychology*, 74 (4), 657-90.
- Keaveney, Susan M. (1995), "Customer Switching Behavior in Service Industries: An Exploratory Study," *Journal of Marketing*, 59 (2), 71-82.
- Klein, Andreas and Helfried Moosbrugger (2000), "Maximum Likelihood Estimation of Latent Interaction Effects with the LMS Method," *Psychometrika*, 65 (4), 457-74.
- Kelley, Scott W., James H. Donnelly Jr., and Steven J. Skinner (1990), "Customer Participation in Service Production and Delivery," *Journal of Retailing*, 66 (3), 315-35.
- Kivetz, Ran and Itamar Simonson (2003), "The Idiosyncratic Fit Heuristic: Effort Advantage as a Determinant of Consumer Response to Loyalty Programs," *Journal of Marketing Research*, 40 (4), 454-67.
- Kolbe, R.H. and M.S. Burnett (1991), "Content-Analysis Research: An Examination of Applications and Directives for Improving Research Reliability and Objectivity," *Journal of Consumer Research*, 18 (2), 243-51.
- Krehbiel, Patricia J. and Russell Cropanzano (2000), "Procedural Justice, Outcome Favorability Emotion," *Social Justice Research*, 13 (4), 339-60.
- Lazarus, Richard S. (1991), "Progress on a Cognitive-Motivational-Relational Theory of Emotion," *American Psychologist*, 46 (8), 819-34.
- Lazarus, Richard S. (1968), "Emotions and Adaptation: Conceptual and Empirical Relations," in W.J. Arnold ed., *Nebraska Symposium of Motivation*, Lincoln, NE: University of Nebraska Press, 175-266.

- Legnick-Hall, Cynthia A. (1996), "Customer Contributions to Quality: A Different View of the Customer-Oriented Firm," *The Academy of Management Review*, 21 (3), 791-824.
- Lincoln, Yvonn S. and Egon Guba (1985), *Naturalistic Inquiry*, Beverly Hills: Sage Publications.
- Lovelock, Christopher H. and Robert F. Young (1979), "Look to Consumers to Increase Productivity," *Harvard Business Review*, 57, 168-78.
- MacKinnon, N.J (1994), *Symbolic Interactionism as Affect Control*, Albany, NY: State University of New York Press.
- Marsh, Herbert W., Zhonglin Wen, and Kit-Tai Hau (2004), "Structural Equation Models of Latent Interactions: Evaluation of Alternative Estimation Strategies and Indicator Construction," *Psychological Methods*, 9 (3), 275-300.
- McDonnell, James, Kimberly J. Strom-Gottfried, David L. Burton, and Joanne Yaffe (2006), "Behaviorism, Social Learning, and Exchange Theory," in S.P. Robbins, P. Chatterjee, and E.R. Canda (eds.), *Contemporary Human Behavior Theory: A Critical Perspective for Social Work*, Pearson, 349-85.
- Maxham, James G. (2001), "Service recovery's influence on consumer satisfaction, positive word-of-mouth, and purchase intentions," *Journal of Business Research*, 54 (1), 11-24.
- Messick, David M. and Keith P. Sentis (1983), "Fairness, Preference, and Fairness Biases," in *Equity Theory: Psychological and Sociological Perspectives*, David M. Messick and Karen S. Cook, eds. New York: Praeger Publishers, 61-94.
- Meuter, Matthew L. and Mary Jo Bitner (1998), "Self-Service Technologies: Extending Service Frameworks and Identifying Issues for Research," in *AMA Winter Educators' Conference*, Dhruv Grewal and Connie Pechmann, eds. Chicago: American Marketing Association, 12-19.
- Meuter, Matthew L., Amy L. Ostrom, Robert I. Roundtree and Mary Jo Bitner (2000) "Self-Service Technologies: Understanding Customer Satisfaction with Technology-Based Service Encounters," *Journal of Marketing*, 64 (3), 50-64.
- Meuter, Matthew L., Mary Jo Bitner, Amy L. Ostrom, and Stephen W. Brown (2005), "Choosing among Alternative Service Delivery Modes: An Investigation of Customer Trial of Self-Service Technologies," *Journal of Marketing*, 69 (2), 61-83.
- Mills, Peter K. and Dennis J. Moberg (1982), "Perspectives on the Technology of Service Operations," *The Academy of Management Review*, 7 (3), 467-78.
- Mills, Peter K., Richard B. Chase, and Newton Margulies (1983), "Motivating the Client/Employee System as a Service Production Strategy," *The Academy of Management Review*, 8 (2), 301-10.

- Moeller, Sabine (2008), "Customer Integration – A Key to an Implementation Perspective of Service Provision," *Journal of Service Research*, 11 (2), 197-210.
- Mohr, Lois A. and Mary Jo Bitner (1995), "The Role of Employee Effort in Satisfaction with Service Transactions," *Journal of Business Research*, 32, 239-52.
- Moller, Arlen C, Richard M. Ryan, and Edward L. Deci (2006), "Self-Determination Theory and Public Policy: Improving the Quality of Consumer Decision without Using Coercion," *Journal of Public Policy in Marketing*, 25 (1), 104-16.
- Muller, Thomas E., David K. Tse and Ramesh Venkatasubramaniam (1991), "Post-Consumption Emotions: Exploring Their Emergence and Determinants," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 4, 13-20.
- Muthén, Linda K. and Bengt O. Muthén (2010), *Mplus User's Guide*, Sixth Edition, Los Angeles, CA.
- Nunnally, Jum C. and Ira H. Bernstein (1994), *Psychometric Theory*, 3<sup>rd</sup> ed. New York: McGraw-Hill.
- Organ, Dennis W. (1990), "The Motivational Basis of Organizational Citizenship Behavior," in: Barry M. Staw and L.L. Cummings eds., *Research in Organizational Behavior*, Vol. 12, Greenwich, CT: JAI Press, 43-72.
- Payne, Adrian F., Kaj Storbacka, and Pennie Frow (2008), "Managing the Co-Creation of Value," *Journal of the Academy of Marketing Science*, 36, 83-96.
- Perdue, Barbara C. and John O. Summers (1986), "Checking the Success of Manipulations in Marketing Experiments," *Journal of Marketing Research*, 23 (4), 317-26.
- Perreault, William D. and Laurence E. Leigh (1989), "Reliability of Nominal Based on Qualitative Judgments," *Journal of Marketing Research*, 26 (2), 135-48.
- Peters, H. Lawrence, Edward J. O'Connor, and Cathy J. Rudolf (1980), "The Behavioral and Affective Consequences of Performance-Relevant Situational Variables," *Organizational Behavior and Human Performance*, 25 (1), 79-96.
- Peterson, Robert A. (1995), "Relationship Marketing and the Consumer," *Journal of the Academy of Marketing Science*, 23 (4), 278-81.
- Ple, Loic and Ruben Chumpitaz Caceres (2010), "Not Always Co-Creation: Introducing Interactional Co-Destruction of Value in Service-Dominant Logic," *Journal of Services Marketing*, 24 (6), 430-37.

- Podsakoff, Philip M., Scott B. MacKenzie, Jeong-Yeon Lee, and Nuthan P. Podsakoff (2003), "Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies," *Journal of Applied Psychology*, 88 (5), 879-903.
- Prahalad, C.K. and Venkat Ramaswamy (2004), "Co-creating Unique Value with Customers," *Strategy & Leadership*, 32 (3), 4-9.
- Reicheld, Frederick (2003), "The One Number You Need to Grow," *Harvard Business Review*, 81 (12), 46-55.
- Reicheld, Frederick and W. Earl Sasser Jr. (1990), "Zero Defections: Quality Comes to Services," *Harvard Business Review*, 68 (5), 105.
- Reynolds, Kristy E. and Sharon E. Beatty (1999), "Customer Benefits and Company Consequences of Customer-Salesperson Relationships in Retailing," *Journal of Retailing*, 75 (1), 11-32.
- Roseman, Ira J., Martin S. Spindel, and Paul E. Jose (1990), "Appraisals of Emotion-Eliciting Events: Testing a Theory of Discrete Emotions," *Journal of Personality and Social Psychology*, 59 (5), 899-915.
- Roseman, Ira J. (1984), "Cognitive Determinants of Emotions: A Structural Theory," in P. Shaver ed., *Review of Personality and Social Psychology*, Vol. 5, Beverly Hills, CA: Sage, 11-36.
- Roseman, Ira J. (1979), *Cognitive Aspects of Emotion and Emotional Behavior*. Paper presented at the 87<sup>th</sup> Annual Convention of the American Psychological Association, New York.
- Rousseau, Denise M. and J. McLean Parks (1993), "The Contracts of Individuals and Organizations," in L.L Cummings and B.M. Straw (eds.) *Research in Organizational Behavior*, Vol. 15, JAI Press, Greenwich, CT, 1-43.
- Rupp, Deborah E. and Sharmin Spencer (2006), "When Customers Lash Out: The Effects of Customer Interactional Injustice on Emotional Labor and the Mediating Role of Discrete Emotions," *Journal of Applied Psychology*, 91 (4), 971-78.
- Ryan, Richard M. and Edward L. Deci (2000), "Self-determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being," *American Psychologist*, 55 (1), 68-78.
- Satorra, Albert (1992), "Asymptotic Robust Inferences in the Analysis of Mean and Covariance Structures," *Sociological Methodology*, 22, 249-78.

- Schermelleh-Engel, Karin, Andreas Klein, and Helfried Moosbrugger (1998), "Estimating Nonlinear Effects Using a Latent Moderated Structural Equations Approach," in Randall E. Schumacker and George A. Marcoulides, eds., *Interaction and Nonlinear Effects in Structural Equation Modeling*, Mahwah, NJ: Lawrence Erlbaum Associates Publishers, 203-38.
- Scherer, K.R. (1988), "Criteria for Emotion-Antecedent Appraisal: A Review," in V. Hamilton, G.H. Bower, & N.H. Frijda eds., *Cognitive Perspectives on Emotion and Motivation*, Norwell, MA: Kluwer Academic, 89-126.
- Seiders, Kathleen, and Leonard L. Berry (1998), "Service fairness: What it is and why it matters." *The Academy of Management Executive*, 12 (2), 8-20.
- Shrout, Patrick E. and Niall Bolger (2002), "Mediation in Experimental and Nonexperimental Studies: New Procedures and Recommendations," *Psychological Methods*, 7 (4), 433-45.
- Song, Jae H. and Carl R. Adams (1993), "Differentiation through Customer Involvement in Production or Delivery," *Journal of Consumer Marketing*, 10 (2), 4-12.
- Stanford, Laura (2008), "Social Exchange Theories," in L.A. Baxter and D.O. Braithwaite (eds.), *Engaging Theories in Interpersonal Communication: Multiple Perspectives*, Sage Publication, Thousand Oaks, CA: 377-89.
- Strauss, Bernd, Maxie Schmidt and Andreas Schoeler (2005), "Customer Frustration in Loyalty Programs," *International Journal of Service Industry Management*, 16 (3), 229-52.
- Van den Bos, Kees, Allan E. Lind, Riel Wilke Vermunt, and A.M. Henk (1997), "How Do I Judge My Outcome When I Do Not Know the Outcomes of Others? The Psychology of the Fair Process Effect," *Journal of Personality and Social Psychology*, 72 (5), 1034-046.
- VanKenhove, Patrick, Kristof DeWulf and Walter VanWaterschoot (1999), "The Impact of Task Definition on Store-Attribute Salience and Store Choice," *Journal of Retailing*, 75 (1), 125-37.
- Van Yperen, Nico W. (1996), "Communal Orientation and the Burnout Syndrome Among Nurses: A Replication and Extension," *Journal of Applied Psychology*, 26, 338-54.
- Vargo, Stephen L. and Robert F. Lusch (2004a), "Evolving to a New Dominant Logic for Marketing," *Journal of Marketing*, 68 (1), 1-17.
- Vargo, Stephen L. and Robert F. Lusch (2004b), "The Four Service Marketing Myths," *Journal of Service Research*, 6 (4), 324-35.
- Vargo, Stephen L. and Robert F. Lusch (2008), "Service-Dominant Logic: Continuing the Evolution," *Journal of the Academy of Marketing Science*, 36, 1-10.

- Verhoef, Peter C., Philip Hans Franses, and Janny C. Hoekstra (2002), "The Effect of Relational Constructs on Customer Referrals and Number of Services Purchased from a Multiservice Provider: Does Age of Relationship Matter?" *Journal of the Academy of Marketing Science*, 30 (3), 202-16.
- Wallendorf, Melanie and Eric J. Arnould (1991), "'We Gather Together': Consumption Rituals of Thanksgiving Day," *Journal of Consumer Research*, 18 (June), 13-31.
- Weiner, Bernard (1985), "An Attributional Theory of Achievement Motivation and Emotion," *Psychological Review*, 92 (4), 548-73.
- Weiss, Howard M., Kathleen Suckow and Russell Cropanzano (1999), "Effects of Justice Conditions on Discrete Emotions," *Journal Applied Psychology*, 84 (5), 786-94.
- Westbrook, Robert A. (1987), "Product/ Consumption-Based Affective Responses and Postpurchase Processes," *Journal of Marketing Research*, 24 (3), 258-270.
- Williams, Larry J., Joseph A. Cote, and M. Ronald Buckley (1989), "Lack of Method Variance in Self-Reported Affect and Perceptions in Work: Reality or Artifact?" *Journal of Applied Psychology*, 74 (3), 462-68.
- Yilmaz, Cengiz and Shelby D. Hunt (2001), "Salesperson Cooperation: The Influence of Relational, Task, Organizational, and Personal Factors," *Journal of the Academy of Marketing Science*, 29 (4), 335-57.
- Zeelenberg, Marcel and Rik Pieters (2006), "Feeling is for Doing: A Pragmatic Approach to the Study of Emotions in Economic Behavior," in D. De Cremer, M Zeelenberg and K. Murnighan eds., *Social Psychology and Economics*, Mahwah, NJ: Erlbaum, 117-37.
- Zeithaml, Valarie A., Leonard L. Berry and Arantharanthan Parasuraman (1993), "The Nature and Determinants of Customer Expectations of Service," *Journal of the Academy of Marketing Science*, 21 (1), 1-12.

## Appendix A: Instructions and e-mail sent by students to recruit participants

To: All students MKT

From: Myles Landers

Subject: Extra credit opportunity

Date: 9/16/11

You are being asked to distribute a survey for extra credit. **All you have to do is find five people to fill out the survey. You will receive 1 point per person who fills out the survey, making a total of 5 possible points. Each person that you ask to fill out the survey should be 19 years or older. Two participant can students (you can be one of these) and three have to be non-students.**

The survey will be available until September 27<sup>rd</sup> at midnight. After September 27<sup>rd</sup>, you will not have an opportunity to earn the 5 extra credit points.

In order for you to receive the extra credit, the individuals filling out the survey **must put your name and your class, including section number**, at the end of the survey when asked. Please make sure that you tell them this in your email and that you give them all of the appropriate information.

Please copy and paste the description of the study (see below) into the email you send out asking individuals to participate. If you have any questions please feel free to email me at [vmlanders@cba.ua.edu](mailto:vmlanders@cba.ua.edu).

Thanks,

Myles Landers

---

**The study that you have been asked to participate in is about specific service experiences that you have encountered.** The goal of this study is to learn about how companies ask you to participate while shopping or using a service, as well as, your reaction to different experiences that you have had when asked to participate while shopping or using a service.

In this survey, you will be asked to describe a total of two memorable customer participation experiences, one positive and one negative, and then answer a few questions regarding each situation. The survey should take between 10 and 15 minutes to complete.


This survey is voluntary and each participant will remain anonymous.

Please click on the link below or copy it into your browser if you would like to participate in this study.

[Link](#)

## Appendix B: Customer Resource Integration Survey

### Self-Service

 qualtrics.com

The study that you have been asked to participate in is about self-service experiences. The goal of this study is to learn about how companies ask you to participate while shopping or using a service, as well as, your reaction to different experiences that you have had when asked to participate while shopping or using a service.


In this survey, you will be asked to describe a total of two memorable self-service experiences, and then answer a few questions regarding each situation.

A self-service experience is one in which you are the only individual involved in the service experience and there is no participation from employees. For example, you are the only one involved in finding the product, purchasing the product, and you never speak to an employee (not even checking you out).


One self-service experience should be positive (i.e. you enjoyed the experience or the outcome of the experience) and one self-service experience should be negative (i.e. you did not enjoy the experience or the outcome of the experience).

Examples of a self-service include:

Online Shopping	Do-It-Yourself Projects
Airline Self Check-in	Hotel Self Check-In
Online Banking	Grocery Shopping with Self-Check Out
Online Video/Movie Rental	Self-Service Car Wash
Self-Service Gas Station	Laundry Mat

0%  100%

[>>](#)


 qualtrics.com

Please try to think about a memorable **POSITIVE** self-service experience.

A self-service experience is one in which you are the only individual involved in the service experience and there is no participation from employees, for example, you are the only one involved in finding the product, purchasing the product, and you never speak to an employee (not even checking you out).

Examples of a self-service include:

Online Shopping	Do-It-Yourself Projects
Airline Self Check-in	Hotel Self Check-In
Online Banking	Grocery Shopping with Self-Check Out
Online Video/Movie Rental	Self-Service Car Wash
Self-Service Gas Station	Laundry Mat

0%  100%

[<<](#) [>>](#)

Please fully describe your **POSITIVE** self-service experience from start to finish. Please use as much detail as possible.

0%  100%



Please explain what made this a positive self-service experience.

0%  100%



How did the company/employee participate during your self-service experience (i.e. did you use the company's technology, what was the process in using the company's technology, did the company provide instructions, how did the company provide the product, etc)?

0%  100%

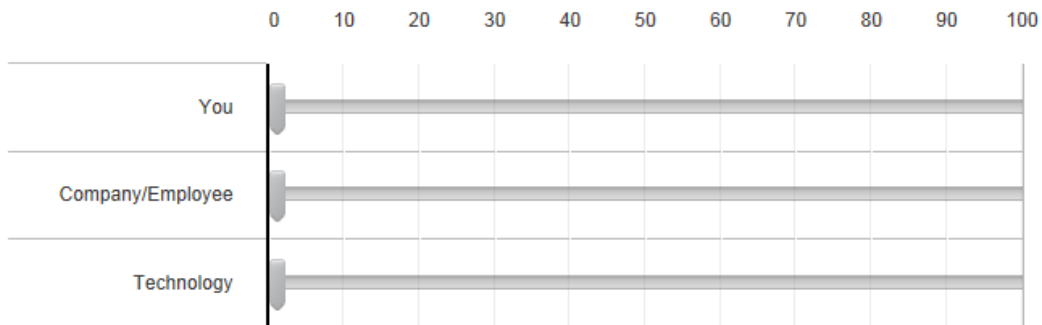


How did you participate during the self-service experience (i.e. did you pick out the product, did you check yourself out, did you try on clothes, etc.)?

0%  100%



What percentage of labor did each of the following contribute to your self-service experience?



Who do you feel was responsible for the success of this self-service experience?

Myself         Company/Employee

How long ago would you say this self-service experience occurred?

0%  100%



Please try to think about a memorable **NEGATIVE** self-service experience.

**A self-service experience is one in which you are the only individual involved in the service experience and there is no participation from employees, for example, you are the only one involved in finding the product, purchasing the product, and you never speak to an employee (not even checking you out).**

Examples of a self-service include:

- |                           |                                      |
|---------------------------|--------------------------------------|
| Online Shopping           | Do-It-Yourself Projects              |
| Airline Self Check-in     | Hotel Self Check-In                  |
| Online Banking            | Grocery Shopping with Self-Check Out |
| Online Video/Movie Rental | Self-Service Car Wash                |
| Self-Service Gas Station  | Laundry Mat                          |

0%  100%



Please fully describe your **NEGATIVE** self-service experience from start to finish. **Please use as much detail as possible.**

0%  100%



Please explain what made this a negative self-service experience.

0%  100%



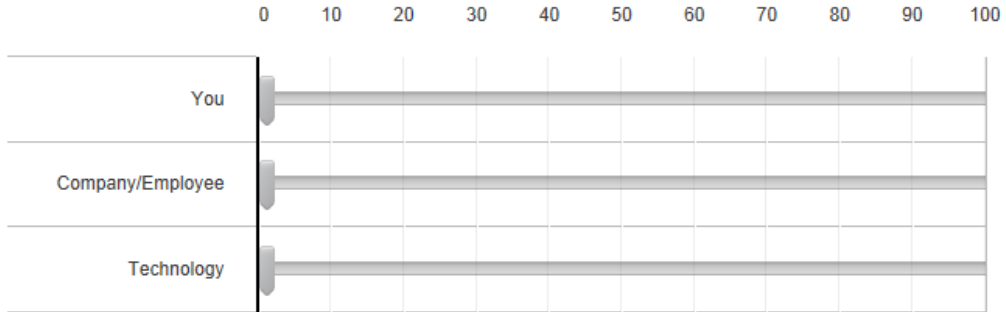
How did the company/employee participate during your self-service experience (i.e. did you use the company's technology, what was the process in using the company's technology, did the company provide instructions, how did the company provide the product, etc)?



How did you participate during the self-service experience (i.e. did you pick out the product, did you check yourself out, did you try on clothes, etc.)?



What percentage of labor did each of the following contribute to your self-service experience?



Who do you feel was responsible for the failure of this self-service experience?

Myself         Company/Employee

How long ago would you say this self-service experience occurred?



<< >>

Joint Service



The study that you have been asked to participate in is about a service experience where both you and an employee were involved. The goal of this study is to learn about how companies ask you to participate while shopping or using a service, as well as, your reaction to different experiences that you have had when asked to participate while shopping or using a service.

**In this survey, you will be asked to describe two memorable experiences that you have had while interacting with an employee. For example, the employee helps you locate something in the store, the employee gives you advice, the employee checks you out, or any other instance in which you interact with the employee.**

One service experience should be positive (i.e. you enjoyed the experience or the outcome of the experience) and one service experience should be negative (i.e. you did not enjoy the experience or the outcome of the experience).

Examples of services where you might interact with employees include:

- |                                |                               |
|--------------------------------|-------------------------------|
| Accountant                     | Dry cleaner or seamstress     |
| Airline                        | Hotel or vacation rental      |
| Attorney                       | Landlord or real estate agent |
| Bank or financial advisor      | Landscaper                    |
| Barber or hairdresser          | Nail or tanning salon         |
| Car or home maintenance        | Printer                       |
| Car rental                     | Restaurant or bar             |
| Caterer                        | Retailer                      |
| Doctor, dentist, or pharmacist | Tuxedo rental                 |



Please try to think about a memorable **POSITIVE** service experience where you interacted with an employee. For example, the employee helps you locate something in the store, the employee gives you advice, the employee checks you out, or any other instance in which you interact with the employee.

Examples of services where you might interact with employees include:

- |                                |                               |
|--------------------------------|-------------------------------|
| Accountant                     | Dry cleaner or seamstress     |
| Airline                        | Hotel or vacation rental      |
| Attorney                       | Landlord or real estate agent |
| Bank or financial advisor      | Landscaper                    |
| Barber or hairdresser          | Nail or tanning salon         |
| Car or home maintenance        | Printer                       |
| Car rental                     | Restaurant or bar             |
| Caterer                        | Retailer                      |
| Doctor, dentist, or pharmacist | Tuxedo rental                 |



Please fully describe your **POSITIVE** service experience where you interacted with an employee from start to finish. Please use as much detail as possible.

0% 100%



Please explain what made this a positive service experience.

0% 100%



How did the company/employee participate during your service experience (i.e. did they check you out, did they help you find something, did they answer any questions, etc)?

0% 100%

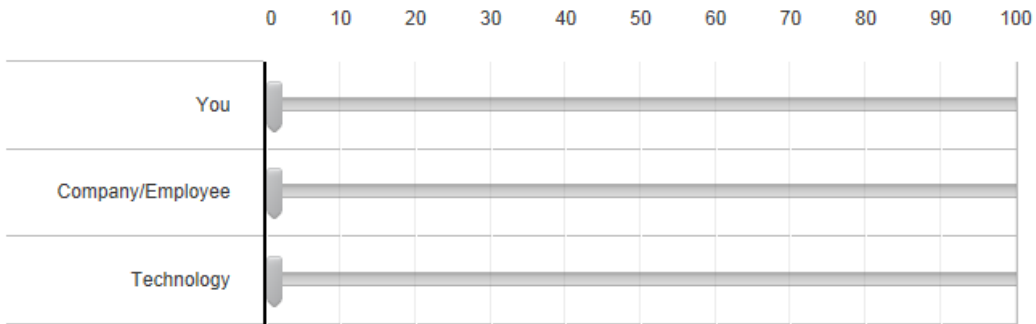


How did you participate during the service experience (i.e. did you pick out the product, did you check yourself out, did you try on clothes, etc.)?



<< >>

What percentage of labor did each of the following contribute to your service experience?



Who do you feel was responsible for the success of this service experience?

Myself |         | Company/Employee

How long ago would you say this service experience occurred?



<< >>

Please try to think about a memorable **NEGATIVE** service experience where you interacted with an employee. For example, the employee helps you locate something in the store, the employee gives you advice, the employee checks you out, or any other instance in which you interact with the employee.

Examples of services where you might interact with employees include:

- |                                |                               |
|--------------------------------|-------------------------------|
| Accountant                     | Dry cleaner or seamstress     |
| Airline                        | Hotel or vacation rental      |
| Attorney                       | Landlord or real estate agent |
| Bank or financial advisor      | Landscaper                    |
| Barber or hairdresser          | Nail or tanning salon         |
| Car or home maintenance        | Printer                       |
| Car rental                     | Restaurant or bar             |
| Caterer                        | Retailer                      |
| Doctor, dentist, or pharmacist | Tuxedo rental                 |

0%  100%



Please fully describe your **NEGATIVE** service experience where you interacted with an employee from start to finish. Please use as much detail as possible.

0%  100%



Please explain what made this a negative service experience.

0%  100%



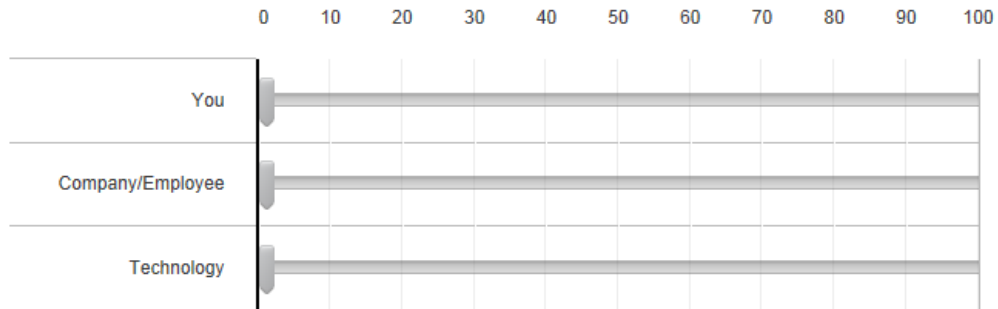
How did the company/employee participate during your service experience (i.e. did they check you out, did they help you find something, did they answer any questions, etc)?



How did you participate during the service experience (i.e. did you pick out the product, did you check yourself out, did you try on clothes, etc.)?



What percentage of labor did each of the following contribute to your service experience?



Who do you feel was responsible for the failure of this service experience?

Myself |         | Company/Employee

How long ago would you say this service experience occurred?



<< >>

### Demographics

What is your gender?

- Male
- Female

In which category does your age fall?

- 18-25
- 26-34
- 35-54
- 55-64
- 65 or over

What is the highest level of education you have completed?

- Less than High School
- High School / GED
- Some College
- 2-year College Degree
- 4-year College Degree
- Masters Degree
- Doctoral Degree
- Professional Degree (JD, MD)

What is your race?

- White/Caucasian
- African American
- Hispanic
- Asian
- Native American
- Pacific Islander
- Other

## Appendix C: Student Recruiting Instructions

To: All students MKT  
From: Myles Landers  
Subject: Extra credit opportunity  
Date:

You are being asked to distribute a survey for extra credit. **All you have to do is fill out the survey and find 5 people to fill out the survey. You will receive 1 point per person who fills out the survey, making a total of 6 possible points. Each person that you ask to fill out the survey should be 19 years or older.**

The survey will be available until (Date) at midnight. After (Date), you will not have an opportunity to earn the 6 extra credit points. The extra credit points will be added to your test 1 score.

In order for you to receive the extra credit, the individuals filling out the survey **must** put **your name and your class, including section number**, at the end of the survey when asked.

**Please copy and paste the description of the study (see below) into the email you send out asking individuals to participate.** If you have any questions please feel free to email me at [vmlanders@cba.ua.edu](mailto:vmlanders@cba.ua.edu) .

Thank you,

Myles Landers

---

You are being asked to take part in a research study examining how customers react to the procedures involved in grocery shopping. The study is being conducted by Myles Landers, a marketing doctoral candidate at the University of Alabama.

This study is important because it will attempt to understand how customers view the procedures involved in grocery shopping and provided managers with actionable strategies. There are no right or wrong answers. However, we ask that you participate and respond in an honest fashion to the best of your ability and knowledge.

Your responses will remain completely anonymous, and your name will not be connected with a specific survey in any manner. Your participation in this project is completely voluntary. You are free not to participate or stop participating any time before you submit your answers. The following screen will begin with a scenario followed by a succession of questions. The entire survey should take you no longer than 15 minutes to complete. There are no risks to you for being involved, and ALL information and responses will remain confidential. There are no direct benefits to you for participating, but you will be contributing to our knowledge of an important research topic.

This survey is part of a research project conducted at University of Alabama. Only the researchers involved in this study will have access to the data. If you have any questions about this study, please contact Myles Landers in the Department of Management and Marketing at [vmlanders@cba.ua.edu](mailto:vmlanders@cba.ua.edu).

If you have questions about your rights as a research participant, contact Ms. Tanta Myles (the University Compliance Officer) at (205) 348-8461 or toll-free at 1-877-820-3066. If you have complaints or concerns about this study, file them through the UA IRB outreach website at [http://osp.ua.edu/site/PRCO\\_Welcome.html](http://osp.ua.edu/site/PRCO_Welcome.html). Also, if you participate, you are encouraged to complete the short Survey for Research Participants online at this website. This helps UA improve its protection of human research participants.

Please click on the link below or copy it into your browser if you would like to participate in this study.

(link)

### Appendix D: Proposed Scales

<p><b>Perceived Effort Level</b></p>	<p>Mohr and Bitner (1995)</p>	<p>If this incident were to happen to you, how much would you agree with the following:</p> <ol style="list-style-type: none"> <li>1. I exerted a lot of energy.</li> <li>2. I was very persistent.</li> <li>3. I had to spend a lot of time to finish the service.</li> <li>4. I had to try hard to complete the service.</li> <li>5. I had to put a lot of effort into this service</li> </ol>
<p><b>Frustration</b></p>	<p>Peters, O'Connor, and Rudolf (1980)</p>	<p>If this incident were to happen to you, how much you agree with the following:</p> <ol style="list-style-type: none"> <li>1. Trying to complete this service would be a very frustrating experience.</li> <li>2. Being frustrated comes with this type of service experience.</li> <li>3. Overall, I would feel frustrated with this experience.</li> </ol>
<p><b>Pleasure</b></p>	<p>Babin and Darden (1995)</p>	<p>If this incident were to happen to you, how much would you feel the following:</p> <ol style="list-style-type: none"> <li>1. Happy</li> <li>2. Pleased</li> <li>3. Hopeful</li> <li>4. Joyful</li> <li>5. Contented</li> </ol>
<p><b>Fairness</b></p>	<p>Van Yperen (1996)</p>	<p>If this incident were to happen to you, please rate your agreement with the following items:</p> <ol style="list-style-type: none"> <li>1. The final benefits that I received were fair, given the time and hassle.</li> <li>2. Given the effort I put forth, the benefits I received were fair.</li> <li>3. The benefits that I received were fair.</li> <li>4. I worked hard considering the benefits that I received.</li> <li>5. The benefits that I received were not proportional to the work required.</li> <li>6. I put more energy into this visit than it is worth.</li> <li>7. I feel unfairly treated by this service provider.</li> </ol>

<b>Positive Word-of-Mouth</b>	Verhoef, Franses, and Hoekstra (2002)	<p>If this incident were to happen to you, how much would you agree with the following:</p> <ol style="list-style-type: none"> <li>1. I would say positive things about this service provider to people I know.</li> <li>2. I would recommend this service provider.</li> <li>3. I would encourage relative and friends to do business with this service provider.</li> </ol>
<b>Desire to Switch</b>	Bougie, Pieters, and Zeelenberg (2003)	<p>Imagining that this situation happened to you, please rate your agreement with the following items:</p> <ol style="list-style-type: none"> <li>1. If I could, I would use another service provider.</li> <li>2. If I had the option, I would switch to a different service provider.</li> <li>3. I would like to switch to a different service provider.</li> </ol>
<b>Satisfaction</b>	Agustin and Singh (2005)	<p>My overall impression of the service provider is:</p> <ol style="list-style-type: none"> <li>1. Bad – Good</li> <li>2. Unfavorable – Favorable</li> <li>3. Unsatisfactory – Satisfactory</li> <li>4. Negative – Positive</li> <li>5. Disliked – Liked</li> </ol>
<b>Shopping Enjoyment</b>	Dawson, Bloch, and Ridgway (1990)	<p>Please answer the following questions about yourself as honestly as you can:</p> <ol style="list-style-type: none"> <li>1. I consider shopping a big hassle.</li> <li>2. When traveling, I enjoy visiting new and interesting shops.</li> <li>3. Shopping is generally a lot of fun for me.</li> <li>4. I enjoy browsing for things even if I cannot buy them yet.</li> <li>5. I often visit shopping malls or markets just for something to do.</li> </ol>
<b>Value Shopping Orientation</b>	Arnold and Reynolds (2003)	<p>Please answer the following questions about yourself as honestly as you can:</p> <ol style="list-style-type: none"> <li>1. For the most part, I go shopping when there are sales.</li> <li>2. I enjoy looking for discounts when I shop.</li> <li>3. I enjoy hunting for bargains when I shop.</li> </ol>

## Appendix E: Study 2 Survey

### Firm Resource Demand Manipulations

#### Low Firm Resource Demand Manipulation

When you enter the grocery store, you see a sign that says "Offering A Good Value For Your Money." At the bottom of the sign you see stickers for MasterCard, Visa, AMEX, and even PayPal indicating that they accept all forms of payment.

Next, a store employee approaches you and asks if you need a cart. You thank them and take the cart and begin shopping. This store has employees who work the floor so they assist you in finding the items on your list.

After shopping, you go to check out. As the cashier checks you out, another store employee places your groceries in bags for you. The store employee who bagged your groceries pushes your cart to the car for you and loads the groceries into the car. No tip is accepted. The store employee says "Thank you" and takes the cart back to the store.

#### High Firm Resource Demand Manipulation

When you enter the grocery store, you see a sign that says "Offering a Good Value for Your Money." At the bottom of that sign it says "Only Accepting Cash and Debit Cards." You need cash to pay for your groceries so you go to the ATM located in the store and you withdraw the cash that you need.

After getting money from the ATM, you make your way to the carts. To use a cart you must put in a quarter and you must return the cart to get your quarter back. You need to use a cart, so you pay the quarter and begin shopping. This grocery store does not have employees that work the floor so you have to look around and find all of the products on your own. You make your way around the store and pick up the products on your shopping list.

After shopping you go to check out. You make your way over to a bagging area where you have to bag your own groceries. When you finish bagging your items, you push the cart back to the store and place it in the cart return area to get you quarter back.

## **Customer Experience Manipulations**

### New Customer Manipulation

It is Saturday morning and you decide to go to a new grocery store to buy groceries. You have never been to this store before so you do not know the procedure for finding and buying merchandise

### Frequent Customer Manipulation

It is Saturday morning and you decide to go to your usual grocery store to buy groceries. This is your usual grocery store so you know the procedure for finding and buying merchandise.

## **Firm Provided Reward Manipulations**

### No Reward Manipulation

When the cashier hands you the receipt, you look at the receipt and see that the total bill for shopping at this grocery store is comparable to other grocery stores in your area.

### 15% Savings Manipulation

When the cashier hands you the receipt, you look at the receipt and see that your items are about 15% cheaper than the prices you find at other grocery stores in your area.

## Appendix F: Study 2 Survey

It is Saturday morning and you decide to go to a new grocery store to buy groceries. You have never been to this store before so you do not know the procedure for finding and buying merchandise. This store carries all of the brands that you like to buy and they offer a good value.

When you enter the grocery store, you see a sign that says "Offering A Good Value For Your Money." At the bottom of the sign you see stickers for MasterCard, Visa, AMEX, and even PayPal indicating that they accept all forms of payment.

Next, a store employee approaches you and asks if you need a cart. You thank them and take the cart and begin shopping. Since you have never been to this store before, you are unsure where to find the items on your list. This store has employees who work the floor so they assist you in finding the items on your list.

After shopping, you go to check out. As the cashier checks you out, another store employee places your groceries in bags for you. When the cashier hands you the receipt, you look at your receipt and see that the total bill for shopping at this store is comparable to other grocery stores that you have visited in your area. The store employee who bagged your groceries pushes your cart to the car for you and loads the groceries into the car. No tip is accepted. The store employee says "Thank you" and takes the cart back to the store. You get into your car and drive home.

Thinking about this grocery store trip, please rate your agreement with the following statements

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
The grocery store demanded a lot from me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The grocery store requested a lot from me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The grocery store expected a lot from me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about this grocery store trip, please rate your agreement with the following statements

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
I have been to this grocery store before	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This is not my first time visiting this grocery store	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This is my usual grocery store	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about this grocery store trip, how much money did you save on this trip?

- None
- 5%
- 15%
- I do not know

Thinking about this grocery store trip, please rate your agreement with the following statements

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
I saved a lot of money	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I received a large discount	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The discount was substantial	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about this grocery store trip, please rate your agreement with the following statements

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
I exerted a lot of energy to complete the service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I had to be very persistent to complete the service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I had to spend a lot of time to finish the service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I had to try hard to complete the service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I had to put a lot of effort into this service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please continue to rate your agreement with the following statements as if this grocery store trip had happened to you

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
The benefits that I received from the grocery store were fair, given the time and hassle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Given the effort I put forth, the benefits I received from the grocery store were fair	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The benefits that I received from the grocery store were fair	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I worked hard considering the benefits I received from the grocery store	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The benefits I received are not proportional to the work required during this grocery store visit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I put more energy into this grocery store visit than it is worth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel unfairly treated by the grocery store	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please select Somewhat Agree.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about this grocery store trip, please rate your agreement with the following.

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
This grocery store experience would be fun	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would feel involved in the shopping task during this grocery store visit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would feel drawn into the shopping task during this grocery store visit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about this grocery store trip, please rate your agreement with the following.

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
This grocery store visit was worthwhile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I consider this grocery store visit a success	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This grocery store worked out as I planned	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This grocery store experience was rewarding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would recommend shopping at this grocery store to my friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about this grocery store trip, please rate your agreement with the following statements

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
Trying to complete this grocery store visit would be a very frustrating experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being frustrated comes with this type of grocery store visit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall, I would feel frustrated with this grocery store visit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about this grocery store trip, how much would you feel the following

	Definitely will not						Definitely will
Happy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pleased	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hopeful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Joyful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Contented	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about this grocery store trip, please rate your agreement with the following statements

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
I would say positive things about this grocery store to people I know	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would recommend this grocery store	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would encourage relatives and friends to do business with this grocery store	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about this grocery store trip, please rate your agreement with the following statements

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
If I could, I would use another grocery store	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I had the option, I would switch to a different grocery store	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to switch to a different grocery store	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

My overall impression of the grocery store is

Bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Good
Unfavorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Favorable
Unsatisfactory	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Satisfactory
Negative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Positive
Disliked	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Liked

Please answer the following questions about yourself as honestly as you can

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
I consider grocery shopping a big hassle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When traveling, I enjoy visiting new and interesting grocery stores	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grocery shopping is generally a lot of fun for me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When grocery shopping, I enjoy browsing for things even if I cannot buy them yet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often visit grocery stores just for something to do	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please answer the following questions about yourself as honestly as you can.

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
It is worth it to me to spend a lot of money on groceries	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I don't mind spending a lot of money on groceries	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am less willing to buy groceries if I think that they will be high in price	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please answer the following questions about yourself as honestly as you can

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
Human contact in providing services makes the process enjoyable for the customer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like interacting with the person who provides the service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It bothers me to use a machine when I could talk to a person instead	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please select Disagree.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please answer the following questions about yourself as honestly as you can

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
For the most part, I go shopping when there are sales	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy looking for discounts when I shop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy hunting for bargains when I shop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please continue to answer the following questions about yourself

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
I think personal contact with store personnel is important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think it is important to be recognized by the store's personnel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I only shop in stores where I know the staff is friendly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think it is important that there are staff members to talk to in the store	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please answer the following questions about yourself as honestly as you can

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
I consider shopping a big hassle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When traveling, I enjoy visiting new and interesting shops	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shopping is generally a lot of fun for me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy browsing for things even if I cannot buy them yet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often visit shopping malls or markets just for something to do	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The following questions are for demographic purposes only

1. What is your gender?

What is your age?

Please indicate your current family structure.

What is the highest level of education you have completed?

What is your annual salary (including bonuses and commissions) in U.S. dollars?

What is your race?

How many times a month do you grocery shop?

Thinking about this overall situation, please rate your agreement with the following statements

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
I could see this situation happening to one of my friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This situation is realistic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This situation is believable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you would like to provide any additional feedback regarding this survey, please enter it here. Clicking the 'next' button will complete the survey. Use the 'back' button below to review and/or edit your selections. Thank you for your help!

If you are taking this survey for a student to receive extra credit points, please enter the student's name below and the course in which they are receiving the extra credit:

Student's first name

Student's last name

Course

Please enter your email address. You may be contacted to confirm that you filled out this survey.

## Appendix G: IRB Approval Document

February 19, 2013

Office for Research  
Institutional Review Board for the  
Protection of Human Subjects

THE UNIVERSITY OF  
**ALABAMA**  
R E S E A R C H

V. Myles Landers  
Dept. of Management & Marketing  
College of Commerce & Business Admin.  
Box 870225

Re: IRB # 13-OR-059, "The Role in Firm Resource Demand in Shoppers' Service Experiences"

Dear Mr. Landers:

The University of Alabama Institutional Review Board has granted approval for your proposed research.

Your application has been given expedited approval according to 45 CFR part 46. Approval has been given under expedited review category 7 as outlined below:

*(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.*

Your application will expire on February 18, 2014. If the study continues beyond that date, you must complete the IRB Renewal Application. If you modify the application, please complete the Modification of an Approved Protocol form. Changes in this study cannot be initiated without IRB approval, except when necessary to eliminate apparent immediate hazards to participants. When the study closes, please complete the Request for Study Closure form.

Should you need to submit any further correspondence regarding this application, please include the assigned IRB application number.

Good luck with your research.

Sincerely,



358 Rose Administration Building  
Box 870127  
Tuscaloosa, Alabama 35487-0127  
(205) 348-8461  
FAX (205) 348-7189  
TOLL FREE (877) 820-3066

Carpatato T. Myles, MSM, CIM  
Director & Research Compliance Officer  
Office for Research Compliance  
The University of Alabama