

Consumer Evaluation of a Vertical Brand Extension in the Lodging Industry: Relationships among Brand Trust, Brand Loyalty, Brand Distance, and Brand Extension

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Dissertation submitted to the faculty of the
Virginia Polytechnic Institute and State University
in partial fulfillment of the requirements for the degree of

Doctor of Philosophy
In
Hospitality and Tourism Management

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March 29, 2013
Blacksburg, Virginia

Keywords: Brand Trust, Brand Loyalty, Brand Distance, Evaluation of Brand Extension, and Lodging Industry

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ABSTRACT

Vertical brand extensions have been used as popular strategies in the lodging industry. Research on brand extension that is related with brand trust and brand loyalty has been useful in making brand extensions successful. However, previous research focused on aggregated relationships among brand trust, brand loyalty, and brand extension. In addition, it has been found that quality and price distance from a core brand of the brand extension has an impact on the success of the brand extension. Therefore, this dissertation proposes a theoretical model with six hypotheses investigating relationships among brand trust, brand loyalty and brand extension simultaneously. Further, the impact of distance from a core brand (brand distance) on the brand extension was examined.

Data was collected using an online panel. A final sample of 396 was used for the data analysis. Structural equation modeling (SEM), a Chi-square difference test, and independent t-tests were utilized to test the hypotheses. The data was randomly split in two. One half of the dataset was used to test a measurement model and the other half of the dataset was used to test a structural equation model.

The findings suggested there were positive relationships between brand trust and brand loyalty, brand trust and brand extension, and brand loyalty and brand extension. Furthermore, it was found that brand distance plays a significant role not only on brand extension, but also on the relationship between brand trust and brand extension and the relationship between brand loyalty and brand extension. This study contributes to vertical brand extension literature by providing a theoretical model by which simultaneous relationships among brand trust, brand loyalty and brand extension were investigated with a moderating factor: brand distance. The findings of this dissertation have important managerial implications for lodging industry brand managers.

DEDICATION

To my parents: *Hee-Jun Lim* and *Dong-Sook Im*

언제나 무한한 사랑으로 저를 지지해 주시는 부모님께 이 논문을 바칩니다.

ACKNOWLEDGEMENTS

First of all, I would like to express my sincerest gratitude to my advisor, Dr. Pamela A. Weaver, for all of her guidance, advice, and support throughout my graduate studies. Without her guidance, I could not have completed this thesis and my graduate studies successfully. The advice from my committee members, Dr. Ken W. McCleary, Dr. Vincent Magnini, and Dr. Jyoti Savla was also greatly appreciated. They provided not only valuable comments and advice but also computer resource (Mplus) to run my analyses.

I would like to thank Dr. Dong S. Ha at Virginia Tech VLSI Telecommunications (VTVT) Lab. He provided me with a great deal of advice regarding my graduate life and financial support. He has been a wonderful supervisor and, he and his family have been great friends of mine in Blacksburg.

Special thanks go out to all of my HTM colleagues for their encouragement and assistance. Also, I want to thank VTVT members, my friends in CNB members of Korean Baptist Church of Blacksburg, and my friends of 흑주회 for precious memories that we shared together. I would like to thank the staff members in the HTM office for their help and support during my study, especially Melissa Dietrich.

I would like to extend thanks to my host family, Dr. and Mrs. John Hess. They have been taking care of me since I first settled in Blacksburg. They made my life at Virginia Tech full of warmth and love.

I would like to express my deepest gratitude to my parents, my brother, JeongHoon Lim, sister, HyunJeong Lim, and sister-in-law, JiHyun Lee. Their constant love, support, and encouragement were the most essential part of my life. I could not have pursued my dream without their love and support.

Finally, I want to show my appreciation to my boyfriend, Jai K. Jung. I am truly appreciative of all that he has done for me over the years. I could not have reached my goals without his help and support at all times. He has made me feel special even when times were tough for me. I feel blessed to be a part of his life, and am fortunate to be married to the most kind-hearted person I have ever known. Jai, I love you more than ever before!

Table of Contents

CHAPTER I	1
INTRODUCTION	1
Introduction	1
Statement of the Problem	3
Objectives of the Study	5
Research Questions	5
Theoretical Foundations	6
Proposed Model of the Study	9
Definition of Key Terms	11
Organization of the Study	12
CHAPTER II	13
REVIEW OF LITERATURE	13
Introduction	13
Brand	13
Categorization Theory	18
Brand Extension	23
Perceived Fit or Similarity	27
The Effects of Context Variables	29
Communication Strategies	31
Consumer-level Differences	32
Studies on Brand Extension within the Hospitality and Tourism Context.....	33
Brand Extension Evaluation	36
Brand Trust and Brand Extension	36
Brand Loyalty and Brand Extension	42
Distance from a Core Brand and Brand Extension	44
Summary	47
CHAPTER III	49
METHDOLOGY	49
Introduction	49
Conceptual Model	49
Research Proposition and Hypotheses	52
Research Question 1	52
Research Question 2	52
Research Question 3	52
Research Question 4	52
Research Question 5	53
Research Question 6	53
Research Design	53
Methods.....	53
Statistical tests	64
Reliability and Validity	68
Summary	68
CHAPTER IV	69
RESULTS	69
Introduction	69

Pretest.....	69
Pretest Methodology	69
Pretest Sample	70
Pretest Results	71
Final Study: Data Collection, Respondent Characteristics, Hypotheses Testing	80
Questionnaire.....	80
Sampling	80
Profile of Respondents	81
Descriptive Statistics, Skewness, and Kurtosis	85
Data Analysis.....	85
Descriptive Information of Variables	85
Test of Hypotheses	91
Summary	127
CHAPTER V	129
DISCUSSION	129
Introduction	129
Summary of the Findings.....	129
Discussion of the Findings.....	131
Brand Trust.....	131
Brand Loyalty	132
Brand Extension	132
Hypotheses Tests	132
Implications.....	139
Managerial Implications.....	139
Theoretical Implications.....	141
Limitations and Future Research	142
Conclusions	144
REFERENCES	146
Appendix A: Survey Questionnaires	159
Appendix B: Descriptive Statistics with Skewness and Kurtosis Values.....	168
Appendix C: VT IRB Approval Letters	171
Appendix D: Mplus Syntax for CFA	173
Appendix E: Mplus Syntax for SEM.....	174
Appendix F: Mplus Syntax for SEM (Mediation Model)	175
Appendix G: Mplus Syntax for SEM with Brand Distance.....	176
Appendix H: Covariances for a Measurement Model	178
Appendix I: Covariances for a Structural Model	180

List of Tables

Table 2-1: Findings of Brand Extension Research	26
Table 2-2: Brand Extensions of Major Hotel Brands.....	34
Table 4-1: Pretest Respondent Profile	71
Table 4-2: Exploratory Factor Analysis of Brand Reliability.....	73
Table 4-3: Comparison of the Two Sets of Brand Reliability Scales	74
Table 4-4: Exploratory Factor Analysis of Brand Intentions	74
Table 4-5: Exploratory Factor Analysis of Brand Loyalty	75
Table 4-6: Exploratory Factor Analysis of Brand Distance – Marriott Hotels & Resorts	76
Table 4-7: Exploratory Factor Analysis of Brand Distance – Courtyard by Marriott	76
Table 4-8: Exploratory Factor Analysis of Brand Distance – SpringHill Suites by Marriott	77
Table 4-9: Exploratory Factor Analysis of Evaluation of Brand Extension – Marriott Hotels & Resorts	78
Table 4-10: Exploratory Factor Analysis of Brand Extension – Courtyard by Marriott ..	78
Table 4-11: Exploratory Factor Analysis of Brand Extension – SpringHill Suites by Marriott.....	79
Table 4-12: Demographic Profile of Respondents.....	82
Table 4-13: Travel Behavioral Characteristics of Respondents	84
Table 4-14: Descriptive Information Regarding Brand Trust	86
Table 4-15: Descriptive Information Regarding Brand Loyalty.....	87
Table 4-16: Descriptive Information Regarding Brand Distance	89
Table 4-17: Descriptive Information Regarding Brand Extension (BE).....	91
Table 4-18: Demographic Comparison Between Two Datasets.....	93
Table 4-19: Independent T-tests Between Two Datasets	94
Table 4-20: CFA Summary of Sophistication – Brand Trust: Reliability	98
Table 4-21: CFA Summary of Sophistication – Brand Trust: Intentions.....	99
Table 4-22: CFA Summary of Sophistication – Brand Trust: Overall Model.....	100
Table 4-23: CFA Summary of Sophistication – Brand Loyalty	102
Table 4-24: CFA Summary of Sophistication – BE Marriott Hotels & Resorts	103
Table 4-25: CFA Summary of Sophistication – BE Courtyard by Marriott	104
Table 4-26: CFA Summary of Sophistication – BE SpringHill Suites by Marriott	105
Table 4-27: Summary of Constructs and Their Indicators	106
Table 4-28: CFA Summary of Sophistication for the Overall Model – BE Marriott Hotels & Resorts	108
Table 4-29: CFA Summary of Sophistication for the Overall Model – BE Courtyard by Marriott.....	111
Table 4-30: CFA Summary of Sophistication for the Overall Model – BE SpringHill Suites by Marriott.....	114
Table 4-31: The Effect of Brand Trust on Brand Loyalty	120
Table 4-32: The Effect of Brand Trust on Brand Extension	120
Table 4-33: The Effect of Brand Loyalty on Brand Extension.....	121
Table 4-34: The Results of the Full Mediation Model (Model 1) and Partial Mediation Model (Model 2)	122

Table 4-35: The Results of Chi-square Difference Test.....	122
Table 4-36: The Effect of Brand Distance on Brand Trust: Marriott Hotel and Resorts	124
Table 4-37: The Effect of Brand Distance on Brand Trust: Courtyard by Marriott	124
Table 4-38: The Effect of Brand Distance on Brand Trust: SpringHill Suites by Marriott	125
Table 4-39: The Effect of Brand Distance on Brand Loyalty: Marriott Hotel and Resorts	126
Table 4-40: The Effect of Brand Distance on Brand Loyalty: Courtyard by Marriott ...	126
Table 4-41: The Effect of Brand Distance on Brand Loyalty: SpringHill Suites by Marriott.....	127
Table 4-42: Summary of Hypotheses Testing Results	128
Table 5-1: Summary of Hypotheses Testing Results	133

List of Figures

Figure 1-1: Proposed Basic Model of the Study	10
Figure 2-1: Chudhuri & Holbrook (2001)'s Path Model of Brand Trust, Brand Loyalty and Brand Performance	38
Figure 2-2: Model Determinants of Hotel Behavior Loyalty (Wilkins et al., 2009)	40
Figure 2-3: A Theoretical Structural Model of Brand Extension	48
Figure 3-1: A Theoretical Structural Model of Brand Extension	51
Figure 3-2: A Structural Model of Brand Extension Process	66
Figure 4-1: Results of CFA Overall Model - Brand Extension: Marriott Hotel & Resorts (BE-M.Ho).....	109
Figure 4-2: Results of CFA Overall Model - Brand Extension: Courtyard by Marriott (BE-Court)	112
Figure 4-3: Results of CFA Overall Model - Brand Extension: SpringHill Suites by Marriott (BE-Spring).....	115
Figure 4-4: Results of the Structural Equation Model - Brand Extension: Marriott Hotel & Resorts (BE-M.Ho)	117
Figure 4-5: Results of the Structural Equation Model - Brand Extension: Courtyard by Marriott (BE-Court)	118
Figure 4-6: Results of the Structural Equation Model - Brand Extension: SpringHill Suites by Marriott (BE-Spring).....	119

CHAPTER I

INTRODUCTION

Introduction

Brand extension, a popular branding strategy, is used when a new product is launched because it reduces advertising cost, entry barrier, risk, and leverages brand equity (van Riel, Lemmink, and Ouwersloot, 2001). Many companies have applied a brand extension strategy when launching a new product by modifying their existing products or services (Webster, 2000). According to Loken, Barsalou, & Joiner (2008); this strategy is often successful because consumers construct and use categorical representations to classify, interpret, and understand information about products and services. In addition, a brand name can be a quality signal that influences consumer decision-making (Kirmani & Rao, 2000; Spence, 1973).

In brand extension research, the investigation of success factors of brand extensions is pervasive (Aaker & Keller, 1990; Tauber, 1988; Völckner & Sattler, 2006). The most important determinants of consumer evaluations of extension products have been perceived similarity or fit between a parent brand and an extension product and perceived quality of the parent brand (Völckner, Sattler, Hennig-Thurau, & Ringle, 2010). In addition, marketing support, parent-brand conviction, retailer acceptance, and parent-brand experience were found to be drivers of brand extension success (Völckner & Sattler, 2006). Völckner et al. (2010) investigated parent brand quality for brand extension success within a service setting. They suggested parent brand quality has a

higher impact on brand extension success than a perceived fit between the parent brand and the brand extension.

In the service industry, “the company” is considered the primary brand rather than the product because the brand of the service company is usually built on customers’ service experiences, in other words the customers’ experiences determines the brand meaning (Berry, 2000). Because the service processes involve extensive customer interactions with service providers, trust of the brand could have an impact on loyalty (Brodie, Whittome, & Brush, 2009; Sirdeshmukh, Singh, & Sabol, 2002). It was found that brand trust is one of the major factors for brand extension success (Reast, 2005). Reast (2005) stated that there was a relationship between brand trust and brand extension. Zboja & Voorhees (2006) investigated the relationship between brand trust and repurchase intention and found brand trust has an impact on repurchase intention, which is considered brand loyalty. Consequently, brand loyalty is positively associated with brand extension (He & Li, 2010; Hem & Iversen, 2004). In addition, distancing techniques have been introduced in vertical brand extension to evaluate how distance between a core brand and vertical brand extension impacts consumer attitudes (Kim, Lavack, & Smith, 2001).

This dissertation investigates the relationships among brand trust, brand loyalty and brand extension. Moreover, the effect of distance between a core brand and brand extension on the relationships of brand trust, brand loyalty and brand extension is examined.

Statement of the Problem

Brand extension has mainly been investigated within a general product setting with little research existing in the service area (Czellar, 2003; Keller & Lehmann, 2006; Völckner et al., 2010). Research has provided the concepts and issues such as consumers' perceptions of fit between a new extension and the parent brand (Aaker & Keller, 1990; Klink & Smith, 2001; van Osselaer & Alba, 2003), the quality of the original brand (Aaker & Keller, 1990), brand reputation (Bottomley & Doyle, 1996), the amount of brand equity (Randall, Ulrich, & Reibstein, 1998), consumer knowledge of the parent and extension categories (Moreau, Lehmann, & Markman, 2001), and characteristics of the consumer and extension marketing program (Barone & Miniard, 2002; Maoz and Tybout 2002; Zhang and Sood 2002). Most of the above studies are within the context of general consumer goods, while research on brand extension in services, especially in the hospitality industry are sparse (Völckner et al., 2010). In addition, Keller and Lehmann (2006) mainly investigated success drivers of brand extension. Little research exists on the holistic model of brand extension.

Research has been conducted on antecedents of brand loyalty (Chaudhuri and Holbrook, 2001; Morgan and Hunt, 1994). It has been suggested that brand trust is a major driver of loyalty (Berry, 2000; Chaudhuri and Holbrook, 2001; Lau and Lee, 2000) and is measured by two dimensions: brand reliability and brand intentions (Delgado-Ballester et al., 2003). Brand trust has an impact on brand extension (Reast, 2005). A relationship between brand trust and brand loyalty and a relationship between brand loyalty and brand extension have been examined separately, whereas little research has

investigated aggregated relationships among brand trust, brand loyalty and brand extension.

Brand extension has been categorized into two types: horizontal extension and vertical extension. A horizontal brand extension situation exists when a brand name is used for a new product that is not related to the product class of the existing brand or is a totally new product category for the firm (Kim and Lavack, 1996). A vertical extension refers to a brand extension used when a firm extends their core brand with a different price point and quality level in the same product category (Keller and Aaker, 1992; Sullivan, 1990). Brand extension research has substantially focused on success factors influencing horizontal brand extension (e.g. Czellar, 2003; Völckner and Sattler, 2006).

Vertical extension has been exploited by major hospitality chains. Along with general products and the service industry, the lodging industry has applied brand extension strategies because of the benefits: reducing advertising cost, entry barrier, risk, and leveraging brand equity (van Riel et al., 2001). Large well-known chains have created smaller sub-brands to target different market segments as they leveraged their brand name to the sub brands (e.g. Marriott Hotels - Courtyard by Marriott, Fairfield Inn & Suites by Marriott, Hilton Hotels – Hilton Garden Inn, Holiday Inn – Holiday Inn Express). Even though many leading lodging chains have applied a vertical brand extension strategy, previous research on brand extension has mainly paid more attention to horizontal brand extension and aggregated success factors of brand extension. Little attention has been paid to brand evaluation of vertical extension. In addition, distance with regards to price and quality between a core brand and brand extension has been

found to have an impact on brand extension in vertical brand extension (Kim et al. (2001); Musante, 2007).

Objectives of the Study

The purpose of the study is to investigate relationships among brand trust, brand loyalty, and brand extension. Further, the impact of distance from a core brand on brand extension is investigated. This study aims to achieve the following objectives:

1. Examine the relationships among brand trust, brand loyalty, and brand extension.
2. Explore the impact of distance from a core brand on brand extension.
3. Develop an integrated theoretical model of brand extension.

Research Questions

The following research questions were addressed:

1. Is there a relationship between brand trust and brand loyalty?
2. Is there a relationship between brand trust and brand extension?
3. Is there a relationship between brand loyalty and brand extension?
4. Is the relationship between brand trust and brand extension moderated by brand loyalty?
5. Does distance from a core brand have an impact on the relationship between brand trust and brand extension?
6. Does distance from a core brand have an impact on the relationship between brand loyalty and brand extension?

Theoretical Foundations

According to the American Marketing Association (2008), a brand is defined as a “name, term, sign, or combination of them intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of the competition.” A brand for a new product is shaped by creating a new name, logo, or symbol and as a result of this it receives “awareness, reputation, and prominence in the marketplace” (Keller, 2002). Keller (2002) suggested that a “strong” brand has different benefits for product, price, communication and channel.

Research on brand extension has mainly taken place in the branding literature to determine how firms leverage brand equity (Keller, 2002). Rangaswamy et al. (1993) stated “Brand extensions represent an opportunity for firms to use the equity built up in the names of existing brands in order to enhance marketing productivity.” It was found that brand extension strategy reduces advertising cost, entry barrier, risk and leverages brand equity (van Riel et al., 2001). Brand extension opportunities can be enhanced by building a strong brand (Keller, 2002). Völckner and Sattler (2006) investigated successful drivers of brand extension. A perception of fit that refers to the similarity between the original parent brand and extension product categories leads to a more favorable extension evaluation (Aaker and Keller, 1990), which means perceived fit positively affects consumers’ attitudes toward brand extensions.

There are two types of brand extension: horizontal and vertical. A horizontal brand extension involves exploiting an existing brand name for a new product introduction whose product category is completely new to the firm (Sheinin and Schmitt,

1994), while a vertical extension is applied to the same product category as the core brand with a different price point and quality level (Keller and Aaker, 1992; Sullivan, 1990). Research on success factors within a horizontal brand extension found that marketing support, fit, and retailer acceptance have an impact on brand extension success (Völckner & Sattler, 2006).

Brand extension research has been examined in the service setting (e.g.; Lei et al., 2004; van Riel et al., 2001; Völckner et al., 2010). A model of brand extension by Aaker and Keller (1990) was directly applied to a services context. It was found that consumers use the original category when evaluating brand extension. In addition, brand extension may be successful if significant similarities exist in the service delivery processes between the original category and brand extension (van Riel et al., 2001). Völckner et al. (2010) investigated the relationship between service quality and brand extension. Some research on brand extension within a hospitality context has taken place (Jiang et al, 2002; Lee, 2007; Kwun 2010). Jiang et al. (2002) examined the relationship between brand extension and customer loyalty in the lodging industry and found that a favorable brand extension can occur. Lee (2007) proposed a conceptual model of a horizontal brand extension in the upscale hotel industry.

According to Keller and Aaker (1992) trust refers to a part of “brand credibility” that is based on the development of loyalty (Berry, 1993) and brand equity (Dyson et al., 1996). Trust is defined as “a generalized expectancy held by an individual that the word of another can be relied on” (Rotter, 1967). In the majority of marketing studies the trust construct is considered multidimensional (Raimondo, 2000). Generally, consumer-brand trust consists of two dimensions: “credibility” and “performance satisfaction” (Reast,

2003). Reast (2005) further investigated the relationship between brand trust and brand extension acceptance. He measured brand trust utilizing two dimensions: credibility and performance satisfaction. It was found that brand trust was moderately associated with brand extension. In other words, both the credibility dimension and performance satisfaction dimension of brand trust are positively associated with brand extension acceptance. On the other hand, Delgado-Ballester et al. (2003) developed and validated a brand trust scale. They stated brand trust has two dimensions: “brand reliability” and “brand intentions.” Brand reliability refers to the perception that a brand fulfills or satisfies the consumer’s needs, whereas brand intentions describes the consumer’s belief that a brand would hold the consumer’s interest even though unexpected problems occur with the consumption of the product (Delgado-Ballester et al., 2003).

Brand loyalty refers to a “biased behavior response expressed over time by some decision-making unit with respect to one or more alternative brands out of a set of such brands” (Joacoby and Chestnut, 1978, p.80). According to Aaker (1991) and Keller (2008), brand loyalty is the core of brand equity, which consists of multiple dimensions: brand awareness, brand image/associations and brand loyalty. Substantial research exists on the relationship between brand extension and two dimensions of brand equity (brand awareness and brand image). However, research on the relationship between brand loyalty and brand extension evaluation is meager (He and Li, 2010). Hem and Iversen (2004) and He and Li (2010) investigated the relationship between brand loyalty and brand extension and found that brand loyalty was positively related to brand extension.

Distancing techniques are used in vertical brand extension by positioning a new brand closer to, or farther away from the core brand (Kim and Lavack, 1996). The

distance refers to a closer or a more distant relationship between a core brand and a vertical brand extension (Kim and Lavack, 1996). Graphical or linguistic distancing techniques are often used to position a brand extension properly from the core brand (Kim and Lavack, 1996). Musante (2007) investigated the distance impact of the up-market extensions from the brand's traditional price point on attitude of brand extension products. He found that more consumer acceptance was associated with an extension product closer to the price point of the brand's core offerings. These results are consistent with the findings that consumers evaluated step-up brand extension more favorably as the price/quality distance of the brand extension increased from the core brand while consumers evaluated step-down brand extension less favorably (Kim et al., 2001). In short, the price/quality distance to the core brand of the brand extension may drive consumer's attitudes when evaluating brand extension.

Proposed Model of the Study

Figure 1-1 presents the basic theoretical model, which will be further developed in Chapter 2. The basic model integrates the relationships among brand trust, brand loyalty and brand extension. The proposed model depicts a logical flow among the constructs. Consumer brand extension is affected directly and indirectly by brand trust. Moreover, the indirect effect of brand trust on consumer evaluation of a brand extension is contingent on brand loyalty. The indirect and direct effects of brand trust and brand loyalty on brand extension are influenced by distance from a core brand.

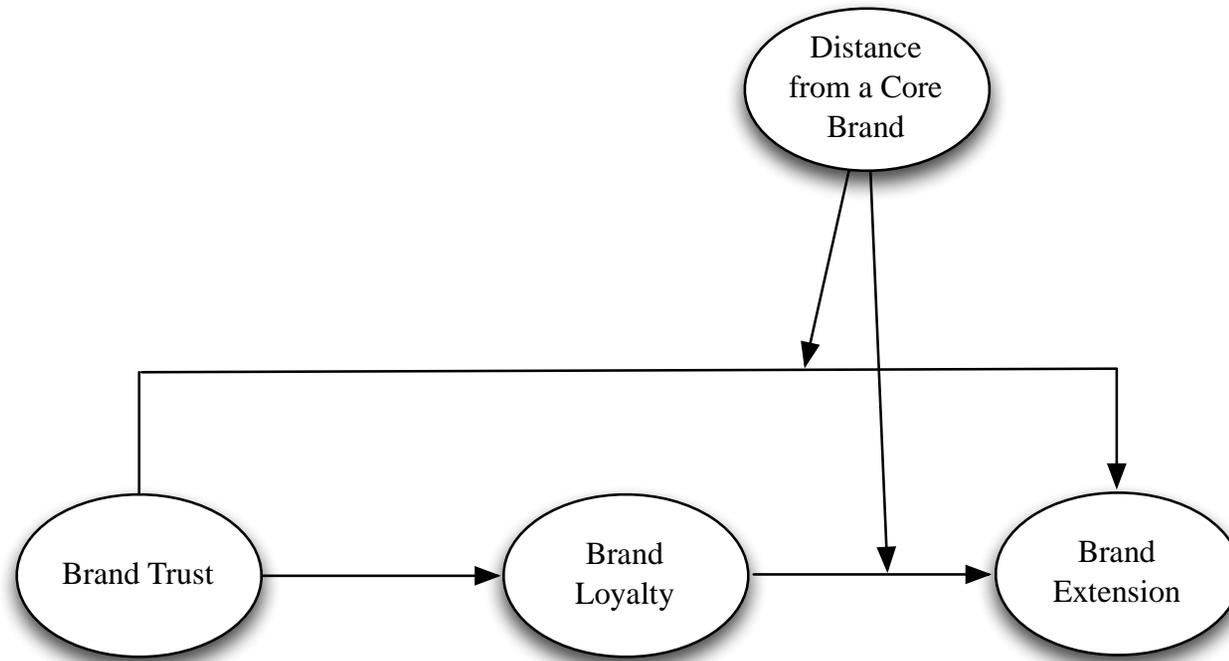


Figure 1-1: Proposed Basic Model of the Study

Definition of Key Terms

- **Brand extension:** A branding strategy using an established brand name for a new product when entering new markets. This provides consumers the familiarity of and knowledge about the established brand (Aaker and Keller, 1990).
- **Brand trust:** “The willingness of the average consumer to rely on the ability of the brand to perform its stated function.”(Chaudhuri and Holbrook, 2002). It is a multidimensional construct, involved with “brand reliability” and “brand intentions” (Delgado-Ballester et al., 2003)
- **Brand loyalty:** “A deeply held commitment to rebuy or repatronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior.” (Oliver, 1999, p.34) Brand loyalty indicates the general preference towards the parent brand (He and Li, 2010).
- **Distance from a core brand:** Distance from a core brand refers to perceived quality and price distance between a core brand and brand extension, which is often referred to as distancing techniques used to increase or decrease the perceived distance between a core brand and a brand extension (Kim et al., 2001).
- **Core brand:** Parent brand that the product is most closely associated with; the umbrella brand name in the consumer’s mind (Balachander and Ghose, 2003). Not all hotels have core brands but this study only looks at ones that do such as Marriott, Hilton, and Hyatt.

Organization of the Study

This dissertation is organized into five chapters. Chapter I presented the overview of the study and included the background of the study, problem statement, and objectives of the study. This chapter also includes research questions, the theoretical foundation, and a proposed model.

Chapter II reviews the literature related to brand, categorization theory, and brand extension, a relationship between brand trust and brand extension, a relationship between brand loyalty and brand extension, distance from a core brand in a vertical brand extension. Moreover, the proposed hypotheses are presented.

Chapter III begins with an introduction of the proposed model and related research questions and hypotheses. This provides a specific discussion of the research design, process of instrument development, data collection, and statistical analysis.

Chapter IV presents the results of the statistical testing of the proposed model including the hypotheses.

Chapter V provides a conclusion including the summary and discussion of the hypotheses testing, discussion of the theoretical and managerial implications of the findings, limitations of the study, and recommendations for future research.

CHAPTER II

REVIEW OF LITERATURE

Introduction

This chapter reviews literature concerning the constructs employed in this study and provides the theoretical underpinnings of the constructs. The literature review includes the areas of brand, categorization theory, brand extension, brand trust, brand loyalty, and distance from a core brand (brand distance).

Brand

Branding has been a major marketing tool in the last decade, as it has been considered one of the most valuable intangible assets firms possess (Keller, 2006). Several definitions exist for a brand. Kotler (2000) defined “a brand as name, term, sign, or combination of them intended to identify the goods and services of one seller or group of sellers and / or differentiate them from those of the competition” (p. 404). Aaker’s definition (1991) of a brand has been accepted widely. He defined the function of a brand as “to identify the goods or services whether of one seller or a group of sellers and to differentiate those goods or services from those of competitors” (p.7). Further, a brand for a new product is shaped by creating a new name, logo, or symbol and as a result of this it receives “awareness, reputation, and prominence in the marketplace” (Keller, 2002).

Branding techniques have been applied in the business world according to its benefits: product-related, price-related, communication-related, and channel-related

effects (Keller, 2002). The product-related effects of a brand are related to consumer product evaluations, consumer confidence, perceptions of quality, and purchase rate positively related to a brand name. In other words, if consumers are well aware of a brand, their attitude and their purchase intention toward the brand are increased. The effect is considered price-related effect when the brand leaders have higher priced positions and consumers have a lower level of price sensitivity toward those leaders. Communication-related effects refer to how the evaluation of brand advertising can be positively biased when consumers have positive feelings toward a brand which is well-known and well-liked. The effect of a well-known brand, which is most likely to have a competitive advantage in marketing activities, is channel-related. Brands are valuable assets and tools influencing consumer behavior include awareness, choice, use, satisfaction, recommendation, trust, and loyalty. They reduce information search costs and risk for consumers and deliver quality, value, promises, and lifestyle enhancement (Kotler and Armstrong, 1996; O’Cass and Grace 2003). In other words, brands have influence on three primary levels: customer market, product market, and financial market (Keller and Lehmann, 2006).

Topics in the area of branding that have received attention are brand positioning, brand integration, brand-equity measurement, brand growth, and brand management (Keller and Lehmann, 2006). Brand positioning guides marketing activities and programs in order to differentiate a brand from others and gain competitive superiority (Keller et al., 2002). It involves establishing key brand associations in the minds of customers. The roles of brand intangibles and corporate images are areas particularly relevant to positioning (Keller and Lehmann, 2006). Specifically, corporate image has been

extensively studied (Biehal and Sheinin, 1998). Keller and Aaker (1992, 1998) stated corporate credibility is carried out when consumers believe that a company is able to deliver products and services that satisfy customer needs and wants (Erdem and Swait, 2004). Further, they suggested that with successfully introduced brand extensions, perceptions of corporate credibility can be enhanced and evaluations of dissimilar brand extensions can be improved. Research on brand integration suggested that synergistic results in branding and marketing activities could occur when branding and marketing activities work in combination. In other words, the effectiveness of branding marketing activities can be enhanced by integrating brand elements, integrating marketing channels and communications, and combining company-controlled and external events (Keller and Lehmann, 2006).

Research on measuring brand effectiveness (e.g. short-term and long-term effects of advertising and promotion) has been extensively conducted. This research has often considered different outcomes and indicators (e.g. price promotion) of marketing effectiveness (Keller and Lehmann, 2006). Keller and Lehmann (2006) suggested little research on measuring customer mindset as possible mediating or moderating variables in analyzing marketing effectiveness had been examined. While little research on measuring brand effectiveness has been performed, research on brand extensions as growth platforms of brands is one of the most heavily-examined and influential areas in marketing (Czellar, 2003). Identifying key theoretical and managerial issues has been addressed and insights and guidance have been provided in academic studies in marketing (Keller and Lehmann, 2006). Further discussion of brand extension will be provided in its own section later in this chapter.

The main issues discussed in brand management are the optimal design of brand architecture, the effects of co-branding and brand alliances, and cross cultural and global branding strategies (Keller and Lehmann, 2006). Research on brand architecture includes line extensions, vertical extensions, multiple brand extensions, sub-brands, and brand portfolios (Aaker, 2004). Several studies on successful characteristics of line extensions and strategic recommendations concerning vertical extension have been conducted (Putsis and Bayus, 2001; Reddy et al., 1994). In addition, studies on co-branding and brand alliances and cross cultural and global branding strategies are increasingly prevalent. Simonin and Ruth (1998) examined the impact of consumers' attitudes toward a brand alliance and suggested each partner's brands could influence each partner's impressions on the condition of product "fit" and "brand fit" between the brand and the other alliances. Cultural and linguistic aspects of branding have also been examined in branding research (Keller and Lehmann, 2006).

Studies on branding have been applied to the area of tourism and hospitality management. A branding concept combining visitor experience with the process of branding is supported within a tourist destination context. Ritchie and Ritchie (1998) emphasized a destination experience in defining a destination brand. They defined a destination brand as:

A name, symbol, logo and word mark or other graphic that both identifies and differentiates the destination; furthermore, it conveys the promise of a memorable travel experience that is uniquely associated with the destination; it also serves to consolidate and reinforce the recollection of pleasurable memories of the destination experience (p.103).

Unlike product markets, a destination brand is more likely to be a corporate or umbrella brand because it allows the destination's individual operators' brand to have certain qualities or attributes (Gnoth, 2007). Topics discussed in tourism literature include a model of destination branding and branding process (e.g. García et al., 2012; Blain et al., 2005; Trembath et al., 2011; Qu et al., 2011), destination branding practices (e.g. Dioko and So, 2012; Hudson and Ritchie, 2009; Ndlovu and Heath, 2011; O'Connor et al., 2008), destination branding and images (e.g. Jetter and Chen, 2011; Tasci and Kozak, 2006), customer-based brand equity with a destination branding (e.g. Lim and Weaver, 2012; Pike et al., 2010).

Branding research has also been applied to the area of services. De Chernatony and Riley (1998) investigated the definition and principles of services branding with experts' views. They suggested services branding shared common principles with those of products at the conceptual level. However, the method of displaying specific elements of services brands might be different from product brands at the operational level due to the unique characteristics of intangibility, inseparability of production and consumption, heterogeneity, and perishability. In services literature, a brand is interpreted as and considered to be a promise (e.g. Ambler and Styles 1996; Berry 2000). While the branding concept has been defined in the fields of products and services, there has been a lack of a consistent understanding of the concept of brand by hotel industry executives and academics (Olsen et al., 2005). In other words, there is no industry-wide consensus on the definition of a brand. Olsen et al. (2005) concluded that the concept of brand for any one specific discipline is too complex to be defined by one specific discipline. Topics of branding discussed in the hospitality field include hotel-restaurant co-branding/alliance

(Ashton and Scott, 2011; Tasci and Denizci, 2011; Guillet and Tasci, 2010; Boo and Mattila, 2002), hotel brand equity (Tsang et al., 2011), internal branding (Punjaisri et al., 2009; Hur and Adler, 2011), brand performance (O’Neill and Xiao, 2006), and the concept of brand (Olsen et al., 2005; Hanson et al., 2009).

Categorization Theory

Categorization is the process of understanding and identifying an object as a member of a class, similar to other members and dissimilar from non-members (Fiske and Pavelchak, 1986). Categorization theory suggests that people divide and group objects into categories for an efficient understanding and processing of the environment as it simplifies an individual’s task of processing a potentially overwhelming number of stimuli in the environment (Walker et al, 1986). It is considered to be the mental operation by which the brain classifies objects and events. It is the most basic phenomenon of cognition, and the most fundamental problem of cognitive science which deals with the kind of knowledge that underlies human cognition, the details of human cognitive processes, and the computational modeling of these processes (Cohen and Lefebvre, 2005). The categories and the process of categorization have been widely studied in both cognitive and social psychology and areas such as linguistics, cognitive anthropology, cognitive computer science, neuroscience and philosophy (McGarty, 1999; Cohen and Lefebvre, 2005).

Categorization literature first appeared in consumer psychology publications two decades ago (Alba and Hutchinson, 1987; Cohen and Basu, 1987). The topic of categorization was relatively new to consumer psychology. Since that time, categorization concepts have been studied by examining product categories (e.g., Herr,

1989; Loken and Ward, 1990; Meyers-Levy and Tybout, 1989; Sujan, 1985), brand categories (e.g., Barone and Miniard, 2002; Bouch and Loken, 1991), goal-related categories (Ratneshwar et al., 2001), attribute-based categories (Hutchinson et al., 1994), cultural categories (Aaker and Lee, 2001), product user categories (Pechmann and Knight, 2002), and the self as a category (Aaker and Keller, 1990). In consumer psychology, Loken, Barsalou, and Joiner (2008) define a consumer category as "a set of products, services, brands, or other marketing entities, states, or events that appear, to the consumer related in some way." They stated that consumers use categorical representations to classify, interpret, and understand information they receive about products and services. Categorical representation is defined as "information that becomes stored in the cognitive system for a consumer category, and that is later used to process it" (Loken et al. 2008). Loken et al. (2008) stated that categorization theory in consumer psychology addresses two general areas of study: category representation and category-based inference.

The three prominent historical views of category representations are the "classical," "prototype," and "exemplar" views (Smith and Medin, 1981). The classical view is a psychological theory about how concepts are represented in humans and other species with the premise that people adopt concept identification strategies that maximize the information gained from each stimulus presentation, ensure that the concept will be attained with certainty, minimize errors on the way to solutions, and minimize cognitive strain (Bruner et al., 1956; Dominowski, 1974). In philosophy, this view originated with Aristotle, while contemporary sources include philosophically oriented studies of language (for example, Katz, 1972; Fodor, 1975), linguistic studies (Lyons, 1968), and psychological studies of concept attainment (Bruner et al., 1956; Hunt et al., 1966). This

classical view has been challenged by the argument that in reality there are few categories with clear-cut boundaries justifying an exclusiveness of properties for all members of one category (Rips, Shoben, and Smith 1973; Rosch 1973). Cohen and Basu (1987) suggested that the classical view of categorization might not provide a very accurate descriptive explanation of the categorization processes in most consumer settings due to the lack of definable and unambiguous concepts.

The prototype view assumes that a prototype could be an abstract representation of either individual instances or an ideal category member based on central tendency information (Cohen & Basu, 1987). Rosch and Mervis (1975) introduced abstract representation, which is based on the most likely features of the category's instances, based on a person's experiences with category members. Cantor (1982) suggested that this prototype model is better than the classical model in that it represents one's response to the variety of possible subsets of features encountered in the social domain. According to Loken et al. (2008), categories are assumed to have a graded structure, such that some category members are more representative, or typical, of a category than other category members. Thus, if more features overlap with common features of the category, it is presumed to increase a category member's prototypicality (Loken et al., 2008).

The exemplar view argues that categories are represented by specific, stored instances of the category, rather than by general, abstracted prototypes. If the target instance is more similar to exemplars of category, it will be more likely to be placed in that category (Cohen and Basu, 1987). Accessibility of the particular category exemplars during the categorization process is an important factor in this view. Factors such as frequency, salient goals, and distinctiveness influencing exemplar retrieval are more

important than a more general rule in object classification. This means that category member salience is likely to depend on contextual factors influencing category member retrieval. For this reason, the exemplar models would predict variable categorization outcomes better than would prototype models (Cohen and Basu, 1987).

Given the diversity of categorization models, Cohen and Basu (1987) suggested a contingency-based, mixed model approach. It is derived from the following assumptions: "(1) that a reasonable amount of feature-based information about any given stimulus has been automatically read in upon exposure to that stimulus, 2) that both analytic (i.e., feature-by-feature) processing of this information and nonanalytic (i.e., based on correlated features and configurable properties) processing are possible, and 3) that the information processor has the flexibility to adopt one or the other mode, or both sequentially, as a function of contextual factors. " These factors are expected to serve a major role in selecting an individual's categorization response. These contextual factors suggested by Cohen and Basu (1987) are initial category learning, task involvement, rule complexity, and the judgment setting.

Research on consumer information processing strategies have investigated whether product attributes are reviewed, evaluated, and combined to yield an overall evaluation, or whether some simpler processes mediate final judgments and choices (Bettman, 1979; Wright, 1975; Sujan, 1985). Categorization theory may provide a theoretical basis for approaching this issue, suggesting that consumers' prior knowledge plays an important role in determining the types of evaluation processes mediating final judgments (Sujan, 1985). Categorization theory suggests that if a new stimulus can be categorized as an example of a previously defined category, then the effect associated

with the category can be quickly retrieved and applied to the stimulus (Fiske, 1992). The categorization approach is potentially a useful way of examining how consumers perceive and react to marketing stimuli (Sujan, 1985).

Cohen and Basu (1987) suggested product class, boundaries, evoked sets, product substitutability and brand homogeneity of response can be meaningfully discussed when these ideas are intimately linked to categorization. The categorization perspective provides a way of thinking about the relationship between a consumer and an individually defined assortment of products as it recognizes the importance of both instrumental aspect and expressive factors, whether market-initiated or based on general or personalized goals and desires (Cohen and Basu, 1987). Categorization is used as a simplification strategy because it minimizes the number of product items without threatening mental representation (Soars, 2003). Developing categorization processes benefits “cognitive processes such as communication, perception, planning of actions and memory storage” (Soars 2003, p.629).

According to Howard (1963), when consumers face the challenge of selecting among numerous brands, they tend to categorize their choices to simplify the choice by a process of elimination that involves two types: acceptable and unacceptable. Currently, a common strategy for a firm is to attempt to leverage its brand value to other products/extended products because consumers construct and use categorical representations to classify, interpret, and understand information they receive about products and services (Loken et al., 2008). For example, Marriott has extended their brand to different levels of the lodging industry aiming to achieve the same brand effect as Marriott itself. The extended brands of Marriott include full service lodging, select

service lodging, extended stay lodging, and timeshare such as Marriott Hotels & Resorts, Courtyard by Marriott, Residence Inn by Marriott, and Marriott Vacation Club International. Loken et al. (2008) stated that research on branding draws heavily from categorization theory. They suggested categorization theory is useful to explain how a consumer uses category information to make judgments about new category members. Categorization theory can be a theoretical background for brand extension. Therefore, consumer research on category inferences has used brand categories by investigating what beliefs associated with a brand category are used to draw inferences about a new brand extension.

Brand Extension

Research on brand extension has mainly been investigated in the area of branding research and how firms should leverage brand equity (Keller, 2002). Keller (2002) suggested that consumer evaluations of brand extensions originated from categorization theory in consumer psychology in that consumers can easily transfer their existing attitude about a parent brand to the extension because both the parent brand and the extension may be categorized by the brand. Rangaswamy et al. (1993) stated that “brand extensions represent an opportunity for firms to use the equity built up in the names of existing brands in order to enhance marketing productivity.” Swanminathan et al. (2001) stated, “brand extension is popular brand strategy which is to attach an existing brand name to a new product introduced in a different product category and can produce reciprocal effects that enhance or diminish the equity of the parent brand.” In other words, brand extension usually appears when a company uses its established brand names to

introduce new products because brand extension strategies reduce advertising costs, barriers to entry, risks, and leverages brand equity (van Riel et al., 2001).

Brand extensions have two forms: horizontal and vertical. In a horizontal brand extension, an existing brand name is used when launching a new product that the category of the new product is completely new to a firm. In other words, consumers' judgment of the extension will be developed from the perceived difference between the brand's traditional category and the extension category (Kim and Lavack, 1996; Musante, 2007). On the other hand, a vertical brand extension refers to a brand extension strategy that consists of a new product being introduced in the same product category as the core brand, but at a different price point and quality level (Keller and Aaker, 1992; Sullivan, 1990). In other words, a brand extension product is introduced above (up-market), or below (down-market) traditional price points for the brand (Musante, 2007). Typically, the core brand name follows brand extension name to show the link between brand extension and the core brand name (e.g. Hilton Hotels, Hilton Garden Inn) (Kim and Lavack, 1996).

During the last decade, more than 50 studies published in the marketing literature were related to brand extensions (Yorston et al., 2010). Most of the studies examined the antecedents, process, and consequences of brand extension evaluation (Yorston et al., 2010). Yorston et al. (2010) divided the research investigating antecedents and the process of brand extension evaluation into four classifications: (1) *research on various conceptualizations of perceived fit or similarity*, (2) *studies of the effects of context variables*, (3) *studies of communication strategies for brand extension success*, and (4) *investigations of consumer-level differences*. In addition to the four classifications,

reciprocal effects and effectiveness of brand extension and evaluating brand extension models have been examined. Table 2-1 presents a summary of the literature review on brand extension.

Table 2-1: Findings of Brand Extension Research

Topics	Findings	Relevant Literature
Perceived fit or similarity	<ul style="list-style-type: none"> • The degree of “fit” between the extension and the parent brand is a major determinant of brand extension. • Perceive fit/similarity has two dimensions: product category fit and brand-level fit. • Perceived fit between the brand and the extension is associated with brand extension price premiums. • Perceived fit is the most important factor of brand extension success. 	<p>Aaker&Keller (1990), Bhat&Reddy (2001), Bottomley&Doyle (1996), Boush&Loken (1991), Buil et al. (2009), Czellar (2003), d’Astous&Fournier (2007), DelVecchio&Smith (2005), He&Li(2010), Mao (2006), Nkwocha et al. (2005), Park et al. (1991), Taylor&Bearden (2002), van Riel et al. (2001), Völckner &Sattler (2006), Wu (2007), Zimmer&Bhat 2004)</p>
The effects of context variables	<ul style="list-style-type: none"> • The context variables are as either sole success factors or mediating or moderating factors for brand extension in combination with the perceived fit. • Perceived quality of the original brand is transferred to the extension. • Perceived quality, overall attitude, price, risk, service intensiveness, and trust are the factors for brand extension success. • Brand portfolio influences on consumers’ evaluation of extension quality. 	<p>Dacin&Smith (1994), Srivastava&Sharma (2011), Musante (2007), Völckner et al. (2010), Lei et al. (2004), Reast (2005), Taylor (2009), Seltene&Brunel (2008), Bhat&Reddy (2001), Lane&Jacobson (1995), Arikan (2010), Kim et al . (2001), Kim&Lavack (1996), Nkwocha et al (2005), Taylor&Bearden (2002), d’Astous&Fournier (2007), DelVecchio&Smith (2005), Zimmer&Bhat (2004)</p>
Communication strategies	<ul style="list-style-type: none"> • The support of communication strategies such as marketing support and advertising has an impact on brand extension success. 	<p>Arikan (2010), Reddy et al. (1994), Volckner&Sattler (2006)</p>
Consumer-level differences	<ul style="list-style-type: none"> • Motivation, expertise, innovativeness, and self-construal have impacts on brand extension success. 	<p>Broniarczyk&Alba (1994), Gurhan-Canli&Maheswaran (1998), Klink&Smith (2001), Yorkston et al. (2010)</p>

Perceived Fit or Similarity

Among the studies of antecedents of brand extension evaluation, a factor widely recognized as a major determinant of brand extension success is the degree of “fit” between the extension and the parent brand (Völckner and Sattler, 2006). Czellar (2003) defined “perceived fit /similarity is characterized by the number of shared associations between the extension product category and the brand.” Perceived fit/ similarity have two dimensions: product category fit and brand-level fit (Bhat & Reddy, 2001; Park et al., 1991). Product category fit indicates the perceived similarity between the existing product categories of the parent brand and the extension category while brand-level fit refers to the similarity between the extension product category and the brand image (Czellar, 2003).

According to Aaker and Keller (1990), a perception of fit between the original parent brand and extension product categories leads to a more favorable extension evaluation. Later, Aaker and Keller (1990)’s research was replicated by Bottomley and Doyle (1996) and van Riel et al. (2001). It was found that the perception of fit between the category of the original parent brand and the category of extension product categories influenced consumers’ attitudes toward brand extensions. Specifically, the perceived quality of the original brand is transferred to the extension category when sufficient congruence between the original product category and the extension category exists. Buil et al. (2009) investigated the impact of perceived fit on brand extension success. They suggested consumers evaluated more favorably brand extensions with a higher degree of fit. Also, brand extensions with higher fit received less negative feedback on parent brand equity.

Boush and Loken (1991) investigated a process of brand extension evaluation. Specifically, the impact of the similarity between the extension product and the brand's current products and the variation among a brand's current products (brand breadth) on brand extension was examined. Delvecchio and Smith (2005) examined the effects of perceived fit on brand extension price premium. They found that brand extension price premiums are associated with the perceived fit between the brand and the extension category. In addition, the relationship is moderated by the levels of financial and social risk related to the extension product category. On the other hand, Mao (2006) applied the concept of perceived fit in brand extensions to multiproduct brands. With multiple product domains, they proposed that different fit perceptions and varying sources of attitude transfer and affect extension evaluations because a multiproduct brand has multiple reference points to judge a brand extension, for which in turn a more complex evaluation process is required. They suggested a two-dimensional fit construct: fit with the parent brand prototype and fit with a product of the brand.

Völckner and Sattler (2006) examined drivers of brand extension success. They investigated ten success factors based on their literature review and tested the structural relationships among the factors. In addition, relative importance of the ten factors was investigated. They suggested that the most important success factor of brand extension was the fit between the parent brand and an extension product. Marketing support, parent-brand conviction, retailer acceptance, and parent-brand experience were found to be significant drivers of brand extension success.

The Effects of Context Variables

In brand extension research, the effects of context variables on brand extension success have been investigated. The context variables discussed include quality (d'Astous and Fournier, 2007; Kim et al., 2001; Lei et al., 2004; Völckner et al., 2010; Zimmer and Bhat, 2004), price (Musante, 2007; Taylor and Bearden, 2002), involvement (Nkwocha et al., 2005; Srivastava and Sharma, 2011), brand portfolio (Dacin and Smith, 1994), risk (Srivastava and Sharma 2011), intensiveness (Lei et al., 2004), trust (Musante, 2007), and attitude (Czellar, 2003). These context variables have been examined as either sole success factors or mediating or moderating factors for brand extension in combination with the perceived fit or similarity.

The main purpose of brand extension is to leverage a brand's equity to a new product by increasing the acceptance of the new product using the brand's equity (d'Astous and Fournier, 2007). Therefore, the perceived quality of the brand is expected to influence brand extension evaluation. Studies on perceived quality as a success factor for a brand extension have been mainly investigated within a services context (Bottomley and Holden, 2001; Lei et al., 2004; Völckner and Sattler, 2007; Völckner et al., 2010). Völckner et al. (2010) examined the impact of perceived quality on the perceived quality of brand extension products. They applied three dimensions of perceived parent brand quality for service brand extensions: interaction quality of the parent service brand, physical environment quality of the parent service brand, and outcome quality of the parent service brand. In addition, they tested the impact of perceived fit and parent service brand conviction along with three dimensions of perceived parent brand quality.

They suggested parent brand quality had more impact on the extension success than perceived fit between the parent brand and the extension.

On the other hand, Lei et al. (2004) stated that previous research has mainly investigated consumers' responses to brand extension. Consumers' overall attitude to an extension is developed by the parent brand and the perceived similarity between an extension and the parent product. They suggested consumers' overall attitude to an extension could be measured by quality because a brand's identity is based on certain specific attributes, which are closely related to perceived quality. They investigated the evaluation of the quality of an extension product and suggested it depended on the level of service intensiveness. Within lower service intensiveness, the quality of an extension product was evaluated more favorably.

Musante (2007), and Taylor and Bearden (2002) investigated the impact of price on brand extension evaluation. Musante (2007) examined the impact of price distance in the up-market extension on brand extension products while Taylor and Bearden (2002) investigated the effects of price information on brand extension evaluations across different levels of similarity. Both studies found similar results in that brand extensions that are closer in price point to the parent brands are evaluated more favorably than brand extensions with further price point from the parent brands. However, for dissimilar extensions, a higher price points had a positive impact on perceived quality evaluations of brand extension products.

In addition to the effect of the "fit", the effect of product involvement and risk on brand extension evaluation has been studied. Nkwocha et al., (2005) defined product involvement in brand extension context as "consumers' perceived relevance of the

extension product category to their needs and values.” They found product involvement had a partial impact on the relationship between product fit and attitude toward extension. Srivastava and Sharma (2011) also investigated the effect of involvement and risk on brand extension evaluation. They studied multiple facets of involvement: relevance, pleasure, sign-value, risk importance, and risk probability and suggested that brand extension was more favorably evaluated when it is highly relevant, more pleasurable, and associated with less risk probability.

Studies on brand portfolio (Dacin and Smith, 1994) and intensiveness (Lei et al., 2004) were examined within the context of brand extension context. Dacin and Smith (1994) suggested that as the number of products affiliated with a brand increases so does consumers’ confidence in and favorability of their evaluations of extension quality. Lei et al. (2004) incorporated brand extension concept into the level of service intensiveness. They found that depending on the levels of service intensiveness involved in extension products, consumers would have more favorable extension evaluations for a less service-intensive extension compared with a more service intensive extension. In other words, when the extension is positioned far from the parent products in terms of service intensiveness, a brand extension product with a parent product requiring relatively strong service intensiveness is evaluated more favorably.

Communication Strategies

The support of communication strategies in brand extension has been considered as a one of the factors that plays a critical role in brand extension success (Arikan, 2010). According to Reddy et al. (1994), brand extensions that have a well-supported advertising

campaign during the initial stage are more likely to be successful than extensions that have less support. In other words, there is a positive relationship between communication strategies and brand extension success. Völckner and Sattler (2006) investigated the impact of marketing support on brand extension success. It was found that marketing support was a relatively important driver of brand extension success followed by fit between a parent brand and an extension product.

Consumer-level Differences

Studies of consumer-level differences in brand extension have been investigated focusing on the following variables: motivation, expertise, innovativeness, and self-construal (Yorkston et al., 2010). According to Gurhan-Canlin and Maheswaran (1998), motivation moderates the relationship between a parent brand and an extension. They found consumers transfer more of the affect of a parent brand to an extension with a low-motivation condition because cognitive processing is less elaborate and more categorical. Expertise also moderates the relationship between the effects of brand associations, brand affect, and fit and brand extension attitude (Broniarczyk and Alba, 1994). Experts evaluate brand extension based on the processing of product-related associations, while novices evaluate brand extension based on perceived fit and attitude toward the brand. Consumer innovativeness and product adoption tendency have an impact on brand extension. According to Klink and Smith (2001), perceived fit is less important in their evaluation of an extension for early adopters because the early adopters are less sensitive to risk.

Studies on Brand Extension within the Hospitality and Tourism Context

Many hotel companies have tried to benefit from their brands' good will through brand extension; most major hotels have at least one successful brand extension in their hotel chain strategy (Jiang et al., 2002). Quality Hotels (now Choice Hotels), extended its product line to Comfort Inns and Quality Royale (now Clarion) in 1981, was one of the first examples of brand extension in the hospitality industry. An explosion of a brand extension in the hospitality industry occurred in 1990's. Holiday Inn introduced Holiday Inn Express and Holiday Inn SunSpree Resort in 1991 and the upscale Holiday Inn Crowne Plaza in 1993. Marriott introduced Courtyard by Marriott in 1983. Hilton announced its brand extension to Homewood Suite line in 2000 (Jiang et al., 2002). Currently, Marriott Corporation and Wyndham Worldwide have approximately 15 brands while Intercontinental Hotel Group and Starwood Hotels and Resorts Worldwide have less than 10 brands (Kwun, 2010) (see Table 2-2). Even though the lodging companies have leveraged their brand value to the extension brands by adding various sub-brands or extended brands, only studies on brand extension have investigated the hospitality and tourism context (Jiang et al., 2002; Lee, 2007; Kwun, 2010).

Table 2-2: Brand Extensions of Major Hotel Brands

Brand	Brand extensions
Inter-Continental Hotel Group	Candlewood Suites, Crowne Plaza, Holiday Inn, Holiday Inn Express, Holiday Inn Club Vacations, Holiday Inn Resort, Hotel Indigo, Inter Continental, Staybridge Suites
Wyndham Worldwide	Wyndham Hotels and Resorts, Wyndham Grand' Collection, Wyndham Garden, TRYP by Wyndham, Ramada, Days Inn, Super 8, Wingate by Wyndham, Baymont Inn & Suites, Microtel Inns and Suites, Hawthorn Suites by Wyndham, Howard Johnson, Travelodge, Knights Inn, Wyndham Vacation Resorts, WorldMark by Wyndham, Dream Hotels, Planet Hollywood, Night Hotels, Baymont Inn & Suites
Marriott International, Inc.	Marriott Hotels & Resorts, JW Marriott Hotels & Resorts, Renaissance Hotels & Resorts, EDITION Hotels, Autograph Collection Hotels & Resorts, Courtyard by Marriott, Residence Inn by Marriott, Fairfield Inn & Suites by Marriott, Marriott Conference Centers, TownePlace Suites by Marriott, SpringHill Suites by Marriott, Marriott Vacation Club, The Ritz-Carlton Hotel Company, L.L.C., The Ritz-Carlton Destination Club, Marriott ExecuStay, Marriott Executive Apartments, Grand Residences by Marriott, Grand Residences Marriott, Marriott Executive Apartments, AC Hotels Marriott, Bulgari Hotels & Resorts
Hyatt	Park Hyatt, Andaz, Grand Hyatt, Hyatt Regency, Hyatt Place, Hyatt Summerfield Suites, Hyatt Resorts, Hyatt Residence Club, Hyatt House
Choice Hotels International, Inc.	Comfort Inn, Comfort Suites, Quality, Sleep Inn, Clarion, Cambria Suites, MainStay Suites, Suburban Extended Stay Hotel, Econo Lodge, Rodeway Inn, Ascend Collections
Hilton Worldwide	Conrad, Doubletree by Hilton, Doubletree Club, Embassy Suites, Hampton Inn Suites, Hilton Hotels & Resort, Hilton Garden Inn, Homewood Suites by Hilton, Waldorf Astoria, Home2 Suites by Hilton, Hilton Grand Vacations
Starwood Hotels & Resorts Worldwide	St Regis, The Luxury Collection, W Hotels, Westin Hotels, Sheraton, Four Points, Aloft, Element, Meridien

(Adapted from Kwun, 2010 and updated)

Jiang et al. (2002) examined brand extension phenomenon in the lodging industry. They empirically tested whether brand extensions encourage guests to repeat their stay with a particular chain's brands. They argued that brand extensions could increase customer loyalty because it reduces risk. It was found that a brand extension strategy could be successful for up to three of brand extensions. Customers are likely to switch brands when the length of brand extension exceeds approximately three. In addition, they found that customer loyalty and repeat purchase can be boosted by a brand extension strategy. Likewise, Kwun (2010) investigated the effects of brand extensions on the lodging portfolio. He stated that perceived quality and brand effects on attitudes were significantly related to consumer attitude toward brand extensions. The brand effects were measured by brand awareness, brand class and brand reputation. Among the variables of the brand effects, brand reputation was the strongest positive influential factor on brand attitude.

Lee (2007) also investigated brand extension concept in the lodging industry. He investigated the process of brand extension in the lodging industry by testing the relationships among perceived fit, perceived quality, attitude toward extension, and behavioral intention. He found that consumers evaluated brand extension more favorably if fit or similarity between the parent brand and extension products was good. Also, parent brand quality had an impact on consumers' brand extension evaluation in the lodging industry. Lee's (2007) study, he applied horizontal brand extension in the lodging industry: the brand extension products consisted of hotels' product brands of beds or pillows.

Brand Extension Evaluation

Most of brand extension research has focused on the consumer perspective and their evaluation of an extension (Grime et al., 2002). The reasons why consumer evaluations have been paid attention are: 1) consumer evaluations are considered as a key element in brand extension success; 2) favorable consumer evaluations refer to an essential element in the development of brand equity (Grime et al., 2002; Pitta and Katsani, 1995). Consumer evaluations of brand extension have been operationalized in various ways: quality and likelihood of trying the extension (Aaker and Keller, 1990); favorability or likeability (e.g. Kirmani et al., 1999; Sheinin and Schmitt, 1994). In addition, consumers should have “brand associations,” which are positive beliefs and favorable attitudes toward the core brand for brand extension success (Grime et al., 2002). Brand associations reflect “the unique meanings associated with a brand name” (Rangaswamy et al., 1993, p.63) and extension evaluations are driven by the prominence of such associations in the extension context (Keller and Aaker, 1992). According to Aaker and Keller (1990), favorable associations from the core (original) brand have to be transferred to the extension for the extension to be successful.

Brand Trust and Brand Extension

Trust has been considered a key factor of success in relationship marketing (Morgan and Hunt, 1994). Trust has been described as a relationship quality feature (Dwyer et al., 1987) or determinant of the perceptions of service quality (Parasuraman et al., 1985), loyalty (Berry, 1993), communications between parties (Mohr & Nevin, 1990), and amount of cooperation (Anderson and Narus, 1990). The trust construct has been

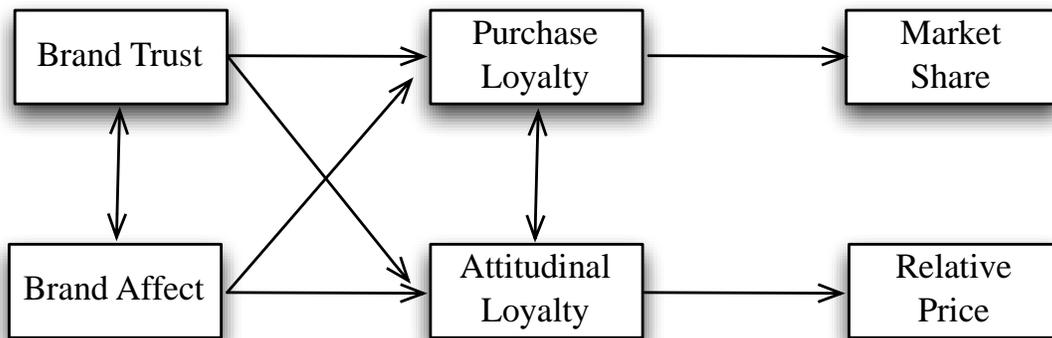
variously defined as: “the willingness of the average consumer to rely on the ability of the brand to perform its stated function” (Moorman et al., 1992); “a generalized expectancy held by an individual that the word of another can be relied on” (Rotter, 1967); “the extent to which a person is confident in, and willing to act on the basis of the words, actions, decisions of others” (McAllister, 1995); and, “the willingness of the average consumer to rely on the ability of the brand to perform its stated function” (Chaudhuri and Holbrook, 2001). Brand trust will be the basis of which consumers will decide whether or not to purchase the brand. Therefore, brand trust plays an important role in the buying process (Luk and Yip, 2008).

According to Chaudhuri and Holbrook (2001), brand trust has multiple facets, which are reliability, safety, and honesty, involving a process that is well thought out and carefully considered. Reast (2005) suggested brand trust has two dimensions: *credibility* and *performance satisfaction*. On the other hands, Delgado-Ballester et al. (2003) developed a brand trust scale and examined its relationships with other theoretically related constructs: brand loyalty and overall satisfaction with the brand. They defined brand trust as reflected in two components: *brand reliability* and *brand intentions*. In their definition, brand reliability refers to “a competence or technical nature and is based on the consumer’s belief that the brand accomplishes its value promise,” and brand intentions indicate “the consumer’s belief that the brand would hold the consumer’s interest when unexpected problems with the consumption of the product arise.”

Chaudhuri and Holbrook (2001) examined the relationship between brand trust along with brand affect and brand loyalty as illustrated in Figure 2-1. They proposed brand trust is related to both purchase and attitudinal loyalty. Brand trust was

operationalized with four items: “I trust this brand,” “I rely on this brand,” “This is an honest brand,” and “This brand is safe”; each item was evaluated with a same seven point Likert scale (1=very strongly disagree, 7=very strongly agree). According to the study’s results, brand trust and affect had an impact on both purchase and attitudinal loyalty. It was suggested brand trust is associated with brand loyalty because trust is important when exchanging valued relationships, which in turn has an impact on market share and relative price (Chaudhuri and Holbrook, 2001). In the results of Delgado-Ballester et al. (2003), brand trust was related to brand loyalty and was considered a main construct leading brand loyalty.

Figure 2-1: Chudhuri & Holbrook (2001)’s Path Model of Brand Trust, Brand Loyalty and Brand Performance



Luk and Yip (2008) investigated the effect of brand trust on consumers’ purchasing behavior. They conceptualized brand trust to have two dimensions: brand reliability and brand intentions by applying Delgado-Ballester (2003)’s measurement of brand trust. In addition, they examined the relationship between consumer satisfaction and brand trust. It was found that consumer satisfaction had an impact on brand trust. The brand intentions had a higher effect on purchasing behavior than brand reliability. Sung

and Kim (2010) examined the relationships among brand personality, brand trust, brand affect, and brand loyalty. They also found that brand trust had an impact on brand loyalty. Liao et al. (2010) investigated the impacts of brand trust, customer satisfaction, and brand loyalty on word-of-mouth. They found that brand trust had an impact on brand loyalty, which in turn, influenced word-of-mouth.

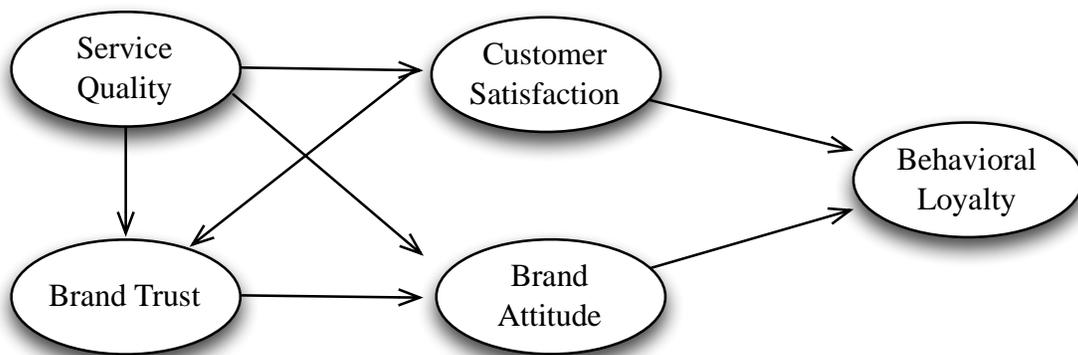
Reast (2005) examined the relationship between brand trust and brand extension acceptance. He stated brands with higher trust ratings have higher brand extension acceptance because consumers are willing to try brand extension if the brands are well trusted. He collected brand data from five categories of goods and services: grocery retail, coffee, tea, pens, and Internet retail. He conceptualized brand trust as a two-dimensional construct: credibility and performance satisfaction. It was found that two dimensions of brand trust are significantly associated to a moderate degree. It was suggested that credibility reflects honesty of the brand in advertising, packaging, or other forms of brand communications and the extended values perceived regarding the brand; whereas performance satisfaction reflects variables with the “delivery” of the brand when quality is consistent and meets expectations, and the brand is dependable or relied on.

Sweeney and Swait (2008) investigated the effects of brand credibility on customer loyalty. They stated that the credibility of the firm was built over time through repeated customer/firm interaction, which could be embedded in the concept of brand. In addition, they suggested brand credibility has played a key role in customer perceptions of pricing tactics, advertising, sales person interactions and online catalogs. They measured brand credibility as a two-dimensional construct: trust-worthiness and expertise. It was found that customer’s behavioral intentions, word-of-mouth recommendations and

switching propensity are positively associated with brand credibility. Moreover, Wu (2007) examined the relationships among brand associations, brand breadths, and the similarity between a parent brand and a brand extension product, and brand extension evaluations. They found that brand trust and brand affect had an impact on consumers' attitude toward brand extension.

Limited studies on brand trust in the hospitality context have been conducted (Lee and Back, 2009; Wilkins et al., 2009). Wilkins et al. (2009) investigated the relationships among service quality, perceived value, customer satisfaction and behavioral loyalty within the lodging industry, specifically within first class and luxury hotels. They found that brand trust, mediated by brand attitude is a significant moderator of behavioral loyalty as shown in Figure 2-2. In addition, service quality was the most influential determinant of loyalty when indirect effects are included.

Figure 2-2: Model Determinants of Hotel Behavior Loyalty (Wilkins et al., 2009)



Lee and Back (2009) also investigated the relationships among brand satisfaction, attitudinal brand loyalty, brand trust, and brand value in the meetings, incentives, conventions, and exhibitions (MICE) industry. In this study, brand trust was conceptualized as “the confidence of average attendees in the reliability and integrity of the brand with a firm expectation that the brand performs its stated functions.” They applied confirmatory factor analysis and structural equation modeling to analyze the relationships. Their study showed that brand trust mediated the relationship between brand satisfaction and brand loyalty. In addition, attitudinal brand loyalty was significantly associated with brand trust.

He and Li (2010) differentiated the concept of “brand” in brand loyalty from the one of “brand” in brand extension. They suggested even though brand loyalty and brand extension evaluations are affective attitudes toward the focal brand, brand loyalty indicates the general preference towards the parent brand/core brand, whereas brand extension evaluation refers to a product-specific brand attitude. In their study, brand loyalty was operationalized as general brand preference on the parent brand. This study follows He and Li’s (2010) operationalization of brand loyalty and brand extension evaluations in that brand loyalty refers to the general preference towards the core brand, while brand extension evaluations concern consumers’ product-specific brand attitude.

In summary, brand trust has an impact not only on brand loyalty but also on brand extension. Therefore, the hypothesis 1 and 2 are proposed.

Hypothesis 1: Brand trust is positively associated with brand loyalty.

Hypothesis 2: Brand trust is positively associated with brand extension.

Brand Loyalty and Brand Extension

Oliver (1999, p.34) defines brand loyalty as

a deeply held commitment to rebuy or repatronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior.

In short, loyalty refers to repeated purchases of particular products or services. The above definition of loyalty has been widely used in the marketing literature. Often, brand loyalty is measured by a particular brand's purchase frequency and purchase possibility (Brody and Cunningham, 1968; Farley, 1964). According to the definition, brand loyalty has two dimensions: behavioral and attitudinal loyalty (Aaker 1991; Oliver 1999).

Behavioral loyalty refers to repeated purchases of the brand while attitudinal brand loyalty indicates commitment associated with the brand (Chaudhuri and Holbrook, 2001). These two dimensional measurements have been considered as relatively accurate to predict a consumers' future behavior (Yi and Jeon, 2003).

Brand loyalty has been an important construct in the marketing literature for at least three decades (Howard and Sheth 1969, p.232). Aaker (1991) and Dick and Basu (1994) stated that brand loyalty leads to certain marketing advantages: reduced marketing costs, more new customers, greater trade leverage, favorable word of mouth, and greater resistance among loyal consumers to competitive strategies. Moreover, loyalty can be enhanced by brand credibility (Sweeney and Swait, 2008). Brand loyalty has been a main construct of customer-based brand equity, which influences brand extension success (Aaker, 1991). Brand equity can be measured internally by both types of loyalty: behavioral loyalty and attitudinal loyalty. van Riel et al. (2001) examined the transfer of

customer-based brand equity to brand extensions and found that the original brand could be used as a key indication to evaluate extensions.

According to Chaudhuri and Holbrook (2001), brand loyalty, which is related to brand trust and brand affect, have two dimensions: purchase loyalty and attitudinal loyalty. They measured purchase loyalty with the following two statements: “I will buy this brand the next time I buy (product name)” and “I intend to keep purchasing this brand,” and attitudinal loyalty with the following two statements: “I am committed to this brand” and “I would be willing to pay a higher price for this brand over other brands.” Purchase loyalty and attitudinal loyalty are related to each other. In addition, purchase loyalty has an impact on market share increase; whereas, attitudinal loyalty influences a higher relative price for the brand. They suggested brand loyalty is an important construct in the determination of brand performance outcomes.

Research on the relationship between brand loyalty and brand extension has been examined (He and Li, 2010). He and Li (2010) investigated how consumers evaluated technology-based brand extensions and how technologic direction interacts with brand loyalty in affecting brand extension evaluation. They found that brand loyalty is related to brand extension evaluation. In addition, they suggested brand loyalty differs from brand extension evaluation in terms of the locus of the brand affect. In their study, brand loyalty was operationalized as general brand preference on the parent brand and brand extension evaluation referred to a product-specific brand attitude.

Several studies of brand loyalty exist in the hospitality field (Jiang et al, 2002; Lee and Back, 2009; Wilkins et al., 2009). The relationships between brand loyalty and brand extension, and determinants of brand loyalty have been investigated. Specifically,

Jiang et al. (2002) explored the relationship between brand loyalty and brand extension. They tested whether hotel customer loyalty can be increased by brand extensions. They stated brand extensions can increase customer loyalty because a brand extension strategy can reduce the switching costs from a particular brand family to a competitor's brand. They measured brand extension as the number of brand names in the product lines because they expected the chance of switching to brands outside the family brand decreased as the number of brands in the family increased. They found that brand loyalty could be positively related to brand extension when the member of brand extensions is approximately three.

Again, in this study, classifications of He and Li (2010) on brand loyalty and brand extension evaluation will be applied. Brand loyalty is considered as the general preference towards the parent brand/core brand, whereas brand extension evaluation refers to a product-specific brand attitude. Therefore, the following hypotheses are proposed:

Hypothesis 3: Brand loyalty is positively associated with brand extension.

Hypothesis 4: Brand loyalty partially mediates the relationship between brand trust and brand extension.

Distance from a Core Brand and Brand Extension

According to Kim et al. (2001), research on the area of vertical brand extension has been sporadic even though vertical brand extension strategies have been used in

various industries. In a vertical brand extension context, the price and quality level of a brand extension may be positioned differently from that of a core brand. Consumers usually perceive a significant difference in price and quality levels to be an inconsistent attribute when a vertical brand extension is introduced, resulting in re-evaluating their initial assessment of the price/quality of the core brand (Kim et al., 2001). This kind of branding technique is referred to as distancing techniques, which refers to techniques used to increase or decrease the perceived distance or separation between a core brand and a brand extension. Linguistic and graphical distancing techniques are usually used in advertising, and sales promotion (Kim and Lavack, 1996). Graphical distancing techniques manipulate the size of the core brand name graphically in order to achieve a distanced position from the core brand while linguistic distancing techniques employ words to manipulate the distance between the core brand and an extension brand (Kim and Lavack, 1996).

In a horizontal brand extension, consumers evaluate a brand extension based on their perceived difference between the brand's traditional category and the extension category. In other words, a horizontal brand extension should be positioned close to the core brand in order to get benefit from the core brand (Musante, 2007). However, no need to rectify the discrepancy is required in vertical brand extensions because it is a within-category extension. In a within-category extension, the relationship between a core brand and an extension is driven by the core brand's image, quality and price points (Musante, 2007).

Kim et al. (2001) investigated the impact of a step-up or step-down vertical brand extension on consumer evaluation of a core brand. In addition, the impact of distancing

techniques on consumer evaluations of vertical brand extensions and core brands was examined. They found that regardless of whether a step-up or step-down approach was used a vertical brand extension has a negative impact on the core brand. However, distancing techniques such as graphic and linguistic distancing techniques reduce the dilution of the core brand image. On the other hand, distancing had an impact on consumer evaluation of a brand extension in that consumers evaluate a step-down extension less favorably if greater distance exists between the core brand and the step-down brand extension. They stated that brand identity would be limited when transferring the identity from the core brand to the brand extension when the brand extension was positioned further from the core brand. They suggested varying quality levels of brand extension products could have an impact on the power of the core brand to the brand extension products.

Musante (2007) examined factors that have an impact on consumer evaluations of up-market vertical brand extensions by exploring the impact of the distance of the up-market extension from the brand's traditional price point on attitude towards the brand extension products. He applied an experimental design by manipulating levels of price. It was found that consumers evaluate more favorably extension products closer to the price point of the brand's traditional offerings. Both the studies of Kim et al. (2001) and Musante (2007) suggested consumers evaluated a brand extension product more favorably when its distance (price/quality) is positioned closer to the core brand.

The definition of "core" brand is similar to the one of parent brand. Parent brand is defined as the product that originally used the brand name (Balachander and Ghose, 2003). In other words, the parent brand is considered as the product most closely

associated with the umbrella brand name in the consumer's mind (Farquhar et al., 1990; Morrin, 1999). In this study, "core" brand is defined as parent brand that the product most closely associated with the umbrella brand name in the consumer's mind.

Because distancing techniques utilize price and quality in a vertical brand extension, a distance is operationalized as a consumer's perceived distance in terms of price and quality from the price and quality of a core brand. In other words, the distance refers to consumer's evaluation of how far the price and quality of brand extension product is positioned from the ones of its core brand. Therefore, the following hypotheses are proposed:

Hypothesis 5: The distance from a core brand moderates the relationship between brand trust and brand extension.

Hypothesis 6: The distance from a core brand moderates the relationship between brand loyalty of the core brand and brand extension.

Summary

This chapter reviewed the literature related with brand, categorization theory, brand extension, brand trust, brand loyalty, and distance from a core brand in order to provide the theoretical framework for the process of consumer brand extension evaluation in the vertical brand extension setting. As discussed, previous literature considered an individual relationship between brand trust and brand loyalty, between brand trust and brand extension, and between brand loyalty and brand extension. There is a great need to integrate the separate relationships into a model providing aggregate relationships among them (see Figure 2-3). In addition, investigating the role of the distance from a core brand would contribute to the existing body of knowledge.

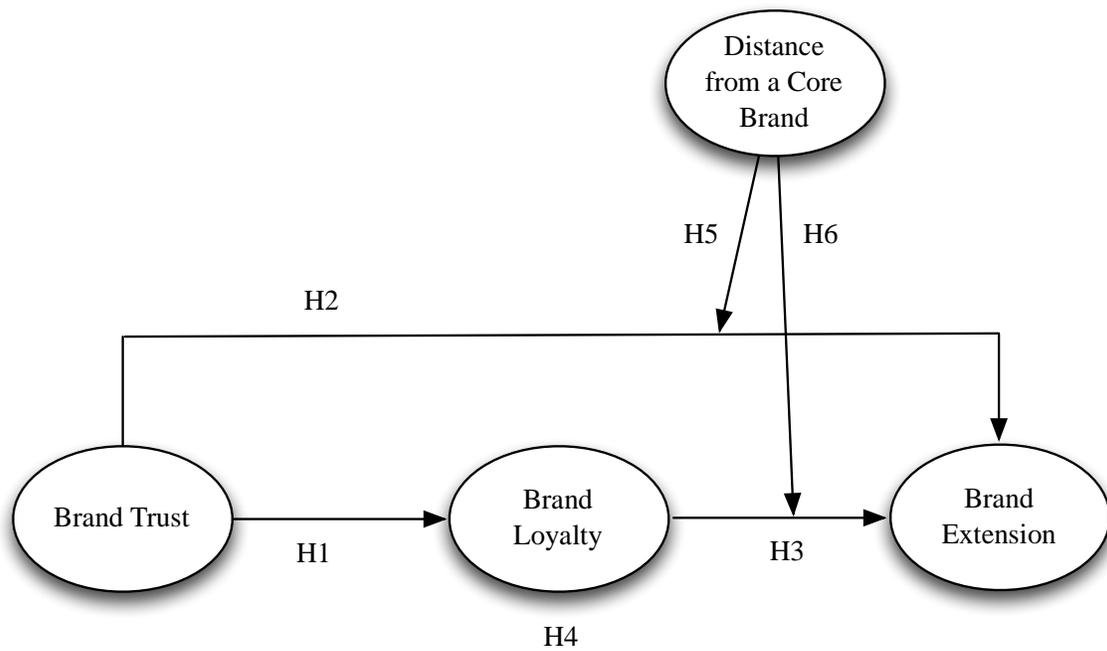


Figure 2-3: A Theoretical Structural Model of Brand Extension

CHAPTER III

METHDOLOGY

Introduction

This chapter discusses the methodology used to explore the research hypotheses. It begins with a discussion of the conceptual model, the research questions and research hypotheses. Then, the research design including research methods and statistical tests is discussed. In particular, brand selection, sampling frame, instrument development, data collection, reliability and validity, and statistical analyses are reviewed.

Conceptual Model

A theoretical structural model integrating brand trust, brand loyalty, distance from a core brand (brand distance), and brand extension has been developed through the literature review in Chapter II. Figure 3-1 depicts the theoretical structural model of the brand extension process, and provides the logical flow of the interaction of the constructs. According to the literature, brand trust, which has two dimensions: reliability and intentions has an impact on brand loyalty, which in turn, brand loyalty influences brand extension. In addition, brand trust influences brand extension. However, previous research has not provided an integrative approach to investigate the relationships among the mentioned constructs.

In the structural model, brand trust is an exogenous construct that affects directly and indirectly brand extension, which is considered the ultimate dependent or endogenous construct. The indirect effects of brand trust on brand extension are contingent upon brand loyalty. Brand loyalty is considered the mediating endogenous

construct, and plays a role of a dependent variable in the relationship between brand trust and brand loyalty. Brand loyalty intervenes between brand trust (exogenous construct) and brand extension (the ultimate endogenous construct). In this study, the structural model was empirically tested in order to explore the structural relationships among the exogenous and endogenous constructs. In addition, distance from a core brand (perceived quality and price distance between a core brand and brand extension) moderates the relationship between brand trust and brand extension, and the relationship between brand loyalty and brand extension.

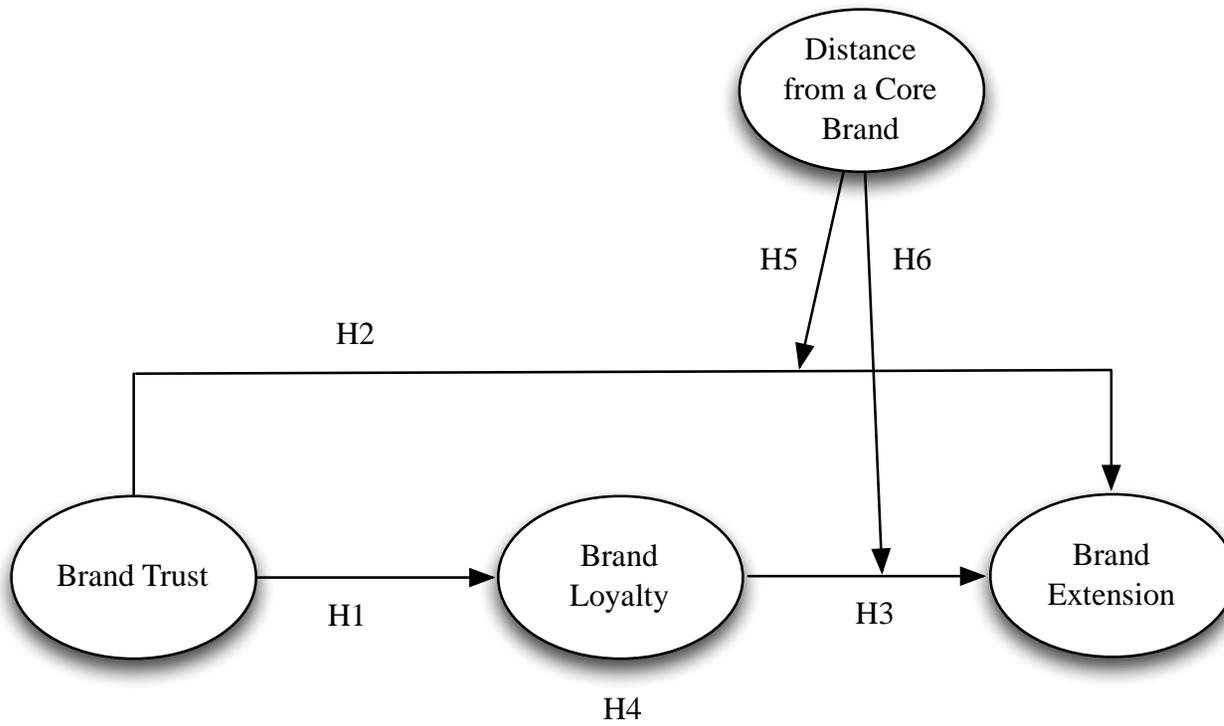


Figure 3-1: A Theoretical Structural Model of Brand Extension

Research Proposition and Hypotheses

The six research questions provided in Chapter I are addressed with six empirically testable hypotheses. A structural model was tested to determine how brand trust influences brand loyalty, and brand extension, how brand loyalty affects brand extension, and whether brand distance has an impact on the relationship among brand trust, brand loyalty and brand extension. Therefore, the six research questions and six hypotheses are presented as following:

Research Question 1

Is there a relationship between brand trust and brand loyalty?

Hypothesis 1: Brand trust is positively associated with brand loyalty.

Research Question 2

Is there a relationship between brand trust and brand extension?

Hypothesis 2: Brand trust is positively associated with brand extension.

Research Question 3

Is there a relationship between brand loyalty and brand extension?

Hypothesis 3: Brand loyalty is positively associated with brand extension.

Research Question 4

Is the relationship between brand trust and brand extension moderated by brand loyalty?

Hypothesis 4: Brand loyalty partially mediates the relationship between brand trust and brand extension.

Research Question 5

Does distance from a core brand have an impact on the relationship between brand trust and brand extension?

Hypothesis 5: The distance from core brand moderates the relationship between brand trust and brand extension.

Research Question 6

Does distance from a core brand have an impact on the relationship between brand loyalty and brand extension?

Hypothesis 6: The distance from core brand moderates the relationship between brand loyalty of the core brand and brand extension.

Research Design

Methods

Brand Selection

This study examined the relationships among brand trust, brand loyalty and brand extension, which required a specific brand to test the relationships. In this study, “brand” in brand trust and brand loyalty differs from brand extension. “Brand” in brand trust and brand loyalty refers to a core brand. Not all hotels have core brands but this study only looks at ones that do. For instance, a “Marriott” brand is considered as a core brand of the

brand extensions: Marriott Hotels & Resorts, Courtyard by Marriott, and Fairfield Inn by Marriott, etc.; a “Hilton” brand is referred to a core brand of the brand extensions: Hilton Hotels & Resorts, Hilton Garden Inn, Doubletree by Hilton, etc. Brand extensions refers to Marriott Hotels & Resorts, Courtyard by Marriott, and Hilton Garden Inn, etc.

Therefore, a core brand and its brand extensions were selected.

In the lodging industry, the most popular hotels that have a core brand and brand extensions are Marriott, Hilton, and Hyatt. Among them, Marriott has the most number of brand extensions. Therefore, this study selected Marriott as a core brand. Among brand extensions of Marriott, three different levels of quality and price of hotels were selected as brand extensions: Marriott Hotels & Resorts, Courtyard by Marriott, and SpringHill Suites by Marriott. Marriott Hotels & Resorts is one of the signature brands and the most recognized brand with an average daily rate of \$131.33. Courtyard by Marriott has an average daily rate of \$115.03 targeting business travelers. SpringHill Suites by Marriott targets travelers in the upper moderate tier and has an average daily rate of \$99.05. As of 2011, there were 188 units of Marriott Hotels & Resorts, 824 units of Courtyard by Marriott and 287 units of SpringHill Suites by Marriott in North America (U.S. and Canada) (Marriott.com).

Sample

The target population of this study was travelers who have stayed at a Marriott property during the past year. The statistical technique that was used in this study is structural equation modeling (SEM), which requires a large sample size. As a rule of thumb, SEM requires at least 10 observations per indicator, which is a lower bound for

the adequacy of sample sizes (Nunnally, 1975). Hair et al. (2010) recommended a sample size of 200, but it depends on the model complexity. In this study, a total of 19 indicators were proposed. Among them, 9 indicators of brand trust were reduced to two factors. Ten indicators were included in the final model. Therefore, the minimum required sample size was 90. The target sample size was 400 so that the data could be randomly split in half. One-half could be used to estimate a measurement model and the other half of the data could be applied to estimate a structural equation model.

Data collection

This study utilized an Internet survey method because it allows researchers to reach a large audience, and to secure respondents' answers quickly and cost-effectively (Zikmund, 2003). This study utilized a commercial online market research company to distribute the questionnaires to the company's panel, Cint.com. Cint is a private global company that specializes in online panel management products. Cint has an access to over seven million people in 50 countries (www.cint.com). According to their panel book published in March 2013, a total of 918,378 panels are available in the U.S (Cint, 2013).

Instrument development

The questionnaire consists of six parts. Part one collected respondents' travel characteristics and trip behavior. Part two, three, and four asked respondents to rate brand trust, brand loyalty, distance from a core brand, and brand extension with seven Likert type scales. Part six gathered information concerning demographic information of the respondents.

Measurement Variables

The proposed model consists of two exogenous constructs (brand trust and brand loyalty), one exogenous moderating construct (distance from a core brand), and one endogenous construct (brand extension).

Brand trust

Chaudhuri and Holbrook (2001) measured brand trust as a four-item index based on seven-point ratings of agreement (1=very strongly disagree, 7=very strongly agree). The following statements measure brand trust: “I trust this brand,” “I rely on this brand,” “This is an honest brand,” and “This brand is safe.” These items yielded a .81 coefficient alpha for the four-item index of brand trust. Reast (2003) also developed brand trust scales; the measures had seven-point semantic differential scales (1=Low, 7=High) with two dimensions of brand trust: credibility and performance satisfaction.

Delgado-Ballester et al. (2003) developed and validated a brand trust scale by applying a multi-step approach. They suggested brand trust had two dimensions: brand reliability and brand intentions. With brand reliability, they found four items. The statements for the *reliability* items are “X is a brand name that meets my expectations,” “I feel confidence in X brand name,” “X is a brand name that never disappoints me,” “X brand name guarantees satisfaction.” The *intention* items are “X brand name would be honest and sincere in addressing my concerns,” “I could rely on X brand name to solve the problem,” “X brand name would make any effort to satisfy me,” “X brand name would compensate me in some way for the problem with the *product*.”

In this study, the scales of brand trust developed by Delgado-Ballester et al. (2003) were used because the development of the scales followed Churchill's (1979) scale development process and the scales were validated through the Delgado-Ballester et al. (2003) study. Because the scales of Delgado-Ballester et al. (2003) were developed to measure brand trust in a general product setting, the scales were slightly modified so that they could be applied to the lodging industry. The modified scales are as follows:

- Brand Reliability (1=Strongly disagree to 7=Strongly agree)
 - Marriott is a brand that meets my expectations.
 - I feel confident with the Marriott brand.
 - A hotel that carries the Marriott brand never disappoints me.
 - I feel that a hotel carrying the Marriott brand guarantees satisfaction.
- Brand Intentions (1=Strongly disagree to 7=Strongly agree)
 - I feel hotels with the Marriott brand will be honest in addressing my concerns.
 - I feel hotels with the Marriott brand will be sincere in addressing my concerns.
 - I can rely on hotels with the Marriott brand to have employees who can solve my problems.
 - I feel hotels with the Marriott brand will have employees who will make every effort to satisfy me.
 - I feel hotels with the Marriott brand will compensate me in some way for a problem with a hotel stay.

Brand loyalty

Brand loyalty has been measured by several researchers. Delgado-Ballester et al. (2003) applied brand loyalty measures consisting of four items related to attitudinal loyalty to investigate the relationship between brand trust and brand loyalty. The items focused on the degree of dispositional commitment. They are “I consider myself to be loyal to X,” “Only under extreme circumstances would I consider purchasing a brand of (product) different from X,” “If the store was out of X, I would go somewhere else to buy some,” “I recommend to buy X.” On the other hand, Chaudhuri and Holbrook (2001) measured both behavioral and attitudinal loyalty. The measures of behavioral loyalty consisted of two items: “I will buy this brand the next time I buy (product),” “I intend to keep purchasing this brand.” The items of the attitudinal loyalty are “I am committed to this brand,” “I would be willing to pay a higher price for this brand over other brands.”

Yi and Jeon (2003) used a four-item brand loyalty scale asking respondents about their relative attitude toward the brand. The statements of the four items are as follow: “I like X brand more so than another brand,” “I have a strong preference for X brand,” “I give prior consideration to X brand when I have a need for a product/service of this type,” “I would recommend X brand to others.” He and Li (2010) adapted the scales of brand loyalty from Washburn et al. (2004) and utilized the following four items:

- “It makes sense to buy X instead of any other brand, even if they are the same.”
- “Even if another brand has some features as X, I would prefer to buy X.”
- “If there is another brand as good as X, I prefer to buy X.”
- “If another brand is not different from X in any way, it seems smarter to purchase X.”

In this study, “brand” in brand loyalty was differentiated from the one of “brand” in brand extension. “Brand” in brand loyalty refers to the general preference towards the parent brand/core brand, whereas “brand” in brand extension refers to a product-specific brand attitude. Therefore, the scales of He and Li (2010) were used to measure the brand loyalty construct because they differentiated the “brand” of brand loyalty from the one of brand extension. They operationalized brand loyalty as general brand preference by consumers on the parent brand, which the operationalization of brand loyalty accords with the purpose of the concept of brand loyalty in this study. Because the scales of He and Li (2010) were used to measure brand loyalty in a general product setting, the scales were slightly modified that so that they could be applied to the lodging industry. The modified scales are as following:

- Brand Loyalty (1=Strongly disagree to 7=Strongly agree)
 - It makes sense to stay at hotels with the Marriott brand instead of a comparable hotel.
 - Even if comparable hotels have similar amenities as Marriott, I would prefer to stay at a hotel with the Marriott brand.
 - Even if another hotel brand is as good as Marriott, I prefer to stay at a Marriott brand.
 - If another hotel brand is not different from Marriott in any way, it is still worth it to stay at a hotel with the Marriott brand.

Brand extension

Purchasing intention and attitude toward a brand extension have been measured in various ways and applied to evaluate brand extension acceptance. Most of the previous brand extension studies utilized “likely to purchase” as a brand extension measure (Reast, 2005). Aaker and Keller (1990) operationalized attitude toward an extension as the perceived overall quality of the extension (1=inferior, 7=superior), and likelihood of trying the extension (1=not at all likely, 7=very likely). Kim et al. (2001) also utilized quality of the brand as one of the measurements of brand extension. They used four items for the brand extension scale: “measures of quality of the brand (1=low quality, 7=high quality),” “likelihood of purchasing (1=not at all likely, 7=very likely),” “whether the product was inferior or superior (1=inferior product, 7=superior product),” “favorability of respondents’ attitude on brand extension.” On the other hand, Reast (2005) utilized “Likely to purchase (1=low, 7=high),” to measure brand extension.

Dwivedi et al. (2010), and He and Li (2010) used multiple items to measure a brand extension attitude. The statements of Dwivedi et al.’s (2010) items are: “My attitude towards X is very positive,” “I am very favorably disposed towards X,” “According to me X is great,” “I admire X a lot,” “I feel good about X.” He and Yi (2010) used “product quality,” “attitude,” “market potential,” “purchase intention,” “recommendation.” On the other hand, Klink and Smith (2001) utilized a two-item measure for brand extension, whereas Reast (2005) used a single item to measure brand extension, which is “likely to try (1=low, 7=high).” The two-item measure of brand extension of Klink and Smith (2001) follows:

- How favorable they feel toward the extension (Not very favorable and very favorable)
- How likely they were to purchase the extension (Not very likely and very likely)

Klink and Smith (2001) applied two items to measure attitude toward brand extension and purchase intention. Because this study investigates impacts of brand trust, and brand loyalty on brand extension, not only consumer's attitude toward brand extension but also consumer's purchase intention were considered. Therefore, the brand extension was operationalized as followings across the three brand extensions:

- Brand Extension (1=Strongly disagree to 7=Strongly agree)
 - Marriott Hotels & Resorts
 - I feel favorable toward Marriott Hotels & Resorts.
 - My attitude towards Marriott Hotels & Resorts is very positive.
 - I am likely to stay at Marriott Hotels & Resorts.
 - I am likely to search out Marriott Hotels & Resorts.
 - Courtyard by Marriott
 - I feel favorable toward Courtyard by Marriott.
 - My attitude towards Courtyard by Marriott is very positive.
 - I am likely to stay at Courtyard by Marriott.
 - I am likely to search out Courtyard by Marriott.
 - SpringHill Suites by Marriott
 - I feel favorable toward SpringHill Suites by Marriott.

- My attitude towards SpringHill Suites by Marriott is very positive.
- I am likely to stay at SpringHill Suites by Marriott.
- I am likely to search out SpringHill Suites by Marriott.

Distance from a core brand

Previous research on brand distance in a vertical brand extension used an experimental design to manipulate the distance between a core brand and a brand extension (Kim et al., 2001; Musante 2007). According to Kim et al. (2001), distancing techniques in a vertical brand extension use quality and price to position brand extensions. A brand can be positioned closer to a core brand or further away from a core brand. Therefore, this study measured the brand distance as perceived distance of quality and price of a brand extension from those of a core brand. The statements of brand distance were measured across the three brand extensions are:

- Distance from a core brand (1=Very different to 7=Very similar)
 - Marriott Hotels & Resorts
 - The overall service quality of Marriott Hotels & Resorts when compared to your overall image of the quality of the Marriott brand is
 - The room rate of Marriott Hotels & Resorts when compared to your overall image of the room rate of Marriott brand is.
 - Courtyard by Marriott

- The overall service quality of Courtyard by Marriott when compared to your overall image of the quality of the Marriott brand is.
- The room rate of Courtyard by Marriott when compared to your overall image of the room rate of the Marriott brand is.
- SpringHill Suites by Marriott
 - The overall service quality of SpringHill Suites by Marriott when compared to your overall image of the quality of the Marriott brand is.
 - The room rate of SpringHill Suites by Marriott when compared to your overall image of the room rate of the Marriott brand is.

To help respondents' understanding of service quality, the following definition of service quality was provided in the final survey.

For this survey "SERVICE QUALITY" refers to companies that are successful in consistently having an accurate sense of how well they perform services that are critical to their customers. They know how long it takes to conduct transactions, how frequently service fails, and how quickly they settle customer complaints. These companies define goals that lead them to meet or exceed customer expectations.

In addition, the following instruction was added to prevent any geographical price differences across the three brand extensions.

Assume all Marriott Hotels listed in this section are in the same geographic location.

Statistical tests

Structural equation modeling (SEM) explores the estimation of simultaneous relationships among theoretical constructs by incorporating multiple independent and dependent variables as well as hypothetical latent constructs that clusters of observed variables might represent (Hair et al., 1998). In other words, SEM allows simultaneous estimation of a measurement model, which relates items to a construct they represent. It relates to a structure of the covariance matrix of the measure. Once the model's parameters have been estimated, its covariance matrix can be compared to an empirical or data-based covariance matrix. If the two matrices are consistent with one another, the structural equation model is considered an acceptable explanation for relationships among the measures.

In this study, SEM was used to test the hypothetical model because SEM concerns a series of dependence relationships simultaneously. It was utilized to test several hypotheses proposed in this study. Hypothesis 1 concerns the direct influence of brand trust on brand loyalty and Hypothesis 2 relates to the direct impact of brand trust on brand extension. Hypothesis 3 proposes a direct influence of brand loyalty on brand extension. Hypothesis 4 concerns a moderation effect of brand loyalty on the relationship between brand trust and brand extension. Hypotheses 5 and 6 propose a moderating effect of brand distance on the relationships among brand trust, brand loyalty and brand extension.

Other statistical techniques other than SEM were utilized as follow: Chi-square difference test and Independent t-tests. A Chi-square difference test was used to test Hypothesis 4 and demographic differences across the two sets of data. Independent t-tests

were used to investigate any differences on study variables of the two sets of data. Mplus was used to test the proposed model and the hypotheses with Maximum Likelihood method.

Measurement model

The measurement model provides information on how well measured variables represent a smaller number of constructs by providing evidence on the validity of individual measures based on the model's overall fit and other evidence of construct validity (Hair et al., 2010). In addition, measurement error is considered explicitly as part of the model. Confirmatory factor analysis (CFA) tests the measurement model. It ensures the uni-dimensionality of the scales measuring each construct in the model and avoids the interaction of the measurement and structural model that could affect the parameters associated with the hypothesized relationships between the constructs in the model. Anderson and Gerbing (1988) stated that the measurement model must first be established and fit before the structural model is interpreted. In this study, the proposed model identified four constructs: brand trust, brand loyalty, brand extension, and distance from a core brand (brand distance). Because brand trust has two distinct dimensions: reliability and intention, summated scales of each dimension were developed regarding the brand trust construct by applying confirmatory factor analysis (see Figure 3.2). In addition, each construct was tested using confirmatory factor analysis except the brand distance construct.

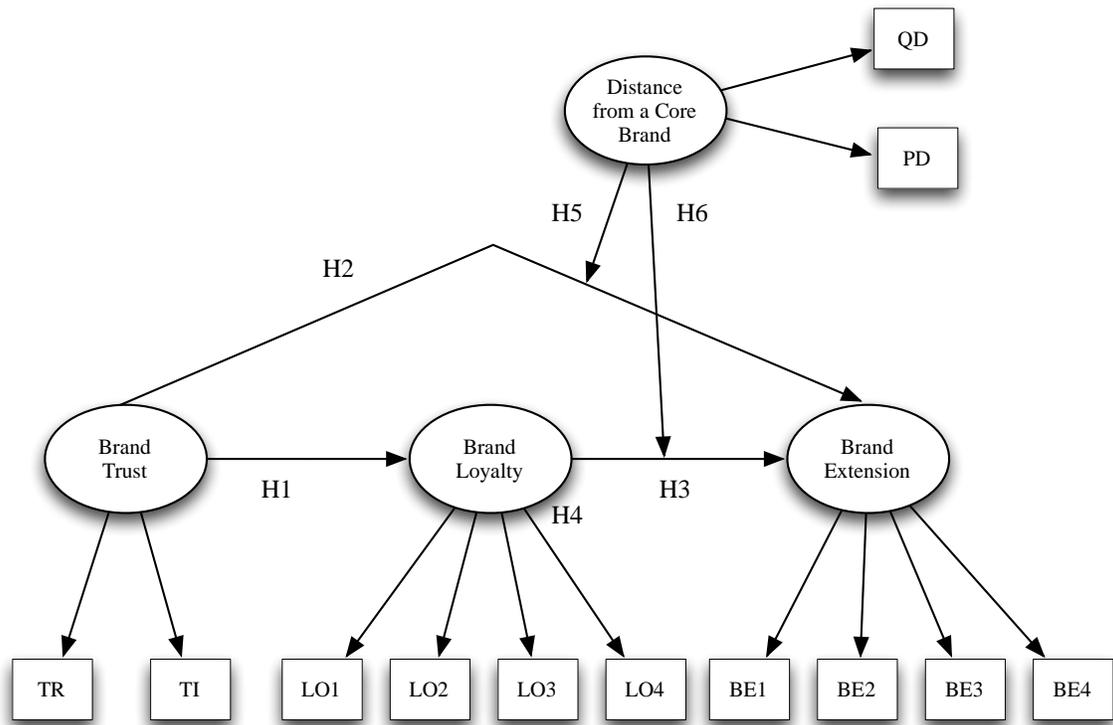


Figure 3-2: A Structural Model of Brand Extension Process

Structural model

The structural portion of SEM is a conceptual representation of the structural relationships between constructs (Hair et al., 2010). The structural relationship between any two constructs is represented empirically by the structural parameter estimate. The structural model includes primarily latent exogenous and endogenous variables, the paths or direct effects between them and the disturbance term for these variables. The proposed model included three latent constructs: brand trust and brand loyalty, and brand extension. Model fits were examined in order to test whether the hypothesized model was a good fit to the observed data. Then, the statistical significance of the path coefficient of each hypothesized relationship among the constructs was examined through an examination of the z values associated with structural coefficients. Finally, SEM provided more accurate estimates of simultaneous relationship because measurement errors in the measurement model were taken into account (Hair et al., 2010).

Evaluation of model fit

The SPSS statistical package and Mplus were used to analyze the data. Structural equation modeling (SEM), Chi-square tests, and Independent t-tests were utilized to test the hypotheses.

According to Hu and Bentler (1999), model fit should be evaluated with multiple indices including root mean square error of approximation (RMSEA) with the cutoff value of .05, standardized root mean square residual (SRMR) with the cutoff value of .08, comparative fit index (CFI) with a cutoff value of .95, and the Tucker-Lewis index (TLI) with a cutoff value of .95.

Reliability and Validity

Reliability is defined as “a measure of the degree to which a set of indicators of a latent construct is internally consistent based on how highly interrelated the indicators are with each other” (Hair et al. 2010, p.618). In other words, reliability represents whether each indicator is correlated with other indicators in the same construct so that all the indicators measure the same thing (Hair et al., 2010). There are three types of reliabilities: internal consistency reliability, item reliability and construct reliability (Hair et al., 2010).

Validity refers to “the extent to which a scale or set of measures accurately represents the concept of interest.” There are three most widely accepted forms of validation: convergent, discriminant, and nomological validity. Convergent validity measures the extent to which the items truly represent the intended latent construct. It is assessed by factor loadings and composite reliability measures (Hair et al., 2010). Discriminant validity measures the extent to which the conceptually similar constructs are distinct. Reliability and validity were tested through Confirmatory factor analysis to establish the conceptual soundness of the latent variables used in the hypothesized model.

Summary

This chapter discussed the research methods for this study. To investigate the relationship among the constructs, six hypotheses were proposed. This chapter included information concerning brand selection, sampling frame, sample selection, and data collection. In addition, the measurement scales were developed. The statistical methods employed were discussed in detail. Finally, reliability and validity issues were presented.

CHAPTER IV

RESULTS

Introduction

Chapter IV will first present the findings of the pretest that was used to validate the questionnaire used in this research. This section will be followed by the results of the final study and hypothesis testing.

Pretest

The purpose of a pretest is to validate the scale items and to screen out problems with the instructions or design of the questionnaire to be used in a study. As a result of the literature review, nine items were used to measure brand trust and four items were developed to measure brand loyalty. In addition, four items for brand extension and two items for distance from a core brand (brand distance) were developed. Four professors assessed the content validity of the items. They were asked to provide comments on content and understandability, and to offer suggestions for improving the proposed scales.

Pretest Methodology

The pretest questionnaire was distributed through an online survey. The questionnaires were posted at FluidSurveys.com, and an invitation email containing the link was sent to respondents via email requesting in them to access the web addresses.

Pretest Sample

The pretest was conducted with a convenience sample of individuals who had stayed at a Marriott property. The questionnaire was distributed to 2,420 randomly selected faculty and staff members at Virginia Tech through email. In total, 121 responses were collected. However, only 114 respondents had stayed at a Marriott property and were used for the analysis. The reliability of the measurement items of brand trust, brand loyalty, brand distance, and brand extension were tested.

The demographic characteristics and travel behavior characteristics of the respondents are shown in Table 4-1. Almost 54% of the respondents were female and 46% were male with an average age of 50. Thirty six percent of the respondents were staff members and 35% of the respondents were professors. Almost half of the respondents were *Marriott Reward* members. Nearly 80% of the respondents have stayed at Marriott Hotels & Resorts and Courtyard by Marriott while only 32.5% of the respondents have stayed at SpringHill Suites by Marriott.

Table 4-1: Pretest Respondent Profile

Respondent Characteristics	Frequency	Percentage/Mean
Gender (n=112)*		
Female	61	54.50%
Male	51	45.50%
Age (n=108)*		
Mean	108	50.42 (Std. 13.06)
Occupation (n=112)*		
Professor	35	31.30%
Research staff	9	8.00%
Staff	41	36.60%
Instructor	3	2.70%
Other	24	21.40%
Marriott Rewards Member (n=114)		
Yes	55	48.20%
No	59	51.80%
Experience with Marriott Hotels & Resorts (n=114)		
Yes	89	78.10%
No	25	21.90%
Experience with Courtyard by Marriott (n=114)		
Yes	100	87.70%
No	14	12.30%
Experience with SpringHill Suites by Marriott (n=114)		
Yes	37	32.50%
No	77	67.50%

*Total numbers vary, based on responses.

Pretest Results

This section presents a discussion of how the items developed from the literature review were modified and determined to be valid. The purpose of this pretest was to establish a uni-dimensional scale for each measurement construct. In order to determine

uni-dimensionality, an exploratory factor analysis (EFA) was conducted along with a principal component analysis for each construct.

Prior to conducting an EFA, assumptions of factor analysis were tested. According to Hair et al. (2010), the value of the Bartlett test of sphericity should be statistically significant so that it can be assumed that sufficient correlation exists among the variables. It is adequate for EFA that the value of the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (MSA) be greater than the .50 benchmark for both the overall test and each individual variable. Each factor identified by EFA should have one dimension and each attribute load on only one factor. The variables with less than a factor loading of .50 should be excluded from EFA.

Brand Trust

Exploratory factor analysis was used to determine the underlying factors of brand trust. According to Delgado-Ballester et al. (2003), brand trust is reflected by two components: brand reliability and brand intentions.

- *Brand reliability*: First, EFA was used with the brand reliability items. Two factors from the VARIMAX rotation with eigenvalues greater than 1 were extracted. The MSA value was .68 with a percentage of explained variance of 88.07%. Table 4-2 shows that cumulative percent of variance and factor loadings for the two-factor solution. It had been expected from the literature (Delgado-Ballester et al., 2003) that brand reliability would have a one-factor solution. The item, “Marriott is a brand that meets my expectations” that did not load as expected and was revised for further scale purification.

Table 4-2: Exploratory Factor Analysis of Brand Reliability

	Factor Loadings		Variance Explained
Brand Trust - Reliability	Factor 1	Factor 2	
Marriott is a brand that meets my expectations.		0.99	25.06%
I feel confident with the Marriott brand.	0.88		63.01%
A hotel that carries the Marriott brand never disappoints me.	0.91		
I feel that a hotel carrying the Marriott brand guarantees satisfaction.	0.95		
Cumulative %			88.07%

A second sample was used to test the brand reliability scale with the reworded item. The original four brand reliability items and the revised item, “Marriott is a brand name that fulfills my expectations.” A total of 155 students that had stayed at a Marriott hotel responded to an online survey. Table 4-3 presents the factor analysis comparison of the two possible brand reliability scales. The scale that used the revised item yielded a higher Cronbach’s Alpha and percentage of explained variance. This result suggests that the scale with the revised item “Marriott is a brand name that fulfills my expectations” performs better than the original item “Marriott is a brand that meets my expectations.”

Table 4-3: Comparison of the Two Sets of Brand Reliability Scales

	Original four items used in pretest	Three original items Plus one revised item
Item	Marriott is a brand name that meets my expectations.	Marriott is a brand name that fulfills my expectations.
Cronbach's Alpha	.91	.92
N of factor extracted	1	1
Initial Eigenvalues	3.17	3.28
% of Variance	79.34	81.98

- *Brand intentions*: Exploratory factor analysis was conducted on the brand intentions scale. One factor with an eigenvalue greater than 1 was extracted. The MSA was .84 and the percentage of explained variance was 87.79%. Table 4-4 shows the cumulative percent of variance and factor loadings for the one-factor solution.

Table 4-4: Exploratory Factor Analysis of Brand Intentions

	Factor Loadings	Variance Explained	Cronbach's Alpha
Brand Trust - Intentions	Factor 1		0.94
I feel hotels with the Marriott brand will be honest in addressing my concerns.	0.92	81.30%	
I feel hotels with the Marriott brand will be sincere in addressing my concerns.	0.96		
I can rely on hotels with the Marriott brand to have employees who can solve my problems.	0.93		
I feel hotels with the Marriott brand will have employees who will make every effort to satisfy me.	0.93		
I feel hotels with the Marriott brand will compensate me in some way for a problem with a hotel stay.	0.75		
Cumulative %		81.30%	

Brand Loyalty

The brand Loyalty construct was operationalized with four items. The MSA value was .82 and the percentage of explained variance was 87.79%. The results indicate the brand loyalty scale is uni-dimensional. All the factor loadings were higher than .90.

Please refer to Table 4-5.

Table 4-5: Exploratory Factor Analysis of Brand Loyalty

	Factor Loadings	Variance Explained	Cronbach's Alpha
Brand Loyalty	Factor 1		0.95
It makes sense to stay at hotels with the Marriott brand instead of a comparable hotel.	0.91		
Even if comparable hotels have similar amenities as Marriott, I would prefer to stay at a hotel with the Marriott brand.	0.96		
Even if another hotel brand is as good as Marriott, I prefer to stay at a Marriott brand.	0.95		
If another hotel brand is not different from Marriott in any way, it is still worth it to stay at a hotel with the Marriott brand.	0.94		
Cumulative %		87.79%	

Distance from a Core Brand (Brand Distance)

Brand distance was operationalized with two items: perceived quality distance and perceived price distance between the core brand and the brand extension. Because this study applied three different brand extensions, three separate EFAs were conducted regarding the brands: Marriott Hotels & Resorts, Courtyard by Marriott, and SpringHill Suites by Marriott. The MSA test and the Bartlett's test of sphericity indicated the items were acceptable for factor analysis. Just one factor was extracted, which indicates this

scale was uni-dimensional. The factor explained between 67.40% and 71.71% of variance depending on the brand. All factor loadings were higher than 0.82 (Table 4-6, 4-7, 4-8).

Table 4-6: Exploratory Factor Analysis of Brand Distance – Marriott Hotels & Resorts

	Factor Loadings	Variance Explained	Cronbach's Alpha
Brand Distance			
- Marriott Hotels & Resorts	Factor 1		0.52
The overall service quality of Marriott Hotels & Resorts when compared to your overall image of the quality of the Marriott brand is (very different ~ very similar)	0.82		
The room rate of Marriott Hotels & Resorts when compared to your overall image of the room rate of the Marriott brand is (very different ~ very similar)	0.82		
Cumulative %		67.40%	

Table 4-7: Exploratory Factor Analysis of Brand Distance – Courtyard by Marriott

	Factor Loadings	Variance Explained	Cronbach's Alpha
Brand Distance			
- Courtyard by Marriott	Factor 1		0.59
The overall service quality of Courtyard by Marriott when compared to your overall image of the quality of the Marriott brand is (very different ~ very similar)	0.84		
The room rate of Courtyard by Marriott when compared to your overall image of the room rate of the Marriott brand is (very different ~ very similar)	0.84		
Cumulative %		70.94%	

Table 4-8: Exploratory Factor Analysis of Brand Distance – SpringHill Suites by Marriott

	Factor Loadings	Variance Explained	Cronbach's Alpha
Brand Distance			
- SpringHill Suites by Marriott	Factor 1		0.60
The overall service quality of Courtyard by Marriott when compared to your overall image of the quality of the Marriott brand is (very different ~ very similar)	0.85		
The room rate of Courtyard by Marriott when compared to your overall image of the room rate of the Marriott brand is (very different ~ very similar)	0.85		
Cumulative %		71.72%	

Brand extension

Brand extension construct consists of four items. All three Marriott properties (Marriott Hotels & Resorts, Courtyard by Marriott, and SpringHill Suites by Marriott) were evaluated using “brand extension” construct. The MSA test and the Bartlett’s test of sphericity indicated that the items were acceptable for factor analysis across all three brands. This scale was unidimensional. The percentage of the total variance explained was 72.19% for Marriott Hotels & Resorts, 80.41% for Courtyard by Marriott, and 81.97% for SpringHill Suites by Marriott (See Table 4-9, 4-10, 4-11). All factor loadings are higher than 0.78. The reliability coefficients range from 0.85 to 0.92 depending on the brand.

Table 4-9: Exploratory Factor Analysis of Evaluation of Brand Extension – Marriott Hotels & Resorts

	Factor Loadings	Variance Explained	Cronbach's Alpha
Brand Extension			
- Marriott Hotels & Resorts	Factor 1		0.85
I feel favorable toward Marriott Hotels & Resorts.	0.88		
My attitude towards Marriott Hotels & Resorts is very positive.	0.90		
I am likely to stay at Marriott Hotels & Resorts.	0.83		
I am likely to search out Marriott Hotels & Resorts.	0.78		
Cumulative %		72.19%	

Table 4-10: Exploratory Factor Analysis of Brand Extension – Courtyard by Marriott

	Factor Loadings	Variance Explained	Cronbach's Alpha
Brand Extension			
- Courtyard by Marriott	Factor 1		0.91
I feel favorable toward Courtyard by Marriott.	0.92		
My attitude towards Courtyard by Marriott is very positive.	0.92		
I am likely to stay at Courtyard by Marriott.	0.92		
I am likely to search out Courtyard by Marriott.	0.83		
Cumulative %		80.41%	

Table 4-11: Exploratory Factor Analysis of Brand Extension – SpringHill Suites by Marriott

	Factor Loadings	Variance Explained	Cronbach's Alpha
Brand Extension - SpringHill Suites by Marriott	Factor 1		0.93
I feel favorable toward SpringHill Suites by Marriott.	0.91		
My attitude towards SpringHill Suites by Marriott is very positive.	0.93		
I am likely to stay at SpringHill Suites by Marriott.	0.91		
I am likely to search out SpringHill Suites by Marriott.	0.87		
Cumulative %		81.97%	

Pretest Summary

The pretest was conducted utilizing a convenience sample of faculty and staff members and undergraduate students at Virginia Tech. It aimed to examine the measurement items for the proposed constructs: brand trust, brand loyalty, brand distance and brand extension. A slight wording change was used for one item in the brand reliability construct (one of the factors of brand trust). The results of EFA and reliability coefficients indicated that all the proposed dimensions were acceptable. The individual construct items loaded as expected with a substantial proportion of explained variance for each construct.

Final Study: Data Collection, Respondent Characteristics, Hypotheses Testing

This section presents information on the questionnaire, data collection and, sampling procedure, the respondents' demographic characteristics and general travel behavior with regards to the Marriott brand. Lastly the hypotheses are tested.

Questionnaire

An On-line self-administered questionnaire was used to collect data. The questionnaire consisted of six parts. Part I includes respondents' travel characteristics and trip behavior. Part II consists of brand trust items; Part III includes brand loyalty items; Part IV has items that measure brand distance; Part V includes the scales of brand extension; Part VI contains demographic related items. The survey can be found in Appendix A.

Sampling

Data were collected using an online panel. Cint.com which is integrated into FluidSurvey.com was used. Only respondents who have stayed at a Marriott property were used in this study. A total of 1,036 individuals accessed the survey and 533 respondents completed the survey. After deleting 137 respondents due to them continually selecting the same option or incorrectly responding to a control question, a final sample of 396 was used for the data analysis. Therefore, the response rate is 38.2%.

Profile of Respondents

This section presents an overview of the respondents. The demographic characteristics of the respondents are presented along with their general travel behavior with regards to Marriott brand.

Demographic Characteristics of the Respondents

The demographic characteristics of the respondents are presented in Table 4-12. There were more female respondents (52.10%) than male (47.90%) with an average age of 49 (Standard deviation: 15.93). Regarding the education level, 37.20% of the respondents had some college/Technical school degrees, 33.20% had four years of college and 12.90% of the respondents had a Master's degree. In terms of ethnicity of the respondents, the majority of the respondents were Caucasian (86.40%). Lastly, 31.70% of the respondents had an annual household income of \$40,000~\$70,000, 18.30% had an annual income of \$70,001 ~ \$100,000, and 21.40% reported an annual income of more than \$100,001.

Table 4-12: Demographic Profile of Respondents

Respondent Characteristics	Frequency	Percentage/Mean
Gender (n=388)		
Female	202	52.10%
Male	186	47.90%
Age (n=388)		
Mean		49.68 (Std. 15.39)
Education (n=395)		
High school or less	51	12.90%
Some college/Technical school	147	37.20%
Four years of college	131	33.20%
Master's degree	51	12.90%
Doctoral degree	15	3.80%
Ethnicity (n=391)		
Caucasian	338	86.40%
African-American	17	4.30%
Hispanic	7	1.80%
Asian	15	3.80%
Native American	2	0.50%
Other	12	3.10%
Total Annual Household Income (n=312)		
Less than \$40,000	89	28.50%
\$40,000 ~ \$70,000	99	31.70%
\$70,001 ~ \$100,000	57	18.30%
\$100,001 ~ \$130,000	30	9.60%
\$130,001 ~ \$160,000	17	5.40%
\$160,001 ~ \$190,000	7	2.20%
Over \$190,000	13	4.20%

Characteristics of the Respondents' General Travel Behavior and Experience with Marriott Brand

The respondents spent an average of nine nights at a hotel away from home in the past year. Among the nights, almost six nights were spent for business and almost three nights were spent for pleasure. Of all 396 respondents, only 24% of the respondents were *Marriott Reward* members. Almost 70% of the respondents have stayed at Marriott Hotels & Resorts, and 74.70% of the respondents have stayed at Courtyard by Marriot while only 19.20% of the respondents have stayed at SpringHill Suites by Marriott. Excluding the Marriott brand, the respondents have stayed at Hilton the most (28.50%) followed by Hyatt (13.60%) (Table 4-13).

Table 4-13: Travel Behavioral Characteristics of Respondents

Respondent Characteristics	Frequency	Percentage/Mean
Marriott Reward Member (n=396)		
Yes	95	24.00%
No	301	76.00%
Experience with Marriott Hotels & Resorts (n=396)		
Yes	227	69.90%
No	119	30.10%
Experience with Courtyard by Marriott (n=396)		
Yes	296	74.70%
No	100	25.30%
Experience with SpringHill Suites by Marriott (n=396)		
Yes	76	19.20%
No	320	80.80%
Experience the most with Other Brand (n=396)		
Inter-Continental Hotel Group	17	4.30%
Wyndham Worldwide	25	6.30%
Hyatt	54	13.60%
Choice Hotels International	35	8.80%
Hilton	113	28.50%
Starwood Hotels & Resorts Worldwide	23	5.80%
Other	129	32.60%
Nights Spent at a Hotel in Past Year (n=395)		
Mean		9.13 (Std. 16.82)
Nights Spent for Business (n=392)		3.46 (Std. 13.90)
Night Spent for Pleasure (n=392)		5.95 (Std. 7.19)

Descriptive Statistics, Skewness, and Kurtosis

Because this study applied Structural Equation Modeling to test the proposed model and the test the hypotheses descriptive statistics examined the normality of the variables. The skewness and kurtosis were examined to assess the normality of the distribution of the data. According to Stevens (2002), a zero value for the skewness and kurtosis assumes perfect normality in the data distribution. Appendix B shows a table of the skewness and kurtosis values for each variable in this study. No variable fell outside the acceptable ± 1.96 range for skewness and kurtosis. Therefore, it is assumed that all the variables are normally distributed.

Data Analysis

This section presents descriptive information for all of the variables in the study, followed by the hypotheses test results. The hypotheses were tested with structural equation modeling.

Descriptive Information of Variables

Brand Trust

Respondents were asked to indicate their level of agreement to nine statements regarding brand trust of Marriott brand on a seven-point Likert scale (1=Strongly disagree to 7=Strongly agree). Four items measured reliability of brand trust on Marriott and five items measured intentions of brand trust on Marriott. Table 4-14 presents the means and standard deviations of the items measuring the respondents' brand trust on Marriott. Among four items of brand reliability, the highest mean is 5.82 for: "I feel confident with the Marriott brand," and the lowest mean is 5.60 for: "I feel that a hotel

carrying the Marriott brand guarantees satisfaction.” The highest mean among five items of brand intentions is 5.78 for: “I feel hotels with the Marriott brand will be sincere in addressing my concerns,” while the lowest mean of the items was 5.26 for: “I feel hotels with the Marriott brand will compensate me in some way for a problem with a hotel stay.”

Table 4-14: Descriptive Information Regarding Brand Trust

Variables	Mean	Std. Devi.
Brand Trust: Reliability		
I feel confident with the Marriott brand (Tr1).	5.82	0.96
A hotel that carries the Marriott brand never disappoints me (Tr2).	5.58	1.09
I feel that a hotel carrying the Marriott brand guarantees satisfaction (Tr3).	5.60	1.14
Marriott is a brand name that fulfills my expectation (Tr4).	5.70	1.06
Brand Trust: Intentions		
I feel hotels with the Marriott brand will be honest in addressing my concerns (Ti1).	5.68	0.95
I feel hotels with the Marriott brand will be sincere in addressing my concerns (Ti2).	5.78	0.97
I can rely on hotels with the Marriott brand to have employees who can solve my problems (Ti3).	5.60	1.05
I feel hotels with the Marriott brand will have employees who will make every effort to satisfy me (Ti4).	5.71	1.04
I feel hotels with the Marriott brand will compensate me in some way for a problem with a hotel stay (Ti5).	5.26	1.24

(1=Strongly disagree to 7=Strongly agree)

Brand Loyalty

Four items were applied to measure brand loyalty of Marriott brand. Respondents were asked to indicate their level of agreement on brand loyalty of Marriott brand on a

seven-point Likert scale (1=Strongly disagree to 7=Strongly agree). Table 4-15 depicts the means and standard deviations of the items measuring the respondents' brand loyalty on Marriott. Among four items of brand loyalty, the highest mean is 4.96: "It makes sense to stay at hotels with the Marriott brand instead of a comparable hotel," and the lowest mean is 4.75 for: "Even if another hotel brand is as good as Marriott, I prefer to stay at a Marriott brand."

Table 4-15: Descriptive Information Regarding Brand Loyalty

Variables	Mean	Std. Devi.
It makes sense to stay at hotels with the Marriott brand instead of a comparable hotel (Lo1).	4.96	1.21
Even if comparable hotels have similar amenities as Marriott, I would prefer to stay at a hotel with the Marriott brand (Lo2).	4.88	1.30
Even if another hotel brand is as good as Marriott, I prefer to stay at a Marriott brand (Lo3).	4.75	1.34
If another hotel brand is not different from Marriott in any way, it is still worth it to stay at a hotel with the Marriott brand (Lo4).	4.84	1.36

(1=Strongly disagree to 7=Strongly agree)

Distance from a Core Brand (Brand Distance)

Two items measured brand distance construct. One item measured quality distance and the other item measured price distance between the Marriott brand and brand extension hotels. Respondents were asked to rate how similar (or how different) their overall service quality of the three hotels when compared to their overall image of the quality of the Marriott brand (1=Very different to 7=Very similar). The three Marriott brands were Marriott Hotels & Resort, Courtyard by Marriott, and SpringHill Suites by Marriott. Table 4-16 shows the means and standard deviations of quality and price

distance. The mean of the service quality distance between Marriott Hotels and Resort and the Marriott brand is 5.56 and the mean of the price distance between them is 5.00. The mean of the service quality distance between Courtyard by Marriot and the Marriott brand is 5.43 while the mean of the price distance between them is 4.82. Lastly, the mean of the service quality distance between SpringHill Suites by Marriott and the Marriott brand is 4.89 and the mean of the price distance between them is 4.57.

Table 4-16: Descriptive Information Regarding Brand Distance

Variables	Mean	Std. Devi.
Brand Distance: Quality		
The overall service quality of Marriott Hotels & Resorts when compared to your overall image of the quality of the Marriott brand is (qcomh)	5.56	1.27
The overall service quality of Courtyard by Marriott when compared to your overall image of the quality of the Marriott brand is (qcoc)	5.43	1.28
The overall service quality of SpringHill Suites by Marriott when compared to your overall image of the quality of the Marriott brand is (qcos)	4.89	1.33
Brand Distance: Price		
The room rate of Marriott Hotels & Resorts when compared to your overall image of the room rate of the Marriot brand is (pcomh)	5.00	1.36
The room rate of Courtyard by Marriott when compared to your overall image of the room rate of the Marriot brand is (pcoc)	4.82	1.24
The room rate of SpringHill Suites by Marriott when compared to your overall image of the room rate of the Marriot brand is (pcos)	4.57	1.27

(1=Very different to 7=Very similar)

Brand Extension

Four items were used to measure brand extension across three Marriott brands. Respondents were asked to indicate their level of agreement on brand extension of Marriott brand on a seven-point Likert scale (1=Strongly disagree to 7=Strongly agree). Table 4-17 describes the means and standard deviations of the items measuring the respondents' brand extension. Among four items of brand extension for Marriott Hotels

& Resorts, the highest mean is 5.64: “I feel favorable toward Marriott Hotels & Resorts,” and the lowest mean is 4.95: “I am likely to search out Marriott Hotels & Resorts.”

Regarding brand extension of Courtyard by Marriott, the highest mean is 5.45: “I feel favorable toward Courtyard by Marriott,” and the lowest mean is 4.84 for “I am likely to search out Courtyard by Marriott.” In terms of brand extension of SpringHill Suites by

Marriott, the highest mean is 4.64: “I feel favorable toward SpringHill Suites by Marriott,” while the lowest mean is 4.19 for: “I am likely to search out SpringHill Suites by Marriott.”

Table 4-17: Descriptive Information Regarding Brand Extension (BE)

Variables	Mean	Std. Devi.
BE - Marriott Hotels & Resorts		
I feel favorable toward Marriott Hotels & Resorts (bem1).	5.64	1.09
My attitude towards Marriott Hotels & Resorts is very positive (bem2).	5.66	1.11
I am likely to stay at Marriott Hotels & Resorts (bem3).	5.36	1.36
I am likely to search out Marriott Hotels & Resorts (bem4).	4.95	1.44
BE - Courtyard by Marriott		
I feel favorable toward Courtyard by Marriott (bec1).	5.45	1.17
My attitude towards Courtyard by Marriott is very positive (bec2).	5.43	1.17
I am likely to stay at Courtyard by Marriott (bec3).	5.18	1.33
I am likely to search out Courtyard by Marriott (bec4).	4.84	1.48
BE - SpringHill Suites by Marriott		
I feel favorable toward SpringHill Suites by Marriott (bec1).	4.64	1.05
My attitude towards SpringHill Suites by Marriott is very positive (bec2).	4.60	1.08
I am likely to stay at SpringHill Suites by Marriott (bec3).	4.38	1.12
I am likely to search out SpringHill Suites by Marriott (bec4).	4.19	1.21

(1=Strongly disagree to 7=Strongly agree)

Test of Hypotheses

Structural equation modeling (SEM) was used to test the hypotheses. In the proposed model, there are three constructs: brand trust, brand loyalty, and brand extension. Therefore, a confirmatory factor analysis (CFA) was applied to test the measurement model. Confirmatory factor analysis was used to investigate the uni-

dimensionality of each construct: brand trust, brand loyalty, and brand extension. Brand trust construct has two dimensions: brand reliability and brand intentions. Then, CFA was applied to test the overall measurement model. In the overall measurement model, summated scales for brand reliability and brand intentions were created by averaging their indicators and used to test the overall measurement model. Finally, SEM was used to test the structural relationships after the satisfactory measurement model was extracted.

In order to test both the measurement model and structural model the data was randomly split in half. Each data set had 198 respondents and is referred to as dataset A and dataset B. Dataset A was used to test a CFA model and dataset B was tested the structural equation model. The two sets of the data used in this study were compared to identify if they had similar demographic and response patterns across the two sets of the data using Chi-square tests and independent t-tests. Table 4-18 shows the results of the Chi-square tests comparing the two sets of the data in terms of gender, age, level of education, ethnicity, and total annual household income. While some differences were found at the .05 level, no differences were found at a probability level of .01.

Dataset A and dataset B were also compared across all variables used to identify the constructs in this study. Independent t-tests found no significant differences between the means of the two datasets at the probability level of .05 (Table 4-19).

Table 4-18: Demographic Comparison Between Two Datasets

	Dataset A		Dataset B		Total		χ^2	Sig.
	Freq.	%	Freq.	%	Freq.	%		
Gender							5.01	0.03
Female	112	57.73%	90	46.39%	202	52.06%		
Male	82	42.27%	104	53.61%	186	47.94%		
Age	Mean 48.24 (Std. 14.96)		51.12 (Std.15.72)		49.68 (Std. 15.39)		t value 1.85	0.06
Education							3.11	0.54
High school or less	23	11.68%	28	14.14%	51	12.91%		
Some college/ Technical school	80	40.61%	67	33.84%	147	37.22%		
Four years of college	62	31.47%	69	34.85%	131	33.16%		
Master's degree	23	11.68%	28	14.14%	51	12.91%		
Doctoral degree	9	4.57%	6	3.03%	15	3.80%		
Ethnicity							7.44	0.19
Caucasian	167	85.20%	171	87.69%	338	86.45%		
African-American	8	4.08%	9	4.61%	17	4.35%		
Hispanic	6	3.06%	1	0.50%	7	1.79%		
Asian	9	4.59%	6	3.10%	15	3.84%		
Native American	0	0.00%	2	1.03%	2	0.51%		
Other	6	3.06%	6	3.07%	12	3.07%		
Total Annual Household Income							12.46	0.05
Less than \$40,000	49	32.89%	40	24.54%	89	28.53%		
\$40,000~\$70,000	47	31.54%	52	31.90%	99	31.73%		
\$70,001~\$100,000	29	19.46%	28	17.17%	57	18.27%		
\$100,001~\$130,000	11	7.38%	19	11.66%	30	9.62%		
\$130,001~\$160,000	3	2.01%	14	8.59%	17	5.45%		
\$160,001~\$190,000	5	3.36%	2	1.23%	7	2.24%		
Over \$190,000	5	3.36%	8	4.91%	13	4.17%		

Table 4-19: Independent T-tests Between Two Datasets

	Dataset A (n=198)		Dataset B (n=198)		t-test
	Mean	Std.	Mean	Std.	
Brand Trust					
(Brand Trust - Reliability)					
I feel confident with the Marriott brand.	5.83	0.99	5.80	0.93	n.s.*
A hotel that carries the Marriott brand never disappoints me.	5.61	1.11	5.55	1.08	n.s.
I feel that a hotel carrying the Marriott brand quarantines satisfaction.	5.60	1.16	5.61	1.12	n.s.
Marriott is a brand name that fulfills my expectation.	5.64	1.15	5.76	0.95	n.s.
(Brand Trust - Intentions)					
I feel hotels with the Marriott brand will be honest in addressing my concerns.	5.66	1.02	5.71	0.88	n.s.
I feel hotels with the Marriott brand will be sincere in addressing my concerns.	5.76	1.03	5.79	0.90	n.s.
I can rely on hotels with the Marriott brand to have employees who can solve my problems.	5.58	1.12	5.63	0.97	n.s.
I feel hotels with the Marriott brand will have employees who will make every effort to satisfy me.	5.72	1.12	5.71	0.95	n.s.
I feel hotels with the Marriott brand will compensate me in some way for a problem with a hotel stay.	5.22	1.35	5.29	1.12	n.s.

*p=.05

	Dataset A (n=198)		Dataset B (n=198)		t-test
	Mean	Std.	Mean	Std.	
Brand Loyalty					
It makes sense to stay at hotels with the Marriott brand instead of a comparable hotel.	4.92	1.29	5.01	1.14	n.s.
Even if comparable hotels have similar amenities as Marriott, I would prefer to stay at a hotel with the Marriott brand.	4.88	1.41	4.89	1.19	n.s.
Even if another hotel brand is as good as Marriott, I prefer to stay at a Marriott brand.	4.66	1.38	4.84	1.29	n.s.
If another hotel brand is not different from Marriott in any way, it is still worth it to stay at a hotel with the Marriott brand.	4.77	1.45	4.91	1.26	n.s.
Brand Distance					
(Quality)					
The overall service quality of Marriott hotels & Resorts when compared to your overall image of the quality of the Marriott brand is (Very different/Very similar)	5.55	1.33	5.58	1.21	n.s.
The overall service quality of Courtyard by Marriott when compared to your overall image of the quality of the Marriott brand is (Very different/Very similar)	5.40	1.31	5.46	1.26	n.s.
The overall service quality of SpringHill Suites by Marriott when compared to your overall image of the quality of the Marriott brand is (Very different/Very similar)	4.83	1.37	4.93	1.29	n.s.
(Price)					
The room rate of Marriott Hotels & Resorts when compared to your overall image of the room rate of the Marriot brand is (Very different/Very similar)	4.94	1.41	5.02	1.32	n.s.
The room rate of Courtyard by Marriott when compared to your overall image of the room rate of the Marriot brand is (Very different/Very similar)	4.78	1.25	4.87	1.24	n.s.

	Dataset A (n=198)		Dataset B (n=198)		t-test
	Mean	Std.	Mean	Std.	
(Price)					
The room rate of SpringHill Suites by Marriott when compared to your overall image of the room rate of the Marriot brand is (Very different/Very similar)	4.55	1.35	4.59	1.18	n.s.
Brand Extension (BE)					
BE-Marriott Hotels & Resorts					
I feel favorable toward Marriott Hotels and Resorts.	5.61	1.13	5.68	1.06	n.s.
My attitude towards Marriott Hotels and Resorts is very positive.	5.64	1.14	5.59	1.09	n.s.
I am likely to stay at Marriott Hotels and Resorts.	5.34	1.45	5.39	1.26	n.s.
I am likely to search out Marriott Hotels and Resorts.	4.90	1.48	5.01	1.41	n.s.
BE-Courtyard by Marriott					
I feel favorable toward Courtyard by Marriott.	5.36	1.21	5.55	1.11	n.s.
My attitude towards Courtyard by Marriott is very positive.	5.35	1.20	5.51	1.14	n.s.
I am likely to stay at Courtyard by Marriott.	5.10	1.38	5.26	1.28	n.s.
I am likely to search out Courtyard by Marriott.	4.71	1.53	4.96	1.42	n.s.
BE-SpringHill Suites by Marriott					
I feel favorable toward SpringHill Suites by Marriott.	4.57	1.10	4.71	0.99	n.s.
My attitude towards SpringHill Suites by Marriott is very positive.	4.55	1.15	4.66	1.01	n.s.
I am likely to stay at SpringHill Suites by Marriott.	4.35	1.20	4.41	1.03	n.s.
I am likely to search out SpringHill Suites by Marriott.	4.16	1.31	4.23	1.11	n.s.

Confirmatory Factor Analysis

CFA was utilized to verify the measurement items of brand trust, brand loyalty and brand extension. Dataset A was used for the analysis. Brand trust consisted of two dimensions: brand reliability (four items) and brand intentions (five items) and brand loyalty has one dimension with four items. Brand extension consisted of one dimension with four items.

CFA of Brand Trust – Reliability

The brand reliability dimension was measured with four items. Confirmatory factor analysis was run regarding the four items and produced satisfactory results. The sample size was 198; there was no missing data. The comparative fit index (CFI) = 1.00, the Tucker-Lewis fit index (TLI)=0.99, and the SRMR=0.01. These values indicate a good fit between the model and the observed data. Standardized parameter estimates and unstandardized parameter estimates are provided in Table 4-20. The standardized factor loadings ranged from 0.89 to 0.95, which are considered high. The squared multiple correlations (SMC) ranged from 0.79 to 0.90, which indicated the reliability of the measure. The composite reliability of this construct is a value of 0.95, which is an acceptable level. The average extract variance estimate is 0.84, which exceeds the recommended cutoff value of 0.50.

Table 4-20: CFA Summary of Sophistication – Brand Trust: Reliability

Observed variable	Est.	β	SMC	Error Variance	Extract Variance Estimate
Trust (Reliability)			0.95		0.84
TR1	1.00	0.89	0.79	0.21	
TR2	1.15	0.91	0.82	0.18	
TR3	1.20	0.91	0.83	0.17	
TR4	1.25	0.95	0.90	0.10	
Fit Index		Value			
Chi-square	2.39 (p=0.30)				
CFI	1.00				
TLI	0.99				
SRMR	0.01				
Comparative Fit Index (CFI); Tucker-Lewis Fit Index (TLI); Squared Multiple Correlation (SMC); Standardized Root Mean Square Residual (SRMR)					

CFA of Brand Trust – Intentions

The brand intentions dimension was measured with four items. CFA was run regarding the five items and produced satisfactory results. The sample size was 198; there was no missing data. The comparative fit index (CFI) = 0.97, the Tucker-Lewis fit index (TLI)=0.95, and the SRMR=0.02. Those values indicate a good fit between the model and the observed data. Standardized parameter estimates and unstandardized parameter estimates are provided in Table 4-21. The standardized factor loadings ranged from 0.66 to 0.93, which are considered high. The squared multiple correlations (SMC) ranged from between 0.44 to 0.86, which indicated the reliability of the measure. The composite reliability of this construct is a value of 0.93, which is an acceptable level. The average extract variance estimate is 0.73, which exceeded the recommended cutoff value of 0.50.

Table 4-21: CFA Summary of Sophistication – Brand Trust: Intentions

Observed variable	Est.	β	SMC	Error Variance	Extract Variance Estimate
Trust (Intentions)			0.93		0.73
TI1	1.00	0.93	0.86	0.14	
TI2	1.00	0.92	0.84	0.16	
TI3	1.04	0.88	0.78	0.22	
TI4	1.02	0.86	0.74	0.26	
TI5	0.94	0.66	0.44	0.56	
Fit Index	Value				
Chi-square	27.90 (p=0.0)				
CFI	0.97				
TLI	0.95				
SRMR	0.02				
Comparative Fit Index (CFI); Tucker-Lewis Fit Index (TLI); Squared Multiple Correlation (SMC); Standardized Root Mean Square Residual (SRMR)					

CFA of Brand Trust – Overall Model

The overall measurement model is composed of two dimensions: reliability and intentions. Confirmatory factor analysis was run regarding the nine items with two dimensions and produced satisfactory results. The sample size was 198; there was no missing data. The comparative fit index (CFI) = 0.98, the Tucker-Lewis fit index (TLI)=0.97, and the SRMR=0.02. Those values indicate a good fit between the model and the observed data. Standardized parameter estimates and unstandardized parameter estimates are provided in Table 4-22. The standardized factor loadings ranged from 0.66 to 0.94, which are considered high. The squared multiple correlations (SMC) ranged between 0.44 and 0.89, which indicated the reliability of the measure. The composite

reliability of this construct is 0.93 and 0.95, which is an acceptable level. The average extract variance estimate is 0.73 for the intentions' dimension and 0.84 for the reliability dimension, which exceeded the recommended cutoff value of 0.50. The results indicated that the overall measurement model was acceptable. Therefore, in the overall measurement model of this study, single summated indicators for brand reliability and brand intentions were utilized.

Table 4-22: CFA Summary of Sophistication – Brand Trust: Overall Model

Observed variable	Est.	β	SMC	Error Variance	Extract Variance Estimate
Trust (Reliability)			0.95		0.84
TR1	1.00	0.89	0.80	0.20	
TR2	1.15	0.91	0.83	0.17	
TR3	1.20	0.91	0.83	0.17	
TR4	1.23	0.94	0.89	0.11	
Trust (Intentions)			0.93		0.73
TI1	1.00	0.92	0.84	0.16	
TI2	0.99	0.91	0.83	0.17	
TI3	1.06	0.89	0.79	0.21	
TI4	1.05	0.88	0.77	0.23	
TI5	0.95	0.66	0.44	0.56	
Fit Index	Value				
Chi-square	76.06 (p=0.0)				
CFI	0.98				
TLI	0.97				
SRMR	0.02				
Comparative Fit Index (CFI); Tucker-Lewis Fit Index (TLI); Squared Multiple Correlation (SMC); Standardized Root Mean Square Residual (SRMR)					

CFA of Brand Loyalty

The brand loyalty dimension was measured with four items. Confirmatory factor analysis was run on the four items and produced satisfactory results. The sample size was 198; there was no missing data. The comparative fit index (CFI) = 0.98, the Tucker-Lewis fit index (TLI)=0.94, and the SRMR=0.02. These values indicate a good fit between the model and the observed data. Standardized parameter estimates and unstandardized parameter estimates are provided in Table 4-23. The standardized factor loadings ranged from 0.86 to 0.93, which are considered high. The squared multiple correlations (SMC) were between 0.75 and 0.87, which indicated the reliability of the measure. The composite reliability of this construct is 0.95, which is an acceptable level. The average extract variance estimate is 0.81, which exceeded the recommended cutoff value of 0.50.

Table 4-23: CFA Summary of Sophistication – Brand Loyalty

Observed variable	Est.	β	SMC	Error Variance	Extract Variance Estimate
Brand Loyalty			0.95		0.81
LO1	1.00	0.86	0.75	0.25	
LO2	1.18	0.93	0.87	0.13	
LO3	1.15	0.93	0.86	0.14	
LO4	1.15	0.88	0.78	0.22	
Fit Index	Value				
Chi-square	16.51 (p<0.01)				
CFI	0.98				
TLI	0.94				
SRMR	0.02				
Comparative Fit Index (CFI); Tucker-Lewis Fit Index (TLI); Squared Multiple Correlation (SMC); Standardized Root Mean Square Residual (SRMR)					

CFA of Brand Extension (BE)

Brand extension was measured with four items across three different brands: Marriott Hotels & Resorts, Courtyard by Marriott, and SpringHill Suites by Marriott. Three separate CFA was run regarding the four items across the three brands. The sample size was 198; there was no missing data. The first round of CFA suggested that the item of BE4 (I am likely to search out Marriott Hotels & Resorts) across the three brands was not a good indicator of brand extension. Thus, a second round of CFA, after removing the item, was conducted and the models across the three brands were evaluated.

Marriott Hotels & Resorts

The comparative fit index (CFI) = 1, the Tucker-Lewis fit index (TLI)=1, and the SRMR=0.00. Those values indicate a perfect fit between the model and the observed data. Standardized parameter estimates and unstandardized parameter estimates are provided in Table 4-24. The standardized factor loadings ranged from 0.84 to 0.98, which are considered high. The squared multiple correlations (SMC) ranged between 0.70 and 0.97, which indicated the reliability of the measure. The composite reliability of this construct is a value of 0.94, which is an acceptable level. The average extract variance estimate is 0.83, which exceeded the recommended cutoff value of 0.50.

Table 4-24: CFA Summary of Sophistication – BE Marriott Hotels & Resorts

Observed variable	Est.	β	SMC	Error Variance	Extract Variance Estimate
Brand Extension (Marriott)			0.94		0.83
BEM1	1.00	0.98	0.97	0.03	
BEM2	0.94	0.91	0.83	0.17	
BEM3	1.09	0.84	0.70	0.30	
Fit Index	Value				
Chi-square	0.00 (p=0.0)				
CFI	1.00				
TLI	1.00				
SRMR	0.00				
Comparative Fit Index (CFI); Tucker-Lewis Fit Index (TLI); Squared Multiple Correlation (SMC); Standardized Root Mean Square Residual (SRMR)					

Courtyard by Marriott

The comparative fit index (CFI) = 1, the Tucker-Lewis fit index (TLI)=1, and the SRMR=0.00. Those values indicate a perfect fit between the model and the observed data. Standardized parameter estimates and unstandardized parameter estimates are provided in Table 4-25. The standardized factor loadings ranged from 0.85 to 0.99, which are considered high. The squared multiple correlations (SMC) ranged between 0.73 and 0.97, which indicated the reliability of the measure. The composite reliability of this construct is 0.95, which is an acceptable level. The average extract variance estimate is 0.87, which exceeded the recommended cutoff value of 0.50.

Table 4-25: CFA Summary of Sophistication – BE Courtyard by Marriott

Observed variable	Est.	β	SMC	Error Variance	Extract Variance Estimate
Brand Extension (Courtyard)			0.95		0.87
BEC1	1.00	0.95	0.89	0.11	
BEC2	1.03	0.99	0.97	0.03	
BEC3	1.03	0.85	0.73	0.27	
Fit Index		Value			
Chi-square	0.00 (p=0.0)				
CFI	1.00				
TLI	1.00				
SRMR	0.00				
Comparative Fit Index (CFI); Tucker-Lewis Fit Index (TLI); Squared Multiple Correlation (SMC); Standardized Root Mean Square Residual (SRMR)					

SpringHill Suites by Marriott

The comparative fit index (CFI) = 1, the Tucker-Lewis fit index (TLI)=1, and the SRMR=0.00. These values indicate a perfect fit between the model and the observed data. Standardized parameter estimates and unstandardized parameter estimates are provided in Table 4-26. The standardized factor loadings ranged from 0.81 to 0.98, which are considered high. The squared multiple correlations (SMC) ranged between 0.62 and 0.95, which indicated the reliability of the measure. The composite reliability of this construct is 0.94, which is an acceptable level. The average extract variance estimate is 0.84, which exceeded the recommended cutoff value of 0.50.

Table 4-26: CFA Summary of Sophistication – BE SpringHill Suites by Marriott

Observed variable	Est.	β	SMC	Error Variance	Extract Variance Estimate
Brand Extension (SpringHill)			0.94		0.84
BES1	1.00	0.96	0.93	0.07	
BES2	1.06	0.98	0.95	0.05	
BES3	0.91	0.81	0.65	0.35	
Fit Index	Value				
Chi-square	0.00 (p=0.0)				
CFI	1.00				
TLI	1.00				
SRMR	0.00				
Comparative Fit Index (CFI); Tucker-Lewis Fit Index (TLI); Squared Multiple Correlation (SMC); Standardized Root Mean Square Residual (SRMR)					

CFA of Overall Measurement Model

The overall measurement model of this study was tested after each construct' uni-dimensionality was confirmed (Sethi & King, 1994). The overall measurement model is composed of three constructs: brand trust, brand loyalty and Brand extension. In terms of the brand trust construct, it was measured by two summated scales of brand reliability and brand intentions (Table 4-27).

Table 4-27: Summary of Constructs and Their Indicators

Constructs	Indicators
Brand Trust	Reliability (TR) Intentions (TI)
Brand Loyalty	It makes sense to stay at hotels with the Marriott brand instead of a comparable hotel (LO1). Even if comparable hotels have similar amenities as Marriott, I would prefer to stay at a hotel with the Marriott brand (LO2). Even if another hotel brand is as good as Marriott, I prefer to stay at a Marriott brand (LO3). If another hotel brand is not different from Marriott in any way, it is still worth it to stay at a hotel with the Marriott brand (LO4).
Brand Extension	I feel favorable toward Marriott Hotels & Resorts (BEM1). - Courtyard by Marriott (BEC1), SpringHill Suites by Marriott (BES1) My attitude towards Marriott Hotels & Resorts is very positive (BEM2). - Courtyard by Marriott (BEC2), SpringHill Suites by Marriott (BES2) I am likely to stay at Marriott Hotels & Resorts (BEM3). - Courtyard by Marriott (BEC3), SpringHill Suites by Marriott (BES3)

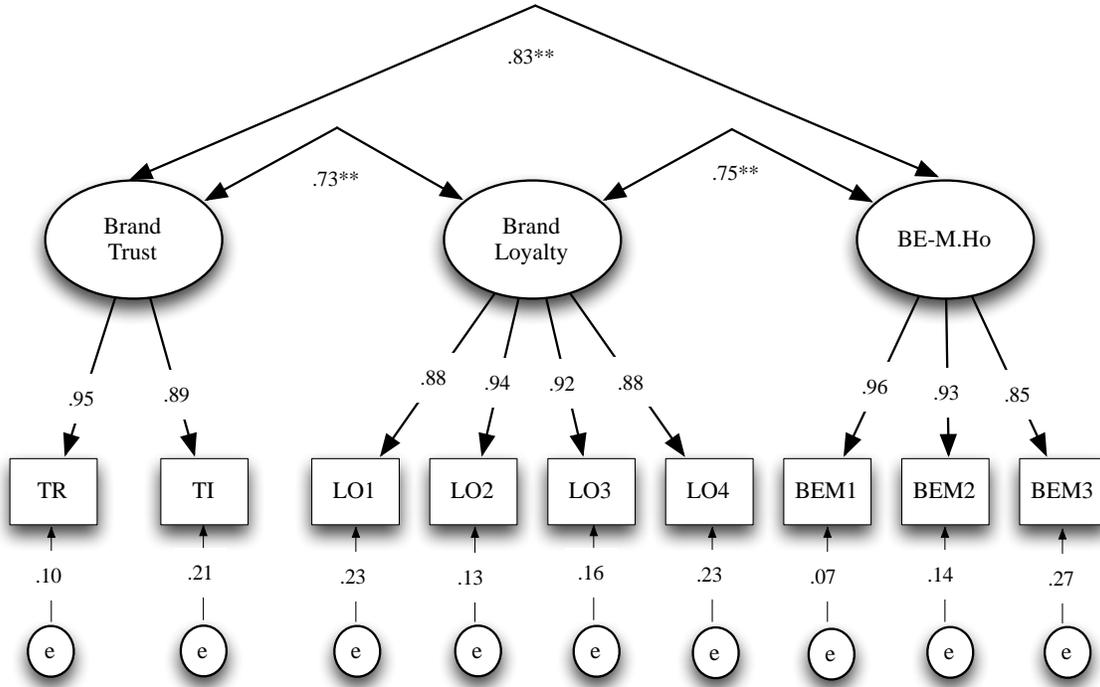
Overall Measurement Model for Marriott Hotels & Resorts

A three-factor model was hypothesized to be confirmed in the measurement portion of the model. The comparative fit index (CFI) = 0.97, the Tucker-Lewis fit index (TLI)=0.95, and the SRMR=0.04. Those values indicate a good fit between the model and the observed data. Standardized parameter estimates and unstandardized parameter estimates are provided in Table 4-28. Standardized parameter estimates are provided in Figure 4-1. The standardized factor loadings ranged from 0.85 to 0.96, which are considered high. The squared multiple correlations (SMC) were between 0.73 and 0.93, which indicated the reliability of the measure. The composite reliability of this construct is 0.92 for brand trust, 0.95 for brand loyalty and 0.94 for brand extension, which are acceptable levels. The average extract variance estimates ranges from 0.81 to 0.85, which exceeded the recommended cutoff value of 0.50. The results indicated that the overall measurement model was acceptable.

Table 4-28: CFA Summary of Sophistication for the Overall Model – BE Marriott Hotels & Resorts

Observed variable	Est.	β	Est./S.E.	SMC	Error Variance	Extract Variance Estimate
Brand Trust				0.92		0.85
TR	1.00	0.95		0.91	0.09	
TI	0.90	0.89	19.35	0.79	0.21	
Brand Loyalty				0.95		0.81
LO1	1.00	0.88		0.77	0.23	
LO2	1.17	0.94	20.24	0.87	0.13	
LO3	1.12	0.92	19.42	0.84	0.16	
LO4	1.12	0.88	17.55	0.77	0.23	
Brand Extension				0.94		0.84
BEM1	1.00	0.96		0.93	0.07	
BEM2	0.97	0.93	26.20	0.86	0.14	
BEM3	1.13	0.85	19.96	0.73	0.27	
Fit Index	Value					
Chi-square	77.81 (p=0.0)					
CFI	0.97					
TLI	0.96					
SRMR	0.04					
Comparative Fit Index (CFI); Tucker-Lewis Fit Index (TLI); Standard Error (S.E.); Squared Multiple Correlation (SMC); Standardized Root Mean Square Residual (SRMR)						

Figure 4-1: Results of CFA Overall Model - Brand Extension: Marriott Hotel & Resorts (BE-M.Ho)



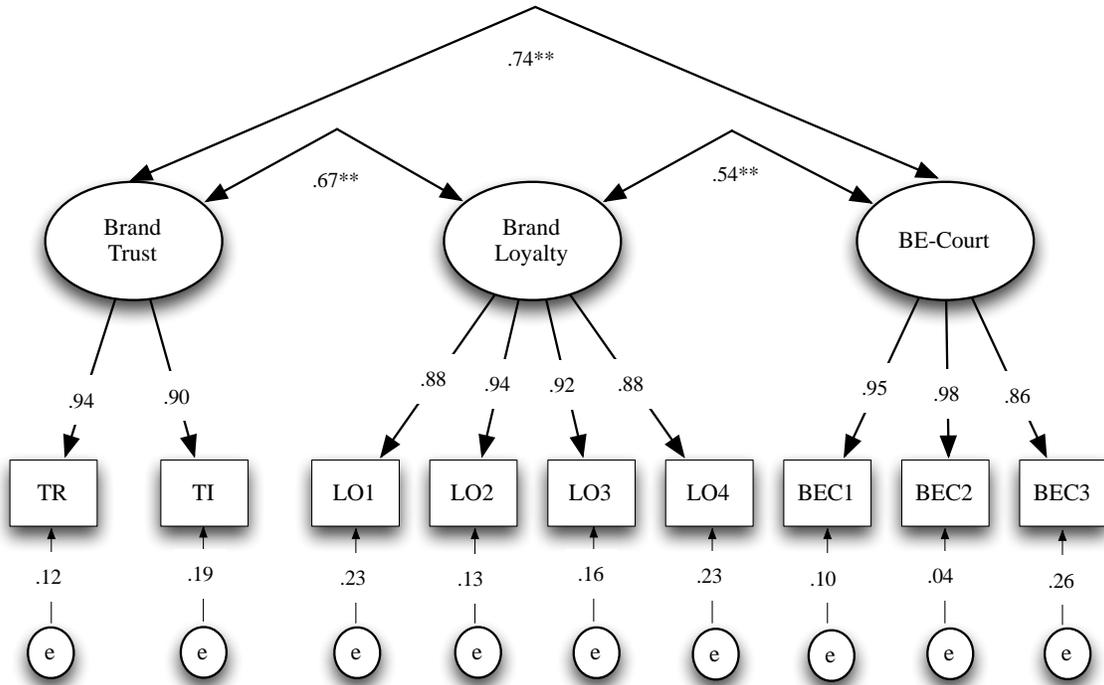
Overall Measurement Model for Courtyard by Marriott

A three-factor model was hypothesized for the measurement portion of the model. The comparative fit index (CFI) = 0.98, the Tucker-Lewis fit index (TLI)=0.97, and the SRMR=0.04. These values indicate a good fit between the model and the observed data. Standardized parameter estimates and unstandardized parameter estimates are provided in Table 4-29. Standardized parameter estimates are provided in Figure 4-2. The standardized factor loadings ranged from 0.86 to 0.95, which are considered high. The squared multiple correlations (SMC) were between 0.74 and 0.96, which indicated the reliability of the measure. The composite reliability of this construct is a value of 0.92 for brand trust, 0.95 for brand loyalty and 0.95 for brand extension, which are acceptable levels. The average extract variance estimates range from 0.81 to 0.87, which exceed the recommended cutoff value of 0.50. The results indicate that the overall measurement model is acceptable.

Table 4-29: CFA Summary of Sophistication for the Overall Model – BE Courtyard by Marriott

Observed variable	Est.	β	Est./S.E.	SMC	Error Variance	Extract Variance Estimate
Brand Trust				0.92		0.85
TR	1.00	0.94		0.88	0.12	
TI	0.92	0.90	18.49	0.81	0.19	
Brand Loyalty				0.95		0.81
LO1	1.00	0.88		0.77	0.23	
LO2	1.17	0.94	20.06	0.87	0.13	
LO3	1.12	0.92	19.33	0.84	0.16	
LO4	1.13	0.88	17.51	0.77	0.23	
Brand Extension				0.95		0.87
BEC1	1.00	0.95		0.90	0.10	
BEC2	1.02	0.98	32.24	0.96	0.04	
BEC3	1.03	0.86	20.22	0.74	0.26	
Fit Index	Value					
Chi-square	59.05 (p<0.01)					
CFI	0.98					
TLI	0.97					
SRMR	0.04					
Comparative Fit Index (CFI); Tucker-Lewis Fit Index (TLI); Standard Error (S.E.); Squared Multiple Correlation (SMC); Standardized Root Mean Square Residual (SRMR)						

Figure 4-2: Results of CFA Overall Model - Brand Extension: Courtyard by Marriott (BE-Court)



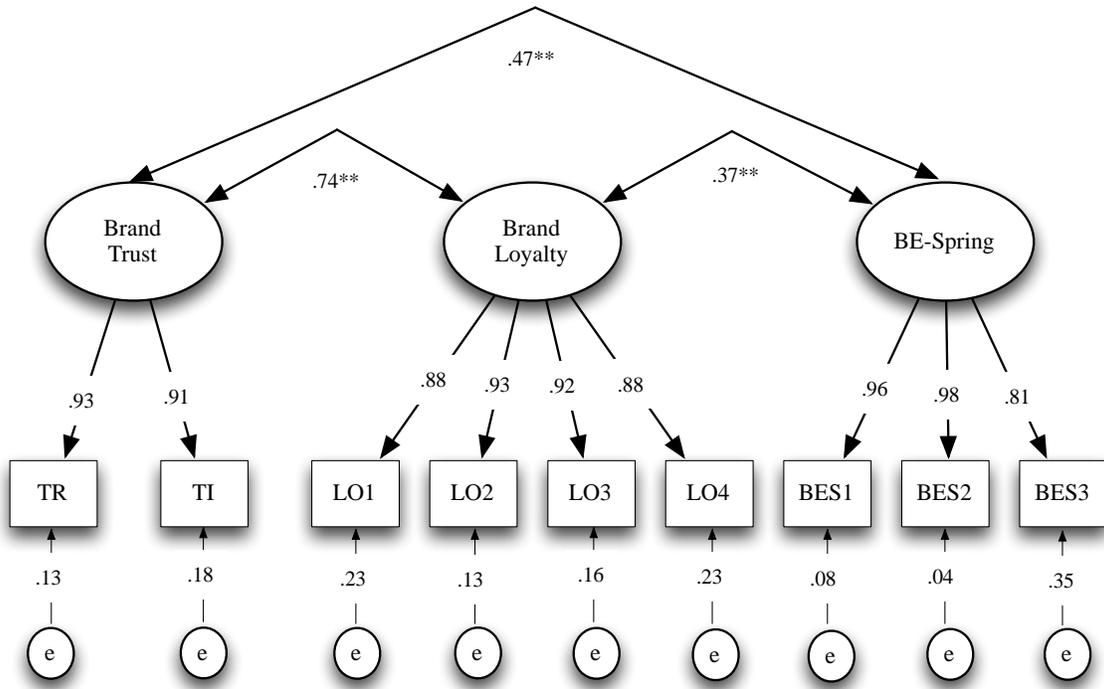
Overall Measurement Model for SpringHill Suites by Marriott

A three-factor model was hypothesized in the measurement portion of the model. The comparative fit index (CFI) = 0.97, the Tucker-Lewis fit index (TLI)=0.95, and the SRMR=0.06. These values indicate a good fit between the model and the observed data. Standardized parameter estimates and unstandardized parameter estimates are provided in Table 4-30. Standardized parameter estimates are provided in Figure 4-3. The standardized factor loadings ranged from 0.81 to 0.98, which are considered high. The squared multiple correlations (SMC) were between 0.65 and 0.96, which indicated the reliability of the measure. The composite reliability of this construct is 0.92 for brand trust, 0.95 for brand loyalty and 0.94 for brand extension, which are acceptable levels. The average extract variance estimates range from 0.81 to 0.85, which exceed the recommended cutoff value of 0.50. The results indicate that the overall measurement model is acceptable.

Table 4-30: CFA Summary of Sophistication for the Overall Model – BE SpringHill Suites by Marriott

Observed variable	Est.	β	Est./S.E.	SMC	Error Variance	Extract Variance Estimate
Brand Trust				0.92		0.85
TR	1.00	0.93		0.87	0.13	
TI	0.93	0.91	17.50	0.82	0.18	
Brand Loyalty				0.95		0.81
LO1	1.00	0.88		0.77	0.23	
LO2	1.17	0.93	20.06	0.87	0.13	
LO3	1.12	0.92	19.37	0.84	0.16	
LO4	1.13	0.88	17.51	0.77	0.23	
Brand Extension				0.94		0.84
BES1	1.00	0.96		0.92	0.08	
BES2	1.07	0.98	32.08	0.96	0.04	
BES3	0.92	0.81	17.49	0.65	0.35	
Fit Index	Value					
Chi-square	81.87 (p=0.0)					
CFI	0.97					
TLI	0.95					
SRMR	0.06					
Comparative Fit Index (CFI); Tucker-Lewis Fit Index (TLI); Standard Error (S.E.); Squared Multiple Correlation (SMC); Standardized Root Mean Square Residual (SRMR)						

Figure 4-3: Results of CFA Overall Model - Brand Extension: SpringHill Suites by Marriott (BE-Spring)



Testing Hypothesis 1-3

In order to test the hypothesis 1-3 simultaneously, SEM was conducted with the dataset B. The hypotheses are as follows.

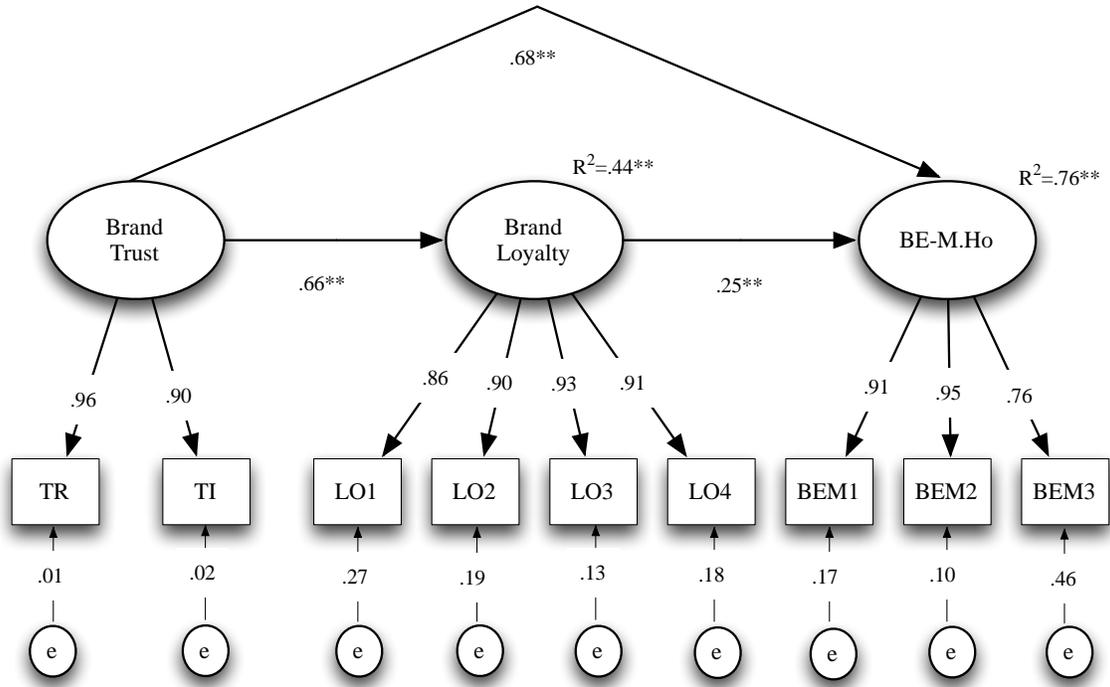
Hypothesis 1: Brand trust is positively associated with brand loyalty.

Hypothesis 2: Brand trust is positively associated with brand extension.

Hypothesis 3: Brand loyalty is positively associated with brand extension.

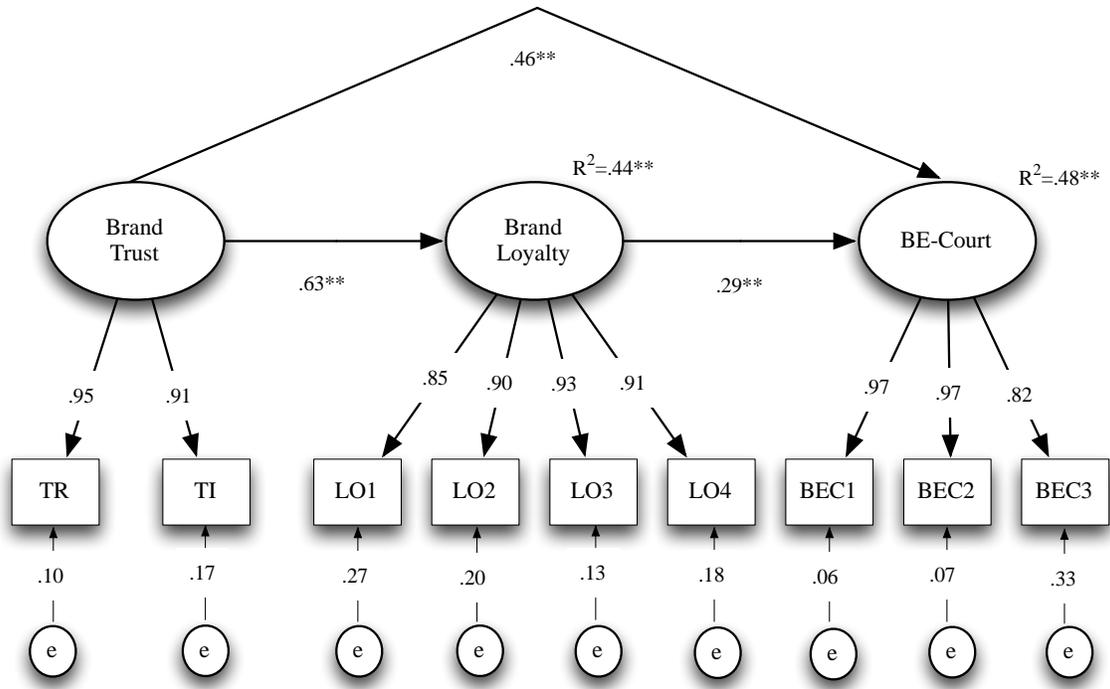
The structural models consist of two exogenous variables (brand trust and brand loyalty) and one endogenous variable (brand extension) across three brands. Brand trust has two items; the brand loyalty has four items. Brand extension has three items. The structural models have a good fit as shown in the Figure 4-4, 4-5, 4-6. The CFI is .98; TLI is .97; and the SRMR is .05 for Marriott Hotels & Resorts. The CFI is .98; TLI is .97; and the SRMR is .04 for Courtyard by Marriott. The CFI is .98; TLI is .97; and the SRMR is .05 for SpringHill Suites by Marriott.

Figure 4-4: Results of the Structural Equation Model - Brand Extension: Marriott Hotel & Resorts (BE-M.Ho)



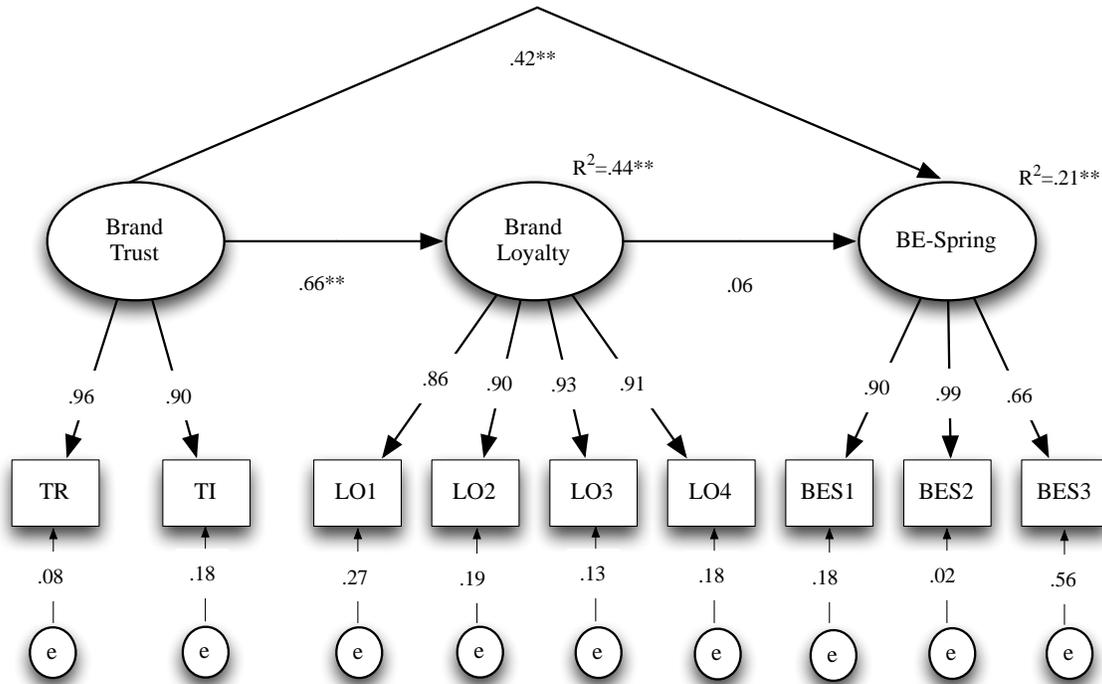
Comparative Fit Index (CFI) = .98; Tucker-Lewis Index (TLI) = .97
 Standardized Root Mean Square Residual (SRMR) = .05; chi-square=61.16; degree of freedom=24. e=error.

Figure 4-5: Results of the Structural Equation Model - Brand Extension: Courtyard by Marriott (BE-Court)



Comparative Fit Index (CFI) = .98; Tucker-Lewis Index (TLI) = .97
 Standardized Root Mean Square Residual (SRMR) = .04; chi-square=56.03; degree of freedom=24. e=error.

Figure 4-6: Results of the Structural Equation Model - Brand Extension: SpringHill Suites by Marriott (BE-Spring)



Comparative Fit Index (CFI) = .98; Tucker-Lewis Index (TLI) = .97
 Standardized Root Mean Square Residual (SRMR) = .05; chi-square=50.22; degree of freedom=24. e=error.

Hypothesis 1 was tested by using the p-value associated with the path coefficient between brand trust and brand loyalty. Table 4-31 shows the results. Brand trust is significantly positively associated with brand loyalty. The same results were produced across the three brand extensions: Marriott Hotels & Resorts ($\beta=.66$, $p<0.01$), Courtyard by Marriott ($\beta=.63$, $p<0.01$), and SpringHill Suites by Marriott ($\beta=.66$, $p<0.01$). Therefore, hypothesis 1 is supported.

Table 4-31: The Effect of Brand Trust on Brand Loyalty

	Marriott Hotels and Resorts	Courtyard by Marriott	SpringHill Suites by Marriott
Brand Trust	.66**	.63**	.66**

** $p < 0.01$

Hypothesis 2 was also tested by using the p-value associated with the path coefficient between the brand trust and brand extension across the three brands. The results are described in Table 4-32. Brand trust is significantly positively associated with brand extension across all the three brands (Marriott Hotels & Resorts: $\beta = .68, p < 0.01$; Courtyard by Marriott: $\beta = .46, p < 0.01$; SpringHill Suites by Marriott: $\beta = .42, p < 0.01$). Depending on brand extension, the degree of the relationship between the brand trust and brand extension varied from .42 to .68. Therefore, the hypothesis 2 was supported.

Table 4-32: The Effect of Brand Trust on Brand Extension

	Marriott Hotels and Resorts	Courtyard by Marriott	SpringHill Suites by Marriott
Brand Trust	.68**	.46**	.42**

** $p < 0.01$

Hypothesis 3 was examined by using the p-value associated with the path coefficient between brand loyalty and brand extension across the three brands. The results are provided in Table 4-33. Brand trust is significantly positively associated with brand extension regarding two brands: Marriott Hotels and Resort ($\beta = .25, p < 0.01$) and Courtyard by Marriott ($\beta = .29, p < 0.01$). With regards to brand extension of SpringHill Suites by Marriott, the relationship between the brand loyalty and the evaluation for

SpringHill Suites by Marriott was not significant. Therefore, the hypothesis 3 was partially supported.

Table 4-33: The Effect of Brand Loyalty on Brand Extension

	Marriott Hotels & Resorts	Courtyard by Marriott	SpringHill Suites by Marriott
Brand Loyalty	.25**	.29**	.06

** p < 0.01

Testing Hypothesis 4

The hypothesis 4 is provided as following:

Hypothesis 4: Brand loyalty partially mediates the relationship between brand trust and brand extension.

In order to test hypothesis 4, a Chi-square difference test was utilized regarding the two models: the full mediation model of brand loyalty vs. the partial mediation model of brand loyalty. Table 4-34 shows the results of the full mediation model (Model 1) and partial mediation model (Model 2). Across the three brands, the values of model fit indicate a good fit regarding the two models. However, the values of Chi-squares in Model 2 are lower than the values of the Chi-squares in Model 1. In addition, the AIC values were evaluated. AIC values offer a relative measure of the information lost when a given model is used to describe reality: the lower AIC value specifies a better model when comparing AIC values between models. Model 2 has lower AIC values than Model 1. This indicates that Model 2 is better model than Model 1. The results of the Chi-square difference test were consistent with the results of the comparison of AIC values (Table 4-

35). Therefore, hypothesis 4, brand loyalty partially mediates the relationships between brand trust and brand extension, was supported.

Table 4-34: The Results of the Full Mediation Model (Model 1) and Partial Mediation Model (Model 2)

	Marriott Hotel and Resorts		Courtyard by Marriott		SpringHill Suites by Marriott	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Chi-square	162.60	61.16	88.16	56.03	69.67	50.22
df	25	24	25	24	25	24
p-value	0.00	0.00	0.00	0.00	0.00	0.00
CFI	0.92	0.98	0.97	0.98	0.97	0.98
TLI	0.89	0.97	0.95	0.97	0.96	0.98
SRMR	0.11	0.05	0.09	0.04	0.09	0.05
AIC	3796.08	3696.63	3680.13	3649.99	3745.93	3728.48
BIC	3861.85	3765.69	3745.89	3719.05	3811.69	3797.53

Comparative Fit Index (CFI); Tucker-Lewis Fit Index (TLI); Standardized Root Mean Square Residual (SRMR); Akaike (AIC); Bayesian (BIC)

Table 4-35: The Results of Chi-square Difference Test

	Marriott Hotel and Resorts		Courtyard by Marriott		SpringHill Suites by Marriott	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Chi-square	162.60	61.16	88.16	56.03	69.67	50.22
Difference		101.44		32.13		19.45
df	25	24	25	24	25	24
Difference		1		1		1
p-value		< 0.01		< 0.01		< 0.01

Full Mediation Model (Model 1); Partial Mediation Model (Model 2)

Testing Hypothesis 5

Hypothesis 5: The distance from a core brand moderates the relationship between brand trust and brand extension.

Hypothesis 5 was tested with a SEM which consisted of two exogenous variables (brand trust and brand loyalty), one endogenous variable (brand extension), and one moderating exogenous variable (brand distance) across three brands. Brand trust had two items; brand loyalty had four items. Brand extension has three items. In addition, brand distance has two items: quality distance from a core brand and price distance from a core brand.

In order to test hypothesis 5, p-values associated with the path coefficients were used. The results are shown in Table 4-36, 4-37, and 4-38. The brand trust*brand distance cross product is not significantly associated with brand extension for Courtyard by Marriott. However, the cross product is significantly associated with brand extension across two brands: Marriott Hotels & Resorts and SpringHill Suites by Marriott at a p-value of .05. Therefore, hypothesis 5 is partially supported.

Table 4-36: The Effect of Brand Distance on Brand Trust: Marriott Hotel and Resorts

Path Relations	Estimates	S.E.	Est./S.E.	P-Value
TRU--->BE	0.57	0.09	6.43	< 0.01
DI--->BE	0.14	0.08	1.76	0.08
TRU*DI--->BE	-0.16	0.05	-2.98	< 0.01
LO--->BE	0.28	0.07	4.13	< 0.01
TRU--->LO	0.72	0.07	9.94	< 0.01

Brand Trust (TRU); Brand Extension (BE);
Brand Distance (DI); Brand Loyalty (LO)

Table 4-37: The Effect of Brand Distance on Brand Trust: Courtyard by Marriott

Path Relations	Estimates	S.E.	Est./S.E.	P-Value
TRU--->BE	0.28	0.14	2.02	0.04
DI--->BE	0.35	0.13	2.76	< 0.01
TRU*DI--->BE	-0.10	0.07	-1.54	0.12
LO--->BE	0.35	0.09	3.71	< 0.01
TRU--->LO	0.73	0.08	9.71	< 0.01

Brand Trust (TRU); Brand Extension (BE);
Brand Distance (DI); Brand Loyalty (LO)

Table 4-38: The Effect of Brand Distance on Brand Trust: SpringHill Suites by Marriott

Path Relations	Estimates	S.E.	Est./S.E.	P-Value
TRU--->BE	0.23	0.15	1.49	0.14
DI--->BE	0.48	0.31	1.55	0.12
TRU*DI--->BE	0.23	0.11	2.04	0.04
LO--->BE	0.07	0.07	0.91	0.36
TRU--->LO	0.72	0.07	9.76	< 0.01

Brand Trust (TRU); Brand Extension (BE);
Brand Distance (DI); Brand Loyalty (LO)

Testing Hypothesis 6

Hypothesis 6: The distance from a core brand moderates the relationship between brand loyalty and brand extension.

Hypothesis 6 was tested using SEM that consisted of two exogenous variables (brand trust and brand loyalty), one endogenous variable (brand extension), and one moderating exogenous variable (brand distance) across three brands. Brand trust had two items; Brand loyalty had four items. Brand extension had three items. In addition, brand distance had two items: quality distance from a core brand and price distance from a core brand.

In order to test the hypothesis 6, p-values associated with the path coefficient were used. The results are shown in Table 4-39, 4-40, and 4-41. The brand loyalty*brand distance cross product is significantly associated with brand extension regarding only SpringHill Suites by Marriott. Therefore, hypothesis 6 was partially supported.

Table 4-39: The Effect of Brand Distance on Brand Loyalty: Marriott Hotel and Resorts

Path Relations	Estimates	S.E.	Est./S.E.	P-Value
LO--->BE	0.27	0.08	3.53	< 0.01
DI--->BE	0.10	0.08	1.24	0.22
LO*DI--->BE	-0.08	0.06	-1.40	0.16
TRU--->BE	0.63	0.12	5.42	< 0.01
TRU--->LO	0.72	0.07	10.01	< 0.01

Brand Trust (TRU); Brand extension (BE);
Brand Distance (DI); Brand Loyalty (LO)

Table 4-40: The Effect of Brand Distance on Brand Loyalty: Courtyard by Marriott

Path Relations	Estimates	S.E.	Est./S.E.	P-Value
LO--->BE	0.37	0.10	3.56	< 0.01
DI--->BE	0.35	0.13	2.61	< 0.01
LO*DI--->BE	-0.09	0.07	-1.31	0.19
TRU--->BE	0.27	0.15	1.83	0.07
TRU--->LO	0.72	0.08	9.68	< 0.01

Brand Trust (TRU); Brand Extension (BE);
Brand Distance (DI); Brand Loyalty (LO)

Table 4-41: The Effect of Brand Distance on Brand Loyalty: SpringHill Suites by Marriott

Path Relations	Estimates	S.E.	Est./S.E.	P-Value
LO--->BE	0.04	0.07	0.60	0.55
DI--->BE	0.41	0.17	2.39	0.02
LO*DI--->BE	0.23	0.07	3.55	< 0.01
TRU--->BE	0.27	0.13	2.07	0.04
TRU--->LO	0.72	0.07	9.74	< 0.01

Brand Trust (TRU); Brand Extension (BE);
Brand Distance (DI); Brand Loyalty (LO)

Summary

Chapter IV discussed the data analysis of the two pretests, and the data analysis for the final survey. The pretests verified the measurement scales regarding the four constructs: brand trust, brand loyalty, brand distance, and brand extension. The final survey was distributed via a commercial company. A total of 398 responses were collected. The responses were randomly split into two datasets. One dataset tested a measurement model while the other dataset tested a structural equation model (SEM). Both the measurement model and structural equation model had a good fit for further analysis. The hypotheses were tested utilizing SEM. A summary of the hypotheses testing results is depicted in Table 4-42.

Table 4-42: Summary of Hypotheses Testing Results

Hypotheses	Brand Extension	Result
H1: Brand trust is positively associated with brand loyalty.	N/A	Supported
H2: Brand trust is positively associated with brand extension.	Marriott Hotels & Resorts	Supported
	Courtyard by Marriott	Supported
	SpringHill Suites by Marriott	Supported
H3: Brand loyalty is positively associated with brand extension.	Marriott Hotels & Resorts	Supported
	Courtyard by Marriott	Supported
	SpringHill Suites by Marriott	Not Supported
H4: Brand loyalty partially mediates the relationship between brand trust and brand extension.	Marriott Hotels & Resorts	Supported
	Courtyard by Marriott	Supported
	SpringHill Suites by Marriott	Supported
H5: The distance from a core brand moderates the relationship between brand trust and brand extension.	Marriott Hotels & Resorts	Supported
	Courtyard by Marriott	Not Supported
	SpringHill Suites by Marriott	Supported
H6: The distance from core brand moderates the relationship between brand loyalty and brand extension.	Marriott Hotels & Resorts	Not Supported
	Courtyard by Marriott	Not Supported
	SpringHill Suites by Marriott	Supported

CHAPTER V

DISCUSSION

Introduction

Chapter V presents the discussion of the findings of the study: a summary and discussion of the hypotheses testing. Managerial implications and theoretical implications of the findings are discussed. Finally, this chapter concludes with the limitations of the study and recommendations for future research.

Summary of the Findings

This study developed a model with regards to the relationships among brand trust, brand loyalty, and brand extension. The model proposed that brand extension would be influenced by brand trust and brand loyalty; and brand loyalty would be influenced by brand trust. In addition, distance from a core brand would have a moderating effect on the relationship between brand trust and brand extension and the relationship between brand loyalty and brand extension. The brand trust construct had two dimensions: reliability and intentions. The reliability dimension had four items. Both brand loyalty and brand extension had four items each. Lastly, distance from a core brand was operationalized by perceived quality distance and perceived price distance between the core brand and the brand extension. This study placed a particular emphasis on consumers' perception of a brand. Consumers who were aware of the study brand, in this study the brand of Marriott, were targeted. Therefore, a population of those who had stayed at a Marriott property was targeted for this study.

Prior to the actual study, a pretest was conducted to verify that the items measured the proposed constructs validly and reliably. The pretest was directed to a convenience sample of individuals who had stayed at a Marriott property and the survey was distributed to 2,420 randomly selected faculty and staff members of Virginia Tech. A total of 121 responses were collected. Of those, 114 responses were used for the analysis. From the pretest, one item of the reliability dimension of the brand trust construct had a slight wording change. Finally, each proposed construct was validated by employing an exploratory factor analysis.

This study utilized an online panel, Cint.com, to complete a self-administrative survey. A final sample of 396 responses was used for the data analysis. The sample was randomly split in two: dataset A and dataset B. Dataset A was used to test a measurement model and dataset B was applied to examine a structural equation model. Before empirically testing the proposed model and hypotheses, independent t-tests with regards to the study variables were performed to detect any differences between dataset A and dataset B. The results indicated there was no difference on the study variables across the two datasets.

The study then tested a measurement model for the construct of brand trust, brand loyalty and brand extension by utilizing a confirmatory factor analysis with dataset A. Through measurement modification, one item of brand extension was excluded from further analysis. Then, structural equation modeling was applied to test the hypotheses. The results found that brand extension was influenced by brand trust and brand loyalty. Brand loyalty was influenced by brand trust. In addition, distance from a core brand had a moderating effect on the relationship between brand trust and brand extension and the

relationship between brand loyalty and brand extension. In addition, brand loyalty partially influenced brand extension in the proposed model. However, this finding was limited to brand extension of Marriott Hotel and Resorts and brand extension SpringHill Suites by Marriott.

Discussion of the Findings

This section presents the development and testing of a measurement model of brand extension including three constructs: brand trust, brand loyalty and brand extension. Then, a detailed discussion of the research hypotheses is undertaken.

Brand Trust

According to Delgado-Ballester et al. (2003). Brand trust is defined as reflected in two dimensions: brand reliability, and brand intentions. They developed scales of brand trust, which have four items of brand reliability and five items of brand intentions. The four items of brand reliability are related with the consumer's belief that the brand achieves its value promise while the five items of brand intentions are concerned with the consumer's belief that the brand would embrace the consumer's interest on purchasing the product even though they faced unexpected problems with their purchase. This study applied the scales of Delgado-Ballester et al. (2003). Confirmatory factor analysis of the brand trust scale retained the two dimensions with nine items that were initially proposed. The confirmatory factor analysis indicated that brand trust has two dimensions: brand reliability and brand intentions. For further model testing, summated scales of brand reliability and brand intentions were developed and applied.

Brand Loyalty

The brand loyalty scales used by He and Li (2010) were applied to measure the brand trust construct. The scales measured respondents' relative attitude toward general brand preference of the parent brand, Marriott. Confirmatory factor analysis of the brand loyalty scale confirmed the one dimension with four items.

Brand Extension

Brand Extension was operationalized by consumers' attitudes toward brand extension and their purchase intention of brand extension. Four items (Klink and Smith, 2001; Dwivedi et al., 2010, Reast, 2005) were proposed for the construct of brand extension. Confirmatory factor analysis retained three items excluding one item from Reast (2005). Therefore, only three items were included for further analysis.

Hypotheses Tests

To investigate the relationships of constructs in the proposed model and the model itself, six research questions and six hypotheses were proposed. Structural equation modeling was used to test hypotheses 1-3 and hypotheses 5 and 6; a Chi-square difference test was employed to test hypothesis 4.

The results of the hypotheses tests are summarized in Table 5-1.

Table 5-1: Summary of Hypotheses Testing Results

Hypotheses	Brand Extension	Result
Hypothesis 1	N/A	Supported
Hypothesis 2	Marriott Hotels & Resorts	Supported
	Courtyard by Marriott	Supported
	SpringHill Suites by Marriott	Supported
Hypothesis 3	Marriott Hotels & Resorts	Supported
	Courtyard by Marriott	Supported
	SpringHill Suites by Marriott	Not Supported
Hypothesis 4	Marriott Hotels & Resorts	Supported
	Courtyard by Marriott	Supported
	SpringHill Suites by Marriott	Supported
Hypothesis 5	Marriott Hotels & Resorts	Supported
	Courtyard by Marriott	Not Supported
	SpringHill Suites by Marriott	Supported
Hypothesis 6	Marriott Hotels & Resorts	Not Supported
	Courtyard by Marriott	Not Supported
	SpringHill Suites by Marriott	Supported

Research Hypothesis 1***H1: Brand trust is positively associated with brand loyalty.***

Structural equation modeling was applied to test the first hypothesis: the relationship between brand trust and brand loyalty. The results indicated that brand trust had a significant influence on brand loyalty. These findings were consistent with previous studies (Chaudhuri and Holdbrook, 2001; Liao et al. 2010; Luk and Yip, 2008; Kim,

2010; Wilkins et al., 2009). Specifically, the relationship between brand trust and brand loyalty was positive and relatively strong (Std. Coefficient: .63^{**} ~ .66^{**}).

Research Hypotheses 2

H2: Brand trust is positively associated with brand extension.

In order to test hypothesis 2, structural equation modeling was utilized. In this study, three different brands were used resulting in three different structural equation models. The three different brands were Marriott Hotels & Resorts, Courtyard by Marriott, and SpringHill Suites by Marriott. The relationship between brand trust and the brand extension was revealed to have a positive relationship across the three brands. Previous research suggested brand trust has an impact on brand extension acceptance (Reast, 2005) and consumers' attitude toward brand extension (Wu, 2007). The results of this study were consistent with the previous research results; brand trust was positively associated with brand extension. In addition, the degree of the relationship between brand trust and brand extension was relatively strong (Std. Coefficient: .42^{**} ~ .68^{**}).

Research Hypotheses 3

H3: Brand loyalty is positively associated with brand extension.

Structural equation modeling was used to test the relationship between brand loyalty and brand extension. Three different brands were used with regards to brand extension: Marriott Hotels & Resorts, Courtyard by Marriott, and SpringHill Suites by Marriott. Previous research suggested behavioral loyalty and attitudinal loyalty are

dimensions of customer-based brand equity (Aaker, 1991), which is a key indicator of brand extension (van Riel et al., 2001). Also, He and Li (2010) stated that brand loyalty is related to brand extension evaluation.

Like the previous research findings, this study found that brand loyalty is positively associated with brand extension. However, these findings are limited to the evaluation of Marriott Hotels & Resorts and Courtyard by Marriott. The relationship between brand loyalty and the evaluation of SpringHill Suites by Marriott was not supported by the structural equation model including brand trust, brand loyalty and brand extension. Therefore, a single relationship between brand loyalty and brand extension of SpringHill Suites by Marriott was examined and it was found that there is a positive relationship between brand loyalty and the evaluation of SpringHill Suites by Marriott.

Research Hypotheses 4

H4: Brand loyalty partially mediates the relationship between brand trust and brand extension.

To investigate the partial mediation effect of brand loyalty between brand trust and brand extension, first, structural equation modeling was applied to develop a full mediation model and a partial mediation model. Then, a Chi-square difference test was utilized to examine which model performs better across the three brands. Hypothesis 4 tested the previous three hypotheses holistically. This study found that the partial mediation model performs better than the full mediation model, which indicates brand

loyalty partially mediates the relationships between brand trust and brand extension across the three brands.

Research Hypotheses 5 and 6

H5: The distance from a core brand moderates the relationship between brand trust and brand extension.

H6: The distance from a core brand moderates the relationship between brand loyalty and brand extension.

In order to test the moderating effect of the distance from a core brand on the relationship between brand trust and brand extension, structural equation modeling was used. Kim et al. (2001) suggested consumers evaluate a step-down brand extension more favorably if a smaller distance, in terms of price and quality, exists between the core brand and the step-down brand extension. On the other hand, in a step-up brand extension, consumers evaluate brand extension more favorably if a greater distance exists between the core brand and the step-up brand extension (Kim et al., 2001). Musante (2007) also stated that consumers evaluate more favorably extension products closer to the price point of the brand's traditional offerings.

First, structural equation modeling including brand trust, brand loyalty, brand extension, and a moderating effect of brand distance on the relationship between brand trust and brand extension was performed across the three extension brands. The results found that the brand distance has a moderating effect on the relationship between brand trust and brand extension. However, these results were limited to the brands of Marriott Hotels & Resorts and SpringHill Suites by Marriott. The moderating effect of brand

distance on the relationship between brand trust and evaluation of Courtyard by Marriot was not significant. However, the results posited that brand distance has a main effect on brand extension.

In addition, the moderating effect of brand distance on the relationship between brand trust and evaluation of Marriott Hotels & Resorts was negative while the moderating effect of brand distance on the relationship between brand trust and evaluation of SpringHill Suites by Marriott was positive. The negative moderating effect of brand distance on the relationship between brand trust and brand extension indicated consumers evaluate brand extension more favorably if a greater distance between a core brand (Marriott) and brand extension (Marriott Hotel and Resorts) exists. On the other hand, the positive moderating effect of brand distance on the relationship between brand trust and brand extension suggested consumers evaluate brand extension more favorably if a smaller distance between a core brand (Marriott) and brand extension (SpringHill Suites by Marriott) exists. These results were consistent with the results of Kim et al. (2001) in that consumers evaluate brand extension more favorably with a smaller distance between a core brand and a step-down brand extension whereas they evaluate brand extension more favorably with greater distance between a core brand and a step-up brand extension.

Second, structural equation modeling including brand trust, brand loyalty, brand extension, and a moderating effect of brand distance on the relationship between brand loyalty and brand extension was performed across the three extension brands. The results found that the brand distance has a moderating effect on the relationship between brand loyalty and brand extension. These results were limited to the brand extension SpringHill

Suites by Marriott. The moderating effect of brand distance on the relationship between brand loyalty and evaluation of Marriott Hotels & Resorts and Courtyard by Marriott was not significant in the structural equation model of brand trust, brand loyalty, and brand extension. With regards to hypothesis 3, a relationship between brand loyalty and evaluation of SpringHill Suites by Marriott in the structural equation model was not significant. The results of hypothesis 6 may explain why the relationship between brand loyalty and evaluation of SpringHill Suites by Marriott was not significant without a moderating effect of brand distance on the relationship. This finding indicates that brand distance plays a great moderating role in the relationship between brand loyalty and evaluation of SpringHill Suites by Marriott.

Therefore, the moderating effect of brand distance was tested in a structural equation model that has only a single relationship between brand loyalty and brand extension. In the single relationship between brand loyalty and brand extension, the moderating effect of brand distance was significant across the two brands: Marriott Hotels & Resorts and Courtyard by Marriott. However, the direction of the moderating effect was different from the one of SpringHill Suites by Marriott. The negative moderating effect of brand distance on the relationship between brand loyalty and brand extension indicated consumers evaluate brand extension more favorably if a greater distance between a core brand (Marriott) and brand extension (Marriott Hotel and Resorts and Courtyard by Marriott) exists. On the other hand, the positive moderating effect of brand distance on the relationship between brand loyalty and brand extension suggested consumers evaluate brand extension more favorably if a smaller distance between a core brand (Marriott) and brand extension (SpringHill Suites by Marriott) exists. Consumers

perceived the quality and price of Marriott Hotels & Resorts and Courtyard by Marriott as similar to or higher than the quality and price of a Marriot brand, which means Marriott Hotels & Resorts and Courtyard by Marriott are positioned slightly higher than the Marriott brand as a vertical brand extension of the Marriott brand. These results were also consistent with the results of Kim et al. (2001) in that consumers evaluate brand extension more favorably with a smaller distance between a core brand and a step-down brand extension whereas, consumers evaluate brand extension more favorably with greater distance between a core brand a step-up brand extension.

Implications

This section discusses the implications from the results of this dissertation. First, managerial implications are presented to provide valuable insights for lodging industry marketers. Second, theoretical implications depict the theoretical contributions of this study to the body of related literature.

Managerial Implications

The findings of the study provide significant managerial implications. They suggests brand extension is influenced by brand trust and brand loyalty. Specifically, brand loyalty partially mediates the relationship between brand trust and brand extension. The findings are of relevance to managers who develop brand strategy because brand trust is associated not only with brand loyalty, but also brand extension. The results suggest that brand trust has a strong impact on brand loyalty and brand extension. This study found that there is a positive relationship between brand trust and brand extension, which indicates higher brand trust ratings promise the ability to leverage the brand name

to brand extension products. In addition, brand trust could have an influence on brand loyalty. A higher brand trust rating may lead to higher brand loyalty. In the lodging industry, the meaning of the brand is determined by customers' experiences, and in turn, the customers' initial experience with the brand builds the brand trust. Therefore, in order to boost brand loyalty and brand extension, particularly with brand trust development, two dimensions of brand trust: brand reliability and brand intentions, should garner specific attention.

Brand loyalty leads not only to reduced marketing costs and favorable word of mouth, but also leverages the brand value to brand extension. In other words, brand loyalty can improve the leveraging value of the brand name through brand extension. Brand extension seems to be an easy and less costly strategy to launch new products for many companies. However, this study demonstrated that brand extension's results differ according to types of brand extension (upward brand extension or downward brand extension) and consumers' perceived brand distance between quality and price of a core brand and those of brand extension. Even though brand loyalty can be a powerful source for brand extension, the findings of this study suggest brand loyalty is not a solution for brand extension. The relationship between brand loyalty and brand extension could be enhanced or damaged depending on consumers' perceived distance of quality and price (brand distance) between a core brand and brand extension. If a smaller distance exists between a core brand and a downward brand extension, the downward brand extension is evaluated more favorably than where greater distance is present. On the other hand, upward brand extensions could be more favorably evaluated on the condition that a greater distance exists between a core brand and an upward brand extension.

Therefore, managers should focus on maintaining high brand reliability and brand intentions, which results in high brand loyalty. Ultimately, high brand loyalty could enhance favorable brand extensions. In addition, when launching a new product in a downward vertical brand extension with different price and quality points, managers should consider the positioning and communication strategies of the new product to have smaller distance of price and quality level from its core brand. However, a greater distance between a core brand and an upward vertical brand extension is required in order to draw consumers' favorable brand extension evaluation.

Theoretical Implications

Although a substantial amount of brand extension research has been conducted in the past decade, little research has been done in the hospitality and tourism setting (Jiang et al. 2002; Kwun, 2010; Lee, 2007). Specifically, little research on vertical brand extension has been conducted even though a vertical brand extension strategy has been popular in the lodging industry with companies adding various sub-brands or extended brands. In addition, aggregated relationships between brand trust and brand extension, brand trust and brand loyalty, and brand loyalty and brand extension have been examined. This study not only investigated factors that influence brand extension but also examined the relationships among the factors simultaneously. In other words, a holistic approach to investigate the relationships among brand trust, brand loyalty and brand extension was applied. It was found that brand loyalty partially mediates the relationship between brand trust and brand extension.

The findings of this study confirmed the previous research on the relationships between brand trust and brand loyalty (Chaudhuri and Holbrook, 2001), between brand

trust and brand extension (Reast, 2005), and between brand loyalty and brand extension (He and Li, 2010) within the lodging industry setting. Brand trust positively influenced not only brand loyalty, but also brand extension. In addition, brand loyalty has a positive impact on brand extension. Depending on brand extension, association levels between brand trust and brand extension was varied.

This study also found brand distance (perceived quality and price distance between a core brand and brand extension) has an impact on brand extension, which is consistent with results of previous research (Kim et al., 2001; Musante, 2007). Also, brand distance moderates the relationship between brand trust and brand extension and between brand loyalty and brand extension. Specifically, in downward brand extensions, brand distance plays a vital role in the relationship between brand loyalty and brand extension in that the relationship between brand loyalty and brand extension becomes weak without a brand distance factor.

As Kim et al. (2001) suggested, consumers evaluate a step-down brand extension product more favorably when its distance (price/quality) is positioned closer to the core brand, this study found similar results as Kim et al. (2001). On the contrary, consumers evaluate a step-up brand extension product less favorably when its distance is positioned closer to the core brand.

Limitations and Future Research

One limitation of this study is related to the sampling frame; U.S. on-line panel was used in the final survey, which is a convenience sampling. Due to the nature of convenience sampling, this dissertation cannot represent an entire population. In addition,

the final survey was distributed via on-line methods, which automatically exclude those who do not use the Internet. Therefore, for future research, this study should be replicated with a random sample from a general population. Second, this study surveyed consumers who have stayed at a Marriott property. The respondents might have had existing favorable attitudes toward the Marriott brand, which could have had an impact on the results. Brand image and trust could be developed without experience with the brand. Thus, for future research, both consumers who have stayed at a Marriott property and have not stayed at a Marriott property should be included to see if there is any difference on brand extension between these two groups.

A third limitation is in regard to the survey design. Only two measurement scales were used for the brand distance construct: perceived general quality and general price similarity. According to the service quality literature, multi-dimensional scales have been developed and applied. For future studies, multiple facet characters of service quality should be considered as a moderating factor on the overall relationships of brand extension. Fourth, this study used one brand, Marriott, as a core brand and three Marriott extended brands as brand extensions. Thus, the results could be limited to only the Marriott brand. In the lodging industry, several major companies have utilized brand extension strategies by adding sub-brands (such as Hilton and Hyatt). Therefore, this study should be replicated with a different brand setting. In addition, research on investigating differences across different brands should be generated.

Fifth, this study investigated only positive or negative impact of brand distance (perceived quality and price similarity) on the brand extension. According to Kim et al. (2001), there are several distancing techniques in a vertical brand extension such as

graphic and linguistic distancing techniques. Generally, these techniques are applied to reduce the dilution of the core brand image. Therefore, future studies should investigate different aspects of the distancing techniques that could impact a core brand image or brand extension. Sixth, the brand distance was operationalized as consumers' perceived quality and price distance of brand extension from a core brand and was measured by a self-administered questionnaire. There might be intervening cause to detect sole effect of brand distance on brand extension because quality and price distance were not manipulated. Therefore, for future studies, the brand distance effect could be examined within an experimental design.

Conclusions

This dissertation examined a theoretical model that attempts to investigate the relationships among brand trust, brand loyalty and brand extension. Also, a moderating effect of brand distance on the model relationships was tested. The findings suggest there are positive relationships between brand trust and brand loyalty, brand trust and brand extension, and brand loyalty and brand extension. Findings of this study also found that brand distance plays a significant role not only on brand extension, but also the relationship between brand trust and brand extension, and the relationship between brand loyalty and brand extension.

This study contributes to vertical brand extension literature by providing a theoretical model by which simultaneous relationships among brand trust, brand loyalty and brand extension were examined including a moderating factor: brand distance. The findings of this study have important managerial implications for lodging industry brand

managers. Limitations of this study were presented along with future research recommendations.

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Appendix A: Survey Questionnaires

A Study of Brand Extension in the Lodging Industry

Part I. Trip behavior

Directions: The following questions ask about your experience based on your business and leisure travel with the Marriott brand. Please read the following statement on “brand” and answer the questions.

In this survey “BRAND” refers to a name, term, and/or sign to identify or differentiate the services of one hotel from another. For example, *the Marriott hotel brand uses “Marriott” for their branded hotels*, e.g. Marriott Hotels & Resorts, Courtyard by Marriott, SpringHill Suites by Marriott.

1. Approximately, how many nights did you spend at any hotel for both business and pleasure in the past year? () nights

1-1. Approximately, how many of these were only for business purposes last year?
() nights

1-2. Approximately, how many of these were only for pleasure purposes last year?
() nights

3. How familiar are you with the **Marriott** collection of brands?

Not At All			Neutral		Very Familiar	
1	2	3	4	5	6	7

4. Are you a member of “**Marriott Rewards**”? Yes No
If no, have you ever been a member of “**Marriott Rewards**”? Yes No

5. Approximately, how many nights did you stay at a **Marriott** property for **business** in the past year?
() nights

6. Approximately, how many nights did you stay at a **Marriott** property for **pleasure** in the past year? () nights

7. Please place a check by any of the hotels listed below that you have stayed at in the past year and indicate approximately how many nights you stayed at the property for business and for pleasure.

Marriott Hotels & Resorts - () nights for **Business** () nights for **Pleasure**

- Courtyard by Marriott - () nights for **Business** () nights for **Pleasure**
- Residence Inn by Marriott - () nights for **Business** () nights for **Pleasure**
- Fairfield Inn & Suites by Marriott - () nights for **Business** () nights for **Pleasure**
- TownePlace Suites by Marriott - () nights for **Business** () nights for **Pleasure**
- SpringHill Suites by Marriott - () nights for **Business** () nights for **Pleasure**
- Marriott ExecuStay - () nights for **Business** () nights for **Pleasure**
- Marriott Executive Apartments - () nights for **Business** () nights for **Pleasure**
- AC Hotels Marriott - () nights for **Business** () nights for **Pleasure**

8. Did you ever stay at **Marriott Hotels & Resorts**? Yes () No ()

9. Did you ever stay at **Courtyard by Marriott**? Yes () No ()

10. Did you ever stay at **SpringHill Suites by Marriott**? Yes () No ()

11. How would you describe your overall opinion of the **Marriott brand**?

Very Unfavorable			Neutral		Very Favorable	
1	2	3	4	5	6	7

12. How would you describe the amount of trust you have in the **Marriot brand**?

Very Low Trust			Neutral		Very High Trust	
1	2	3	4	5	6	7

13. Excluding Marriott, select the one brand hotel you stayed the most.

- Inter-Continental Hotel Group
- Wyndham Worldwide
- Hyatt
- Choice Hotels International
- Hilton
- Starwood Hotels & Resorts Worldwide
- Other hotels

Part II. Brand trust

14. For the following items, please express your opinion regarding the **Marriott brand**

	Strongly Disagree		Neutral			Strongly Agree	
I feel confident with the Marriott brand .	1	2	3	4	5	6	7
A hotel that carries the Marriott brand never disappoints me.	1	2	3	4	5	6	7
I feel that a hotel carrying the Marriott brand guarantees satisfaction.	1	2	3	4	5	6	7
Marriott is a brand that fulfills my expectations.	1	2	3	4	5	6	7

	Strongly Disagree		Neutral			Strongly Agree	
I feel hotels with the Marriott brand will be honest in addressing my concerns.	1	2	3	4	5	6	7
I feel hotels with the Marriott brand will be sincere in addressing my concerns.	1	2	3	4	5	6	7
I can rely on hotels with the Marriott brand to have employees who can solve my problems.	1	2	3	4	5	6	7
I feel hotels with the Marriott brand will have employees who will make every effort to satisfy me.	1	2	3	4	5	6	7
I feel hotels with the Marriott brand will compensate me in some way for a problem with a hotel stay.	1	2	3	4	5	6	7

Part III. Brand loyalty

15. For the following items, please express your opinion regarding the **Marriott brand**.

	Strongly Disagree		Neutral			Strongly Agree	
It makes sense to stay at hotels with the Marriott brand instead of a comparable hotel.	1	2	3	4	5	6	7
Even if comparable hotels have similar amenities as Marriott, I would prefer to stay at a hotel with the Marriott brand .	1	2	3	4	5	6	7
Even if another hotel brand is as good as Marriott , I prefer to stay at a Marriott brand .	1	2	3	4	5	6	7
If another hotel brand is not different from Marriott in any way, it is still worth it to stay at a hotel with the Marriott brand .	1	2	3	4	5	6	7

Part IV. Brand distance

Directions: The following questions ask about your perception based on the room rate and quality of Marriott brand hotels. Please read the following statement on “Service Quality” and answer the questions.

For this survey “**SERVICE QUALITY**” refers to companies that are successful in consistently having an accurate sense of how well they perform services that are critical to their customers. They know how long it takes to conduct transactions, how frequently service fails, and how quickly they settle customer complaints. These companies define goals that lead them to meet or exceed customer expectations.

IMPORTANT!

ASSUME ALL MARRIOTT HOTELS LISTED IN THIS SECTION ARE IN THE SAME GEOGRAPHIC LOCATION.

16. How familiar are you with **Marriott Hotels & Resorts**?

Not At All							Very Familiar	
1	2	3	4	5	6	7		

17. How familiar are you with **Courtyard by Marriott**?

Not At All							Very Familiar	
1	2	3	4	5	6	7		

18. How familiar are you with **SpringHill Suites by Marriott**?

Not At All							Very Familiar	
1	2	3	4	5	6	7		

19. I feel the overall service quality of the **Marriott brand** is

Very Poor							Excellent	
1	2	3	4	5	6	7		

20. I feel the overall service quality of **Marriott Hotels & Resorts** is

Very Poor							Excellent	
-----------	--	--	--	--	--	--	-----------	--

27. I feel the room rate of **Marriott Hotels & Resorts** is

Very Inexpensive				Very Expensive		
1	2	3	4	5	6	7

28. I feel the room rate of **Courtyard by Marriott** is

Very Inexpensive				Very Expensive		
1	2	3	4	5	6	7

29. I feel the room rate of **SpringHill Suites by Marriott** is

Very Inexpensive				Very Expensive		
1	2	3	4	5	6	7

30. The room rate of **Marriott Hotels & Resorts** when compared to your overall image of the room rate of the **Marriott brand** is.

Very Different				Very Similar		
1	2	3	4	5	6	7

31. The room rate of **Courtyard by Marriott** when compared to your overall image of the room rate of the **Marriott brand** is.

Very Different				Very Similar		
1	2	3	4	5	6	7

32. The room rate of **SpringHill Suites by Marriott** when compared to your overall image of the room rate of the **Marriott brand** is.

Very Different				Very Similar		
1	2	3	4	5	6	7

Part V. The evaluation of brand extension

33. Please express your opinion regarding **Marriott Hotels & Resorts.**

	Strongly Disagree		Neutral			Strongly Agree	
I feel favorable toward Marriott Hotels & Resorts.	1	2	3	4	5	6	7
My attitude towards Marriott Hotels & Resorts is very positive.	1	2	3	4	5	6	7
I am likely to stay at Marriott Hotels & Resorts.	1	2	3	4	5	6	7
I am likely to search out Marriott Hotels & Resorts.	1	2	3	4	5	6	7

34. Please express your opinion regarding **Courtyard by Marriott.**

	Strongly Disagree		Neutral			Strongly Agree	
I feel favorable toward Courtyard by Marriott.	1	2	3	4	5	6	7
My attitude towards Courtyard by Marriott is very positive.	1	2	3	4	5	6	7
I am likely to stay at Courtyard by Marriott.	1	2	3	4	5	6	7
I am likely to search out Courtyard by Marriott.	1	2	3	4	5	6	7

35. Please express your opinion regarding **SpringHill Suites by Marriott.**

	Strongly Disagree		Neutral			Strongly Agree	
I feel favorable toward SpringHill Suites by Marriott.	1	2	3	4	5	6	7
My attitude towards SpringHill Suites by Marriott is very positive.	1	2	3	4	5	6	7
I am likely to stay at SpringHill Suites by Marriott.	1	2	3	4	5	6	7
I am likely to search out SpringHill Suites by Marriott.	1	2	3	4	5	6	7

36. For quality control purposes, please mark at “3” on the following item

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

Part VI. Demographic Information

37. What is your gender? Female () Male ()

38. Age (in which year you were born):

39. What is your zip code:

40. Education:

- High school or less
- Some college/Technical school
- Four years of college
- Master’s degree
- Doctoral degree

41. Ethnic group:

- Caucasian
- African-American
- Hispanic
- Asian
- Native American
- Other:

42. What is your current marital status?

- Single (Never Married)
- Living with Spouse/Partner
- Widowed
- Separated
- Divorced

43. Total annual household income (before taxes):

- Less than \$40,000
- \$40,000-\$70,000
- \$70,001-\$100,000
- \$100,001-\$130,000

- \$130,001-\$160,000
- \$160,001-\$190,000
- Over \$190,000

Thank you for your participation!

Appendix B: Descriptive Statistics with Skewness and Kurtosis Values

Variables	Mean	Std. Devi.	Skew.	Kurt.
Brand Trust				
- Brand Trust: Reliability				
I feel confident with the Marriott brand (Tr1).	5.82	0.96	-0.91	1.02
A hotel that carries the Marriott brand never disappoints me (Tr2).	5.58	1.09	-0.76	0.58
I feel that a hotel carrying the Marriott brand guarantees satisfaction (Tr3).	5.60	1.14	-0.83	0.53
Marriott is a brand name that fulfills my expectation (Tr4).	5.70	1.06	-0.85	0.69
- Brand Trust: Intentions				
I feel hotels with the Marriott brand will be honest in addressing my concerns (Ti1).	5.68	0.95	-0.98	1.78
I feel hotels with the Marriott brand will be sincere in addressing my concerns (Ti2).	5.78	0.97	-0.88	1.06
I can rely on hotels with the Marriott brand to have employees who can solve my problems (Ti3).	5.60	1.05	-0.70	0.28
I feel hotels with the Marriott brand will have employees who will make every effort to satisfy me (Ti4).	5.71	1.04	-0.77	0.43
I feel hotels with the Marriott brand will compensate me in some way for a problem with a hotel stay (Ti5).	5.26	1.24	-0.56	0.16
Brand Loyalty				
It makes sense to stay at hotels with the Marriott brand instead of a comparable hotel (Lo1).	4.96	1.21	-0.30	-0.08
Even if comparable hotels have similar amenities as Marriott, I would prefer to stay at a hotel with the Marriott brand (Lo2).	4.88	1.30	-0.34	-0.01
Even if another hotel brand is as good as Marriott, I prefer to stay at a Marriott brand (Lo3).	4.75	1.34	-0.17	-0.26
If another hotel brand is not different from Marriott in any way, it is still worth it to stay at a hotel with the Marriott brand (Lo4).	4.84	1.36	-0.20	-0.40

Variables	Mean	Std. Devi.	Skew.	Kurt.
Brand Distance				
- Brand Distance: Quality				
The overall service quality of Marriott hotels & Resorts when compared to your overall image of the quality of the Marriott brand is (Very different ~ Very similar) (qcomh)	5.56	1.27	-0.92	0.94
The overall service quality of Courtyard by Marriott when compared to your overall image of the quality of the Marriott brand is (Very different ~ Very similar) (qcoc)	5.43	1.28	-0.85	0.95
The overall service quality of SpringHill Suites by Marriott when compared to your overall image of the quality of the Marriott brand is (Very different ~ Very similar) (qcos)	4.89	1.33	-0.03	-0.21
- Brand Distance: Price				
The room rate of Marriott Hotels & Resorts when compared to your overall image of the room rate of the Marriot brand is (Very different ~ Very similar) (pcomh)	5.00	1.36	-0.45	0.09
The room rate of Courtyard by Marriott when compared to your overall image of the room rate of the Marriot brand is (Very different ~ Very similar) (pcoc)	4.82	1.24	-0.11	-0.12
The room rate of SpringHill Suites by Marriott when compared to your overall image of the room rate of the Marriot brand is (Very different ~ Very similar) (pcos)	4.57	1.27	0.02	0.22

Variables	Mean	Std. Devi.	Skew.	Kurt.
Evaluation of Brand Extension (BE)				
BE - Marriott Hotels & Resorts				
I feel favorable toward Marriott Hotels and Resorts (bem1).	5.64	1.09	-1.06	1.60
My attitude towards Marriott Hotels and Resorts is very positive (bem2).	5.66	1.11	-0.88	0.65
I am likely to stay at Marriott Hotels and Resorts (bem3).	5.36	1.36	-0.90	0.79
I am likely to search out Marriott Hotels and Resorts (bem4).	4.95	1.44	-0.64	0.10
BE - Courtyard by Marriott				
I feel favorable toward Courtyard by Marriott (bec1).	5.45	1.17	-0.77	0.92
My attitude towards Courtyard by Marriott is very positive (bec2).	5.43	1.17	-0.73	0.71
I am likely to stay at Courtyard by Marriott (bec3).	5.18	1.33	-0.58	0.10
I am likely to search out Courtyard by Marriott (bec4).	4.84	1.48	-0.40	-0.18
BE - SpringHill Suites by Marriott				
I feel favorable toward SpringHill Suites by Marriott (bec1).	4.64	1.05	0.18	0.75
My attitude towards SpringHill Suites by Marriott is very positive (bec2).	4.60	1.08	0.07	1.10
I am likely to stay at SpringHill Suites by Marriott (bec3).	4.38	1.12	-0.05	1.38
I am likely to search out SpringHill Suites by Marriott (bec4).	4.19	1.21	-0.25	1.05

Appendix C: VT IRB Approval Letters



Office of Research Compliance
Institutional Review Board
2000 Kraft Drive, Suite 2000 (0497)
Blacksburg, VA 24060
540/231-4606 Fax 540/231-0959
email irb@vt.edu
website <http://www.irb.vt.edu>

MEMORANDUM

DATE: January 23, 2013
TO: Pamela A Weaver, Yu Mi Lim
FROM: Virginia Tech Institutional Review Board (FWA00000572, expires May 31, 2014)
PROTOCOL TITLE: Consumer evaluation of a vertical brand extension in the lodging industry: relationships among brand trust, brand loyalty, brand distance, and brand extension.
IRB NUMBER: 13-058

Effective January 23, 2013, the Virginia Tech Institutional Review Board (IRB) Chair, David M Moore, approved the New Application request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report within 5 business days to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at:

<http://www.irb.vt.edu/pages/responsibilities.htm>

(Please review responsibilities before the commencement of your research.)

PROTOCOL INFORMATION:

Approved As: **Exempt, under 45 CFR 46.110 category(ies) 2**
Protocol Approval Date: **January 23, 2013**
Protocol Expiration Date: **N/A**
Continuing Review Due Date*: **N/A**

*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:

Per federal regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals/work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.

Invent the Future

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY
An equal opportunity, affirmative action institution

MEMORANDUM

DATE: March 5, 2013
TO: Pamela A Weaver, Yu Mi Lim
FROM: Virginia Tech Institutional Review Board (FWA00000572, expires May 31, 2014)
PROTOCOL TITLE: Consumer evaluation of a vertical brand extension in the lodging industry: relationships among brand trust, brand loyalty, brand distance, and brand extension.
IRB NUMBER: 13-058

Effective March 5, 2013, the Virginia Tech Institution Review Board (IRB) Chair, David M Moore, approved the Amendment request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report within 5 business days to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at:

<http://www.irb.vt.edu/pages/responsibilities.htm>

(Please review responsibilities before the commencement of your research.)

PROTOCOL INFORMATION:

Approved As: **Exempt, under 45 CFR 46.110 category(ies) 2**
Protocol Approval Date: **January 23, 2013**
Protocol Expiration Date: **N/A**
Continuing Review Due Date*: **N/A**

*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:

Per federal regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals/work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.

Invent the Future

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Appendix D: Mplus Syntax for CFA

Mplus VERSION 4.21
MUTHEN & MUTHEN
03/12/2013 4:29 PM

INPUT INSTRUCTIONS

Title:

CFA All (M.ho)

DATA:

File is "E:\Data\Final_Data_Sort_A_mplus.txt" ;

Format is free;

VARIABLE:

Names are

Tr1 Tr2 Tr3 Tr4 Ti1 Ti2 Ti3 Ti4 Ti5

Lo1 Lo2 Lo3 Lo4

qm qmh qc qs

qcomh qcoc qcos

pm pmh pc ps

pcomh pcoc pcos

bem1 bem2 bem3 bem4

bec1 bec2 bec3 bec4

bes1 bes2 bes3 bes4

tr ti;

Usevariables are

tr ti Lo1 Lo2 Lo3 Lo4 bem1 bem2 bem3 ;

ANALYSIS:

Type = general ;

MODEL:

Trust BY tr@1 ti ;

Loyalty BY Lo1@1 Lo2 Lo3 Lo4 ;

Brand BY bem1@1 bem2 bem3 ;

Trust with Loyalty ;

Trust with Brand ;

Loyalty with Brand ;

OUTPUT:

SAMPSTAT STANDARDIZED TECH4 MODINDICES(3.84);

Appendix E: Mplus Syntax for SEM

Mplus VERSION 4.21
MUTHEN & MUTHEN
03/12/2013 4:33 PM

INPUT INSTRUCTIONS

Title:

STR M.Ho

DATA:

File is "E:\Data\Final_Data_Sort_B_mplus.txt" ;

Format is free;

VARIABLE:

Names are

Tr1 Tr2 Tr3 Tr4 Ti1 Ti2 Ti3 Ti4 Ti5

Lo1 Lo2 Lo3 Lo4

qm qmh qc qs

qcomh qcoc qcos

pm pmh pc ps

pcomh pcoc pcos

bem1 bem2 bem3 bem4

bec1 bec2 bec3 bec4

bes1 bes2 bes3 bes4

tr ti ;

Usevariables are

tr ti Lo1 Lo2 Lo3 Lo4 bem1 bem2 bem3 ;

ANALYSIS:

Type = general ;

MODEL:

Trust BY tr@1 ti ;

Loyalty BY Lo1@1 Lo2 Lo3 Lo4 ;

Brand BY bem1@1 bem2 bem3 ;

Brand on Loyalty Trust;

Loyalty on Trust ;

OUTPUT:

standardized sampstat tech4 ;

modindices ;

Appendix F: Mplus Syntax for SEM (Mediation Model)

Mplus VERSION 4.21
MUTHEN & MUTHEN
03/12/2013 4:37 PM

INPUT INSTRUCTIONS

Title:

STR M.Ho

DATA:

File is "E:\Data\Final_Data_Sort_B_mplus.txt" ;

VARIABLE:

Names are

Tr1 Tr2 Tr3 Tr4 Ti1 Ti2 Ti3 Ti4 Ti5

Lo1 Lo2 Lo3 Lo4

qm qmh qc qs

qcomh qcoc qcos

pm pmh pc ps

pcomh pcoc pcos

bem1 bem2 bem3 bem4

bec1 bec2 bec3 bec4

bes1 bes2 bes3 bes4

tr ti ;

Usevariables are

tr ti Lo1 Lo2 Lo3 Lo4 bem1 bem2 bem3 ;

ANALYSIS:

Type = general ;

MODEL:

Trust BY tr@1 ti ;

Loyalty BY Lo1@1 Lo2 Lo3 Lo4 ;

Brand BY bem1@1 bem2 bem3 ;

Brand on Loyalty ;

Loyalty on Trust ;

OUTPUT:

standardized sampstat tech4 ;

modindices ;

Appendix G: Mplus Syntax for SEM with Brand Distance

Mplus VERSION 4.21
MUTHEN & MUTHEN
03/12/2013 4:43 PM

INPUT INSTRUCTIONS

Title:

STR Dis Trust Mho

DATA:

File is "E:\Data\Final_Data_Sort_B_mplus.txt" ;

VARIABLE:

Names are

Tr1 Tr2 Tr3 Tr4 Ti1 Ti2 Ti3 Ti4 Ti5

Lo1 Lo2 Lo3 Lo4

qm qmh qc qs

qcomh qcoc qcos

pm pmh pc ps

pcomh pcoc pcos

bem1 bem2 bem3 bem4

bec1 bec2 bec3 bec4

bes1 bes2 bes3 bes4

tr ti ;

Usevariables are

tr ti Lo1 Lo2 Lo3 Lo4 bem1 bem2 bem3 qcomh pcomh ;

ANALYSIS:

Type = random ;

ALGORITHM = INTEGRATION;

MODEL:

TRU BY tr@1 ti ;

LO BY Lo1@1 Lo2 Lo3 Lo4 ;

BD BY bem1@1 bem2 bem3 ;

DI By qcomh@1 pcomh ;

TRUxDI | TRU XWITH DI;

BD on TRU DI TRUxDI ;

BD on LO ;

LO on TRU ;

OUTPUT:

TECH1 TECH8;

Mplus VERSION 4.21
MUTHEN & MUTHEN
03/12/2013 4:54 PM

INPUT INSTRUCTIONS

Title:

STR Dis Loyalty M.ho

DATA:

File is "E:\Data\Final_Data_Sort_B_mplus.txt" ;

VARIABLE:

Names are

Tr1 Tr2 Tr3 Tr4 Ti1 Ti2 Ti3 Ti4 Ti5

Lo1 Lo2 Lo3 Lo4

qm qmh qc qs

qcomh qcoc qcos

pm pmh pc ps

pcomh pcoc pcos

bem1 bem2 bem3 bem4

bec1 bec2 bec3 bec4

bes1 bes2 bes3 bes4

tr ti ;

Usevariables are

tr ti Lo1 Lo2 Lo3 Lo4 bem1 bem2 bem3 qcomh pcomh ;

ANALYSIS:

Type = random ;

ALGORITHM = INTEGRATION;

MODEL:

TRU BY tr@1 ti ;

LO BY Lo1@1 Lo2 Lo3 Lo4 ;

BD BY bem1@1 bem2 bem3 ;

DI By qcomh@1 pcomh ;

LOxDI | LO XWITH DI ;

BD on LO DI LOxDI ;

BD on TRU ;

LO on TRU ;

OUTPUT:

TECH1 TECH8;

Appendix H: Covariances for a Measurement Model

Marriott Hotels & Resort

Covariances

	TR	TI	L01	L02	L03
TR	1.067				
TI	0.864	0.978			
L01	0.921	0.856	1.658		
L02	0.938	0.847	1.518	1.985	
L03	0.862	0.783	1.384	1.664	1.900
L04	0.873	0.789	1.382	1.647	1.693
BEM1	0.887	0.787	1.009	1.048	0.973
BEM2	0.897	0.779	0.956	1.032	0.949
BEM3	0.981	0.928	1.322	1.437	1.369

Covariances

	L04	BEM1	BEM2	BEM3
L04	2.098			
BEM1	0.969	1.286		
BEM2	0.967	1.163	1.307	
BEM3	1.358	1.357	1.269	2.103

Courtyard by Marriott

Covariances

	TR	TI	L01	L02	L03
TR	1.067				
TI	0.864	0.978			
L01	0.921	0.856	1.658		
L02	0.938	0.847	1.518	1.985	
L03	0.862	0.783	1.384	1.664	1.900
L04	0.873	0.789	1.382	1.647	1.693
BEC1	0.754	0.703	0.719	0.790	0.726
BEC2	0.754	0.702	0.739	0.835	0.760
BEC3	0.815	0.766	0.963	1.083	0.979

Covariances

	L04	BEC1	BEC2	BEC3
L04	2.098			

BEC1	0.754	1.470		
BEC2	0.793	1.355	1.438	
BEC3	0.993	1.349	1.391	1.898

SpringHill Suites by Marriott

Covariances					
	TR	TI	L01	L02	L03
TR	1.067				
TI	0.864	0.978			
L01	0.921	0.856	1.658		
L02	0.938	0.847	1.518	1.985	
L03	0.862	0.783	1.384	1.664	1.900
L04	0.873	0.789	1.382	1.647	1.693
BES1	0.418	0.439	0.458	0.465	0.494
BES2	0.500	0.501	0.516	0.528	0.551
BES3	0.487	0.537	0.673	0.739	0.790

Covariances				
	L04	BES1	BES2	BES3
L04	2.098			
BES1	0.367	1.211		
BES2	0.462	1.190	1.325	
BES3	0.666	1.026	1.085	1.438

Appendix I: Covariances for a Structural Model

Marriott Hotels and Resorts

Covariances					
	TR	TI	L01	L02	L03
TR	0.881				
TI	0.684	0.711			
L01	0.649	0.578	1.294		
L02	0.616	0.511	1.067	1.409	
L03	0.672	0.567	1.148	1.292	1.666
L04	0.713	0.592	1.097	1.193	1.397
BEM1	0.741	0.625	0.687	0.700	0.746
BEM2	0.790	0.659	0.722	0.732	0.849
BEM3	0.718	0.598	0.841	0.937	0.980

Covariances				
	L04	BEM1	BEM2	BEM3
L04	1.596			
BEM1	0.747	1.113		
BEM2	0.839	1.000	1.181	
BEM3	1.010	0.862	0.945	1.579

Courtyard by Marriott

Covariances					
	TR	TI	L01	L02	L03
TR	0.881				
TI	0.684	0.711			
L01	0.649	0.578	1.294		
L02	0.616	0.511	1.067	1.409	
L03	0.672	0.567	1.148	1.292	1.666
L04	0.713	0.592	1.097	1.193	1.397
BEC1	0.614	0.537	0.596	0.630	0.772
BEC2	0.645	0.569	0.642	0.646	0.781
BEC3	0.643	0.559	0.791	0.871	0.959

Covariances				
	L04	BEC1	BEC2	BEC3
L04	1.596			
BEC1	0.746	1.233		
BEC2	0.762	1.185	1.297	
BEC3	0.937	1.137	1.152	1.654

SpringHill Suites by Marriott

Covariances

	TR	TI	L01	L02	L03
TR	0.881				
TI	0.684	0.711			
L01	0.649	0.578	1.294		
L02	0.616	0.511	1.067	1.409	
L03	0.672	0.567	1.148	1.292	1.666
L04	0.713	0.592	1.097	1.193	1.397
BES1	0.401	0.337	0.387	0.318	0.390
BES2	0.410	0.345	0.388	0.353	0.383
BES3	0.307	0.256	0.404	0.391	0.420

Covariances

	L04	BES1	BES2	BES3
L04	1.596			
BES1	0.344	0.980		
BES2	0.370	0.895	1.017	
BES3	0.479	0.589	0.684	1.066