

HOW PRE-ENGAGEMENT FACTORS AND SERVICE PRODUCT ATTRIBUTE
COMPLEXITY IMPACT CUSTOMER TENURE WITH A RETAILER

By

PHILIP MCMAHAN

Bachelor of Science in Industrial Engineering
Oklahoma State University
Stillwater, Oklahoma
1977

Master of Business Administration
Southern Methodist University
Dallas, Texas
1982

Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
DOCTOR OF PHILOSOPHY
December 2014

HOW PRE-ENGAGEMENT FACTORS AND
SERVICE PRODUCT ATTRIBUTE COMPLEXITY
IMPACT CUSTOMER TENURE WITH A RETAILER

Dissertation Committee:

Dr. Todd Arnold

Dissertation Adviser

Dr. Tom Brown

Dr. Rathin Sarathy

Dr. Tom Parliament

ACKNOWLEDGEMENTS

Much like an “Oscar” acceptance speech, there are a great many people to thank. The list would be as long as the dissertation itself. I will just hold it down to the three most important people in my life.

I give thanks every day for my wonderful wife, Mary, whose smile greets me every morning and is never afraid to say: Get in there and do the work you signed up for.

And to my parents, Hatton and Mary, who gave me the desire to learn (with proper motivation at an early age), the ability to learn (they were both really smart), and the opportunity to learn (they always provided support in every way for me to learn more). Thank you, Mom and Dad. I wish you were here to see me graduate and become the new Dr. Phil.

Name: PHILIP MCMAHAN

Date of Degree: DECEMBER, 2014

Title of Study: HOW PRE-ENGAGEMENT FACTORS AND SERVICE PRODUCT
ATTRIBUTE COMPLEXITY IMPACT CUSTOMER TENURE WITH A RETAILER

Major Field: DOCTOR OF PHILOSOPHY

Abstract: The purpose of this research is to look at how various cultural dimensions – power distance, uncertainty avoidance, and individualism/collectivism – are related to the actual tenure of a customer with a retail service provider. In addition, how these same culture dimensions impact the selection of a service product based on the complexity of the service product attributes was examined. Additionally, how the complexity of the service product attributes relate directly to customer tenure with the retail service provider was studied. Finally, how the customer’s anticipated service quality expectations, another pre-engagement factor, was explored with regard to its impact on the subsequent tenure of the customer with the retail service provider.

This study was done using both primary survey data regarding culture and anticipated service quality expectations and secondary data from a bank’s retail checking account base to calculate customer tenure. One unique feature of this research is that it develops the customer tenure relationship using actual customer tenure, not intention to remain. In addition, expert raters were used to develop the relative service product attribute complexity rankings for the various types of retail checking accounts offered. The results demonstrated that the cultural dimension of collectivism and the tangible construct of anticipated service quality expectations did have significant effects, positive and negative respectfully, on customer tenure. Also, service product attribute complexity did have a significant positive effect on customer tenure.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION.....	1
Purpose of This Research.....	4
Potential Contributions	4
II. REVIEW OF LITERATURE and HYPOTHESIS DEVELOPMENT.....	6
Why Accurate Customer Retention Measurement and Service Product Selection Impact Customer Lifetime Value Calculations	7
Relationship Marketing.....	9
Post-Engagement Relationship Theories	9
Pre-Engagement Relationship Factors	11
Recap.....	13
Culture.....	14
What is Culture?	14
Cultural Measurement.....	16
National Culture.....	19
Individual Culture	20
Cultural Dimensions and Hypothesis Used in This Study	23
Service Product Attribute Complexity.....	33
Service Product Attribute Complexity – What It Is	34
Service Product Attribute Complexity and Customer Confusion.....	35
Service Product Attribute Complexity and Innovation.....	36
Service Product Attribute Complexity and Psychology.....	36
Service Product Attribute Complexity Hypotheses	37
Service Expectations.....	39
What is Service Quality and Why is it Important?	39
Differences in Service Quality Constructs and Measurements	41
Expectations: What Are They?.....	42
Definition of Expectation	44
Results of Expectation Research and Hypothesis.....	45
Model of the Research Study	46

Chapter	Page
III. METHODOLOGY	48
Research Context	48
Sample and Procedures	49
Sample and Procedures: Phase 1 Customer Tenure.....	49
Service Product Attribute Complexity Ranking Development	51
Survey Measures Phase 2.....	51
Phase 2 Survey Response	52
Survey Response Demographic Analysis	55
Survey Response Construct Measures Analysis.....	58
IV. RESULTS	66
Results of Phase 1	66
Analysis of Mean Lives of Various Checking Accounts	66
Complexity Rankings.....	71
Regression Equation Regarding Complexity and Mean Lives.....	72
Results of Phase 2	77
Surveyed Accounts Results	77
SEM Model	79
Hypothesis Testing of the Model.....	79
Individual Hypothesis Results Based on SEM Model.....	81
Summary of Results.....	84
V. DISCUSSION and CONCLUSIONS	85
Interpretation of Results.....	85
Theoretical Implications	90
Managerial Implications	92
Limitations of the Study.....	95
Future Research	96
Conclusion.....	98
REFERENCES.....	100
APPENDICES.....	110

LIST OF TABLES

Table	Page
1. Results of Previous Research Regarding Individual Measurement of Power Distance and Various Other Constructs	25
2. Results of Previous Research Regarding Individual Measurement of Uncertainty Avoidance and Various Other Constructs.....	28
3. Results of Previous Research Regarding Individual Measurement of Individualism/Collectivism and Various Other Constructs	32
4. Comparison of Number of Accounts Open, Closed, and Completing Surveys...	54
5. Demographic Breakdown of People Completing Surveys	56
6. Initial EFA Loadings from Bank Surveys	59
7. Recap of Validity and Reliability – Initial CFA	60
8. Standardized Covariances of Constructs – Initial CFA.....	61
9. Recap of Validity and Reliability – Final CFA	63
10. Standardized Covariances of Constructs – Final CFA.....	64
11. Fit Statistics for the CFA Model	64
12. Analysis of Open Account Data Set.....	68
13. Analysis of Closed Account Data Set	69
14. Analysis of Closed Accounts by Year.....	70
15. Analysis of Service Product Attribute Complexity Rankings	71
16. Correlation of Raters	72
17. Analysis of Regression Model and Parameter Estimates Using Service Product Complexity Attributes	74
18. Analysis of Regression Model and Parameter Estimates Using Service Product Complexity Attributes	76
19. Analysis of Surveyed Accounts	78
20. Turnover Results Analysis.....	78
21. Descriptive Statistics	80
22. SEM Model Results	81
23. Hypothesis 1 Results	81
24. Hypothesis 2 Results	81
25. Hypothesis 3 Results	82
26. Hypothesis 4 Results	82
27. Hypothesis 5 Results	82
28. Hypothesis 6 Results	83

Table	Page
29. Hypothesis 7 Results	83
30. Hypothesis 8 Results	84

LIST OF FIGURES

Figure	Page
1 Model of Hypotheses	47

CHAPTER I

INTRODUCTION

Why do some customers defect from a business relationship while others remain? Satisfied customers still leave a business, while other customers remain with a business regardless of their level of satisfaction (Jones & Sasser, 1995). Customer retention is viewed as the focal point of relationship marketing activities (Parish & Holloway, 2010). For most businesses, it is of primary importance to retain their customers over long periods of time. One of the primary reasons to understand customer retention is that retention is a major determinant of customer lifetime value, the value to the firm of the discounted net revenues of the customer over time. By lowering customers' defection rates (raising customers' tenure), a business can improve profitability (Zeithaml, Berry, & Parasuraman, 1996). Certainly things occur in the relationship that can cause the customer to defect. Businesses work diligently to shift customers into more desirable relationships and relational interactions. Yet, they are often disappointed in the success of their efforts (Palmatier, Scheer, Evans, & Arnold, 2008).

To try to understand customer behavior and thereby improve the academic understanding of customer tenure, researchers have examined many different constructs on which businesses should focus to try to improve customer tenure and thereby improve profits.

While many of these constructs have been researched in the context of business-to-business and business-to-consumer regarding the sales of goods, this research will focus on the business-to-consumer relationship in the services portion of the economy.

Research has previously focused on two approaches that help explain the relationships between retailers and customers, the relationship benefits approach and the relationship quality approach. However, both of these approaches deal only with post-engagement constructs. Neither approach takes into account factors that have occurred in a pre-engagement timeframe regarding the customer. The customer has had a life prior to the engagement with a retailer that includes all the experiences he/she has had and their individual personality traits. A person has been described as an autonomous entity with a distinctive set of attributes, traits, and experiences (de Mooij & Hofstede, 2002). There is growing research on pre-engagement constructs such as consumer relationship proneness and product category involvement that indicate that an individual's pre-engagement personality traits have an impact on how a business relationship evolves (Odekerken-Schröder, De Wulf, & Schumacher, 2003).

One such trait that causes behavioral differences is culture. Culture can influence customers' attitudes and behavior (Lam, 2007). Culture is about permanent beliefs, and these beliefs influence the way a person views the world (Malai & Speece, 2005). Culture also has been assumed explicitly as an antecedent to behavior (Berry, Poortinga, Segall, & Dasen, 1992; Triandis, 1994). Since customer tenure is a behavior, understanding how culture impacts customer tenure is important.

The act of choosing a service is also a behavior. Every service sector activity performed has some sort of product attached to it. If the service delivery is the "how" of a service

encounter, then the service product is the “what” (Miller, Hardgrave, & Jones, 2013). Unless they understand the nature of the relationship between the service product and the consumer, firms may be attempting to build relationships in situations that are not likely to lead to relationship development (Ward & Dagger, 2007). Because culture is an antecedent to behavior, it should therefore impact the choice of the service product by the customer. The service product has discernible, tangible, and multidimensional features (Chase, 1981) and may sometimes be the ultimate determinant of service quality by the customer (Schneider & Bowen, 1995). One such feature is the complexity of the product. It has been the author’s experience in 30 years of banking that differing levels of attribute complexity in retail checking accounts are related to the length of time the account is open. A portion of this research project is to determine whether this anecdotal experience does have a basis for support.

Because choosing a service product (which includes different levels of attribute complexity) is a behavior and culture has been assumed to be an antecedent of behavior, it seems important to understand the relationship between culture and the selection process of the service product, for which this research will focus on the complexity sub-dimension.

Expectation of service quality is another belief that a customer has prior to engagement. Any disconfirmation model of service quality is based on a difference between expected service quality (using dimension measurements at the expectation level) and the perceived service quality (using the same dimension measurements at the perceived level) (Grönroos, 1984; Parasuraman, Zeithaml, & Berry, 1988). Therefore, all people are recognized as having some expectation of service quality. It should be anticipated that some people have very low expectations of service quality, and others have very high expectations of service quality,

while still others have expectation levels between these two anchoring ends. This research looks to a person's expectations of service quality and how those expectations may impact customer retention.

This research project has a unique feature in that it attempts to measure how pre-engagement factors (culture and service expectations) and the selection of a service product affect actual customer tenure, not intent to remain or any other construct of that nature.

Purpose of This Research

The purpose of this research is to expand the academic and practitioner knowledge base in these areas.

1. Develop a more complete understanding of how the culture of an individual relates to the actual tenure of the customer with a retailer.
2. Develop a more complete understanding of how the culture of an individual impacts the selection of a service product through the attribute complexity sub-dimension of the service product.
3. Examine how service product attribute complexity of the service product selected relates to actual customer tenure with the retailer of the customer.
4. Examine how the pre-engagement "anticipated" expectation of a consumer about service quality relates to the consumer being retained as a customer by the retailer.

Potential Contributions

In this research, I seek to make contributions to the relationship marketing literature. First, I look to extend the scope of knowledge regarding how the pre-engagement factors of culture and service quality expectations relate to actual customer tenure. This is also in

answer to the research challenge of placing culture as a parameter in constructing theories, in this case regarding relationship management (Triandis, 1978).

Second, I look to answer, at least in part, some of the questions posed by Zeithaml (2000) of: (1) what aspects of service are most important for customer tenure, and (2) how can defection-prone customers be identified. Question 1 may be answered in the analysis of the relationship between expectations of service quality and actual customer tenure. Using statistical techniques, the identification of a specific dimension of service quality expectations that has the strongest impact should be accomplished. The second question should have some explanations from the relationships between the various dimensions of culture, service product attribute complexity, and actual customer tenure. Since culture is a pre-engagement trait and the selection of a service product is a day 1 transaction, how these impact customer tenure should enable retailers/service providers to have an early indication of how long the relationship with the customer may be maintained.

Third, having a more complete understanding of actual customer tenure based on the pre-engagement factors in the study, a more accurate estimate of a customer's length of relationship with the retailer will be developed. This will allow a more complete estimation of customer lifetime value. Also in this area, by having a more complete understanding of how the service product is selected, a retailer/service provider has a better grasp on what the future net revenues generated by the customer would be based on that selection. This, too, would allow a much more complete estimation of customer lifetime value. By having this more accurate estimate, retailer/service providers should be able to spend their marketing and product development dollars more efficiently.

CHAPTER II

LITERATURE REVIEW and HYPOTHESIS DEVELOPMENT

In this section, I will review the literature to develop the basis and support for my hypotheses as well as the hypotheses themselves. I will start with an examination of customer lifetime value, which is one of the primary reasons for trying to understand current customer tenure. I also examine why it is so important to understand pre-engagement measures in terms of how they impact tenure directly and how they impact the selection of a service product. Then I describe how relationship marketing has begun to focus on pre-engagement measures as important constructs in understanding customer behavior. Next, I explore the pre-engagement measures of culture, what they are, and why they are important in this research. The concept of service product attribute complexity will be explained next, along with how it impacts customer tenure. The last construct to be discussed in this paper is how the pre-engagement construct of anticipated service quality expectations, based on the expectations portion of the SERVQUAL model, impacts customer tenure.

Why Accurate Customer Retention Measurement and Service Product Selection Impact Customer Lifetime Value Calculations

Much of the current research in relationship marketing focuses on how to retain customers in a relationship with a retailer after the customers are already in that relationship. While research indicates that customer retention has been identified as important to profitability (Zeithaml et al., 1996), it does not mean that only long-term customers are profitable. Both customers having long-term and short-term relationships with a retailer can be profitable (Reinartz & Vijay, 2000).

To understand how both short-term and long-term relationships can be profitable, one must have an understanding of customer lifetime value (CLV). CLV employs a prospective perspective on customer profitability, predicting future customer behavior (either for current customers or for perspective customers) and discounting derived cash flows over the expected lifetime of a customer in a relationship with a retailer (Pfeifer, Haskins, & Conroy, 2005). The basic formula is to take the revenues less the cost to generate those revenues over the total time of the expected life of the customer and then discount those cash flows back at the appropriate interest rate to reflect current dollars. Should a customer generate more net revenue over a shorter period of time, that customer could have a greater, an equal, or a lesser CLV than a customer who generates less revenue over a longer period of time. Two major factors must be understood to develop an accurate measure of CLV. The first is net revenues and the second is expected life of the customer with the retailer in order to calculate how long the net revenues will be expected and then to set the appropriate discount rate to calculate the present value of future cash flows.

Net revenues are a function of what product or service is purchased. Therefore, the service product that is selected by a customer has a tremendous impact on net revenues. The expected time the customer is retained by the retailer is the second major factor.

Both of these factors are studied in this paper. Because this study looks at pre-engagement factors that predict selection of service products and how those impact customer tenure, this research helps in answering the question of how profitable in the future both current and, just as important, future customers may be. As one research paper stated, targeting profitable customers is good, but it is even better to target customers who will be profitable (Reinartz & Kumar, 2003).

This research is based on the relationships of pre-engagement constructs versus actual customer retention. Therefore, the results can give a model of expected life of customers that is much more accurate than ones calculated against measures of intention. Among the required data and skills needed to accurately calculate CLV is having the proper statistical technique to forecast and model future customer behavior, including the length of time the customer will patronize the firm (Wen, Chen, & Qianpin, 2012). This cannot be done well when using customer intentions as a basis for retention durations. One study found a positive correlation of 0.27 between customers' intentions to remain and actual customer behavior (Kamakura, Mittal, De Rosa, & Mazzon, 2002). Many studies use no limit for customer lifetimes (infinite tenure) (Gupta & Lehmann, 2003), while others use estimated lives – some as little as three years for a lifetime duration (Rust, Kumar, & Venkatesan, 2011).

It is evident that an understanding of how customer tenure by a retailer and service product selection by a customer is important for any understanding of CLV; thus the next

section is a review of how relationship marketing has begun to understand why pre-engagement factors are important for a more complete understanding of the behavior of customers in these areas.

Relationship Marketing

Relationship marketing – the establishment and maintenance of a long-term buyer-seller relationship – has profoundly influenced marketing theory and practice (Reinartz & Kumar, 2003). There is a consensus that the relationship between the firm and its customers is crucial to the firms' survival and success (Bendapudi & Berry, 1997).

Historically, the key challenge for researchers is to identify and understand how firm-controlled antecedent variables influence important marketing outcomes such as customer loyalty and positive word of mouth (Hennig-Thurau, Gwinner, & Gremler, 2002). A key goal of relationship marketing theory has been and will be the identification of key drivers that influence important outcomes of the firm. Also, a better understanding of the causal relationships between these drivers and outcomes is required.

Post-Engagement Relationship Theories

Hennig-Thurau et al. (2002) identified two conceptual approaches: the relational benefits approach (Bendapudi & Berry, 1997; Gwinner, Gremler, & Bitner, 1998; Reynolds & Beatty, 1999) and the relationship quality approach (Crosby, 1991; Crosby, Evans, & Cowles, 1990; Dorsch, Swanson, & Kelley, 1998; Smith, 1998). The relationship quality approach focuses on the nature of the relationship, while the relationship benefits approach focuses on the receipt (exchange) of benefits. These two approaches were shown to be together in work by Verhoef (2003). Relationship marketing theory and customer equity theory posit that customers' perceptions of the

quality of the relationships (strength of the relationships) and customers' evaluations of the suppliers' offerings (benefits of relationships) shape customers' behavior in the relationship (Garbarino & Johnson, 1999; Rust, Zeithaml, & Lemon, 2001; Woodruff, 1997). This research related both concepts – relationship quality as proxied by affective commitment and relationship benefits as proxied by payment equity – to customer tenure. Affective commitment was defined as the psychological attachment, based on loyalty and affiliation, of one exchange partner to another (Bhattacharya, Rao, & Glynn, 1995; Gundlach, Achrol, & Mentzer, 1995). The relationship marketing literature suggests that affective commitment is a prediction of customer tenure (Gustafsson, Johnson, & Roos, 2005). Payment equity was defined as a customer's perceived fairness of the price paid for the firm's product or services (Bolton & Lemon, 1999). The research indicated that only affective commitment had a positive impact on customer tenure; payment equity did not. This finding indicates that the relational benefits theory may not explain customer tenure well as the perceived relational benefits of the relationship by the consumer may change over time, which could have a negative impact on the relationship and therefore customer tenure. These changes were noted as "situational" or "reactional" triggers (Gustafsson et al., 2005).

A trigger is a factor or event that changes the basis of a relationship (Roos, Edvardsson, & Gustafsson, 2004). Situational triggers alter customers' evaluations of an offering based on changes in their lives or in something impacting family. These would include demographic changes in family, changes in job situations, or changes in economic situations. Reactional triggers are those critical incidents of deterioration in

perceived performance that redirect customers' attention to evaluate present performance more completely, which may put them on a switching path (Roos, 1999).

Pre-Engagement Relationship Factors

Both of these conceptual approaches deal with the relationships between consumers and firms on a post-engagement basis, focusing on the interaction between the firm and customer. The question still remains to be asked: given all this research focusing on post-engagement constructs that would enhance customer tenure – such as loyalty, trust, commitment, and satisfaction – why do customers leave? Certainly, trigger events as described above can be a cause of a customer leaving the firm. But are there pre-engagement factors or traits that impact customer tenure that should be explored to help explain the success/failure of post-engagement relationship management efforts?

Various research efforts have begun to look at pre-engagement traits to improve the understanding of relationship marketing. These studies start to explore these pre-engagement traits in greater detail and how they might impact customer tenure in various ways, both positively and negatively. Personality traits are based on inner psychological characteristics that exert relatively universal effects on attitudes and behaviors, mostly independent of the situation (Kassarjian, 1991). Some individuals are intrinsically inclined to engage in relationships (Christy, Oliver, & Penn, 1996). Research on consumer relationship proneness and product category involvement study how they impact relationship commitment and therefore buying behavior (Odekerken-Schröder et al., 2003). Consumer relationship proneness refers to a stable tendency of a consumer to engage in relationships with retailers and can therefore be considered a trait. The concept focuses on the tendency to engage in relationships, a pre-engagement trait. Product

category involvement is defined as a consumer's personality trait representing an enduring perceived importance of the product category based on the consumer's inherent needs, values, and interests. This research supports the hypothesis that higher levels of product category involvement within a product category and a consumer exhibiting a higher level of consumer relationship proneness will have a higher level of relationship commitment. Additional research (De Wulf, Odekerken-Schröder, & Iacobucci, 2001) shows that higher levels of consumer relationship proneness and product category involvement strengthen the impact of a perceived relationship investment (a consumer's perception of the extent to which a retailer devotes resources, efforts, and attention at maintaining or enhancing relationships) on relationship quality.

There is additional research regarding other pre-engagement traits such as those regarding attachment theory and its importance to relationship marketing. Attachment theory is a broad theory of social development that describes the origin of the patterns of close interpersonal relationships. The interaction of environmental and genetic factors in early development leads to individual differences in patterns of attachment behavior. Attachment behaviors are interpersonal actions that are intended to increase an individual's sense of security. These interpersonal patterns are quite stable and in adulthood are called "adult attachment styles" (Ravitz, Maunder, Hunter, Sthankiya, & Lancee, 2010). Research studies how customer attachment styles influence the perception of customers regarding trust and satisfaction (Mende & Bolton, 2011). Psychology research shows that attachment styles are conceptualized and measured along two continuous dimensions called "attachment anxiety" and "attachment avoidance" (Brennan, Clark, & Shaver, 1998). Psychologists identify these two dimensions with

negative labels. Attachment anxiety is the extent to which a person worries that relationship partners might not be available in times of need, has an excessive need for approval, and fears rejection and abandonment. Attachment avoidance is the extent to which a person has an excessive need for self-reliance, fears depending on others, distrusts relationship partners' goodwill, and strives for emotional and cognitive distance from partners. Research indicates that: (1) customer attachment anxiety and customer attachment avoidance are negatively related to satisfaction with the firm, (2) customer attachment anxiety and customer attachment avoidance are negatively related to trust in a firm, and (3) customer attachment anxiety and customer attachment avoidance are negatively related to affective commitment (Mende & Bolton, 2011). Relationship marketing literature suggests that affective commitment is a prediction of customer tenure (Gustafsson et al., 2005).

Recap

This review of the relationship marketing literature showed there are two conceptual approaches to relationship marketing: relationship quality and relationship benefits. A brief description of some of the constructs that support the relationship quality approach on a post-engagement basis was provided. To show that current research is moving to study and better understand pre-engagement constructs and how these have an impact on post-engagement factors, research on various pre-engagement traits was discussed. It seems clear that the more we can explain "who" the customer is at the start of a relationship, a more complete picture of how to make relationship marketing more effective in the future will emerge. In order to predict a customer's behavior more completely, we must begin to take both the person and the situation into account. Each

person carries a certain amount of mental programming that is stable over time and leads to that person's showing more or less the same behavior in similar situations (Hofstede, 2001). A portion of this mental programming consists of culture, which will be discussed next.

Culture

Culture has been defined as “the collective programming of the mind which distinguishes the members of one group from another” (Hofstede, 1984). In this research, cultural dimensions are the focus of research at the individual level. To properly set the stage for the study at that level, I will first review how “culture” has been defined in previous studies. A recap of the three main measures of culture is next, including why the Hofstede cultural dimensions were selected for this study. I will then discuss studies using national culture that present how various dimensions of national culture have been shown to explain differences between countries in various business contexts. The next section will discuss why “individual” level measures of culture are important and how various research studies have been done using “national culture” constructs as individual proxies while others have been done using actual individual measurements. Lastly, the cultural dimensions used in this study will be discussed, including the results of studies done previously on these cultural dimensions. The individual sections on the specific culture dimension to be examined will include the relevant hypothesis that was tested.

What is “Culture”?

A person is an autonomous entity with a distinctive set of attributes, traits, and experiences (de Mooij & Hofstede, 2011). Culture can help explain who a person is. The configuration of these internal attributes cause behavior (Shao, Kwok, & Guedhami,

2009) and should be expressed consistently in behavior and conduct across situations.

Values are enduring beliefs that a specific mode of conduct or end-state of existence is personally and socially preferable to alternate modes of conduct or end-states of existence (Rokeach, 1968). Hofstede (2001) defined a value as a broad tendency to prefer certain ways of being or doing things over others. Culture has been viewed as a collective mind set that manifests itself in values (Shao et al., 2009). Culture influences values, which affects attitudes and then behavior (Adler, 1997).

A majority of studies of the similarities and differences in individual psychological functioning in various cultures and ethnic groups assumes explicitly that culture is an antecedent to human thought and behavior (Berry et al., 1992; Triandis, 1994). Culture has had many definitions in various research studies. It has been defined as transmitted and created content and patterns of values, ideas, and other symbolic-meaningful systems as factors in shaping of human behavior and the artifacts produced through behavior (Kroeber & Parsons, 1958). Culture consists in patterned ways of thinking, feeling, and reacting, acquired and transmitted mainly by symbols constituting the distinctive achievements of human groups; the essential core of culture consists of traditional ideas and their attached values (Kluckhohn, 1951). The GLOBE research project (Koopman, Den Hartog, Konrad, & al, 1999) defined culture as shared motives, values, beliefs, identities, and interpretations of significant events that result from common experiences of members of collectives that are transmitted across age generations. The Hofstede definition of culture has been used by many researchers: the collective programming of the mind that distinguishes the members of one group over another. For the purpose of

this study, the definition of culture is the collective programming of the mind that distinguishes one person from another that manifests itself in values.

Many researchers discuss the power of culture. Culture spans the boundary between the conceptual world and the real world (Malai & Speece, 2005). Culture can influence consumers' attitudes and behaviors (Lam, 2007). Culture is about permanent beliefs, and individuals develop such beliefs in either their own culture or in the cultures in which they are associated; these beliefs condition the way people view the world, so therefore culture influences attitudes and perceptions toward marketing stimuli (Malai & Speece, 2005). According to Hofstede (2001), cultures are extremely stable over time. Culture has this in common with personality traits, which change over time; but the changes are unlikely to be large enough to deny stability (Buss, 1988).

There has been a great deal of research and discussion regarding what is the appropriate set of measures. Since culture is a worldwide construct (culture exists in some form everywhere there are people), being able to explain and conceptualize culture is very difficult. One must be able to explain many different cultures using a consistent set of measures. Various measurement systems have been developed to explain culture over the years. However, each measurement system conceptualizes culture in various ways, and all have been used in research. These measurements systems will be discussed next.

Cultural Measurement

Researchers have suggested and used culture as a multidimensional construct. There is no single index of culture, just as there is no single index of personality (Donthu & Yoo, 1998). The difficulty in distinguishing strictly cultural factors from other macro-

level influences further complicates defining culture (Sekaran, 1983). The usefulness of the concept of culture to explain cultural differences depends on the ability to break down the concept of culture into identifiable components (Soares, Farhangmehr, & Shoham, 2007). Since culture has been defined as a multidimensional construct, one of the great challenges in explaining the impact of culture is determining an appropriate set of measures to assess it (Youngdahl, Kellogg, Nie, & Bowen, 2003).

The breakdown of culture into various constructs, dimensions, and values has been accomplished by various researchers. The three most popular models of culture are those of Hofstede (2001), Schwartz (1994), and the GLOBE project. Each of these will be briefly reviewed in the reverse order of popularity.

The GLOBE study (Global Leadership and Organizational Behavior Effectiveness research program) is a cross-cultural research project funded in 1993 that continues today. It examines the inter-relationship between societal culture, organizational culture, and organizational leadership (Koopman et al., 1999). The study identifies nine dimensions in the form of societal practices and societal values (Brewer & Venaik, 2010). These nine dimensions are power distance, uncertainty avoidance, institutional collectivism, in-group collectivism, gender egalitarianism, assertiveness, performance orientation, future orientation, and humane orientation. This research focuses on the measurement of each of these dimensions at the macro (national) level.

The Schwartz (1994) dimensions identify seven cultural dimensions (values): conservatism, intellectual autonomy, affective autonomy, hierarchy, egalitarianism, mastery, and harmony. The unique attribute of these dimensions is that Schwartz condensed them into two major dimensions: conservation and mastery. These two

dimensions capture all seven of the sub-dimensions (Chui, Lloyd, & Kwok, 2002). The breakdown of the sub-dimensions falls into Conservation (conservation, affective autonomy, and intellectual autonomy) and Mastery (mastery, hierarchy, egalitarianism, and harmony). Again, these were and are continually being measured at the macro (national) level.

The third measure of cultural dimensions is the one developed by Hofstede (2001). He developed five cultural dimensions: power distance, uncertainty avoidance, individualism/collectivism, masculinity/femininity, and long-term versus short-term orientation. Hofstede used a “work-related” context and originally applied his framework to human resource management, but it is increasingly used in business and marketing studies (Milner, Fodness, & Speece, 1993; Shankarmahesh, Ford, & LaTour, 2003). These dimensions were developed again at the macro (national) level. Three of these dimensions (power distance, individualism/collectivism, and uncertainty avoidance) will be used in this research project and will be discussed in more detail in a later section.

There are other measures of culture such as ones using language for a proxy (Stulz & Williamson, 2003), but the three mentioned above are the most prominent.

Hofstede’s (2001) framework is very comprehensive. His measures of culture reveal the universal (etic) dimensions of culture that could be found across human respondents in many countries (Donthu & Yoo, 1998). Most cultural typologies are found to converge to Hofstede’s cultural typology (Clark, 1990). While the Hofstede measures are not free from criticism, they are – in terms of use and acceptability across the various disciplines of management – the most used measures (Kirkman, Lowe, & Gibson, 2006; Sivakumar & Nakata, 2001).

Since these three major instruments used to measure culture were each developed to measure dimensions at the national level, the following section will discuss how research on these national culture measures show how culture impacts various business practices.

National Culture

While I do not focus here on macro-level measurement of cultural dimensions, it is important to understand that previous research indicates that national culture can help explain many cross-country differences in various business/management practices. A nation's culture determines the importance of goals and manifests itself in observable social norms, societal institutions, and collective /individual behavior (Shao et al., 2009). Conducting research with a cross-country perspective allows for better verification of theory or identification of how theory must be modified to account for other cultural contexts (Malhotra & McCort, 2001).

Research finds that cultural biases affect economic exchange between nations (Guiso, Sapienza, & Zingales, 2009); cultural differences in countries can impact the dividend payout ratio (Shao et al., 2009); and national culture has an impact on the design of a country's financial system, bank-based versus market-based (Kwok & Tadesse, 2006).

Cultural distance between acquirer and target can impact the success or failure of a cross-border merger and acquisition in that a higher cultural distance improves the chances of success, in part due to the fact that because each side understands the large differences in cultures, a great deal of work is done before the transaction is closed to mitigate the difference (Chakrabarti, Gupta-Mukherjee, & Jayaraman, 2008).

While these are just some of the studies done using national culture, measured with any of the three previously discussed measures of cultural dimensions, it can be seen that

national culture has a powerful impact in the world of international business. But the world of business and countries are made up of individuals, and these individuals have culture as part of their makeup. The next section looks at how individual culture is an important part of identifying consumer behavior and how studies show that culture impacts various other constructs of consumer behavior.

Individual Culture

Why is research done at the individual level of culture important? Research should study values at the individual level (Soares et al., 2007). Host country nationals are not culturally interchangeable with the rest of the host country populations. There are cases where host country nationals do not subscribe to the culture implied by nationality in their passports (Caprar, 2011). Differences in behavior that are culturally based would exist even if the world was not organized into nation states. Country and culture are not synonymous (Furrer, Liu, & Sudharshan, 2000). It is important to consider not just the geographical dispersion of culture, but also the stratification and segmentation of culture within a certain space (Caprar, 2011).

Two types of research are beginning on culture at the individual level. The first approach uses secondary data, Hofstede's cultural dimension measures for example, to ascribe characteristics of cultural groupings without directly measuring members of the group. The second approach is a direct measurement of the values of the subjects regarding their cultural characteristics (Soares et al., 2007).

Studies using the first methodology are those similar to studies done on bank service quality perceptions between Canadian and Tunisian cultures (Ladhari, Ladhari, & Morales, 2011). The research measures were questionnaires regarding service quality

while the cultural part of the study was done by simply looking at Hofstede's (2001) cultural dimensions and seeing the difference between these two countries. Another example of this type of research was done on the relationship among perceived service quality, brand name value, customer loyalty, and a dimension of culture (individualism) (Malai & Speece, 2005). A questionnaire was used to allow measurement of all the constructs except culture, which was taken from the Hofstede dimensions score for individualism to act as a proxy for the individualism construct, which was not measured individually. A last example of this type of study is one done to look at cross-cultural differences in complaint behavior (Liu & McClure, 2001). While a questionnaire was developed for complaint behavior, country culture dimensions on individualism were used as a proxy for the individual measurement of this construct in order to separate the results into two groups, individualist versus collectivist cultures.

While the methodology using secondary data for cultural dimensions does provide help in doing research for a broad-base finding using national culture dimensions as a proxy for individual culture dimensions, it is not really comparing "apples to apples" in that the actual measurement of the individuals' cultural values in that dimension is not being compared to the actual measurement of the other constructs being researched. Culture is no longer a phenomenon defined by a particular locale since the world is becoming de-territorialized and penetrated by elements from other cultures, resulting in cultural contamination, cultural pluralism, and hybridization (Craig & Douglas, 2006). It is important for researchers to measure values and cultural orientation rather than assume differences based on where the data was collected (Zhang, Beatty, & Walsh, 2008). Using country as a surrogate for an individual's culture orientation can be misleading

(Youngdahl et al., 2003). When the cultural heterogeneity within a country is great, the use of the term “national culture” or “national character” may be improper to describe the true cultural characteristics of a country because of the wide variations from, and many exceptions to, the described national culture (Hofstede, 1980). The tradition of using Hofstede’s metrics in such a way that individuals are equally assigned a particular cultural dimension by their national identity is acceptable when the unit of analysis in a country or culture is used as a contextual variable. It is not appropriate when a study examines the effect on an individual’s cultural orientation (Yoo, Donthu, & Lenartowicz, 2011).

As previously stated, Hofstede’s (2001) cultural dimensions are widely used in various research areas. Applying Hofstede’s cultural typology at the individual level is reasonable. Cultural influence on brand loyalty was done by Lam (2007) using individually measured cultural values (based on Hofstede’s cultural dimensions of individualism, uncertainty avoidance, masculinity, and power distance). Cultural values were measured at the individual level (power distance, collectivism, uncertainty avoidance, masculinity, and time orientation) in research done regarding culture and customer participation in service encounters (Youngdahl et al., 2003). A study of the relationship between culture and behavioral intentions (Liu, Furrer, & Sudharshan, 2001) used the cultural dimensions (Hofstede’s dimensions of power distance, individualism, masculinity, uncertainty avoidance, and long-term orientation) measured at the individual level as part of the primary data gathering process.

Cultural Dimensions and Hypotheses Used in This Study

In this study, only three of the Hofstede (2001) cultural dimensions will be used: power distance, uncertainty avoidance, and individualism/collectivism. Research that examined all five culture traits of power distance, uncertainty avoidance, masculinity, individualism/collectivism, and long-term orientation and their individual relationships to a positive intention to remain (positive word of mouth) showed that masculinity did not have a significant effect and long-term orientation had an effect only at the 10% significance level (Liu et al., 2001). The three other traits all had significant effects at the 5% level of significance.

Many researchers have looked only at a subset of traits in various studies (Ladhari, Pons, Bressolles, & Zins, 2011; Patterson & Smith, 2003; Schumann, Wunderlich, & Zimmer, 2012). Donthu and Yoo (1998) looked at all five dimensions in their literature review but did not investigate masculinity because they thought it was not strongly related to service expectations. Another study indicated only two of the five traits, uncertainty avoidance and individualism, influenced store loyalty (Straughan & Albers-Miller, 2001). Because of the prior research cited above that seemed to focus more highly on power distance, uncertainty avoidance, and individualism/collectivism as having the most impact on service quality and other measures of customer tenure, they were selected as the focal traits of this study.

In each of the following sections, the dimension will be defined and research shown that indicates the results of how this dimension relates to various other constructs of customer behavior. At the end of each section, the hypothesis to be tested will be shown.

Power Distance

The basic issue involved in the dimension called power distance is human inequality. This inequality can occur in a variety of ways, either together or separately: social status and prestige, wealth, financial and political power, and special laws and privileges (Hofstede, 2001). The problem involved is the degree of human inequality that underlines the functioning of each particular society.

The dimension of power distance has been defined in several ways depending on the level of the unit to be analyzed. In a societal context, it has been defined as the extent to which the less powerful members of a society accept and expect that power is distributed unequally. In large power-distance cultures, everyone has his/her rightful place in the social hierarchy and one's social status must be clear so that others can show proper respect (de Mooij & Hofstede, 2011). Power distance is the extent to which people accept that power is distributed unequally and is related to conservatism and maintaining the status quo (Steenkamp, 2001).

Power distance indicates the extent to which the fact that power is distributed unequally is accepted in the society by those who do not possess power. In cultures with small power distances, inequalities should be minimized within organizations and societies. In a large power-distance culture, it is believed that there should be a certain degree of inequality (Schuler & Rogovsky, 1998).

At the individual level, the definitions of power distance are very similar. It is defined as the extent to which members within a society accept and expect that power in organizations, and in the society at large, is distributed unequally (James, 1995). Individuals who scored high in power distance accept inequality while those who scored

low in power distance did not (Hofstede, 1980). Lastly, power distance is described as the degree to which a person accepts power inequality in dealing with others (Youngdahl et al., 2003). All these definitions have a common theme of long-term acceptance and expectation of a difference in power. These themes indicate that the dimension of power distance should be a stable dimension over time.

For the purposes of this research, the dimension of power distance will be defined using the Hofstede (2001) definition adjusted to the unit of measurement in this study, at the individual level. Power distance is the extent to which the less powerful individuals in a nation accept and expect that power is distributed unequally. Various research studies have been done relating power distance and other constructs of consumer behavior, as shown in Table 1.

Table 1
Results of Previous Research Regarding Individual Measurement of Power Distance and Various Other Constructs

Authors	Relationship Tested	Results	Comments
Yeniyurt & Townsend, 2003	Power distance on the acceptance rate of new products	Negative	People high in power distance tend to be less innovative
Liu et al., 2001	Power distance, loyalty, and perceived service quality	Not related	PD and loyalty are not related when perceived service quality is positive
Liu et al., 2001	Power distance, positive word of mouth, and perceived service quality	Negative	PD are less likely to give Positive word of mouth when perceived service quality is positive
Lam, 2007	Power distance and proneness to brand loyalty	Negative relationship but not significant	Customers high in power distance less prone to brand loyalty
Donthu & Yoo, 1998	Power distance and service quality expectations	Negative	Customers high in power distance have lower service quality expectations
Ladhari et al., 2011	Power distance and service quality perceptions	Negative	Customers high in power distance have lower service quality perceptions

Lam (2007) indicated there was a negative but not significant relationship between power distance and proneness to brand loyalty. Proneness to brand loyalty was defined as an orientation characterized by the degree to which a consumer repetitively chooses the same brands and stores (Shim & Gehrt, 1996). This definition does indicate a duration component, making the context similar to customer tenure with a retailer. Liu et al. (2001) also showed that power distance has a negative relationship with positive word of mouth and loyalty, both of which are shown to be related to customer tenure.

The culture dimension of power distance has been linked to negative relationships with other constructs similar to customer tenure. Therefore, a hypothesis for a relationship between power distance and customer tenure might be the following.

Hypothesis 1: There is a negative relationship between customers having high power distance culture trait and actual customer tenure with a retailer.

Uncertainty Avoidance

Uncertainty about the future is a basic fact of human life with which we try to cope through the domains of technology, law, and religion (Hofstede, 2001). Uncertainty avoidance does not mean risk avoidance. According to Hofstede (2001), when the risk probabilities of something occurring cannot be determined, an individual with high uncertainty avoidance will exhibit a great deal of anxiety. When the risks are determined, this anxiety will disappear. High uncertainty avoidance individuals are looking to reduce ambiguity (the unknown probability of occurrence), not risk (the probability of an outcome of an occurrence).

Like the previous construct of power distance, uncertainty avoidance has been defined in various ways. Hofstede (2001) said it is the extent to which a culture programs its members to feel either uncomfortable or comfortable in unstructured situations. Unstructured situations are novel, unknown, surprising, or different from the usual. The basic problem is the degree to which a society tries to control the uncontrollable.

Uncertainty avoidance was also defined as the extent to which people feel threatened by uncertainty and ambiguity and try to avoid those situations (de Mooij & Hofstede, 2011). A person with high uncertainty avoidance has a need for rules and formality to structure life. Yet another definition is the extent to which people feel uncomfortable in the presence of vagueness and ambiguity (Yeniyurt & Townsend, 2003).

While each researcher may rearrange the words of a definition, this construct's definition is probably the most consistent between researchers of any of the Hofstede dimensions used in this paper. The definition of uncertainty avoidance in this research study is: the extent to which an individual feels threatened or is made uncomfortable by ambiguity, uncertainty, or vagueness.

This construct has been used by several researchers in studying consumer behavior, as shown in Table 2.

Table 2
Results of Previous Research Regarding Individual Measurement of
Uncertainty Avoidance and Various Other Constructs

Authors	Relationship Tested	Results	Comments
Lam, 2007	Uncertainty avoidance and proneness to brand loyalty	Positive	Customers high in UA have greater brand loyalty
Liu et al., 2001	Uncertainty avoidance and switching	Negative	High UA customers less likely to switch
Liu et al., 2001	Uncertainty avoidance and negative word of mouth	Negative	High UA customers are less likely to engage in negative WOM
Liu et al., 2001	Uncertainty avoidance and complaining	Negative	High UA customers are less likely to complain
Yeniyurt & Townsend, 2003	Uncertainty avoidance and acceptance rate of new products	Negative	UA has a negative effect on acceptance rate of some products
Steenkamp, Hofstede, & Wedel, 1999	Uncertainty avoidance and customer innovativeness	Negative	UA has a negative impact on consumer innovativeness
Donthu & Yoo, 1998	Uncertainty avoidance and service quality expectations	Positive	High UA customers have higher service quality expectations than low UA customers
Ladhari et al., 2011	Uncertainty avoidance and service quality perceptions	Negative	High UA customers perceived service quality as lower
Furrer et al., 2000	Uncertainty avoidance and service quality perceptions of responsiveness, assurance, empathy, and reliability	Positive	High UA customers has positive relationship with these dimensions
Furrer et al., 2000	Uncertainty avoidance and service quality perception of tangibles	Negative	High UA customers has negative relationship with this dimension

Lam (2007) indicated in his research that individuals who scored high in uncertainty avoidance have a greater proneness to brand loyalty. As described under the culture dimension of power distance, brand loyalty proneness is an orientation characterized by the degree to which a consumer repetitively chooses the same brands and stores (Shim & Gehrt, 1996). Additional research has shown that persons who are high in uncertainty avoidance are less likely to switch retailers and are less likely to engage in negative word of mouth (Liu et al., 2001). Both of the constructs are linked to customer tenure. One

would then expect that an individual high in uncertainty avoidance would have longer customer tenure with a retailer than one who scored low on uncertainty avoidance.

Hypothesis 2: There is a positive relationship between the culture dimension of uncertainty avoidance and the actual tenure of the customer with a retailer.

Individualism/Collectivism

The individualism/collectivism dimension appears to be the most extensively employed dimension in cross-cultural consumer behavior research (Kim, Triandis, Kâğitçibaşı, Choi, & Yoon, 1994; Triandis, 1989; Triandis, Bontempo, Villareal, Asai, & Lucca, 1988; Zhang & Gelb, 1996). Individualism on the one side versus its opposite, collectivism, is the degree to which individuals are supposed to look after themselves or remain integrated into groups. Positioning itself between these poles is a very basic problem (Hofstede, 2001). This dimension refers to an individual's attitude toward the concept of self (Dawar, Parker, & Price, 1996). One can identify individualism when personal goals have priority and collectivism when group goals have priority (Triandis, 1995).

In the research that I reviewed for this study, there does not seem to be a true definition for the construct but only attempts to describe the differences between the two poles of the construct individualism/collectivism. Individualism pertains to societies in which ties between individuals are loose; everyone is expected to look after himself/herself and his/her family. Collectivism, its opposite, pertains to societies in which people from birth onward are integrated into strong, cohesive in-groups, which throughout people's lifetimes continue to protect them in exchange for unquestioning loyalty (Hofstede, Hofstede, & Minkov, 1991). Collectivism is summarized as giving

priority to the people of collectives and individualism as giving priority to the goals of individuals (Triandis, McCusker, Betancourt, Iwao, Leung, Salazar, & Zakeski, 1993). In collectivist cultures, attitudes towards events, actors, and objects depend on how they relate to the individual's need to belong, to fit in, to engage in actions that are contextually appropriate, to maintain social harmony, and to save face for self and others. An individualist's self-esteem and attitude depend more on his/her success in being unique, and self-expression, and in validating internal "defining" attributes (Liu & McClure, 2001). Individualism (as opposed to collectivism) is the degree to which people in a society value an individual's opinion and put their individual interests and the interests of their immediate families above those of others. Collectivism is the degree to which people are expected to belong to an "in-group" and have that group look after them in exchange for absolute loyalty to the group (Schuler & Rogovsky, 1998).

Developing a definition for individualism/collectivism for this research was difficult since there are more examples in the literature than definitions. However, a definition is needed, so I give one here based on the Hofstede definition: the concept of individualism/collectivism is the degree to which an individual makes decisions affecting himself/herself and his/her family members first or the decisions made first to affect the group he/she most identifies with outside his/her immediate family.

This dimension of culture has been used in many different studies to determine if and how it will impact customer behavior, as shown in Table 3.

Research indicates that there is a positive relationship between individualism and proneness to be brand loyal (Shim & Gehrt, 1996). However, other research finds a positive relationship between collectivism and relationship building (Aaker &

Maheswaran, 1997). Individualism and collectivism are opposite ends of the spectrum, therefore we would not expect that both would exhibit behavior that would lead to customer retention. Donthu and Yoo (1998) and Furrer et al. (2000) showed inconsistent relationships between the culture trait of individualism and the service quality constructs of empathy and assurance. There is research showing that customers in both a collectivist culture and an individualistic culture, when dissatisfied, are more prone to exit (Liu & McClure, 2001). These results seem to indicate that there are constructs that point to increased customer retention for both individualism and collectivism and decreased customer retention for both. However, it would seem logical that when a person who is high in collectivism perceives the in-group he /she identifies with to be loyal to a specific service provider, the loyalty to the in-group would act as a positive motivation for staying with the service provider. It was also my experience in 30 years of community banking that members of a group closely tied together (for example first and second generation Hispanic immigrants from Mexico) act to follow the group lead in maintaining a relationship with the bank.

Table 3
Results of Previous Research Regarding Individual Measurement of Individualism/Collectivism and Various Other Constructs

Authors	Relationship Tested	Results	Comments
Shim & Gehrt, 1996	Individualism and proneness to brand loyalty	Positive	Proneness is the degree to which a customer repetitively chooses the same brand/store
Aaker & Maheswaran, 1997	Collectivism and relationship building	Positive	
Yeniyurt & Townsend, 2003	Individualism and acceptance rate of innovation	Positive	
Steenkamp et al., 1999	Individualism and innovation	Positive	
Donthu & Yoo, 1998	Individualism and service quality expectations	Positive	Individualistic customers have higher service quality expectations than collectivist
Malai & Speece, 2005	Individualism and perceived service quality	Positive	
Donthu & Yoo, 1998	Individualism and empathy	Positive	
Furrer et al., 2000	Individualism and empathy	Negative	
Donthu & Yoo, 1998	Individualism and assurance	Positive	
Furrer et al., 2000	Individualism and assurance	Negative	
Furrer et al., 2000	Individualism and responsiveness	Positive	
Furrer et al., 2000	Individualism and tangibles	Positive	
Furrer et al., 2000	Individualism and reliability	Positive but nonsignificant	
Liu & McClure, 2001	Collectivism and negative word of mouth/exit	Positive	When dissatisfied, collectivist customers are more likely to engage in negative WOM/exit behavior
Liu & McClure, 2001	Individualism, voiced dissatisfaction, and exit behavior	Negative	Individualistic customers who voice dissatisfaction are less likely to exit
Liu & McClure, 2001	Individualism, non-voiced dissatisfaction, and exit behavior	Positive	Individualistic customers who did not voice dissatisfaction are less likely to stay

Therefore, while the research findings indicate a significant relationship between customer retention and the culture dimension of collectivism, the results are unclear whether the relationship is a positive or negative one. Both logic and past experience, however, would lead me to believe it should exhibit a positive relationship. I would then hypothesize the following.

Hypothesis 3: There is a positive relationship between culture dimension of collectivism and actual customer tenure of the customer with the retailer.

Service Product Attribute Complexity

All economies are service economies (Vargo & Lusch, 2004). The term “service product” is used in the recognition that every service sector activity performed has a product of some sort attached to it. If the service delivery is the “how” of a service encounter, then the service product is the “what” (Miller et al., 2013). What is delivered is as important as how it is delivered. Service product has been defined as whatever service features are offered (Rust & Oliver, 1994). Other researchers have referred to service product as the core service (Sureshchandar, Rajendran, & Anantharaman, 2002). The core service portrays the content of a service.

While the term “service product” or “core service” has been only vaguely described and defined in the literature, numerous examples are given in life that help crystallize its meaning. The varieties of food and other dishes offered at a restaurant to its customers constitute a service product. A lawyer’s drawing up a will for a client is a service product, as is a person having a tooth capped by a dentist.

The service product itself has perceivable, tangible, and multidimensional features (Schneider & Bowen, 1995). Because of the multidimensionality of the service product, it

was necessary to select only one particular dimension on which to focus; the complexity dimension was selected because of my own anecdotal experience. During my 30 years of banking, I was charged to monitor liquidity risk in the bank. I noticed that the simpler checking account types did not remain open as long as accounts' having more complex features such as tiered service charges and/or tiered interest rates. Therefore, complexity in service products was selected to determine whether it did in fact have a bearing on account duration. Complexity is important in the design of any product/service as it is initially in control of the seller during product design but is fundamentally determined by the buyer. What service product attribute complexity is will be examined next.

Service Product Attribute Complexity – What It Is

Complexity has been defined in the context of consumer innovation adoption as the degree to which an innovation is perceived as relatively difficult to understand or use (Arts, Frambach, & Bijmolt, 2011). A definition of product complexity (Sitzia & Zizzo, 2011) is an inability by subjects to understand what the value of a product is, which can be justified in terms of combinations of possible utility outcomes that can be obtained by multiple product features.

Putting these ideas together and recognizing that there has not been a consistent definition regarding the complexity of a service product in terms of its features and attributes, for the purpose of this research, it is defined as the extent to which an objective person, knowledgeable about the product category, would rank a product within a given product category as relatively easier to understand in terms of features and attributes relative to another product. Service product attribute complexity can range from relatively simple to quite complex.

Service Product Attribute Complexity and Customer Confusion

The literature has very little research on service product attribute complexity regarding consumer purchasing decisions. Research has studied other concepts that lead to the hypothesis that service product attribute complexity is an important determinant of customer tenure. For instance, researchers have looked at how customer confusion relates to brand loyalty (Walsh & Mitchell, 2010). Customer confusion was made up of three dimensions: similarity, overload, and ambiguity. Of the three, brand loyalty and positive word of mouth, constructs consistent with a consumer who would remain as a firm's customer, increase when ambiguity confusion proneness increases. Ambiguity confusion proneness is defined as a consumer's tolerance for processing unclear, misleading, or ambiguous products, product-related information or advertisements. Also, overload confusion has a significant positive impact on general positive word of mouth. Overload confusion proneness has been defined as the consumer's difficulty when confronted with more product information and alternatives than they can process in order to get to know, to compare, and to comprehend alternatives.

Service product complexity, as operationally defined, has ease of understanding of the features and the information about the service product. As the amount of features and information increases, it is reasonable to assume, based on these distinctions, that ambiguity confusion proneness and overload confusion proneness increase. Again, both of these constructs are positively related to brand loyalty and positive word of mouth communications, which could be logically linked to increased customer intention to remain with the firm. Walsh & Mitchell (2010) showed that neither ambiguity confusion nor overload confusion proneness has a negative impact on trust (Morgan & Hunt, 1994).

This is important because poor trust would act to decrease the customers' intention to remain with the firm.

Service Product Attribute Complexity and Innovation

The selection of a service product may be impacted by how a perceived innovation of the service product is viewed by the customer. In a meta-analysis research study done on consumer adoption innovation, complexity was defined as the degree to which an innovation is perceived to be relatively difficult to understand and use (Arts et al., 2011). The authors indicated that product complexity was a barrier to adoption behavior. The more an innovation is seen as complex, the more learning costs will be required to adopt new behaviors (Hoeffler, 2003; Wood & Moreau, 2006). Once these learning costs have been "paid," however, the customer is more inclined to remain with the service provider (Burnham, Frels, & Mahajan, 2003). The more complex the innovation and thus the higher its perceived costs (more understanding required of the product), the less feasible behavior change becomes (Alexander, Lynch, & Wang, 2008).

Service Product Attribute Complexity and Psychology

Literature from psychology points to how service product attribute complexity leads to increased customer retention. The line of reasoning starts with effectance motivation or one's desire for understanding, predictability, and control over one's environment (Waytz, Morewedge, Epley, Monteleone, Gao, & Cacioppo, 2010). A person driven by effectance motivation would desire to decrease the complexity in one's environment. Anthropomorphism may serve to satisfy effectance motivation because knowledge about the self is readily available and richly represented in a way that confers a strong sense of understanding, predictability, and control over non-human agents (Gallese & Goldman,

1998). Anthropomorphism represents the process of inductive inference whereby people imbue the real or imagined behavior of other agents with human like characteristics, motivations, intentions, or underlying mental states (Waytz et al., 2010).

Anthropomorphism can also present customers an easier means to understand a product (Hart, Jones, & Royne, 2013). Anthropomorphism grounds consumer perceptions in social cognition rather than objective alternatives (Chandler & Schwarz, 2010); it strengthens bonds to the humanized entity (Sundar, 2004). It has also been shown to enhance consumer evaluations of products (Aggarwal & McGill, 2007).

The advantage for consumers may be relative to the complexity of the product (Hart et al., 2013). Research indicates that the magnitude of consumer anthropomorphism is greater for complex products or products with a high number and variety of parts, materials, and functions. This is important because the conclusion they reached indicated that product managers could anticipate relatively greater intentions to retain complex products.

Service Product Attribute Complexity Hypotheses

These three different streams of literature support an expectation that service product attribute complexity will have a positive impact on customer tenure. Two of the consumer confusion constructs (ambiguity confusion proneness and overload confusion proneness) indicate that increasing these dimensions will have a positive impact on retention-related constructs (brand loyalty and positive word of mouth). The psychology literature shows how a consumer will imbue human behavior on non-human agents that results in their intentions to retain complex products. This suggests the following hypothesis.

Hypothesis 4: Service product attribute complexity positively impacts customer tenure of a customer with the retailer.

Yeniyurt and Townsend (2003) presented research on the acceptance rate of new products and its relationship with power distance. Their research showed a negative relationship between power distance and acceptance rate of new products. Complexity has been shown to be positively related to high-adoption intention of innovation and new products (Arts et al., 2011). Therefore, these relationships suggest that a person high in power distance would select a less complex service product. Therefore, one might hypothesize the following.

Hypothesis 5: There is a negative relationship between power distance and the attribute complexity of the service product selected.

Uncertainty avoidance has a negative impact on consumer innovativeness (Steenkamp et al., 1999) and a negative effect on the acceptance rate of some products (Yeniyurt & Townsend, 2003). One would also expect that uncertainty avoidance means an individual would feel threatened by the uncertainty dealing with a more complex service product. Therefore, a hypothesis would be as follows.

Hypothesis 6: There is a negative relationship between uncertainty avoidance and the attribute complexity of the service product selected.

Unlike the inconsistencies found in the individualistic/collectivistic dimension of culture and constructs that could logically lead to customer retention, two studies have indicated a positive relationship between individualism and innovation (Steenkamp et al., 1999; Yeniyurt & Townsend, 2003). Product complexity has been identified as a barrier to adoption of innovation behavior (Arts et al., 2011). A person high in individualism has

a positive relationship to innovation and the acceptance rate of innovation, and therefore product complexity would not be a barrier to that individual. One would then expect an individual high in collectivism to select a less complex service product. Therefore, a hypothesis that might be suggested follows.

Hypothesis 7: There is a negative relationship between collectivism and the selection of a service product based on attribute complexity.

Service Expectations

In this section I will discuss service quality, including definitions, development of theory using disconfirmation/confirmation and using expectations versus perceptions. Next, the type of expectations used in this research will be discussed along with various results of other researchers who have used expectations alone or as a single hypothesis in their research.

What is Service Quality and Why is it Important?

Services, according to many articles, make up a larger and larger percentage of the Gross Domestic Product of the United States and an increasingly larger share of the population is employed in this area. To begin to understand service quality, one must begin with what services are and how they are different from “goods.”

Because services are performance, they cannot be seen, felt, tasted, or touched in the same manner as goods. Several unique characteristics distinguish services from goods: intangibility, perishability, inseparability, and heterogeneity. These have all been shown to be important characteristics in many research articles. (See a recap of these articles in Zeithaml, Parasuraman, & Berry, 1985.) Of these characteristics, intangibility is a critical goods-service distinction from which all other differences emerge (Bateson, 1979). The

issue to be concerned with in terms of service quality is the characteristic of heterogeneity, which concerns the potential for high variability in the performance of a service. This variability in service performance leads to the consumer being pleased, displeased, committed, noncommitted, involved, or noninvolved with the service provider.

Service quality has been defined in various manners. It has been defined as being the result of a comparison customers make between their expectations about a service and their perceptions of the way the service was actually performed (Caruana, 2002). Another definition is that service quality is a judgment in which the client compares expectations to the actual delivery in each service dimension (Grönroos, 1984; Parasuraman, Zeithaml, & Berry, 1985). Service quality was defined as a consumer's judgment about a product's overall excellence by Zeithaml (1988) and was described as an attitude that results from a comparison of expectations by Bolton & Drew (1991) and by Parasuraman et al. (1988).

Service quality has been found to have significant impacts on various other constructs that are important to a business. A high level of service quality enhances customer satisfaction, decreases customer defection, and enhances customer loyalty (Jun & Cai, 2001). Perceived service quality has been associated with customer tenure (Bloemer, De Ruyter, & Wetzels, 1999; Sirdeshmukh, Singh, & Sabol, 2002). Service quality was found to contribute positively to customer satisfaction (Edward & Sahadev, 2011). Research has indicated that perceived service quality has been found to be significantly associated with customer loyalty (Baumann, Elliott, & Burton, 2012). A very comprehensive study determined that service quality influences different intentions, such

as giving recommendations, willingness to pay more, and doing more business with the provider (Zeithaml et al., 1996).

Differences in Service Quality Constructs and Measurements

Research introduced the notion that service quality stems from a comparison of what consumers feel a service provider should offer (expectations) against how the provider actually performs (Grönroos, 1982; Lewis & Booms, 1983; Sasser, Olsen, & Wyckoff, 1978). Brady and Cronin (2001) stated that researchers generally adapt one of two conceptualizations of service quality: the “Nordic” perspective, which defines the dimensions of service quality in global terms of functional and technical quality (Grönroos, 1982, 1984), and the “American” perspective, which uses the five characteristics of SERVQUAL (Parasuraman et al., 1988). Both of these conceptualizations show that service quality is a multidimensional construct, and both work on the confirmation/disconfirmation theory. Each of these conceptualizations will be briefly discussed.

It was proposed (Grönroos, 1978, 1982; Grönroos & Shostack, 1983) that the consumer’s assessment of service quality is a result of the assessment of two dimensions – functional quality and technical quality – along with the impact of the organization’s image, and the model and definitions of service quality used the confirmation/disconfirmation model. The functional quality of the exchange process is how the service is provided, including all interactions between organization and customer, and comprising seven attributes that are process related. These are employees’: (1) behavior, (2) attitude, (3) accessibility, (4) appearance, (5) customer contact, (6) internal relationship, and (7) service mindedness. The technical quality is the outcome

of the exchange process (what is received by the customer). This was made up of five attributes: (1) employee's technical skill, (2) employee's knowledge, (3) technical solutions, (4) computerized systems, and (5) machine quality (Grönroos, 1982; Grönroos & Shostack, 1983). The third dimension (image) is the general perception of the firm by the customer (Grönroos, 1982).

The SERVQUAL dimensions evolved from the initial 10 dimensions (Parasuraman et al., 1985) into five dimensions (Parasuraman et al., 1988). These final dimensions are (1) tangible elements – appearance of equipment, physical activities, and personnel; (2) reliability – ability to perform the promised service accurately and dependably; (3) responsiveness – willingness to help customers and provide prompt service; (4) assurance – courteous and knowledgeable staff who can insure confidence and trust; and (5) empathy – personalized attention and care. This model has gone on to become one of the most popular measurement systems for service quality and has had a major impact on business and academic communities (Buttle, 1996).

The SERVQUAL model has been criticized. While this research is only focused on the expectation side of the SERVQUAL model, one must recognize that other scholars have found reasons to criticize various parts of the SERVQUAL methodology. A very good recap of the criticisms appears in the Buttle (1996) article.

Expectations: What Are They?

As shown above, confirmation-disconfirmation models deal with the difference in measurement between “perceived” and “expectations” for different constructs. This fact recognizes that all consumers have expectations of something occurring at a business. In this study, the focus is on an expectation of service.

The term “expectation” has many meanings depending upon the context of the research being done at the time. Even the same researchers have defined the term differently. Expectation was defined as the desires or wants of customers, what they feel a service provider *should* offer rather than *would* offer (Parasuraman et al., 1988). This is the definition along the lines of Miller (1977) as “desires” or “wants” of customers – what they feel a service provider *should* offer rather than *would* offer. Later on, the term “expectation” was redefined as the service customers would expect from excellent service organizations, rather than normative expectations (Parasuraman, Berry, & Zeithaml, 1991; Parasuraman, Zeithaml, & Berry, 1994). Teas (1993) believed respondents could be using any one of six interpretations of expectations: (1) service attribute importance – customers may respond by rating the expectations statements according to the importance of each; (2) forecasted performance – customers may respond by using the scale to predict the performance they would expect; (3) ideal performance – optimal performance or what the performance can be; (4) deserved performance – the performance level customers feel performance should be in light of their investment; (5) equitable performance – the level of performance customers feel they ought to receive given a perceived set of costs; and (6) minimal tolerable performance – what performance must be.

The service quality literature indicates two major concepts and operationalizations of the construct “expectations.” Expectations in the first concept are viewed as predictions made by customers about what is likely to happen during an impending transaction/exchange (Zeithaml & Berry, 1993). This is consistent with the notion of expectations as predictions of the occurrence of future events. The second has been

termed “normative expectations.” While the service quality literature uses this term to indicate a higher level of expectations than “likely will,” it still has many variations in the literature. Researchers have characterized these expectations as what customers wish for (Miller, 1977), what customers hope for (Zeithaml & Berry, 1993), and what they think should happen in the next encounter (Boulding, Kalra, Staelin, & Zeithaml, 1993). In one research study (Coye, 2004), in order to try to decrease confusion in using the term “expectation,” the author used the term “entering desire” to describe what customers want ideally from the service at the beginning of the service encounter.

Definition of Expectation

In this research, the term “ideal expectation” will be used in order to describe what a customer wants in an ideal sense, which may be unrelated to what is reasonable/feasible and/or what the service provider tells the customer to expect (Boulding et al., 1993). This also goes back to the original definition of expectations (Zeithaml & Berry, 1993). As posited by Boulding et al. (1993), ideal expectations represent enduring wants and needs that remain unaffected by the full range of marketing and competitive factors postulated to affect “should” expectations. Ideal expectations are much more stable over time than consumer expectations of what should occur. The ideal expectation at time t equals the ideal expectation at time $t + 1$. Like Boulding et al. (1993), this research does not specify a process that generates ideal expectations. The existence of these expectations is assumed regardless of how they were conceived or generated.

Research has noted that even using “should” terminology resulted in very high scores in the expectations section of the SERVQUAL model (Parasuraman et al., 1991). Thus the SERVQUAL expectations section was modified to focus on what customers would

expect from companies delivering “excellent” service for that type product/service. It could be logically assumed that if “should” expectations result in very high scores, “ideal” expectations, being of an even higher level of expectations, would result in higher scores, which might not allow a proper analysis and interpretation of the results.

While the SERVQUAL model uses the term “quality of service” at an “excellent” service provider, in this study the expected quality of service will focus on the service quality the customer anticipated when he/she opened their first account. Therefore, the term “anticipated” service quality expectations will be used in this study. Anticipated service quality expectations will be defined as the expectations of service quality an individual looks forward to from a retail service provider based on what he/she has experienced in life prior to the first engagement with this retail service provider. One might logically expect anticipated service quality expectations to be somewhat lower in desired quality than the excellent service quality expectations used in the SERVQUAL model.

Because this definition explicitly refers to a time prior to engagement, this construct can be considered a pre-engagement construct for service quality expectations.

Results of Expectation Research and Hypothesis

Some research deals solely with expectations, which is important to this research. Oliver (1980) suggested that in the absence of prior experience with a service provider, expectations initially define the perceived level of service. Desired expectations, as defined by Parasuraman et al. (1988), are positively affected by a consumer’s familiarity with the service provider (Webb, 2000). Familiarity is defined as knowledge gained

through exposure to information concerning the service provider. The more familiar a consumer is with a service provider, the higher the desired expectations standard.

Intangibility of services may complicate the formation of expectations (Parasuraman et al., 1988). A consumer's desired expectations of service quality increases as intangibility of the process and outcome of a service increase (Bebko, 2000). As the desired expectations increase, there is a greater chance that the provider will not be able to meet them.

When excellent service quality expectations are high, it would logically seem there are more situations that a retailer will fail to meet those expectations. Even when using anticipated service quality expectations, it would still logically seem that there are more, but possibly fewer than under excellent service quality expectations, situations in which a retailer would fail to meet those levels of expectations. Thus, the perceived relational benefits of the relationship may change, possibly due to a reactional trigger that may put the customer on a switching path (Roos, 1999). The more times that a retailer fails to meet the anticipated service quality expectations of the customer, the higher the chances of customers exiting the relationship with the retailer. Therefore, one would expect the following.

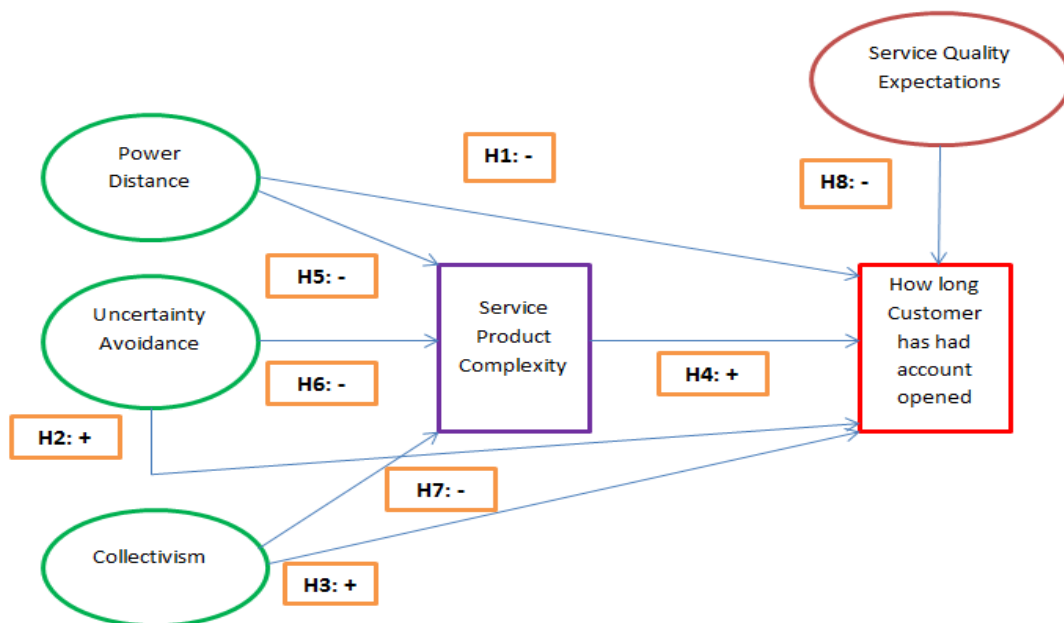
Hypothesis 8: There is a negative relationship between “anticipated” service quality expectations and actual customer tenure with the retailer.

Model of the Research Study

The relationships in this research paper are modeled in Figure 1, which shows the relationships between the constructs described in this paper of power distance, uncertainty avoidance, collectivism, service product complexity, excellent service quality

expectations, and actual customer retention. The figure also indicates the direction of the proposed relationships. The model hypothesizes that the culture dimensions of power distance, uncertainty avoidance, and collectivism along with anticipated service quality expectations are all pre-engagement traits and beliefs that impact actual customer retention directly. The culture dimensions also work directly on the selection of the service product through its complexity sub-dimension; therefore, service product attribute complexity also mediates the relationships between the culture dimensions and actual customer retention.

Figure 1. Model of the Hypotheses



CHAPTER III

METHODOLOGY

Research Context

I sought a service context in which a consumer has a variety of product options to choose from with varying degrees of service product attribute complexity. After careful consideration, checking accounts in a banking/financial services context meet the criteria. Federal banking regulations (Regulation DD, as governed by the Consumer Financial Protection Bureau) require the explanations of these products in a very explicit, tightly controlled manner using specific terms having the same meaning across all products. This made it easier to rank the relative complexity of the products. The banking industry also has a large set of customers, even in small banks, from which to obtain an adequate sample size. Moreover, each bank has the ability to provide an exact open date from which the actual length of the relationship can be derived, and this length has enough variance (from six months to 20+ years) to test the effect of the constructs being studied.

An additional benefit of this approach is that the study can focus on actual behavior instead of some behavioral proxy. Customer tenure in this study was the actual time the account was open at the financial institution and will not be defined as a latent construct. This study looks at actual tenure behavior, not intention to remain

The sample enabled the author to discover whether cultural dimensions of power distance, uncertainty avoidance, collectivism, service product attribute complexity, and anticipated service quality expectation affect not only the intention to remain but also the actual behavior that a consumer does remain as a customer of the organization.

Sample and Procedures

The analysis done in the study was accomplished in two phases. Phase 1 consisted of an analysis of secondary data. The data was collected from a community bank located in a central U.S. state that had total assets of approximately \$500,000,000 and customers in both rural and urban settings. The bank was selected because it had not been part of any acquisition of deposits for over 29 years. By focusing only on one institution, it allowed us to hold other potential variables, such as the effect of different regulatory oversight, constant. This allowed a determination whether the type of accounts do have different mean lives.

Sample and Procedures: Phase 1 Customer Tenure

Two data files were obtained from the bank. The first data file was a list of all retail checking accounts that had been closed over approximately the past five years, from January 2, 2009, through July 13, 2014. The data included in this file is the type of account, the date the account was opened, and the date the account was closed. The length of time from the date the account was opened to the date the account was closed was the length of time the account was open at the bank, which represents customer tenure for this data set.

A second data file obtained from the bank consisted of all currently open retail checking accounts as of July 18, 2014, that are currently being offered or had been

offered by the bank in the last five years. The data included in this file was a reference ID number, the type of checking account, the date the account was opened, and the birth year of the account holder. Accounts where the account holder was currently younger than 18 years of age were excluded by the bank. The length of time from account opening until the date the file was created was the length of time the account was open – customer tenure for this data set.

By looking at both closed and open accounts, a determination was made as to whether the average lives of the different checking account types were in fact different. It also allowed comparison of the mean lives of the various account types, using the closed account file, to determine whether there was a statistical difference in the mean lives of the closed checking accounts based on the year the account was closed. If they are not the same, it might indicate that something happened outside the normal operating environment of the bank that might have had an impact on account closings and thus customer tenure. Also, by comparing the average customer tenure of the open checking account types to the customer tenure of the closed account types, we would expect to see a similar pattern in terms of customer tenure.

The primary limitation of this type of data is that we are only able to investigate Hypothesis 4 (service product attribute complexity positively impacts customer tenure of a customer with the retailer). The bank also provided a list of the types of accounts included in the open account data set. In addition, the Regulation DD disclosures were obtained. These disclosures included account features such as fees charged, when they are charged, whether and how interest is compounded and paid which allowed the service product attribute complexity rankings to be completed.

Service Product Attribute Complexity Ranking Development

The service product attribute complexity rankings were developed by having a panel of three banking experts review all of the retail consumer checking account disclosures provided by the bank. These experts included the following. First was a professor in finance from a large research university in the central U.S. He has over 30 years of experience in researching and teaching finance and advising on pension issues. Next was a community banker with over 30 years of community banking experience who has started two community banks. He is currently chairman and co-CEO of a community bank. The final individual was a well-known banking consultant and community bank president who has given presentations at the American Banking Association national conferences regarding community banking issues. He consults with community bankers across the United States and was previously a professor of finance at a large northern university. These experts were asked to rank each type of account from least complex to most complex in terms of service product attribute complexity, defined as the extent to which an objective person, knowledgeable about the product category, would rank a product within a given product category as relatively easier to understand in terms of features and attributes relative to another product. These rankings were averaged, and the results were used as the complexity rankings for each type of account.

Survey Measures Phase 2

For Phase 2, a survey instrument was developed to measure the constructs of the various cultural dimensions: power distance, uncertainty avoidance, and collectivism. In

order to determine the measures to be used for these dimensions, I reviewed previous research articles that were based on the individual assessments of Hofstede's (2001) dimensions (which I was using) and that had the actual measurements disclosed. I found four articles that met these criteria (Furrer et al., 2000; Lam, 2007; Yoo et al., 2011; Youngdahl et al., 2003). All these measures were based originally on Hofstede's measures. I made the decision to use the measures in the CVSCALE developed in 2011 (Yoo et al., 2011) as the most current validated scale available. This scale has been used in other research (Schumann et al., 2012). Respondents were asked to indicate the extent to which they agreed with each item on a seven-point Likert scale from 1- Strongly Disagree to 7 - Strongly Agree. The full scale items are shown in Appendix A.

The anticipated service quality expectations measures were developed from Parasuraman et al. (1988) and Parasuraman et al. (1991), modified to delete the term "excellent expectations," and having the context adjusted to a retail checking account/banking situation. Respondents were asked to indicate the extent to which they agreed with each item on a seven-point Likert scale anchored from 1 -Strongly Disagree to 7 – Strongly Agree. The full scale items are shown in Appendix B. The anticipated expectation index was the numeric average of the five dimensions in the survey. Also, a set of demographic questions was asked, requesting the gender, race, and age of the account holder. Additional questions regarding how long the person has had an account at the bank and their intention of maintaining that account at the bank for the next three years was also on the survey.

Phase 2 Survey Response

The surveys were sent by U.S. Mail to all account holders shown in the open account data set obtained from the bank under Phase 1. Paper surveys were used to ensure all account holders received a survey. While electronic banking is becoming more and more popular, my 30 years of community banking experience has convinced me that at the present time, all bank customers still do not use electronic banking and the Internet. So as not to introduce a bias into the results, paper surveys were used. There were 4,217 account holders who were mailed a survey. Usable returned surveys numbered 392, a response rate of 9.32%. A breakdown of the returned surveys by account type and in comparison to the number of accounts in both the open and closed account data sets is shown in Table 4.

Also shown in Table 4 is the mean customer tenure of the accounts based on the data received in the open accounts data set from returned surveys. The surveys returned represented all account types. The smallest percentage returned on a particular account type was 6.10% as a percent of open accounts (account type 9, which also had the fewest accounts). The maximum was 14.22% (account type 3). The measure of customer tenure for the Phase 2 survey analysis was calculated by the length of time (in years) the account was open at the bank

Table 4
Comparison of Number of Accounts Open, Closed, and Completing Surveys

Account Type	Accounts Open				Accounts Closed			Accounts in Survey Sample			
	Service Product Attribute Complexity Ranking	% Total	# Accounts	Mean Time Opened	% Total	# Accounts	Mean Time Opened	% Total	# Accounts	Mean Time Opened	% Surveys as % Open
	1	1.33	25.3	1,067	6.34	36.84	1,029	3.68	19.64	77	6.84
2	3.00	14.5	611	11.61	16.36	457	6.91	12.50	49	13.76	8.02
3	7.67	15.8	668	11.88	12.67	354	9.78	24.23	95	11.28	14.22
4	4.33	2.4	102	4.40	1.11	31	2.75	1.79	7	3.98	6.86
5	5.00	24.9	1,048	3.64	20.23	565	1.98	19.13	75	4.05	7.16
6	7.67	10.0	420	16.47	6.98	195	10.75	13.52	53	16.87	12.62
7	7.00	5.2	219	18.04	4.94	138	11.04	7.91	31	16.64	14.16
9	5.33	1.9	82	19.49	0.86	24	14.70	1.28	5	20.85	6.10
		100	4,217	9.14	100	2,793	5.58	100	392	10.51	9.30

based on the date shown for account opening and the date the open data file was created. This is the same customer tenure calculation that was used in the initial analysis of the open account data file. It was not the amount of time the account was open as reported by the respondent. The mean customer tenure of the accounts that returned surveys appears to be fairly close to the mean customer tenure in the open accounts data set by account type.

Actual customer retention rather than customer “intention to remain” data was used for the following reasons. The relationship between intentions and behavior itself is highly suspect (Mittal & Kamakura, 2001). A meta-analysis done in 1998 (Sheppard, Hartwick, & Warshaw, 1988) indicated that the correlation between intention and behavior was .53. Many marketers have found, to their detriment, that consumers who “talk the talk” in surveys do not “walk the walk” in actual behavior. Academic research shows that intentions are far from perfect predictors of behavior (Arts et al., 2011). It can be nonlinear (Jamieson & Bass, 1989) and vary on the basis of the time horizon used to measure intentions (Morwitz & Schmittlein, 1992). Thus, bias that might apply to intentions might not apply to behavior, and vice versa. Divergences will occur even if responses to intentions questions are the best predictions possible given the available information. The lesson is that researchers should not expect too much from intentions data (Manski, 1990). Lastly, organizations are ultimately interested in behavior, not just intentions (Mittal & Kamakura, 2001).

Survey Response Demographic Analysis

The demographic breakdown of the account holders returning surveys is shown in Table 5. The table demonstrates the breakdown of respondents by gender, race, age of the

account holder as reported by the respondent, the years the account has been open at the bank according to the respondent, and the responses to the question regarding the respondents' intention of maintaining the account at the bank for the next three years.

This data is also shown broken out by checking account type.

**Table 5
Demographic Breakdown of People Completing Survey**

		Total	%	Account Type							
				1	2	3	4	5	6	7	9
Gender	M	203	53.14	39	22	45	5	42	30	18	2
	F	179	46.86	38	26	43	2	33	22	12	3
	Total	382	100.00	77	48	88	7	75	52	30	5
Race	W	359	93.73	66	46	85	7	70	52	30	3
	AA	4	1.04	3	1						
	NA	15	3.92	4	1	3		4		1	2
	H	4	1.04	2	1			1			
	O	1	0.26	1							
	Total	383	100.00	76	49	88	7	75	52	31	5
# Years had Account at Bank	Mean	14.97		10.28	16.79	17.41	10	9.34	20.08	22.07	19.4
	Median	13		8	15	15	8	8	20	20	18
Most Likely to have account in 3 Years	7	284	72.82	52	42	64	4	55	39	24	4
	6	52	13.33	14		13	1	11	8	4	1
	5	8	2.05			4	1	2	1		
	4	8	2.05	4	1	2			1		
	3	4	1.03		1			2	1		
	2	5	1.28	1	1		1	1		1	
	1	29	7.44	6	4	11		4	2	2	
	Total	390	100.00	77	49	94	7	75	52	31	5

Table 5 (Continued)

		Total	Account Type							
			1	2	3	4	5	6	7	9
Population	Age at Account Opening									
	Mean	44.33	41.96	39.51	64.78	45.35	37.89	43.49	45.01	37.30
	Median	44.00	42.00	40.00	64.00	47.00	36.00	43.00	44.00	37.00
	Standard Deviation	17.62	17.53	15.38	12.29	13.10	14.91	12.86	16.56	10.50
	Number	4,010	1,058	589	618	101	1,040	356	176	72
Survey	Age at Account Opening									
	Mean	51.26	50.29	41.59	64.92	43.71	46.09	46.91	49.12	39.50
	Median	52.00	55.00	41.00	65.00	43.00	49.00	47.00	47.00	38.50
	Standard Deviation	15.70	17.18	12.46	10.72	15.41	12.61	12.77	13.92	15.15
	Number	367	77	46	91	7	74	43	25	4
Population	Current Age									
	Mean	52.91	48.25	50.93	76.06	49.60	41.45	59.08	61.96	56.40
	Median	54.00	49.00	52.00	76.00	52.00	40.00	59.00	62.00	10.21
	Standard Deviation	18.79	17.67	15.28	10.32	13.05	15.16	12.65	14.98	58.50
	Number	4,010	1,058	589	618	101	1,040	356	176	72
Survey	Current Age									
	Mean	61.08	57.14	54.82	75.73	47.57	50.08	63.23	64.20	60.50
	Median	63.00	61.00	58.00	75.00	43.00	52.00	60.00	65.00	61.00
	Standard Deviation	15.92	16.86	13.31	8.36	15.92	13.23	12.26	11.12	5.92
	Number	367	77	46	91	7	74	43	25	4

Overall, the gender of the respondents were fairly equal (M = 53%, F = 47%). By far the largest reported race was White/Caucasian (94%). The average age of the respondent completing the survey is above 60. (Calculated mean age based on the open accounts data set is 52.91.) They reported being with the bank almost 15 years. Since demographic data for gender and race were not available for the entire open account data set, there was no opportunity to determine whether the respondents were similar to the overall demographics of the entire account holders with retail checking accounts at the bank.

One interesting result was seen regarding the question on respondents maintaining their accounts at the bank. When looking at the replies to the question, a total of 9.75% answered that they did not expect to maintain their account at the bank for three years (answers of 1, 2, or 3). If the actual customer churn is approximately 13% per year (based on my experience and verified by the bank's CFO), it would be expected that this number should be approximately 39% (13% per year for three years). The 9.75% turnover shown in the responses is less than one year of actual turnover.

Survey Response Construct Measures Analysis

The initial phase of the construct measures analysis consisted of evaluating the measurements to insure acceptable internal consistency of the measures, acceptable discriminate validity between measures, as well as the expected factor structure. Both exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were utilized to evaluate the factor structure.

Eight factors were originally proposed for analysis: three cultural factors (power distance, uncertainty avoidance, and collectivism) and five service quality expectation factors (tangibles, reliability, responsiveness, assurance, and empathy). An exploratory factor analysis was performed using SAS JMP 10.0 to determine whether the measurements held together in eight factors. The eigenvalues initially indicated a seven-factor model. The three cultural factors loaded separately, as did service quality expectations tangibles. However, the other four service quality expectation factors broke out into three factors with significant cross loading. Reducing the factors to six did not result in any improvement. When the number of factors was reduced to five, the cultural factors of power distance, uncertainty avoidance, and collectivism loaded as expected.

The service quality expectation indicators separated into two factors; the construct tangibles loaded as expected, but the remaining indicators loaded best as one factor that I referred to as service quality expectation intangibles. These loadings are shown in Table 6 below.

Table 6
Initial EFA Loadings from Bank Surveys

Measures	Power Distance	Uncertainty Avoidance	Collectivism	Service Expectations Tangibles	Service Expectations Intangibles
1	0.772426	0.545537	0.605093	0.551141	0.684676
2	0.816862	0.861624	0.577055	0.867747	0.536430
3	0.484566*	0.864057	0.776830	0.741496	0.656293
4	0.537752	0.713442	0.817240	0.737816	0.857641
5	0.445648*	0.800740	0.754588		0.679624
6			0.780551		0.801920
7					0.731237
8					0.594275
9					0.836765
10					0.817418
11					0.737026
12					0.725371
13					0.701820
14					0.692311
15					0.727390
16					0.473070*
Cronbach's Alpha	0.752500	0.847900	0.868100	0.821200	0.936900

* Factor loading less than .50, indicating a potential weak indicator.

Next, a confirmatory factor analysis was done using SAS JMP 10.0 based on the five-factor model shown in Table 6. Table 7 below shows a summary of the CFA analysis regarding convergent reliability. (All indicators of the same construct are well correlated.)

Table 7
Recap of Validity and Reliability – Initial CFA

Construct	Indicator	Significant (Y/N) <i>p</i> < .05	Standardized Loadings	Squared Multiple Corr	Reliability	Cronbach's Alpha	Convergent Reliability On Cronbach (.8)	Composite Reliability	Convergent Reliability On Composite (.7)	Average Variance Extracted	Convergent Reliability On AVE (.5)
Power Distance	Q1	Y	0.74162	0.55000		0.7525	N	0.757		0.3936	N
	Q2	Y	0.78671	0.61891							
	Q3	Y	0.50935	0.25944	N						
	Q4	Y	0.56824	0.32290	N						
	Q5	Y	0.46560	0.21678	N						
Uncertainty Avoidance	Q1	Y	0.56701	0.32150	N	0.8479		0.878		0.5947	
	Q2	Y	0.84055	0.70652							
	Q3	Y	0.85842	0.73689							
	Q4	Y	0.75831	0.57503							
	Q5	Y	0.79605	0.63370							
Collectivism	Q1	Y	0.63550	0.40386	N	0.8681		0.87		0.5286	
	Q2	Y	0.62074	0.38532	N						
	Q3	Y	0.78119	0.61026							
	Q4	Y	0.80530	0.64851							
	Q5	Y	0.72090	0.51970							
	Q6	Y	0.77721	0.60406							
Service Expectation- Tangibles	Q1	Y	0.58570	0.34304	N	0.8212		0.834		0.5641	
	Q2	Y	0.82014	0.67263							
	Q3	Y	0.80749	0.65204							
	Q4	Y	0.76722	0.58863							
Service Expectation- Intangibles	Q4	Y	0.76535	0.58576		0.8900		0.897		0.6372	
	Q6	Y	0.75153	0.56480							
	Q7	Y	0.74320	0.55235							
	Q9	Y	0.85654	0.73366							
	Q10	Y	0.86564	0.74933							

The construct of power distance indicated three weak indicators and poor convergent reliability. Uncertainty avoidance showed good convergent reliability with one weak indicator. The collectivism construct showed good convergent reliability with two weak indicators. Service quality expectations tangibles again showed good convergent reliability with one weak indicator. Because initially service quality expectations had 16 indicators, I selected the five questions with the highest factor loading in the EFA analysis. These were Questions 4, 6, 7, 9, and 10. The construct indicators were all good and exhibited good convergent reliability.

To ensure that the indicators and the constructs exhibited good discriminant reliability, the standardized covariances were reviewed. All covariances were less than .45, which indicated good discriminant reliability.

Table 8
Standardized Covariances – Initial CFA

	Power Distance	Uncertainty Avoidance	Collectivism	Service Expectations Tangibles	Service Expectations Intangibles
Power Distance	N/A				
Uncertainty Avoidance	0.0152	N/A			
Collectivism	0.1676	0.2870	N/A		
Service Expectations Tangibles	-0.0603	0.3549	0.1585	N/A	
Service Expectations Intangibles	0.0023	0.2681	0.1265	0.4444	N/A

Based on these results, several indicators were removed and the EFA/CFA process was repeated. Two indicators were removed from the power distance construct (Questions 3 and 5). Question 4, while weak, was the strongest of the three and the SAS JMP 10.0 software would not run with only two indicators, so it was retained. Question 1 was removed from uncertainty avoidance. Questions 1 and 2 were removed from the

Collectivism construct. Question 1 was removed from service quality expectation tangibles, while all indicators were kept for service quality expectation intangibles.

To repeat the process, another EFA was performed after removing the weak indicators. The same constructs appeared as in the initial EFA. Next a CFA was performed; the better results are shown in Table 9. Improved results are seen after removing the weak indicators. Power distance showed improved convergent reliability passing the Composite Reliability and Average Variance Extracted (AVE) tests. All other constructs showed good convergent reliability.

Discriminant validity was tested to ensure that good discriminant reliability was maintained. As shown in Table 10, there remained good discriminant validity. Discriminant validity was also verified by comparing the squared inter-factor correlations between two factors to the AVE calculation for each of the two factors. In every case, the squared inter-factor correlations were smaller than the related AVE number, again indicating good discriminant validity.

To determine the model fitness, several measurements were calculated using SAS JMP 10.0 structural equation modeling software. The results of both the first and second CFA models are shown in Table 11. The two most popular ways of evaluating model fit are those that involve the Chi Square (χ^2) goodness of fit test and various fit indices (Hu & Bentler, 1999). The χ^2 statistic assesses the magnitude of the discrepancy between the sample and fitted covariance matrices. When large sample sizes are used, χ^2 can lack the necessary discrimination between a good fitting and poor fitting model (Wheaton, Muthén, Alwin, & Summers, 1977). They suggested to access the χ^2/df ratio and judged a

Table 9
Recap of Validity and Reliability – Final CFA

Construct	Indicator	Significant (Y/N) <i>p</i> < .05	Standardized Loadings	Squared Multiple Corr	Reliability	Cronbach's Alpha	Convergent Reliability On Cronbach (.8)	Composite Reliability	Convergent Reliability On Composite (.7)	Average Variance Extracted	Convergent Reliability On AVE (.5)
Power Distance	Q1	Y	0.77571	0.6017260	N	0.7569	N	0.744		0.5000	
	Q2	Y	0.79440	0.6310714							
	Q4	Y	0.51693	0.2672166							
Uncertainty Avoidance	Q2	Y	0.83869	0.7034009		0.8828		0.887		0.6626	
	Q3	Y	0.86743	0.7524348							
	Q4	Y	0.75420	0.5688176							
	Q5	Y	0.79110	0.6258392							
Collectivism	Q3	Y	0.75163	0.5649477		0.8601		0.861		0.6078	
	Q4	Y	0.80966	0.6555493							
	Q5	Y	0.76136	0.5796690							
	Q6	Y	0.79434	0.6309760							
Service Expectation- Tangibles	Q2	Y	0.79853	0.6376502		0.8319		0.841		0.6382	
	Q3	Y	0.75699	0.5730339							
	Q4	Y	0.83904	0.7039881							
Service Expectation- Intangibles	Q4	Y	0.76497	0.5851791		0.8900		0.897		0.6370	
	Q6	Y	0.75034	0.5630101							
	Q7	Y	0.74215	0.5507866							
	Q9	Y	0.85738	0.7351005							
	Q10	Y	0.86652	0.7508569							

Table 10
Standardized Covariances of Constructs – Final CFA

	Power Distance	Uncertainty Avoidance	Collectivism	Service Expectations Tangibles	Service Expectations Intangibles
Power Distance	N/A				
Uncertainty Avoidance	0.0187	N/A			
Collectivism	0.1287	0.2600	N/A		
Service Expectations Tangibles	-0.0497	0.3459	0.1499	N/A	
Service Expectations Intangibles	0.0017	0.2660	0.1149	0.4479	N/A

Table 11
Fit Statistics for the CFA Model

	Initial CFA Model Fit	Second CFA Model Fit
Number of Observations	392	392
χ^2	714.0274	472.2588
χ^2 DF	265	142
χ^2 / χ^2 DF	2.69	3.33
Pr > χ^2	<.0001	<.0001
Standardized RMR (SRMR)	0.0507	0.0492
Adjusted GFI	0.8404	0.8469
Parsimonious GFI	0.7683	0.7354
RMSEA Estimate	0.0658	0.0771
RMSEA Lower 90% CI	0.06	0.0695
RMSEA Upper 90% CI	0.0717	0.0849
Probability of Close Fit	<.0001	<.0001
Bentler Comparative Fit Index	0.9044	0.9144
Num Correlation Residuals > .10		29

ratio of five or less as reasonable. The χ^2 of 472.258 with a p value of < .0001 indicated the null hypothesis of “good fit” should be rejected. However, based on a χ^2 /df ratio of 3.33, the model could be judged as acceptable.

Fit indices can also help determine the reasonableness of model fit. With a root mean square error of approximation (RMSEA) estimate of .0771, this fit index initially would not suggest a reasonable estimate of approximate fit. It has been suggested that RMSEA values from .05 to .08 indicate a fair fitting model (Browne, Cudeck, & Bollen, 1993). The RMSEA result of .0771 would suggest a fair fitting model. The lower 90% CI of RMSEA is .0695, $p < .001$, which indicates a rejection of the close fit hypothesis. The upper 90% CI of the RMSEA is .0849, which being less than .10 does allow a rejection of the poor fit hypothesis. Hu and Bentler (1999) proposed an acceptable number for standard root mean square residual (SRMR) to be less .08. The model shows a SRMR of .0492, which indicates acceptable fit.

A final check on model fit is to look at the correlation residuals. There are 29 residuals out of 171 data points (19 questions) that are greater than .10. Fourteen of these residuals relate to correlations with power distance indicators. Six of them relate to the weak power distance indicator I retained in order to have three indicators on the power distance construct. That indicator was also involved in the four highest correlation residuals.

Based on the model fit statistics with four fit statistics being acceptable, and understanding that the residual issue is caused by the requirement to use a weak indicator in the power distance construct, I conclude that the model fit is adequate; these indicators for the constructs were the ones used to develop the complete structural equation model.

CHAPTER IV

RESULTS

I will describe the results of the research as broken down in the Methods Chapter. I will first describe the results of Phase 1, Analysis of Secondary Data, including analysis of the mean lives of the different types of accounts in both the open and closed account data sets and the development of the service product complexity rankings. In this part, I show the analysis to support or reject Hypothesis 4. Then I will describe the Phase 2 research consisting of analysis of the surveyed accounts and then the structural equation model results using the CFA model previously developed.

Results of Phase 1

Analysis of Mean Lives of the Various Retail Checking Accounts

The open account data set consisted of 4,217 accounts with eight different types of accounts. The number and mean life of these accounts are shown in Table 12. The mean lives of the various types of accounts were tested using a one-way Analysis of Variance (ANOVA) test to determine whether these mean lives were statistically the same or different. The null hypothesis for this test was that the means are statistically the same.

The results of this test indicated an F ratio of 409.7997 with $\text{Prob} > F < .0001$. Based on these results, the null hypothesis was rejected. Next, a test was done to determine whether some account types have mean lives that are statistically the same and which account types may have different means from others. This was done using SAS JMP 10.0 and using an All Pairs Tukey-Kramer HSD test. The results indicated various groupings of accounts with statistically the same mean lives but, as indicated in the ANOVA test, not all account types have statistically the same average life.

The closed account data set consisted of 2,793 accounts with the same eight account types as noted in the open account data set. The number in each account type and mean lives of the various accounts are shown in Table 13. The means of the lives were tested using a one-way ANOVA test to determine whether the mean lives were statistically the same for all the different types of accounts. Thus, again the null hypothesis was that the mean lives for all different types of accounts were statistically the same. This hypothesis can be rejected as the results indicated an F ratio of 148.422 and a $\text{Prob} > F$ of $< .0001$. A test was then performed on account mean lives to determine which accounts, if any, had statistically the same average lives and which accounts had statistically different average lives. This was performed using SAS JMP 10.0 and the All Pairs, Tukey Kramer HSD test. The test did show a similar pattern to that of the open accounts data set test. While the average life is longer in the open account data set for each respective account type, the pattern of grouping by accounts is the same.

Table 12
Analysis of Open Account Data Set

Account Type Code	Number of Accts	% of Accounts	Mean Life	Median Life	Comparison of Mean Life of Account Types using All Pair Tukey-Kramer HSD	Null Hypothesis is Mean Life for all Account Types are the same
5	1,048	24.85	3.64	2.33		F Ratio 409.7997
4	102	2.42	4.40	3.94		Prob > F <.0001
1	1,067	25.30	6.34	5.79		
2	611	14.49	11.61	11.88	C	
3	668	15.84	11.88	11.27	C	
6	420	9.96	16.47	15.83	B	
7	219	5.19	18.04	17.36	A	
9	82	1.94	19.49	17.26	A	
	4,217	100.00	9.14	7.19		

Table 13
Analysis of Closed Account Data Set

Account Type Code	Number of Accts	% of Accounts	Mean Life	Median Life	Comparison of Mean Life of Account Types using All Pair Tukey-Kramer HSD	Null Hypothesis is Mean Life for all Account Types are the same
5	565	20.23	1.98	1.30		F Ratio 148.4220
4	31	1.11	2.75	2.50	D E	Prob > F <.0001
1	1,029	36.84	3.68	2.70	D	
2	457	16.36	6.91	6.00	C	
3	354	12.67	9.78	8.30	B	
6	195	6.98	10.75	9.90	B	
7	138	4.94	11.04	9.90	B	
9	24	0.86	14.70	13.30	A	
	2,793	100.00	5.58	3.50		

Another test on the closed accounts was done to determine whether the mean lives of accounts remained consistent (statistically the same) over each year reported. If so, that result would lead to a belief that there were no unique or one-time factors that negatively impacted the closing rate of the checking accounts. A one-way ANOVA test was performed, and the null hypothesis stated that the mean lives of the closed accounts each year were statistically the same. The years in the closed account data set were 2009, 2010, 2011, 2012, 2013, and YTD 2014. The results indicated that we cannot reject this hypothesis as the F ratio was .7109 and the Prob > F was .6152. An All Pairs Tukey Kramer test was also done to determine whether the means were statistically the same. The results from this test also indicated this to be true and are shown in Table 14.

Table 14
Analysis of Closed Accounts by Year

Year	Mean Time	Comparison of Mean Life of Account Types using All Pair Tukey-Kramer HSD	Null Hypothesis is Mean Life for all Account Types are the same in each year
Accounts Closed	# Accts Closed	Open of Account	
2009	521	5.24	A
2010	452	5.39	A
2011	604	5.56	A
2012	585	5.76	A
2013	432	5.86	A
2014	199	5.82	A
			F Ratio 0.7109
			Prob > F 0.6152

The number of accounts closed (2,793) compared to the number of open accounts (4,217) indicated a turnover ratio of 66.23%. Taken over 5.5 years, the annual churn, assuming the number of open accounts is reasonably close to the actual number open during that time, is 13.25%. Based on my 30 years of banking experience, I believe that is a reasonable number. I also discussed this number with the CFO of the institution, who verified its reasonableness.

Complexity Rankings

The methods to develop service product attribute complexity rankings stated that each of the three experts would receive a description of accounts; each account would have the appropriate Truth in Savings disclosure. These account disclosures are shown in Appendix 3. The names of the accounts were not shown so as to avoid prejudicing the ranking process. Account type 8 was included in the list: there were seven accounts of this type in the initial closed account data set but none in the open account data set, Thus they were not used in the analysis. The account types were shown in random order on the disclosure sheet given to the experts. Each individual ranked the accounts independently, and none had knowledge of or contact with the other individuals performing the same task. The individual rankings and the averages of those rankings are shown in Table 15.

Table 15
Analysis of Service Product Attribute Complexity Rankings

Account Type Code	Rater 1	Rater 2	Rater 3	Avg of Complexity Rankings	Std Dev
1	1	2	1	1.33	0.58
2	5	1	3	3.00	2.00
3	6	9	8	7.67	1.53
4	2	6	5	4.33	2.08
5	8	5	2	5.00	3.00
6	9	7	7	7.67	1.15
7	4	8	9	7.00	2.65
8	3	4	4	3.67	0.58
9	7	3	6	5.33	2.08

In order to determine the interrater reliability of this ranking, two different analyses were performed. The first analysis was the calculation of the Intraclass Correlation Coefficient using Agreestat 2011.1 software. This was done as a fully crossed design (all raters rated all subjects). Since the raters were not selected at random, the calculation was

set as the raters were the only ones of interest. The ICC rating was .45, which would represent fair agreement (Cicchetti, 1994).

The second analysis was to determine the correlation of the rankings between the raters. The correlation matrix is shown in Table 16. It indicates that raters 2 and 3 had fairly good correlation (.7833), but rater 1 did not have good correlation with either rater 2 (.2667) or rater 3 (.30). Raters 2 and 3 had good correlation with the average. The correlation between the average and rater 1 (.6563) was much improved over the correlations with the other individual raters.

Table 16
Correlation of Raters

	Rater 1	Rater 2	Rater 3	Average
Rater 1	1.0000			
Rater 2	0.2667	1.0000		
Rater 3	0.3000	0.7833	1.0000	
Average	0.6563	0.8587	0.8725	1.0000

The conclusion is with an IC coefficient seen as fair and a good correlation between raters 2 and 3 along with the raters' correlation with the simple averages; I consider these ranking to exhibit adequate reliability to be used in this study.

Regression Equation Regarding Complexity and Mean Lives

In order to determine whether service product attribute complexity had an effect on the mean lives of the various accounts, I performed a regression analysis using SAS JMP 10.0 and included the service product attribute complexity rankings as the independent variable and the mean lives of the accounts as the dependent variables. This was done on both the open and closed account data sets.

The results of the open account data set analysis (Table 17) show an Adjusted R² of 38.239% and a RMSE of 6.0089. The effect test indicated that the parameter (service

product attribute complexity rankings) was significant with an F ratio of 436.0586 and Prob > F of < .0001.

Table 17 shows the parameter estimates for each account type along with the results of the All Pairs, Tukey Kramer HSD test. It also indicates how those parameter estimates would be used to derive the mean value for customer tenure in the regression equation. A comparison of the calculated mean to the actual mean is also shown. The column “Mean Life Based on Parameter Estimates” is calculated as follows: the intercept of 6.34 is the parameter estimate for account type 1 (complexity ranking of 1.33). Its calculated mean life and actual mean life are the same (difference = 0). To obtain the mean life for account type 2, the second least-complex account based on ranking, I added the parameter for the previous account, 6.34, to the parameter estimate for account type 2, which is 5.27. This gives the number of 12.68. The mean life of account 2 is 11.61, which gives the difference of 1.07 years, as indicated. Parameter estimates are calculated this way in JMP as the service product attribute complexity ranking is an ordinal variable. Some parameter estimates are negative. This indicates that the previous account type had a larger mean life than the current account type. If the service product attribute complexity rankings had tracked directly to the increase in the mean lives of the accounts, there would have been no negative parameters in the regression equation. Since there are some negative parameters, this indicates that the service product attribute complexity rankings did not track directly with the increasing mean lives of the accounts.

Table 17
Analysis of Regression Model and Parameter Estimates
Using Service Product Complexity Attributes

Account Type Code	Avg of Complexity Rankings	Number of Accts	Mean Life	Comparison of Mean Life of Account using All Pairs Tukey-Kramer HSD			Parameter Estimates	Prob > t	Mean Life Based on Parameter Estimates	Difference (Actual Mean vs Parameter Mean)	Test to Determine Whether Parameter Estimates are Significant	
5	5.00	1,048	3.64			E	-0.76	0.2233	4.71	-1.07	F Ratio	436.0586
4	4.33	102	4.40			E	-7.21	<0.0001*	5.46	1.06	Prob > F	<.0001
1	1.33	1,067	6.34			D	6.34	<0.0001*	6.34	0.00		
2	3.00	611	11.61			C	5.27	<0.0001*	12.68	1.07		
3	7.67	668	11.88			C	-4.39	<0.0001*	14.72	2.84		
6	7.67	420	16.47			B	-4.39	<0.0001*	14.72	-1.75		
7	7.00	219	18.04	A			-1.45	0.0629	19.11	1.07		
9	5.33	82	19.49	A			15.85	<0.0001*	20.56	1.07		
		4,217	9.14									

A question that must be addressed is: would a random set of rankings generate a regression model as good as the one generated using the service product attribute complexity rankings? To test this, I did another regression model using the account type code (since it was assigned randomly by the author) as an ordinal ranking as the independent variable and the mean lives of the accounts as the dependent variable. The results of this regression model showed an adjusted R^2 of 40.43%, RMSE of 5.90, an F ratio of 409.8 with a Prob > F of < .0001. These results are comparable, and somewhat better, than the results obtained with the regression model using the service product attribute complexity rankings.

The results of the analysis done on the closed account data set (Table 18) showed an Adjusted R^2 of 26.905% and a RMSE of 5.345. The effects test results showed an F ratio of 172.278 and a Prob > F of < .0001. Table 18 shows the parameter estimates for each checking account type, and these can be interpreted in the same manner as described under the open accounts data set. I ran a regression model in the same manner as described under the open accounts data set using the account type code as an ordinal ranking variable as the independent variable. The results of this model indicated an adjusted R^2 of 27.0 %, RMSE of 5.34, an F ratio of 148.42 with Prob > F of < .0001. Similar to the results described earlier, this parameter was significant (even though assigned randomly) and had a higher Adjusted R^2 than the model using the service product attribute complexity ranking.

Table 18
Analysis of Regression Model and Parameter Estimates
Using Service Product Complexity Attributes

Account Type Code	Avg of Complexity Rankings	Number of Accts	Mean Life	Comparison of Mean Life of Account using All Pairs Tukey-Kramer HSD			Parameter Estimates	Prob > t	Mean Life Based on Parameter Estimates	Difference (Actual Mean vs Parameter Mean)	Test to Determine Whether Parameter Estimates are Significant	
											F Ratio	Prob > F
5	5.00	565	1.98			E	-0.77	0.4331	2.43	-0.45	F Ratio	172.2780
4	4.33	31	2.75			D E	-4.15	< 0.0001 * [*]	3.21	0.46	Prob > F	< 0.0001
1	1.33	1,029	3.68			D	3.68	< 0.0001 * [*]	3.68	0.00		
2	3.00	457	6.91		C		3.23	< 0.0001 * [*]	7.36	0.45		
3	7.67	354	9.78	B			-0.92	0.0712	10.58	0.80		
6	7.67	195	10.75	B			-0.92	0.0712	10.58	-0.17		
7	7.00	138	11.04	B			-3.66	0.0020 * [*]	11.50	0.45		
9	5.33	24	14.70	A			12.72	< 0.0001 * [*]	15.15	0.45		
		2,793	5.58									

These results indicate support for Hypothesis 4, service product attribute complexity positively impacts customer retention, as defined in the study. These results seem to indicate that there is a fairly strong relationship between the type of account, based on its attributes, and customer tenure.

Results of Phase 2

Surveyed Accounts Results

The surveyed accounts consisted of 392 accounts with the same eight account types as noted in the open account data set. The number of surveyed accounts with the mean lives calculated as in the open account data set is shown in Table 19. The mean lives of the account types were tested using a one-way ANOVA test to determine whether the mean lives were statistically the same for all the different account types. Again, the null hypothesis was that the mean lives for all different types of accounts are statistically the same. This hypothesis can be rejected as the results indicated an F ratio of 27.563 and a $\text{Prob} > F$ of $< .0001$. A test was then performed on account mean lives to determine which accounts, if any, have statistically the same mean lives and which accounts had statistically different mean lives. This was performed using SAS JMP 10.0 and the All Pairs, Tukey Kramer HSD test. These results are also shown in Table 19. Interestingly, the surveyed accounts showed a very similar pattern to that of open account data set results when both were sorted in smallest to largest mean life.

Table 19
Analysis of Surveyed Accounts

Account Type Code	Service Product Attribute	Number of Accts	Mean Life	Comparison of Mean Life of Account using All Pairs Tukey-Kramer HSD			Null Hypothesis is Mean Life for all Account Types are the Same		
	Complexity Ranking						F Ratio	Prob > F	
4	4.33	7	3.98			C	D	27.5631	<0.0001
5	5.00	75	4.05				D		
1	1.33	77	6.84				D		
3	7.67	95	11.28		B	C			
2	3.00	49	13.76	A	B				
7	7.00	31	16.64	A					
6	7.67	53	16.87	A					
9	5.33	5	20.85	A					
		392	10.51						

It appears that the “intention to remain” question reports answers that are inconsistent with actual results (Table 20). As stated earlier, the apparent annualized turnover is 13.25%, which – based on my experience and after discussing with the bank CFO – seems reasonable. When totaling the negative responses from the question (answers 1, 2, 3) and assuming all negative commenters will leave the bank, the turnover the bank would experience based on the negative answers (3.23%) is significantly less than the actual turnover (13.25%) seen in the past.

Table 20
Turnover Results Analysis

Account Type	# in Open Acct Data	# in Closed Acct Data	Annualized Turnover	# Accounts in Survey	Number of Negative Responses Regarding Intentions	% Leaving Bank in 3 Years	Annualized Turnover	Difference Between Actual Turnover and Intention to Remain
1	1,067	1,029	19.29%	77	7	9.09	3.03%	16.26%
2	611	457	14.96%	49	6	12.24	4.08%	10.88%
3	668	354	10.60%	95	11	11.58	3.86%	6.74%
4	102	31	6.08%	7	1	14.29	4.76%	1.32%
5	1,048	565	10.78%	75	7	9.33	3.11%	7.67%
6	420	195	9.29%	53	3	5.66	1.89%	7.40%
7	219	138	12.60%	31	3	9.68	3.23%	9.38%
9	82	24	5.85%	5	0	0.00	0.00%	5.85%
Total	4,217	2,793	13.25%	392	38	9.69	3.23%	10.02%

SEM Model

Hypothesis Testing of the Model

The descriptive statistics of the input data are shown in Table 21. In order to more completely understand the interactions and examine the effects of the various constructs on the variable of customer tenure, I utilized a structural equation model approach using JMP 10.0.

The results of the complete model are shown in Table 22. Using similar reasoning as was discussed in assessing the fit of the CFA model, this model fit is adequate. I judged the χ^2/df ratio of 2.91 to be acceptable. The RMSEA value of .0699 also suggests a fair fitting model. The lower 90% CI of RMSEA is .0628 with a p value of $< .0001$, indicating a rejection of the close fit hypothesis. The upper 90% CI of RMSEA is .077, which allows a rejection of the poor fit hypothesis. The SRMR value is .047, which indicates acceptable fit. A final check of the model fit was to examine the correlation residuals. There are 47 residuals out of 210 data points with residuals greater than .1. Fourteen of them were between customer tenure and the various measures. Another 14 related to correlations with power distance indicators.

Table 21
Descriptive Statistics

Var #	Variable Name	M	SD	1	2	3	4	5	6	7
1	Customer Tenure	10.5089	8.2387	1.0000						
	Service Product Attribute									
2	Complexity	5.1876	2.4786	0.2805	1.0000					
3	Power Distance	2.6193	1.2584	0.0340	0.0088	1.0000				
4	Uncertainty Avoidance	6.1668	0.8864	0.0459	0.0366	0.0356	1.0000			
5	Collectivism	4.3083	1.3541	0.1324	-0.0254	0.1405	0.2313	1.0000		
	Service Quality Expectations-									
6	Tangibles	5.8949	0.9571	-0.0849	0.0539	-0.0382	0.2936	0.1114	1.0000	
	Service Quality Expectations-									
7	Intangibles	6.7122	0.6013	-0.0756	0.0428	0.0063	0.2474	0.1279	0.3951	1.0000

Table 22
SEM Model Results

Num Observations	392
Chi-Square	500.1473
Chi-Square DF	172
Chi-Square / Chi-Square DF	2.91
Pr > Chi-Square	<.0001
Standardized RMR (SRMR)	0.047
Adjusted GFI	0.8513
Parsimonious GFI	0.7284
RMSEA Estimate	0.0699
RMSEA Lower 90% CI	0.0628
RMSEA Upper 90% CI	0.077
Probability of Close Fit	<.0001
Bentler Comparative Fit Index	0.9158
Num Correlation Residuals > .10	47

Based on the model fit statistics discussed above, the model was deemed to be adequate. Next, the results of the hypotheses proposed in this paper will be discussed.

Individual Hypothesis Results Based on SEM Model

The first hypothesis presented was that there is a negative relationship between power distance and customer tenure. This hypothesis, H1, was not supported by the results at the .05 level of significance, although the direction of the relationship was as predicted.

Table 23
Hypothesis 1 Results

Hypothesized Direction	Hypothesized +/-	Std Effect	Std Error	t Value	p Value
Power distance => Customer Tenure	—	-0.00892	0.0545	-0.1635	0.8701

Hypothesis 2 was also not supported. The cultural dimension of a person having uncertainty avoidance did not show a significant relationship with customer tenure.

Again, the direction of the relationship was as predicted.

Table 24
Hypothesis 2 Results

Hypothesized Direction	Hypothesized +/-	Std Effect	Std Error	t Value	p Value
Uncertainty Avoidance => Customer Tenure	+	0.0509	0.0566	0.8982	0.3691

Hypothesis 3 dealt with the relationship between the cultural dimension of collectivism and customer tenure. This hypothesis was supported at the .05 level of significance.

Table 25
Hypothesis 3 Results

Hypothesized Direction	Hypothesized +/-	Std Effect	Std Error	t Value	p Value
Collectivism => Customer Tenure	+	0.1615	0.0537	3.0101	0.002612

The relationship between service product attribute complexity and customer tenure was tested in H4. While this hypothesis was tested using simple regression earlier, the SEM results gave a clearer indication of the relationship and allowed the comparison of the level of the effect to customer tenure. The results of the SEM model indicated support for the hypothesis.

Table 26
Hypothesis 4 Results

Hypothesized Direction	Hypothesized +/-	Std Effect	Std Error	t Value	p Value
Service Product Attribute Complexity => Customer Tenure	+	0.2922	0.0456	6.4095	<0.0001

The next set of hypotheses dealt with the relationship of cultural dimensions with the selection of accounts based on service product attribute complexity. Hypothesis 5 stated a negative relationship between power distance and the selection of an account based on service product attribute complexity. H5 was not supported at the .05 level of significance, although the direction of the relationship was as predicted.

Table 27
Hypothesis 5 Results

Hypothesized Direction	Hypothesized +/-	Std Effect	Std Error	t Value	p Value
Power Distance => Service Product Attribute Complexity	-	-0.00279	0.05778	-0.0483	0.9614

Hypothesis 6 stated that there is a negative relationship between uncertainty avoidance and the selection of an account based on service product attribute complexity. This hypothesis was not supported at the .05 level of significance. The direction of the relationship was also not as predicted.

Table 28
Hypothesis 6 Results

Hypothesized Direction	Hypothesized +/-	Std Effect	Std Error	t Value	p Value
Uncertainty Avoidance => Service Product Attribute Complexity	—	0.0517	0.0557	0.09279	0.3534

The final relationship of cultural dimensions tested was collectivism and the selection of an account based on service product attribute complexity. The relationship was hypothesized to be negative. This hypothesis, H7, was not supported, although the direction of the relationship was as predicted.

Table 29
Hypothesis 7 Results

Hypothesized Direction	Hypothesized +/-	Std Effect	Std Error	t Value	p Value
Collectivism => Service Product Attribute Complexity	—	*0.0398	0.0574	-0.6931	0.4883

The final hypothesis to be studied was the relationship between anticipated service quality expectations and customer tenure. Originally, the five factors that make up anticipated service quality expectations were to be averaged together and used as one construct in H8. However, as previously discussed, the five factors originally proposed separated out into two factors, tangibles and intangibles. Therefore, I looked at each separately, although the direction of the relationship was anticipated to be the same as in the original H8.

The results of H8a using the anticipated service quality expectations tangibles indicate support at the .10 level of significance and very close to being significant at the

.05 level. The results of H8b, using the anticipated service quality expectations intangibles, indicate this hypothesis was not supported.

Table 30
Hypothesis 8 Results

Hypothesized Direction	Hypothesized +/-	Std Effect	Std Error	t Value	p Value
Anticipated Service Quality Tangibles => Customer Tenure	—	-0.1196	0.0622	-1.9232	0.0545
Anticipated Service Quality Intangibles => Customer Tenure	—	-0.0589	0.0580	-1.0163	0.3095

Summary of Results

The respondents to the survey represented a fair cross-section of the various types of accounts offered by the bank. The accounts of the respondents exhibited similar patterns of customer tenure and mean lives differentiation when compared to the total population of the open accounts.

The model hypothesized in this study explained (R^2 of customer tenure) 12.58% of the variability in customer tenure. Only one cultural dimension, collectivism, was significant in understanding customer tenure. No cultural dimensions were significant in the selection of products based on service product complexity attributes. Anticipated service quality expectations based on tangibles identified by customers did show an effect on customer tenure.

CHAPTER V

DISCUSSION and CONCLUSIONS

In this study, I looked to understand how various cultural dimensions, power distance, uncertainty avoidance, and collectivism impacted customer tenure in a service organization. I also explored how a customer's anticipated service quality expectations affect customer tenure. Lastly, I investigated how service product attribute complexity of service products influenced customer tenure in a service setting.

In this section, I will discuss possible explanations for the results for both the hypotheses that were supported and those that were not supported. Possible explanations for why the expected results were not found is especially important in that other studies found results, as shown in the literature review, that would support the hypotheses. I will discuss the implications of these results for both theory and practice, reflect on the limitations of the study, and provide possible areas of research regarding pre-engagement traits of customer and customer tenure in a retail setting.

Interpretation of Results

Power distance and its relationship with customer tenure was the first cultural dimension examined in this study. I hypothesized a negative relationship between

customer tenure and power distance; a person high in power distance, expectation and acceptance of power being distributed unequally, will not remain as a customer of a service organization. This research is similar to research done by Lam (2007), which indicated a negative but not significant relationship with brand loyalty. In this research study, the construct “power distance” had a mean of 2.6193 (indicating a low power distance level-nonacceptance of inequality) and a standard deviation of 1.258. This indicates that there is little diversity in this construct over the survey respondents. As noted in the demographic analysis, the respondents were primarily Caucasian (94%) with a median age of 62. The median age of all account holders is 54. The lack of distribution in the power distance construct seems to parallel the lack of diversity in the demographics of the respondents. I ran a model with only power distance as the construct affecting customer tenure, but no significant effect was indicated. Another reason for the lack of diversity in the power distance measurement may be the fact that in the banking industry, the laws and regulations prohibiting any disparate (unequal) treatment between individuals are very strict and the regulators are rigorous in their enforcement of these laws. Prospective account holders understand that unequal treatment is a violation of the law and therefore will not accept it in dealing with a bank. Non-acceptance of inequality regarding ownership of a retail checking account could be something of a precondition to becoming a bank customer.

Power distance was also hypothesized to have a negative relationship with the selection of checking accounts having higher levels of attribute complexity; people high in power distance would select less complex accounts. In this research, there was almost no correlation between power distance and service product attribute complexity.

Uncertainty avoidance was the second cultural dimension examined in this research. Uncertainty avoidance is the extent to which people feel threatened by ambiguity, uncertainty, or vagueness. The construct had a mean of 6.1668 and a standard deviation of .8864, indicating the respondents were all very high in uncertainty avoidance. This again may be explained by the relatively high median age of the respondents. An older demographic may be more risk avoidant, indicating a high uncertainty avoidance factor. The small standard deviation parallels the lack of diversity in the respondent sample. I examined a model where uncertainty avoidance was the only construct with an effect on customer tenure and saw no significant effect. Also, since bank deposits are backed by the Federal Deposit Insurance Corporation, which in turn is backed by a line of credit with the U.S. Treasury, individuals may place monies in banks as a risk-free place to hold liquidity funds. It may be that high uncertainty avoidance is a cultural trait of most people with liquidity accounts (monies to pay daily bills) at banks.

Uncertainty avoidance was hypothesized to be in a negative relationship with the selection of accounts with more service product attribute complexity; the higher the uncertainty avoidance construct, the less complex account the individual would select. However, there was little correlation found between the two and no significant effect was discovered. Uncertainty avoidance may not be a factor in the selection of a bank account since the Truth in Savings law mandates standard disclosures of all terms. The language in this law was heavily researched by the regulatory agencies to allow customers to compare accounts; therefore little uncertainty avoidance exists regarding the perceived complexity of one account to another. Another potential way that uncertainty avoidance is reduced is that account holders know that they can change the type of account at the

bank very easily; so if they are unclear later about the complexity, they are able to change types. This ability to change reduces anxiety in individuals, so therefore it has no impact on account selection.

The third cultural dimension that was included in this study was collectivism, the degree to which an individual puts himself and family first or the group with which he/she identifies first. Based on results from previous research, I was uncertain of the direction of the relationship between collectivism and customer tenure. Experience led me to believe this would be a positive relationship, which it appears to be in the results shown here. People with a higher degree of collectivism exhibit longer customer tenure. It may be that positive word of mouth works with individuals having a higher measure of collectivism, so they might wish to be part of a larger successful group, especially if that positive word of mouth comes from a group with which the individual already identifies.

Collectivism was also examined for a hypothesized relationship with selection of retail checking accounts based on service product attribute complexity. This relationship was hypothesized to be a negative relationship. The correlation between collectivism and service product attribute complexity was very low, indicating that collectivism has little impact on the selection of accounts based on complexity explicitly.

Overall, only one of the cultural dimensions studied in this research was found to have an effect on customer tenure. However, the other two dimensions, power distance and uncertainty avoidance, may be important based on the context of this study, retail checking accounts, in that these cultural dimensions are important in a person even desiring a checking account.

In this research, the study of how service product attribute complexity affects customer tenure was a major focus. As seen in the results of both the open account data set and the closed account data set, the different account types do have different mean lives. In addition, the pattern of the mean lives of the account types showed similar patterns of varying tenure in both data sets. Relative service product attribute complexity showed that the impact of increasing complexity on customer tenure was positive. However, as discussed earlier, there was no cultural dimension showing a significant effect on service product attribute complexity. So while service product attribute complexity does impact customer tenure, what may cause an account holder to pick a specific account based on complexity is not based on the three cultural dimensions examined in this study.

In addition to the questions regarding the constructs in the survey, a question was asked each respondent: The checking account I selected was simple to understand in terms of its features. This was done using a seven-point Likert scale anchored by 1 – Strongly Disagree to 7 – Strongly Agree. The results showed a mean response of 6.37, median of 7, with a standard deviation of .89. Using an ANOVA test with the null hypothesis stating the mean response by account type was statistically the same. The results indicated support for this hypothesis with an F ratio of 1.54 and Prob > F of .1505. This indicates that regardless of the account, account holders responded that they understood the attributes in the accounts they had.

Lastly, I examined the relationship of anticipated service quality expectations and customer tenure. The constructs of anticipated service quality expectations based on tangibles (building, staff appearance, materials associated with the service) and

intangibles (willingness to help, accuracy, etc.) were studied separately in this research. In both cases, I hypothesized that a negative relationship between these constructs and customer tenure would exist; the higher the anticipated expectation, the shorter the customer's tenure with the organization would be. The results indicated the relationship to be significant for tangibles but not for intangibles. A customer who wants to open a retail checking account – which, being a service product is an intangible – looks to find a tangible expression of the potential quality of the account. This might explain those results. If that tangible belief leads to higher expectations but the service quality does not live up to those expectations, the customer is disappointed. When a negative reactional trigger occurs, the customer may decide to change institutions. In looking at the actual results, the mean of the tangible construct is lower than the mean of the intangible construct and has a higher standard deviation, which indicates a wider range of responses. It may be that the customers almost always anticipate the best regarding service quality intangibles from the bank but it does not impact customer tenure. Only the tangibles have a pre-engagement impact on customer tenure, what the customer can see and touch.

Theoretical Implications

The aim of this research was to fill a gap in the literature by examining how pre-engagement factors of various cultural dimensions impacted actual customer tenure, how the pre-engagement factors of anticipated service quality effects actual customer tenure, and how service product attribute complexity impacts actual customer tenure in a retail service provider context.

This study does show that collectivism, based on Hofstede's (2001) definition, does act as a pre-engagement factor to affect actual customer tenure. Past studies that have

dealt with only with post-engagement constructs and pseudo customer tenure constructs (such as intent to remain, positive word of mouth, etc.) should be examined in light of the fact that pre-engagement factors are important as an antecedent to what happens in the business to a retail customer relationship. Future studies regarding customer tenure or constructs looking to act as pseudo measures of customer tenure should recognize that an individual is made up of past experience and traits that impact how the individual reacts in current situations.

Also, this study shows how important it is to measure actual tenure. As shown in the analysis of the intention to remain question, the response is very different and much more favorable than the actual data indicates. This could also lead to results and decisions based on information that does reflect the real-world environment.

This research also shows why not only the relationship between the customer and the service provider is important, but that the service product selected by the customer has an impact on the tenure of the customer with the retail service provider. For studies done in a service provider context, the type of service product used by the customer should be included in the analysis to develop a deeper understanding of the complete relationship between the customer and the retail service provider. Researchers must be sure to include enough customers so that the complete set of all service products are in the research sample.

Service product attribute complexity and its positive effect on customer tenure have an interesting component: what is the limit we should increase complexity of service products before a negative return is reached.

Managerial Implications

This research helps explain why customers who exhibit satisfaction with a retailer still may leave the retailer. The retailer simply did not have a chance to maintain the customer due to his/her selection of the service product provided at initial engagement. Understanding how the selection of service product impacts customer satisfaction and measures previously used to understand behavioral loyalty would help retailers be better able to spend marketing dollars more effectively, for both acquiring and retaining customers. Understanding how customers segment themselves according to their selections could impact the retailer's share of the market; share of customer's wallet; and improve customer lifetime value, which improves shareholder value.

The results of this study indicate that the higher the service product attribute complexity ranking (> 5), the higher customer tenure. The customer is indicating how he/she wishes the relationship with the service provider to evolve. A customer selecting a more complex account is signaling that he/she wishes a longer term relationship. This can be seen as important because the respondents in the survey indicated they understood the complexity of the service product they were using, regardless of the account type they were using. This might lead one to question how different types of service products are presented to the customer at the time of initial contact with the potential customer. Suppose a service provider rewards extra compensation to staff based on the service products delivered and it is easier and faster for the staff member to discuss a less complex product that results in the measured goal (a new customer). Staff members thus may be rewarded for discussing only products that are not increasing shareholder value as much as may be possible. It would be important for all service providers to be sure that

staff members have a complete understanding of all products. It may require a change in the initial presentation to ensure that the customer has a good understanding and awareness of the range of service products available.

One cultural dimension – collectivism – did have an effect on customer tenure. It may be important to the service retailer to determine where a new customer is on the individualistic/collectivistic continuum. This may be done by asking a few questions, for example, on initial contact or through a brief survey for new customers, to help in understanding the customer's potential customer tenure. The collectivism construct could also be used by a service provider that uses survival analysis programs in data mining software to help predict potential customer churn.

In looking at the results of the other cultural dimensions in a retail banking context, one interesting point was the lack of dispersion in the constructs of power distance and uncertainty avoidance. The survey respondents were lower in power distance, indicating non-acceptance of inequality, and high in uncertainty avoidance, indicating non-acceptance of ambiguity. This could be interpreted as these two cultural positions being necessary for an individual to wish to have a retail checking account. If so, is the mandate from the regulators to find ways to have the “unbanked” open a checking account necessary even if culturally they do not wish to? Since low power distance and high uncertainty avoidance seem to exist in most of the bank's population, it may be fruitful for marketing campaigns to target individuals having these cultural beliefs as they may be more likely to wish to have a bank account.

While not part of the official study, it was interesting to note the customers' ages when they first opened accounts (based on bank data). No account types had account

holders with a mean age at opening of less than 35. Based on my experience, this age demographic is a problem for many community banks. Another interesting fact to note was the age of the survey respondents. The mean age of respondents was over 60, yet the mean age of all account holders is 53. When banks or any service provider perform surveys, it is important that the users of the survey data understand the demographics of the respondents compared to the total customer base to be sure that an adequate cross-section of the customer base is captured or they know how the survey respondent demographics do not match the customer base. This is important for community banks or other smaller service providers doing in-house surveys when the staff is not trained in proper statistical analysis or when they are missing the proper software to analyze the results.

The anticipated service quality expectation constructs separated out into tangibles and intangibles. The customers had very high expectations of the intangibles in that they felt the bank staff would be accurate, willing to help, polite, etc. But this did not help explain customer tenure. Only the tangible portion did. Higher anticipated service quality expectation-tangibles lead to lower customer tenure. The more the tangibles indicated high quality, the more the customers expected out of their accounts; when it did not happen, they were disappointed and left. Thus it is apparent that the quality of what the customer sees is also reflected in the products and services delivered. To the customer, one is a reflection of the other.

Lastly, business managers find it very helpful to find ways to predict customer performance. In that light, a regression equation was developed using the survey data with the independent variables of service product attribute complexity, collectivism, and

tangible anticipated service quality expectations with customer tenure as the dependent variable. Because of the small data set, there was no holdout data against which to test the equation or fit statistics against which it could be measured. The results of this equation indicated all independent variables are significant and had an adjusted R^2 of .31. Using this equation with only pre-engagement constructs, a manager would have a good start in understanding potential customer tenure and could bring into the equation other variables such as balances, number of other accounts, etc. to increase the predictability of this equation.

Limitations of the Study

The practical implications of this study should be considered in light of the study's limitations. The data is cross-sectional and limited to one type of service provider (community bank) and one type of service product (retail checking accounts). Additionally, where the bank is located and how it operates may have given rise to a narrow spectrum of cultural diversity.

While there is literature precedent for the expert rater approach (Smither, Barry, & Reilly, 1989), consumer perceptions of relative service product attribute complexity could be different. Future research could establish perceptions in this area.

The demographics of the bank's account holders did not cover the complete range of ages of individuals who can potentially have checking accounts. The data did not include, and therefore surveys were not sent, to account holders currently less than 18 years of age. However, as shown earlier, the ages of the account holders of the bank skewed toward middle and older ages. Also, as noted in the demographic analysis, Caucasian

individuals made up 94% of the respondents. This could have impacted the range of answers in the cultural diversity dimensions.

This study was not done using individual branch locations, so how customer tenure and how cultural dimensions impacted customer tenure by physical location was not studied.

As noted above, this was a cross-sectional study. It may be asked why surveys were not sent to accounts holders who previously closed their account. Base on my experience collecting this data for over seven years, there are basically four reasons why accounts are closed: the first is the account holder passes away; second is the account holder moves; third, the account holder is upset with the bank in some way and leaves; and fourth, the account holder has the account closed by the bank because of failure to comply with bank policies. It is reasonable to assume that only the account holders that move would be willing to respond to a survey such as this in a truthful manner. Therefore, to look at closed accounts correctly, this would have to be a longitudinal survey using the data collected now and placed in the context of closed accounts over a period of years as the accounts do close. This would be beyond the scope of this project.

Future Research

This research expands the need for additional research in pre-engagement factors of cultural diversity. Related to the limitations noted above, expanding the context of the research to other service providers would be very useful as would expanding this research into larger, more diverse banks.

In regard to the banking context, expanding the research to look at the cultural dimensions and service product attribute complexity not just in terms of actual customer

tenure but moving along the continuum of explaining customer lifetime value by including dollar balances maintained in the account and overall customer profitability would be of great importance. In addition, expanding the scope of this research to a longitudinal study to look at cultural differences based on closed accounts, to account for the limitations in obtaining surveys from past accounts holders who have already closed their accounts, might shed more light on customer behavior.

Additional research in the Hofstede (2001) cultural dimensions not used in this study, masculinity and long-term orientation, should be done to examine whether they have an impact on customer tenure. The research could be done using, for example, the Schwartz (1994) cultural dimensions, either separately or the two condensed constructs, to examine whether similar results would be found.

As noted in the managerial implications, power distance and uncertainty avoidance had very little dispersion in measurement. Research regarding the possibility that low power distance and high uncertainty avoidance may explain in part why individuals have a checking account would be very useful, especially because of the regulatory pressures previously discussed.

Research to expand the construct of service product attribute complexity could be important. As noted in the limitation section, consumer perceptions of relative service product attribute complexity could be different. Question that might be researched are: how do these differences manifest themselves? Are they there at all and, if so, how might the antecedents of attribute complexity impact customer tenure? Are there different types of complexities that a customer looks at separately and then intuitively puts together to

generate a single complexity factor? Where does the inflection point exist in terms of increased complexity versus reduced tenure?

In this paper, high uncertainty avoidance was hypothesized to be mitigated by outside factors such as FDIC insurance. How can various cultural traits that may be detrimental to customer tenure or other important business goals be mitigated by outside factors a service provider could control? This could also have a substantial impact on business.

Conclusion

The purpose of this dissertation was to:

- generate a more complete understanding of the culture of an individual and how it relates to customer tenure,
- determine how culture may impact service product selection through service product attribute complexity,
- determine how service product attribute complexity contributes toward customer tenure,
- determine how anticipated service quality expectations relate to customer tenure.

The results of this study showed that:

- the cultural dimension of collectivism does have a positive effect on customer tenure, while power distance and uncertainty avoidance did not show any significant effect on customer tenure;
- the cultural dimensions researched in this study did not have an effect on service product selection through service product attribute complexity;

- service product attribute complexity has a significant effect on customer tenure;
- with anticipated service quality expectations separated into a tangible construct and an intangible construct, the tangible construct indicated a negative effect on customer tenure, while the intangible construct portion showed no effect.

The potential contribution of this paper expanded the research in how pre-engagement factors of culture and anticipated service quality expectations have an effect on a customer's tenure with a retail service provider. It also showed that it is important to place culture as a parameter in constructing theories (Triandis, 1978). There was a discussion regarding the development of methods to identify defection-prone customers and generate a more accurate estimate of customer tenure.

The results of this paper are important in that they expand the knowledge of why customers remain with a service provider. Without customers, no business survives.

REFERENCES

- Aaker, J.L., & Maheswaran, D. (1997). The effect of cultural orientation on persuasion. *Journal of Consumer Research*, 24 (December), 315-328.
- Adler, N.J. (1997). *International dimensions of organizational behavior*. Mason, OH: International Thomson Publishing.
- Aggarwal, P., & McGill, A.L. (2007). Is that car smiling at me? Schema congruity as a basis for evaluating anthropomorphized products. *Journal of Consumer Research*, 34(4), 468-479.
- Alexander, D.L., Lynch Jr, J.G., & Wang, Q. (2008). As time goes by: Do cold feet follow warm intentions for really new versus incrementally new products? *Journal of Marketing Research*, 45(3), 307-319.
- Arts, J.W., Frambach, R.T., & Bijmolt, T.H. (2011). Generalizations on consumer innovation adoption: A meta-analysis on drivers of intention and behavior. *International Journal of Research in Marketing*, 28(2), 134-144.
- Bateson, J. (1979). Why we need service marketing: Conceptual and theoretical developments in marketing, O.C. Ferrell, S.W. Brown, C.W. Lamb (Eds.), Chicago: American Marketing Association.
- Baumann, C., Elliott, G., & Burton, S. (2012). Modeling customer satisfaction and loyalty: Survey data versus data mining. *Journal of Services Marketing*, 26(3), 148-157.
- Bebko, C.P. (2000). Service intangibility and its impact on consumer expectations of service quality. *Journal of Services Marketing*, 14(1), 9-26.
- Bendapudi, N., & Berry, L.L. (1997). Customers' motivations for maintaining relationships with service providers. *Journal of Retailing*, 73(1), 15-37. doi: [http://dx.doi.org/10.1016/S0022-4359\(97\)90013-0](http://dx.doi.org/10.1016/S0022-4359(97)90013-0).
- Berry, J., Poortinga, Y., Segall, M., & Dasen, P. (1992). *Cross-cultural psychology: research and applications*. New York: Cambridge University Press.
- Bhattacharya, C.B., Rao, H., & Glynn, M.A. (1995). Understanding the bond of identification: An investigation of its correlates among art museum members. *The Journal of Marketing*, 59(4), 46-57.
- Bloemer, J., De Ruyter, K., & Wetzels, M. (1999). Linking perceived service quality and service loyalty: A multi-dimensional perspective. *European Journal of Marketing*, 33(11/12), 1082-1106.
- Bolton, R.N., & Drew, J.H. (1991). A multistage model of customers' assessments of service quality and value. *Journal of Consumer Research*, 17(4), 375-384.

- Bolton, R.N., & Lemon, K.N. (1999). A dynamic model of customers' usage of services: Usage as an antecedent and consequence of satisfaction. *Journal of Marketing Research*, 36(2), 171-186.
- Boulding, W., Kalra, A., Staelin, R., & Zeithaml, V.A. (1993). A dynamic process model of service quality: From expectations to behavioral intentions. *Journal of Marketing Research*, 30(1), 7-27.
- Brady, M.K., & Cronin Jr, J.J. (2001). Some new thoughts on conceptualizing perceived service quality: A hierarchical approach. *The Journal of Marketing*, 65(3), 34-49.
- Brennan, K.A., Clark, C.L., & Shaver, P.R. (1998). Self-report measurement of adult attachment. In J.A. Simpson & S.W. Rholes (Ed.), *Attachment Theory and Close Relationships* (pp. 46-76). New York: Guilford Press
- Brewer, P., & Venak, S. (2010). GLOBE practices and values: A case of diminishing marginal utility & quest. *Journal of International Business Studies*, 41(8), 1316-1324.
- Browne, M.W., Cudeck, R., & Bollen, K.A. (1993). Alternative ways of assessing model fit. *Sage Focus Editions*, 154, 136-136.
- Burnham, T., Frels, J., & Mahajan, V. (2003). Consumer switching costs: A typology, antecedents, and consequences. *Journal of the Academy of Marketing Science*, 31(2), 109-126. doi: 10.1177/0092070302250897.
- Buss, A.H. (1988). *Personality: Evolutionary heritage and human distinctiveness*. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Buttle, F. (1996). SERVQUAL: Review, critique, research agenda. *European Journal of Marketing*, 30(1), 8-32.
- Caprar, D.V. (2011). Foreign locals: A cautionary tale on the culture of MNC local employees. *Journal of International Business Studies*, 42(5), 608-628.
- Caruana, A. (2002). Service loyalty: The effects of service quality and the mediating role of customer satisfaction. *European Journal of Marketing*, 36(7/8), 811-828.
- Chakrabarti, R., Gupta-Mukherjee, S., & Jayaraman, N. (2008). Mars-Venus marriages: Culture and cross-border M&A. *Journal of International Business Studies*, 40(2), 216-236.
- Chandler, J., & Schwarz, N. (2010). Use does not wear ragged the fabric of friendship: Thinking of objects as alive makes people less willing to replace them. *Journal of Consumer Psychology*, 20(2), 138.
- Chase, R.B. (1981). The customer contact approach to services: Theoretical bases and practical extensions. *Operations Research*, 29(4), 698-706.
- Christy, R., Oliver, G., & Penn, J. (1996). Relationship marketing in consumer markets. *Journal of Marketing Management*, 12(1-3), 175-187.
- Chui, A.C., Lloyd, A.E., & Kwok, C.C. (2002). The determination of capital structure: Is national culture a missing piece to the puzzle? *Journal of International Business Studies*, 33(1), 99-127.
- Cicchetti, D.V. (1994). Guidelines, criteria, and rules of thumb for evaluating normed and standardized assessment instruments in psychology. *Psychological Assessment*, 6(4), 284-290. doi: 10.1037/1040-3590.6.4.284.
- Clark, T. (1990). International marketing and national character: A review and proposal for an integrative theory. *The Journal of Marketing*, 54(4), 66-79.
- Coye, R.W. (2004). Managing customer expectations in the service encounter. *International Journal of Service Industry Management*, 15(1), 54-71.

- Craig, C.S., & Douglas, S.P. (2006). Beyond national culture: Implications of cultural dynamics for consumer research. *International Marketing Review*, 23(3), 322-342.
- Crosby, L.A. (1991). Building and maintaining quality in the service relationship. In S.W. Brown, Gummesson, E., Edvardsson, B. & Gustavsson, B. (Ed), *Service Quality: Multidisciplinary and Multinational Perspectives* (pp. 269-287). Lexington, MA: Lexington Books.
- Crosby, L.A., Evans, K.R., & Cowles, D. (1990). Relationship quality in services selling: An interpersonal influence perspective. *The Journal of Marketing*, 54(3), 68-81.
- Dawar, N., Parker, P.M., & Price, L.J. (1996). A cross-cultural study of interpersonal information exchange. *Journal of International Business Studies*, 27(3), 497-516.
- de Mooij, M., & Hofstede, G. (2002). Convergence and divergence in consumer behavior: Implications for international retailing. *Journal of Retailing*, 78(1), 61-69.
- de Mooij, M., & Hofstede, G. (2011). Cross-cultural consumer behavior: A review of research findings. *Journal of International Consumer Marketing*, 23(3-4), 181-192.
- De Wulf, K., Odekerken-Schröder, G., & Iacobucci, D. (2001). Investments in consumer relationships: A cross-country and cross-industry exploration. *The Journal of Marketing*, 65(4), 33-50.
- Donthu, N., & Yoo, B. (1998). Cultural influences on service quality expectations. *Journal of Service Research*, 1(2), 178-186.
- Dorsch, M.J., Swanson, S.R., & Kelley, S.W. (1998). The role of relationship quality in the stratification of vendors as perceived by customers. *Journal of the Academy of Marketing Science*, 26(2), 128-142.
- Edward, M., & Sahadev, S. (2011). Role of switching costs in the service quality, perceived value, customer satisfaction and customer retention linkage. *Asia Pacific Journal of Marketing and Logistics*, 23(3), 327-345.
- Furrer, O., Liu, B.S.-C., & Sudharshan, D. (2000). The relationships between culture and service quality perceptions basis for cross-cultural market segmentation and resource allocation. *Journal of Service Research*, 2(4), 355-371.
- Gallese, V., & Goldman, A. (1998). Mirror neurons and the simulation theory of mind-reading. *Trends in Cognitive Sciences*, 2(12), 493-501.
- Garbarino, E., & Johnson, M.S. (1999). The different roles of satisfaction, trust, and commitment in customer relationships. *Journal of Marketing*, 63(2), 70-87. doi: 10.2307/1251946.
- Grönroos, C. (1978). A service oriented approach to marketing of service. *European Journal of Marketing*, 5, 588-601.
- Grönroos, C. (1982). Strategic management and marketing in the service sector. *Helsingfors: Swedish School of Economics and Business Administration*, 10(2), 27-32.
- Grönroos, C. (1984). A service quality model and its marketing implications. *European Journal of Marketing*, 18(4), 36-44.
- Grönroos, C., & Shostack, G.L. (1983). *Strategic management and marketing in the service sector*: Cambridge, MA: Marketing Science Institute.
- Guiso, L., Sapienza, P., & Zingales, L. (2009). Cultural biases in economic exchange? *The Quarterly Journal of Economics*, 124(3), 1095-1131.
- Gundlach, G.T., Achrol, R.S., & Mentzer, J.T. (1995). The structure of commitment in exchange. *The Journal of Marketing*, 59(1), 78-92.

- Gupta, S., & Lehmann, D.R. (2003). Customers as assets. *Journal of Interactive Marketing, 17*(1), 9-24.
- Gustafsson, A., Johnson, M.D., & Roos, I. (2005). The effects of customer satisfaction, relationship commitment dimensions, and triggers on customer retention. *Journal of Marketing, 69*(4), 210-218.
- Gwinner, K., Gremler, D., & Bitner, M. (1998). Relational benefits in services industries: The customer's perspective. *Journal of the Academy of Marketing Science, 26*(2), 101-114. doi: 10.1177/0092070398262002.
- Hart, P.M., Jones, S.R., & Royne, M.B. (2013). The human lens: How anthropomorphic reasoning varies by product complexity and enhances personal value. *Journal of Marketing Management, 29*(1-2), 105-121.
- Hennig-Thurau, T., Gwinner, K.P., & Gremler, D.D. (2002). Understanding relationship marketing outcomes an integration of relational benefits and relationship quality. *Journal of Service Research, 4*(3), 230-247.
- Hoeffler, S. (2003). Measuring preferences for really new products. *Journal of Marketing Research, 40*(4), 406-420. doi: 10.2307/30038875.
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. London: Sage.
- Hofstede, G. (1984). Cultural dimensions in management and planning. *Asia Pacific Journal of Management, 1*(2), 81-99.
- Hofstede, G.H. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations*: London: Sage.
- Hofstede, G., Hofstede, G.J., & Minkov, M. (1991). *Cultures and organizations: Software of the mind* (Vol. 2). London: McGraw-Hill.
- Hu, L.-T., & Bentler, P.M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6*(1), 1-55.
- James, D.L. (1995). *The Executive guide to Asian-Pacific communications*. Australia: Allen & Unwin.
- Jamieson, L.F., & Bass, F.M. (1989). Adjusting stated intention measures to predict trial purchase of new products: A comparison of models and methods. *Journal of Marketing Research, 26*(3), 336-345.
- Jones, T.O., & Sasser, W.E. (1995). Why satisfied customers defect. *Harvard Business Review, 73*(6), 88-91.
- Jun, M., & Cai, S. (2001). The key determinants of internet banking service quality: A content analysis. *International Journal of Bank Marketing, 19*(7), 276-291.
- Kamakura, W.A., Mittal, V., De Rosa, F., & Mazzon, J.A. (2002). Assessing the service-profit chain. *Marketing Science, 21*(3), 294-317.
- Kassarjian, H.H., & Sheffet, M.J. (1991). Personality and consumer behavior: An update. In Kassarjian, H.H. and T.S Robertson (Eds.), *Perspective in consumer behavior, 4th ed.* New Jersey: Prentice Hall
- Kim, U.E., Triandis, H.C., Kâğitçibaşı, Ç.E., Choi, S.-C.E., & Yoon, G.E. (1994). *Individualism and collectivism: Theory, method, and applications*. Thousand Oaks, CA: Sage Publications, Inc.

- Kirkman, B.L., Lowe, K.B., & Gibson, C.B. (2006). A quarter century of culture's consequences: A review of empirical research incorporating Hofstede's cultural values framework. *Journal of International Business Studies*, 37(3), 285-320.
- Kluckhohn, C. (1951). *The study of culture*. Stanford CA: Stanford University Press.
- Koopman, P.L., Den Hartog, D.N., Konrad, E., & al, e. (1999). National culture and leadership profiles in Europe: Some results from the GLOBE study. *European Journal of Work and Organizational Psychology*, 8(4), 503-520.
- Kroeber, A.L., & Parsons, T. (1958). The concepts of culture and of social system. *American Sociological Review*, 23(5), 582-583.
- Kwok, C.C., & Tadesse, S. (2006). National culture and financial systems. *Journal of International Business Studies*, 37(2), 227-247.
- Ladhari, R., Ladhari, I., & Morales, M. (2011). Bank service quality: comparing Canadian and Tunisian customer perceptions. *The International Journal of Bank Marketing*, 29(3), 224-246. doi: <http://dx.doi.org/10.1108/02652321111117502>.
- Ladhari, R., Pons, F., Bressolles, G., & Zins, M. (2011). Culture and personal values: How they influence perceived service quality. *Journal of Business Research*, 64(9), 951-957.
- Lam, D. (2007). Cultural influence on proneness to brand loyalty. *Journal of International Consumer Marketing*, 19(3), 7-21.
- Lewis, R.C., & Booms, B.H. (1983). The marketing aspects of service quality. *Emerging perspectives on services marketing*, 65(4), 99-107.
- Liu, B.S.-C., Furrer, O., & Sudharshan, D. (2001). The relationships between culture and behavioral intentions toward services. *Journal of Service Research*, 4(2), 118-129.
- Liu, R.R., & McClure, P. (2001). Recognizing cross-cultural differences in consumer complaint behavior and intentions: An empirical examination. *Journal of Consumer Marketing*, 18(1), 54-75.
- Malai, V., & Speece, M. (2005). Cultural impact on the relationship among perceived service quality, brand name value, and customer loyalty. *Journal of International Consumer Marketing*, 17(4), 7-39.
- Malhotra, N.K., & McCort, J.D. (2001). A cross-cultural comparison of behavioral intention models: Theoretical consideration and an empirical investigation. *International Marketing Review*, 18(3), 235-269.
- Manski, C.F. (1990). The use of intentions data to predict behavior: A best-case analysis. *Journal of the American Statistical Association*, 85(412), 934-940. doi: 10.2307/2289590.
- Mende, M., & Bolton, R.N. (2011). Why attachment security matters how customers' attachment styles influence their relationships with service firms and service employees. *Journal of Service Research*, 14(3), 285-301.
- Miller, J.A. (1977). "Studying satisfaction, modifying models, eliciting expectations, posing problems, and making meaningful measurements." in *Conceptualization and Measurement of Consumer Satisfaction and Dissatisfaction*, H. Keith Hunt, ed. Bloomington, IN: School of Business, Indiana University, 72-91.
- Miller, R.E., Hardgrave, B.C., & Jones, T.W. (2013). Iss-Qual: A measure of service quality for the information systems function. *Information Systems Management*, (in press).

- Milner, L.M., Fodness, D., & Speece, M.W. (1993). Hofstede's research on cross-cultural work-related values: Implications for consumer behavior. *European Advances in Consumer Research*, 1, 70-76.
- Mittal, V., & Kamakura, W.A. (2001). Satisfaction, repurchase intent, and repurchase behavior: Investigating the moderating effect of customer characteristics. *Journal of Marketing Research*, 38(1), 131-142. doi: 10.2307/1558577.
- Morgan, R.M., & Hunt, S.D. (1994). The commitment-trust theory of relationship marketing. *The Journal of Marketing*, 58(3), 20-38.
- Morwitz, V.G., & Schmittlein, D. (1992). Using segmentation to improve sales forecasts based on purchase intent: Which "intenders" actually buy? *Journal of Marketing Research*, 29(4), 391-405.
- Odekerken-Schröder, G., De Wulf, K., & Schumacher, P. (2003). Strengthening outcomes of retailer-consumer relationships: The dual impact of relationship marketing tactics and consumer personality. *Journal of Business Research*, 56(3), 177-190.
- Oliver, R.L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17(4), 460-469.
- Palmatier, R.W., Scheer, L.K., Evans, K.R., & Arnold, T.J. (2008). Achieving relationship marketing effectiveness in business-to-business exchanges. *Journal of the Academy of Marketing Science*, 36(2), 174-190.
- Parasuraman, A., Berry, L., & Zeithaml, V. (1991). Refinement and reassessment of the SERVQUAL scale. *Journal of Retailing*, 67, 420-450.
- Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1985). A conceptual model of service quality and its implications for future research. *The Journal of Marketing*, 49(4), 41-50.
- Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1988). Servqual: A multiple-item scale for measuring consumer perc. *Journal of Retailing*, 64(1), 12.
- Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1994). Reassessment of expectations as a comparison standard in measuring service quality: Implications for further research. *The Journal of Marketing*, 58(1), 111-124.
- Parish, J.T., & Holloway, B.B. (2010). Consumer relationship proneness: A reexamination and extension across service exchanges. *The Journal of Services Marketing*, 24(1), 61-73.
- Patterson, P.G., & Smith, T. (2003). A cross-cultural study of switching barriers and propensity to stay with service providers. *Journal of Retailing*, 79(2), 107-120.
- Pfeifer, P.E., Haskins, M.E., & Conroy, R.M. (2005). Customer lifetime value, customer profitability, and the treatment of acquisition spending. *Journal of Managerial Issues*, 17(1), 11-25.
- Ravitz, P., Maunder, R., Hunter, J., Sthankiya, B., & Lancee, W. (2010). Adult attachment measures: A 25-year review. *Journal of Psychosomatic Research*, 69(4), 419-432. doi: 10.1016/j.jpsychores.2009.08.006.
- Reinartz, W.J., & Kumar, V. (2003). The impact of customer relationship characteristics on profitable lifetime duration. *Journal of Marketing*, 67(1), 77-99. doi: 10.2307/30040512.

- Reinartz, W.J., & Vijay, K. (2000). On the profitability of long-life customers in a noncontractual setting: An empirical investigation and implications for marketing. *The Journal of Marketing*, 64(4), 17-35.
- Reynolds, K.E., & Beatty, S.E. (1999). Customer benefits and company consequences of customer-salesperson relationships in retailing. *Journal of Retailing*, 75(1), 11-32.
- Rokeach, M. (1968). *Beliefs, attitudes and values: A theory of organization and change*. San Francisco: Jossey-Bass.
- Roos, I. (1999). Switching processes in customer relationships. *Journal of Service Research*, 2(1), 68-85.
- Roos, I., Edvardsson, B., & Gustafsson, A. (2004). Customer switching patterns in competitive and noncompetitive service industries. *Journal of Service Research*, 6(3), 256-271.
- Rust, R.T., Kumar, V., & Venkatesan, R. (2011). Will the frog change into a prince? Predicting future customer profitability. *International Journal of Research in Marketing*, 28(4), 281-294.
- Rust, R.T., & Oliver, R.L. (1994). *Service quality: Insights and managerial implication from the frontier*. New York: Sage Publications.
- Rust, R.T., Zeithaml, V.A., & Lemon, K.N. (2001). *Driving customer equity: How customer lifetime value is reshaping corporate strategy*: SimonandSchuster. com.
- Sasser, W.E., Olsen, R.P., & Wyckoff, D.D. (1978). *Management of service operations: Text, cases, and readings*: Boston, MA: Allyn and Bacon.
- Schneider, B., & Bowen, D. (1995). *Winning the service game*. Boston, MA: Harvard Business School Press.
- Schuler, R.S., & Rogovsky, N. (1998). Understanding compensation practice variations across firms: The impact of national culture. *Journal of International Business Studies*, 29(1), 159-177.
- Schumann, J.H., Wunderlich, N.V., & Zimmer, M.S. (2012). Culture's impact on customer motivation to engage in professional service enactments. *Schmalenbach Business Review*, 64(2), 141-165.
- Schwartz, S.H. (1994). *Beyond individualism/collectivism: New cultural dimensions of values*. Thousand Oaks, CA: Sage Publications, Inc.
- Sekaran, U. (1983). Methodological and theoretical issues and advancements in cross-cultural research. *Journal of International Business Studies*, 14(2), 61-73.
- Shankarmahesh, M.N., Ford, J.B., & LaTour, M.S. (2003). Cultural dimensions of switching behavior in importer-exporter relationships. *Academy of Marketing Science Review*, 3, 1-17.
- Shao, L., Kwok, C.C., & Guedhami, O. (2009). National culture and dividend policy. *Journal of International Business Studies*, 41(8), 1391-1414.
- Sheppard, B.H., Hartwick, J., & Warshaw, P.R. (1988). The theory of reasoned action: A meta-analysis of past research with recommendations for modifications and future research. *Journal of Consumer Research*, 15(3), 325-343.
- Shim, S., & Gehrt, K.C. (1996). Hispanic and native American adolescents: An exploratory study of their approach to shopping. *Journal of Retailing*, 72(3), 307-324.
- Sirdeshmukh, D., Singh, J., & Sabol, B. (2002). Consumer trust, value, and loyalty in relational exchanges. *Journal of Marketing*, 66(1), 15-37.

- Sitzia, S., & Zizzo, D.J. (2011). Does product complexity matter for competition in experimental retail markets? *Theory and Decision*, 70(1), 65-82.
- Sivakumar, K., & Nakata, C. (2001). The stampede toward Hofstede's framework: avoiding the sample design pit in cross-cultural research. *Journal of International Business Studies*, 32(3), 555-574.
- Smith, J.B. (1998). Buyer-seller relationships: Similarity, relationship management, and quality. *Psychology & Marketing*, 15(1), 3-21.
- Smither, J.W., Barry, S.R., & Reilly, R.R. (1989). An investigation of the validity of expert true score estimates in appraisal research. *Journal of Applied Psychology*, 74(1), 143-151. doi: 10.1037/0021-9010.74.1.143.
- Soares, A.M., Farhangmehr, M., & Shoham, A. (2007). Hofstede's dimensions of culture in international marketing studies. *Journal of Business Research*, 60(3), 277-284.
- Steenkamp, J.-B.E. (2001). The role of national culture in international marketing research. *International Marketing Review*, 18(1), 30-44.
- Steenkamp, J.-B.E., Hofstede, F.T., & Wedel, M. (1999). A cross-national investigation into the individual and national cultural antecedents of consumer innovativeness. *The Journal of Marketing*, 63(2), 55-69.
- Straughan, R.D., & Albers-Miller, N.D. (2001). An international investigation of cultural and demographic effects on domestic retail loyalty. *International Marketing Review*, 18(5), 521-541.
- Stulz, R.M., & Williamson, R. (2003). Culture, openness, and finance. *Journal of Financial Economics*, 70(3), 313-349.
- Sundar, S.S. (2004). Loyalty to computer terminals: Is it anthropomorphism or consistency? *Behaviour & Information Technology*, 23(2), 107-118.
- Sureshchandar, G., Rajendran, C., & Anantharaman, R. (2002). Determinants of customer-perceived service quality: A confirmatory factor analysis approach. *Journal of Services Marketing*, 16(1), 9-34.
- Teas, R.K. (1993). Expectations, performance evaluation, and consumers' perceptions of quality. *The Journal of Marketing*, 57(4), 18-34.
- Triandis, H.C. (1978). Some universals of social behavior. *Personality and Social Psychology Bulletin*, 4(1), 1-16.
- Triandis, H.C. (1989). The self and social behavior in differing cultural contexts. *Psychological Review*, 96(3), 506.
- Triandis, H.C. (1994). *Culture and social behavior*: New York: McGraw-Hill Book Company.
- Triandis, H.C. (1995). *Individualism & collectivism*. Boulder, CO: Westview Press.
- Triandis, H.C., Bontempo, R., Villareal, M.J., Asai, M., & Lucca, N. (1988). Individualism and collectivism: Cross-cultural perspectives on self-ingroup relationships. *Journal of Personality and Social Psychology*, 54(2), 323.
- Triandis, H.C., McCusker, C., Betancourt, H., Iwao, S., Leung, K., Salazar, J.M., & Zaleski, Z. (1993). An etic-emic analysis of individualism and collectivism. *Journal of Cross-Cultural Psychology*, 24(3), 366-383.
- Vargo, S.L., & Lusch, R.F. (2004). Evolving to a new dominant logic for marketing. *Journal of Marketing*, 68(1), 1-17.

- Verhoef, P.C. (2003). Understanding the effect of customer relationship management efforts on customer retention and customer share development. *Journal of Marketing*, 67(4), 30-45.
- Walsh, G., & Mitchell, V.W. (2010). The effect of consumer confusion proneness on word of mouth, trust, and customer satisfaction. *European Journal of Marketing*, 44(6), 838-859.
- Ward, T., & Dagger, T.S. (2007). The complexity of relationship marketing for service customers. *Journal of Services marketing*, 21(4), 281-290.
- Waytz, A., Morewedge, C.K., Epley, N., Monteleone, G., Gao, J.-H., & Cacioppo, J.T. (2010). Making sense by making sentient: Effectance motivation increases anthropomorphism. *Journal of Personality and Social Psychology*, 99(3), 410-435. doi: 10.1037/a0020240.
- Webb, D. (2000). Understanding customer role and its importance in the formation of service quality expectations. *Service Industries Journal*, 20(1), 1-21.
- Wen, C., Chen, C., & Qianpin, L. (2012). Customer lifetime value: A review. *Social Behavior & Personality: An International Journal*, 40(7), 1057-1064. doi: 10.2224/sbp.2012.40.7.1057.
- Wheaton, B., Muthén, B., Alwin, D.F., & Summers, G.F. (1977). Assessing reliability and stability in panel models. *Sociological Methodology*, 8, 84-136. doi: 10.2307/270754.
- Wood, S.L., & Moreau, C.P. (2006). From fear to loathing? How emotion influences the evaluation and early use of innovations. *Journal of Marketing*, 70(3), 44-57. doi: 10.2307/30162100.
- Woodruff, R.B. (1997). Customer value: The next source for competitive advantage. *Journal of the Academy of Marketing Science*, 25(2), 139-153.
- Yeniurt, S., & Townsend, J.D. (2003). Does culture explain acceptance of new products in a country? An empirical investigation. *International Marketing Review*, 20(4), 377-396.
- Yoo, B., Donthu, N., & Lenartowicz, T. (2011). Measuring Hofstede's five dimensions of cultural values at the individual level: Development and validation of CVSCALE. *Journal of International Consumer Marketing*, 23(3-4), 193-210.
- Youngdahl, W.E., Kellogg, D.L., Nie, W., & Bowen, D.E. (2003). Revisiting customer participation in service encounters: does culture matter? *Journal of Operations Management*, 21(1), 109-120.
- Zeithaml, V.A. (1988). Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. *The Journal of Marketing*, 52(3), 2-22.
- Zeithaml, V.A. (2000). Service quality, profitability, and the economic worth of customers: What we know and what we need to learn. *Journal of the Academy of Marketing Science*, 28(1), 67-85.
- Zeithaml, V.A., & Berry, L.L. (1993). The nature and determinants of customer expectations of service. *Journal of the Academy of Marketing Science*, 21(1), 1-12.
- Zeithaml, V.A., Berry, L.L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *The Journal of Marketing*, 60(2), 31-46.
- Zeithaml, V.A., Parasuraman, A., & Berry, L.L. (1985). Problems and strategies in services marketing. *The Journal of Marketing*, 49(2), 33-46.

- Zhang, J., Beatty, S.E., & Walsh, G. (2008). Review and future directions of cross-cultural consumer services research. *Journal of Business Research*, 61(3), 211-224.
- Zhang, Y., & Gelb, B.D. (1996). Matching advertising appeals to culture: The influence of products' use conditions. *Journal of Advertising*, 25(3), 29-46.

APPENDICES

Appendix 1. Measures for the cultural dimensions (Yoo et al., 2011)

Power Distance

1. People in higher positions should make most decisions without consulting people in lower positions.
2. People in higher positions should not ask the opinions of people in lower positions too frequently.
3. People in higher positions should avoid social interaction with people in lower positions.
4. People in lower positions should not disagree with decisions by people in higher positions.
5. People in higher positions should not delegate important tasks to people in lower positions.

Uncertainty Avoidance

1. It is important to have instructions spelled out in detail so that I always know what I am supposed to do.
2. It is important to closely follow instructions and procedures.
3. Rules and regulations are important because they inform me of what is expected of me.
4. Standardized work procedures are helpful.
5. Instructions for operations are helpful.

Collectivism

1. Individuals should sacrifice self-interest for the group.
2. Individuals should stick with the group even through difficulties.
3. Group welfare is more important than individual rewards.
4. Group success is more important than individual success.
5. Individuals should only pursue their goals after considering the welfare of the group.
6. Group loyalty should be encouraged even if individual goals suffer.

Appendix 2. Expectation Measures

These were derived from the SERVQUAL measures developed for the SERVQUAL model but changed to substitute the term banking institution for “excellent banking institution.” The verbiage used in the survey is as follows.

Please think back to when you opened your first checking account. Placing yourself at that time, what would be your response to the following statements about service expectations?

Tangibles

1. I believe that a banking institution should have the most modern state of the art equipment and technology.
2. The physical buildings at a banking institution, both inside and out, should be visually appealing.
3. The staff of a banking institution should be well dressed and appear neat.
4. The materials associated with the service (such as pamphlets and statements) will be visually appealing in a banking institution.

Reliability

1. When a banking institution promises to do something by certain time, they will do so.
2. When customers have a problem, a banking institution will be sympathetic and reassuring.
3. A banking institution will perform the service right the first time.
4. A banking institution will maintain their records accurately.

Responsiveness

1. The staff of a banking institution will inform customers exactly when the services will be performed.
2. The staff of a banking institution will always be willing to help customers.
3. The staff of a banking institution will never be too busy to respond to customer requests.

Assurance

1. Customers should be able to trust the staff of a banking institution.
2. Customers of a banking institution will feel safe in handling their transactions with the staff.
3. The staff of a banking institution should be polite.

4. The staff of a banking institution will have the knowledge to answer customer questions.

Empathy

1. A banking institution will have staff who give customers personal attention.
2. The staff of a banking institution will understand the needs of the customers.
3. A banking institution will have the customers' best interest at heart.
4. A banking institution will have operating hours convenient to all their customers.

Demographics and Other Questions Asked

Gender: Male / Female

Race: White or Caucasian / African American / Hispanic / Asian / Native American / Other

Your age in years: _____

Number of years you have had this checking account at the bank: _____

Assuming that you don't move to another city, how likely is it that you will still have this account in 3 years?

___ Very unlikely ___ Mostly unlikely ___ Somewhat Unlikely

___ Unknown ___ Somewhat Likely ___ Mostly likely ___ Very Likely

Appendix 3. Truth in Savings Disclosures Used to Rank Service Product Attribute Complexity

Truth in Savings Disclosures

Account Type 1

Minimum Balance to Open Account – The minimum deposit to open this account is \$100

No monthly service charge

No minimum balance requirement

Statement only

Account Type 2

Minimum Balance to Open Account – The minimum deposit to open this account is \$100

A service charge fee of \$5.00 will be charged.

Account Type 3

Account is exclusively for individuals 55 and older

Minimum Balance to Open Account – The minimum deposit to open this account is \$500

Rate information – Your interest and annual percentage yield may change.

Frequency of rate changes – We may change the interest rate on your account at any time.

Determination of rate – At our discretion, we may change the interest rate on your account.

Compounding and crediting frequency – Interest will be compounded every month. Interest will be credited to your account monthly.

Daily balance computation method – We use the daily balance method to calculate the interest on your account. This method applies a daily periodic rate to the principal in the account every day.

Minimum balance to obtain the annual percentage yield disclosed – A minimum balance of \$500 must be maintained in the account each day to obtain the disclosed annual percentage yield.

Accrual of interest on noncash deposits - Interest begins to accrue on the first business day after the banking day you deposit noncash items.

Minimum balance to avoid imposition of fees – A minimum balance fee of \$8.00 will be imposed every statement cycle if the balance in the account falls below \$500 any day of the cycle.

Effect of closing an account – If you close your account before interest is credited, you will not receive the accrued interest.

Other benefits: One box of checks free each order, free fax service (local only), 50% discount on safe deposit box, free Travelers checks (single signature only), no annual fee on ATM/ Debit cards, free money orders and Cashier's Checks.

Account Type 4

Minimum Balance to Open Account – The minimum deposit to open this account is \$100

No monthly service charge

No minimum balance

Requires monthly statements to be received by e-Statements

First 250 monthly transactions are free then \$.25 per additional transaction.

Account Type 5

Minimum Balance to Open Account – The minimum deposit to open this account is \$100

No monthly service charge

No minimum balance

Requires monthly statements to be received by e-Statements

Account Type 6

Minimum Balance to Open Account – The minimum deposit to open this account is \$500

Minimum balance to avoid imposition of fees – A minimum balance fee of \$7.00 will be imposed every statement cycle if the balance in the account falls below \$500 any day of the cycle.

Account Type 7

Minimum Balance to Open Account – The minimum deposit to open this account is \$1,500

Rate information – Your interest and annual percentage yield may change.

Frequency of rate changes – We may change the interest rate on your account at any time.

Determination of rate – At our discretion, we may change the interest rate on your account.

Compounding and crediting frequency – Interest will be compounded every month. Interest will be credited to your account monthly.

Daily balance computation method – We use the daily balance method to calculate the interest on your account. This method applies a daily periodic rate to the principal in the account every day.

Minimum balance to obtain the annual percentage yield disclosed – A minimum balance of \$1,500 must be maintained in the account each day to obtain the disclosed annual percentage yield.

Accrual of interest on noncash deposits - Interest begins to accrue on the first business day after the banking day you deposit noncash items.

Minimum balance to avoid imposition of fees – A minimum balance fee of \$10.00 will be imposed every statement cycle if the balance in the account falls below \$1,500 any day of the cycle.

Effect of closing an account – If you close your account before interest is credited, you will not receive the accrued interest.

Account Type 8

Minimum Balance to Open Account – The minimum deposit to open this account is \$100

Fees- A transaction fee of \$.50 will be charged for each transaction. This fee will not apply if you have an electronic deposit to or withdrawal from this account.

No transaction charge for ATM or debit card.

Account Type 9

Minimum Balance to Open Account – The minimum deposit to open this account is \$100

Fees- A service charge fee of \$8.00 will be charged each statement cycle.

The following services are provided at discount rates: One box of checks at discounted rate each order, 50% discount rate on safe deposit box, free traveler's checks (single signature only)

VITA

Philip W. McMahan

Candidate for the Degree of

Doctor of Philosophy

Thesis: HOW PRE-ENGAGEMENT FACTORS AND SERVICE PRODUCT
COMPLEXITY IMPACT CUSTOMER RETENTION BY RETAILERS

Major Field: DOCTOR OF PHILOSOPHY

Biographical:

Education:

Will complete the requirements for the Doctor of Philosophy in Business at
Oklahoma State University, Stillwater, Oklahoma in December, 2014.

Completed the requirements for the Master of Business Administration at
Southern Methodist University, Dallas, Texas in 1982.

Completed the requirements for the Bachelor of Science in Industrial
Engineering at Oklahoma State University, Stillwater, Oklahoma in 1977.

Experience:

1982-2012 Commercial banking with last 10 years as President of the First
National Bank in Altus, Altus, Oklahoma

1977-1980 Manufacturing Engineering, Texas Instruments Inc., Dallas, TX

Professional Memberships:

American Institute of Certified Public Accountants

Oklahoma Society of Certified Public Accountants

Presentations:

Presented paper at the 2013 EDBA Doctoral Consortium

Presented paper at the 2014 EDBA Doctoral Consortium