

## ARE RETAIL BANKS SATISFYING THEIR CUSTOMERS IN COSTA RICA?

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### ABSTRACT

*Retail banks serving ethnically diverse customer bases are challenged to measure up to differing perceptions of service quality. While there is existing research about customer satisfaction and service quality in the banking industry around the world, there are no clear conclusions as to the most important service quality dimensions for satisfying bank customers. Moreover, there is little published work about the similarities or differences with which ethnically diverse customers view the service aspect of retail banking. This study examines the perceptions of four specific ethnic groups about how service quality dimensions contribute to their satisfaction with retail banking in Costa Rica. Costa Rica was a logical research location given the large number of expatriates living and working there as well as its own ethnically diverse citizenry. We find that as a group ten service quality dimensions have a moderate positive correlation with customer satisfaction. Each of the four ethnic groups showed significant differences in their perceptions of the importance of each dimension to their satisfaction. In fact, among the four groups, no commonalities existed in how they ranked their three most important dimensions. The findings in this study provide targeted information for bank managers and others working to improve satisfaction levels of specific groups of the ethnically diverse customer population in Costa Rica and elsewhere.*

### INTRODUCTION

The banking sector experienced rapid growth and competitiveness in light of regulatory changes in large and small markets around the world during the 1980s and 1990s. Correspondingly, the number of global bank mergers during the past ten years has risen. It is now commonplace for banks to traverse state regional and national borders, serving consumer groups with various financial needs, expectations, and perceptions. It is incumbent on banks and their managers to put their best foot forward when deciding on the strategies they will use to generate repeat business, ramp up customer loyalty, and increase profitability, all with an eye on customer satisfaction.

Research shows that some consumers will pay higher fees demanded by large banks because they perceive a higher return on service quality. Others, however, perceive personalization as their key benefit and would rather do business with smaller local banks which charge lower fees (DeYoung, 1999). Since the 1990s, banks have begun to implement new strategies for reducing fixed costs, investing in high-tech infrastructures, instituting innovative products, and introducing service quality programs (Newman, 2001). Retail banks have been recent “victims” of globalization; corporations like Citicorp, American Express, and HSCB Holdings are constantly striving to introduce innovative approaches for promoting trust and sincerity throughout their global customer networks (White, 1998). By taking advantage of emerging trends, industry members can better meet consumer demands when reevaluating and making available more flexible and efficient services.

This paper examines customer satisfaction with banking services provided by Costa Rican banks. Given its political neutrality, high literacy rate and relatively well-developed infrastructure, throughout the

second half of the twentieth century, Costa Rica was an attractive vacation and business destination for visitors from throughout the western hemisphere. Since the end of the region's political instability in the 1990s, however, Costa Rica's attractiveness has increased dramatically, and it has grown into a popular destination for foreigners to live and work.

As result of its attraction to global travelers, ethnic diversity continues to characterize Costa Rica's population, and the country's service businesses, have to appeal to a wide variety of customer likes and dislikes. Pleasing a wide range of customers' preferences is especially important for service businesses in competitive industries (such as retail banking) because many customers perceive their products (such as checking and saving accounts) to be similar among banks. Retail bank managers recognize that their employees must deliver these products with high quality service. The challenge for bank managers in ethnically diverse markets like Costa Rica is to determine which aspects of service are most likely to contribute to their customers' satisfaction.

No published research analyzes the determinants of customer satisfaction in the Costa Rican retail bank marketplace. Nevertheless, Costa Rica banks provide a unique opportunity to examine customer satisfaction for several reasons. The Costa Rican banking system consists primarily of large, government sponsored, institutions with many branch offices throughout the country. In particular, Banco Nacional and Banco de Costa Rica have numerous branches throughout the country. Banco Crédito Agrícola de Cartago is considerably smaller with only a few branches. A fourth bank, Banco Popular, is considered a private bank of public interest. As such, certain special regulations apply to this bank. In 1995, banking laws were changed to allow for private banking. While some private banks have entered the market, the government sponsored banks continue to dominate the Costa Rica banking system. In addition to banks, there are some non-bank financial institutions that accept deposits. Again, these are primarily smaller operations.

The Costa Rican government does not offer banks deposit insurance. However, the government banks are backed by the Costa Rican government. Failures have been relatively rare in the Costa Rica banking system in recent years. However, in 1995, Banco Anglo Costarricense failed with losses of about \$200 million. The Costa Rican government stepped in to cover the losses so depositors did not lose any money.

From a customer standpoint, Costa Rica's banks provide most services of a modern day banking system, although they are characterized by slow teller service. While this has been improving, a 30 minute wait to get to a teller is not uncommon, particularly on heavy service times like Fridays and paydays. Armed guards are visible at every bank branch, and frequently customers must pass through metal detectors prior to entering bank buildings. Automatic teller machines are quite popular in Costa Rica. In addition, each of the banks offer internet banking services, through which customers can pay bills and make bank transfers between accounts.

The elements noted above make Costa Rica a unique place to examine satisfaction with banking services. The remainder of this paper is organized as follows: In the next section we discuss the relevant literature regarding customer satisfaction in the banking industry. The following section discusses the data utilized in the study and some summary statistics. Next the Methodology used in the study is presented followed by a discussion of the results. The paper closes with some concluding comments and a discussion of the limitations of the paper.

## REVIEW OF THE LITERATURE

Until the early 1980s, most existing research regarding the link between customer satisfaction and service quality focused on customer satisfaction in the manufacturing sector. This type of research was relatively

easy to identify and measure given the relative ease of product standardization (Crosby, 1979 & Garvin, 1983). Slowly, new studies began to emerge as numerous researchers worked to identify and explain the determinants of customer satisfaction in the service sector. Since most services are intangible and their delivery is performance based, definitive quality measurement systems can be challenging (Zeithaml, 1981). Services are usually diverse and highly labor intensive, resulting in noticeable variations in service delivery rather than the automatic, machine-like delivery of a tangible factory product.

Research prior to the mid-1980s concentrated mainly on the operational characteristics of customer satisfaction and assessment of the motivators that caused customers to be satisfied with the services they received (Oliver, 1980; Churchill & Suprenant, 1982; Lehtinen & Lehtinen, 1982; & Bearden & Teel, 1983). Oliver, (1980) brought forth the theory that a direct relationship between a customer's satisfaction and his expectations does indeed exist. "Satisfaction" was later found to be determined by the customer's positive perception of the performance of a particular service. In other words, the higher the perception of the quality of customer service, the higher the level of customer satisfaction (Bryant et al., 1998; Vavra, 1997; Ganesh, Arnold, & Reynolds, 2000; and Caruana, Money and Berthon, 2000). More current research in this area found that businesses can often acquire repeat customers by providing service that surpasses their expectations (Oliver, 1997; Olson & Dover, 1979; Yi, 1991; Bryant et al., 1998; and Ganesh et al., 2000).

While working on their well-known study of customer satisfaction in the service sector, Parasuraman, Berry, and Zeithaml (1985) identified ten determinants of service quality that contribute to customer satisfaction. To conduct research in four distinct service industries, they classified the ten determinants and created SERVQUAL, their scale for prioritizing, comparing, and evaluating various performance attributes of service delivery. The authors indicated that the reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding, and tangibles dimensions are ten criteria used by customers to evaluate quality of the service they receive. In later studies, the authors established that customer perceptions of service quality and ensuing levels of satisfaction are related to individual levels of tolerance. They concluded that a customer is likely to be satisfied with both the service and the service provider, if a service is provided within acceptable quality limits. Later, the researchers condensed their original ten dimensions into five, with the assertion that, within a wide array of service industries, customers were unable to distinguish clearly among all ten original dimensions (Parasuraman, 1988).

Today, researchers tend to view customer satisfaction and service quality on the basis of research completed during the last 30 years. For instance, Rust and Zahorik (1993) and Trubik and Smith (2000) concluded that high levels of customer satisfaction result in customer retention, specifically in highly aggressive, competitive, and saturated markets. In 1996, Zeithaml et al. illustrated that superior levels of service quality stimulated favorable customer intentions, which subsequently encouraged retention, decreased expenses, increased profits, and customer referrals. Customers demonstrate positive intentions and satisfaction for a business by purchasing more, paying premium prices, and referring the business to others. This link between customer intentions and service quality has been reinforced through supplementary research by Parasuraman, et al. (1988); Anderson and Sullivan (1990); Parasuraman, Berry, and Zeithaml (1991); and Cronin and Taylor (1992).

Rust and Zahorik (1993) and Trubik and Smith (2000) advocate that high levels of customer satisfaction produce customer retention, especially in certain highly-competitive and saturated markets like financial services. Financial service institutions whose immediate competitors offer comparable products have learned that a critical element to their success is the provision of enhancements to service quality (Allred and Addams, 2000). Today's banking environment is truly competitive, with the same or similar products easily accessible from the majority of institutions. Effectively, service quality is the foremost

manner of differentiating oneself in the marketplace (Seonmee and Brian, 1996; Barnes and Howlett, 1998; Naser, Jamal, and Al-Khatib, 1999; and Wang, Lo and Hui, 2003). Retail banks are seen as the primary purveyors in the marketplace of products that are perceived as similar. As a result, retail banks must offer services that meet or exceed their customers' expectations in order to continue thriving and remain profitable entities.

Since Parasuraman et al. (1985) classified their original ten dimensions and released their conclusions regarding service quality; researchers have continued to examine various components of the financial services industry in their quest to more easily identify which of the ten will most likely lead to positive customer satisfaction. Most research shows solid correlation between the group of dimensions and customer satisfaction, however, a common grouping of the ten service quality dimensions that points to a universal perception as most important to customers' satisfaction is not prominent.

In 1996, Snow et al. (1996) found pointedly differing service quality expectations between different ethnic groups in Canada. Lassar, Manolis and Winsor (2000) discovered that private banks in South Florida were providing consistently high levels of dependable service to their Latin American customers. As a group their customers felt that reliability was the most important service quality dimension for their satisfaction Othman and Owen (2001) established compliance, assurance, and responsiveness as the dimensions most strongly associated with the average customer's satisfaction in the Kuwaiti banking sector.

Yavas, Benkenstein and Stuhldreier's (2003) research of private retail banks in the former East Germany explained were tangibles (the physical appearance of facilities and personnel), responsiveness (timeliness of service), and empathy. Bick, Brown and Abratt (2004) concluded that in South Africa, customers perceived the most important service quality dimension to be reliability. Research of retail bank customers' satisfaction in Thailand revealed a significant negative correlation with empathy, one of Parasuraman et al.'s ten service quality dimensions (Promsi, 2005). Competence, safety, and tangibles were the dimensions that most contributed to customers' satisfaction with their banks in Dhaka City, Bangladesh (Islam and Admed, 2005). African American, Latino, and non-Latino Caucasians in our South Florida study clearly demonstrated differences the significance of the ten dimensions to their satisfaction with their retail banks (Lopez, Hart, and Rampersad, 2007).

## DATA, METHODOLOGY AND SUMMARY STATISTICS

Data for this study were obtained by conducting a survey of customer satisfaction with banking services in Costa Rica. The researchers used the same survey instrument for this study developed and used for their research about customer satisfaction in South Florida (Lopez, Hart & Rampersad; 2007). This instrument has its foundation in work done by Parasuraman et al. (1985) in which the SERVQUAL instrument was developed. This instrument has been criticized by numerous researchers of customer satisfaction and service quality in the financial services industry. Carman (1990), Peter et al. (1993) and Sureshchandar, Rajendran and Anantharaman, et al. (2002), among others, have criticized the SERVQUAL instrument, questioning its ability to include all important dimensions of service quality. Carman (1990) found that each of the ten dimensions differed in importance depending on the industry researched and recommended that researchers modify SERVQUAL, creating their own survey instrument to fit the specific needs of the industry in question. Given this and other evaluations of SERVQUAL's value as a universal research tool, we developed our own survey instrument that complements SERVQUAL.

Using input from ten South Florida bank executives, we eliminated many of the questions in SERVQUAL and reworded others. We worked with local retail bank executives to ensure that the survey

instrument would be easily understood by people from different ethnic groups. We pilot tested our survey on a small group of ethnically diverse retail bank customers in South Florida which included five women and five men over the age of 18. The pilot test group included three African-Americans, three Latinos, and four non-Latino Caucasians. Final revisions were made to the survey using pilot test participants' feedback.

The survey instrument used in this study contained four sections. The first section asks questions about the demographic characteristics of the respondent (age, gender, ethnic group, and education levels). Local experts were asked about the most common ethnic groups in Costa Rica. These inquiries were used to develop the ethnicity categories in section one. The second section gathers information about respondents' satisfaction with their retail banks. The third section has 27 statements asking for respondents' perceptions of the importance of ten service quality dimensions for their satisfaction with their retail banks. In the last section, respondents force ranked each of the ten dimensions in order of their importance to their satisfaction with their retail banks.

For the Costa Rican marketplace, the survey was translated into Spanish by several of the researchers. A draft was sent to a Costa Rican advisor who made additional language changes. The survey was then reverse-translated into English by an advisor in Florida before final changes to the Spanish version were made.

Surveys were distributed to respondents outside retail outlets and in businesses in the San Jose, Alajuela, and Heredia provinces in Costa Rica. Data was collected during June and July 2006. There were three different data collection teams who were trained and supervised by one of the researchers. Members of the data collection teams answered participants' questions about survey questions and assured respondents of the anonymity of their responses. To minimize timing and/or location biases in the sample, data was gathered at different locations, on different days of the week, and at different times of the day. To include customers from a variety of retail banks, researchers did not collect data outside or near any bank. Respondents were not asked to identify their retail banks.

The objectives of this research were (1) to determine if Costa Rica's diverse retail banking customers' satisfaction is positively correlated with the ten service quality dimensions (2) to find out if various ethnic groups in Costa Rica report different levels of customer satisfaction with their retail banks, and (3) to determine if diverse ethnic groups in Costa Rica have differing perceptions about the importance of the ten service quality dimensions for their satisfaction with their retail banks.

This study's hypotheses are:

H1: There is a statistically significant positive correlation between Parasuraman et al's ten service quality dimensions and customers' satisfaction with their retail banks in Costa Rica.

H2: Each of the ten dimensions will have a significant explanatory power for customers' satisfaction with their retail banks in Costa Rica.

H3: Different ethnic groups in Costa Rica will report different levels of customer satisfaction with their retail banks.

H4: Different ethnic groups in Costa Rica will have different perceptions of the relative importance of the ten service quality dimensions to their satisfaction with their retail banks.

## Methodology

This undertaking leverages work by many researchers, including Parasuraman et al. (1985), Carman (1990), Snow et al. (1996), Promsi (2005), and Lopez, Hart and Rampersad (2007). The theoretical framework rests on Parasuraman et al.'s 1985 theory that ten distinct dimensions of service quality are positively correlated with customer satisfaction in service industries. Although Parasuraman et al. later consolidated the ten dimensions into a smaller group of five, several researchers, including Carman (1990), recommend studying the original ten. Because we found perception differences of the original ten dimensions among South Florida's ethnically diverse population (Lopez, Hart & Rampersad, 2007), we decided to evaluate customers' perceptions of all ten dimensions for our Costa Rica research. Several Florida-based bank executives familiar with the Central American banking industry also recommended including the original ten dimensions in this study.

## Summary Statistics

A precise count of the response rate was not recorded. However, the research teams estimated that about 50% of those individuals that were approached elected to participate in the study. The procedures netted 319 completed surveys. When analyzing the data collected, the researchers found that a large percentage of respondents made mistakes in completing the survey's final section, which was intended to collect data to test H4 (as defined below). To ensure that only reliable data was included in our final analysis for H4, 109 surveys were excluded from that analysis. Thus, the sample size for H4 was 210. Table 1 contains demographic information about the sample. The first column reports on the data used for hypotheses 1-4. The second column reports on the data used to test hypothesis 4.

Table 1: Demographic Characteristics of the Sample Testing H1, H2 and H3

<i>Demographic variable</i>	<i>Valid percent H1-H3</i>	<i>Valid percent H4</i>
<b>Age Ranges</b>		
18-27	39.1	40.73
28-37	29.3	28.2
38-47	16.4	20.1
48-57	10.4	8.6
58+	4.8	2.4
<b>Gender</b>		
Male	57	56
Female	33	34
<b>Ethnicity</b>		
Español (Spanish)	11.9	16.5
Mestizo (mixed race)	20.8	31.3
Indígena (native)	0.3	0.0
Coreano (Korean)	1.6	0.0
Anglo (non-Latin Caucasian)	60.4	46.2
Caribeño (Caribbean)	5.0	6.0
<b>Completed education level</b>		
Less than high school	6.9	5.7
Vocational	8.2	8.1
High school	70.3	72.2
College	11.7	18.1
Graduate school	1.6	2.4
Post graduate	0.3	0.5

*This table shows the demographic characteristics of the participants in the study by age, gender, ethnicity and completed educational level.*

FINDINGS

The data were analyzed using the SPSS program. The analysis begins by examining the correlation between customer satisfaction and the ten service quality dimensions. Customer satisfaction was measured as the response to the following question: “How Satisfied are you with the services provided by your financial institution.” We ran a Pearson’s product moment correlation between customer satisfaction and the various explanatory variables to thereby testing the first hypothesis.

H1: There is a statistically significant positive correlation between Parasuraman et al’s ten service quality dimensions and customers’ satisfaction with their retail banks in Costa Rica.

The results are presented in Table 2. The results indicate that ten of the explanatory variables are significantly correlated with customer satisfaction, while five variables were not significantly correlated. Interestingly, the demographic variables were not correlated with customer satisfaction, indicating that the views of various demographic groups regarding customer satisfaction are generally consistent. Analysis of the data for this hypothesis was interesting because, while all ten service quality dimensions showed positive correlations with customer satisfaction at the .001 level, none resulted in a strong positive correlation (more than .500). Unlike results from the 2007 Lopez, Hart, and Rampersad study of South Florida’s ethnically diverse customer population, reliability was found to be the most important dimension for satisfaction among Costa Rican retail bank customers (with a correlation of .487). This is similar to findings by Lassar, et al., (2000), which revealed reliability as the most important dimension of satisfaction for Miami private bank customers from the US and Latin America.

Table 2: Correlations of Satisfaction with Service Quality Dimensions

<b>Service Quality Dimension</b>	<b>Dimensions’ Correlations with Satisfaction (at the .001 level)</b>
Reliability	0.487***
Responsiveness	0.420***
Credibility	0.417***
Tangibles	0.380***
Empathy	0.378***
Communication	0.350***
Courtesy	0.345***
Access	0.338***
Safety	0.331***
Competence	0.325***
Age	-0.025
Gender	-0.036
Ethnicity	-0.014
Education	0.016
Marital Status	0.015

*This table shows the Pearson’s Product Moment Correlations between the total satisfaction score and each of Parasuraman’s ten service quality dimensions in Costa Rican banks. \*\*\* indicates significance at the 1 percent level, \*\* indicates significance at the 5 percent level and \* indicates significance at the 10 percent level.*

Next, we test hypothesis 2 which states that each of the ten dimensions will have significant explanatory power for customers’ satisfaction with their retail banks in Costa Rica. The test is completed by regressing customer satisfaction on the independent variables. The regression specification is as follows:

$$\text{Retail bank satisfaction} = \alpha + B1 (\text{age}) + B2 (\text{gender}) + B3 (\text{ethnicity}) + B4 (\text{education}) + B5 (\text{marital status}) + B6 (\text{tangibles}) + B7 (\text{reliability}) + B8 (\text{responsiveness}) + B9 (\text{competence}) + B10 (\text{courtesy}) + B11 (\text{credibility}) + B12 (\text{safety}) + B13 (\text{access}) + B14 (\text{communication}) + B15 (\text{empathy}).$$

The regression results are presented in Table 3. The results reveal a coefficient of correlation of 0.614, indicating a reasonably strong positive relationship. The R<sup>2</sup> of the regression is 0.378 and the adjusted R<sup>2</sup>

is 0.343 indicating a general lack of multicollinearity. The F-statistic for the regression is 10.876, which is significant at the one percent level. Only three of the regression coefficients are significant in explaining total customer satisfaction. These three significant coefficients are tangibles, reliability and empathy, which indicates a general lack of support for hypothesis 2.

Table 3: Regressions on Total Customer Satisfaction

Variable	Coefficient	t-statistic
Constant	19.247	2.494**
Age	-1.422	-1.455
Gender	-2.405	-1.139
Ethnicity	-0.578	-0.963
Education	1.018	0.971
Marital Status	0.004	0.004
Tangibles	0.211	2.522**
Reliability	0.269	3.821***
Responsiveness	0.014	0.202
Competence	-0.002	-0.029
Courtesy	0.035	0.429
Credibility	0.138	1.574
Safety	-0.020	-0.270
Access	-0.015	-0.238
Communication	0.089	1.583
Empathy	0.164	2.815***
<b>R</b>	<b>0.614</b>	
<b>R<sup>2</sup></b>	<b>0.378</b>	
<b>R<sup>2</sup> Adjusted</b>	<b>0.343</b>	
<b>F</b>	<b>16.717***</b>	

Table 3 shows the results of the regression of independent variables of interest on total customer satisfaction. \*\*\* indicates significance at the 1 percent level, \*\* indicates significance at the 5 percent level and \* indicates significance at the 10 percent level.

The analysis continues by testing the third hypothesis that different ethnic groups in Costa Rica will report different levels of customer satisfaction with their retail banks. The SPSS means test for differences in means was conducted. We failed to reject the null hypotheses of no difference in means. In addition to those items listed here, the results held for Koreans, Other Asians, and Indians. However, due to the small number of surveys completed by members of these ethnic groups, we do not draw any conclusions for them. Table 4 shows the mean levels and standard deviations.

Table 4: Customer Satisfaction Scores by Ethnicity

Ethnic Group	N	Mean Satisfaction Score	Standard Deviation
Spanish	38	73.55	30.96
Mestizos	66	82.19	12.19
Anglos	193	79.02	19.64
Caribbeans	16	83.12	18.16
Entire Sample	319	79.10	20.04

Table 4 shows the mean customer satisfaction score by ethnicity.

In the final section of the survey, respondents were asked to provide their opinions about the relative importance of each of the ten service quality dimensions to their satisfaction with their retail banks. We expect that each ethnic group will value the service quality elements differently. Thus, we propose the following hypothesis:

H4: Different ethnic groups in Costa Rica will have different perceptions of the relative importance of the ten service quality dimensions to their satisfaction with their retail banks.

Respondents force ranked the ten dimensions from one to ten, with a one representing the most important dimension to them, and ten indicating the least important. As discussed earlier, due to mistakes in



participants' responses to the final section of the survey instrument, 109 surveys from the initial 319 were discarded before analyzing the data to test H4. Thus, this test was conducted using 210 data observations from participants who responded without errors to the final section of the survey. We ran means and median tests to determine differences in preferences.

Table 5 and Table 6 show the means and results of a means test of Spanish, Mestizo, Anglo, and Caribbean participants' rankings. We did not include Indian, Korean, and Other Asian ethnic groups' information in this analysis because the data was too limited. Dimensions with tied rankings are italicized.

Table 5: Results of Means Test of the Perceived Relative Importance of Service Quality Dimensions

Most to Least Important	Spanish	Mean Score	Mestizo	Mean Score	Anglo	Mean score	Caribbean	Mean score
1*	Safety	4.7143	Reliability	4.8333	Communication	4.5526	Reliability	3.4000
2	Communication	5.2000	Tangibles	4.8485	Empathy	4.5895	Courtesy	4.6000
3	Access	5.3030	Responsiveness	5.2576	Safety	5.0211	Communication	5.2000
4	Tangibles	5.7429	Communication	5.4545	Access	5.3579	<i>Empathy</i>	<i>5.3000</i>
5	Responsiveness	5.8286	Courtesy	5.5758	Credibility	5.4789	<i>Tangibles</i>	<i>5.3000</i>
6	Reliability	5.9571	<i>Competence</i>	<i>5.5909</i>	Competence	5.7474	Competence	5.4000
7	Competence	6.0571	<i>Credibility</i>	<i>5.5909</i>	Courtesy	5.8053	Credibility	5.5000
8	Credibility	6.1471	<i>Safety</i>	<i>5.5909</i>	Reliability	5.9000	Responsiveness	5.7000
9	Empathy	6.1714	Empathy	6.2879	Responsiveness	6.6158	Access	5.8000
10	Courtesy	6.3000	Access	6.3939	Tangibles	6.7263	Safety	6.3000

*Means Test scores (derived from SPSS Means Test) by ethnicity for each of the ten dimensions of customer satisfaction.*

We find that there are significant differences in both the order of relative importance each group gave to the dimensions as well as in their means scores, as evidenced in Table 5 and Table 6. For example, Caribbeans ranked Reliability first with a mean score of 3.4, whereas Anglos ranked Reliability seventh with a mean score of 5.9. The Spanish perceived Courtesy as the least important dimension to their satisfaction (giving it a mean score of 6.3), Anglos ranked it as sixth most important (mean score = 5.8053), and Caribbeans ranked it second (mean score = 4.6). Tangibles were the second most important dimension in Mestizos' satisfaction with their retail banks (mean score = 4.8485), and this dimension was ranked last by Anglos (mean score = 6.7263). The only dimension that shows some similarity in rankings across all four ethnic groups is Communication, which ranked in the top four for all ethnicities.

To quantify the differences in means, an ANOVA test of the data for H4 showed statistically significant differences among the means of the scores of the four ethnic groups for eight of the ten dimensions. For these eight dimensions, the F ratios show significant variability among the groups. Thus, the null hypothesis of no differences in rankings (H4) is rejected. Analysis for the Competence and Credibility dimensions showed no statistically significant variance among the groups. Three post hoc tests (Tukey, LSD, and Scheffe) further confirmed these findings for between group variances. Detailed test results are in Table 6 below.

Table 6: Results of ANOVA Test of the Perceived Relative Importance of Service Quality Dimensions

Dimension	F
Empathy	4.686***
Reliability	4.481***
Tangibles	4.346***
Responsiveness	3.436**
Access	1.761
Safety	1.313
Courtesy	1.253
Communication	1.246
Credibility	.571
Competence	.413

Table 6 shows ANOVA test results for the variance of the means and associated level of significance among the four ethnic groups for Parasuraman's ten service quality dimensions at the .01 level. \*\*\* indicates significance at the 1 percent level, \*\* indicates significance at the 5 percent level and \* indicates significance at the 10 percent level.

## CONCLUSIONS AND LIMITATIONS

We decided to undertake this research project after completing a similar analysis of the South Florida retail banking sector because we were interested in seeing if analysis of Costa Rica's ethnically diverse population would reveal similar findings. Costa Rican study results were surprisingly different from our South Florida findings in that the correlation of all ten dimensions with satisfaction was much weaker. Additionally, respondents' rankings of the individual dimensions showed greater differences among ethnicities than was revealed in South Florida.

Our research confirmed that the group of ten dimensions of service quality that Parasuraman et al. identified in 1985 is moderately important to Costa Rican customers' satisfaction with their retail banks. Second, while all of the ten dimensions showed positive correlations with satisfaction at the .001 level, they were not statistically significant. This provides conflicting information for the country's bank executives in that there is no clear direction about a service quality dimension upon which bank leaders can focus their training that would ensure customer satisfaction.

Third, although analysis found no significant differences among satisfaction levels of the region's different ethnic groups, they did demonstrate that Spanish, Mestizo, Anglo, and Caribbean ethnic groups in Costa Rica have sharply different perceptions of the relative importance of nearly all of the ten service quality dimensions. The marked differences among ethnic groups can be of great importance to retail bank branch managers operating in neighborhoods in which particular ethnicities predominate. By focusing service training on those quality dimensions that are most important to the ethnicity served, managers and customer service representatives may be able to increase their customers' satisfaction levels.

This study's results contribute significantly to the collective body of knowledge about ethnicity, customer satisfaction, and service quality determinants for retail banks. They confirm that major ethnic groups in Costa Rica have divergent views about the importance of service quality dimensions to their satisfaction, even though their overall levels of satisfaction are similar. Research conclusions provide industry executives and academics with greater knowledge of the service areas customers of different ethnicities perceive as important. If used appropriately, this information may help banks achieve higher levels of customer satisfaction, retention, and profitability.

One of this study's most important conclusions is that ethnic groups rank the importance of each service quality dimension differently. For managers of branch banks in neighborhoods serving areas dominated by a specific ethnic group, this knowledge can help them focus their customer service efforts. For example, bank managers serving the Anglo population in Costa Rica now know that their service

strategies should emphasize communication, empathy, and the safety of customers' deposits. Branch managers serving the Caribbean population in Costa Rica have learned that their service strategies must emphasize reliability, courtesy, and communication to satisfy their customers. Managers of branches serving Mestizos must emphasize their banks' reliability and responsiveness, and their facilities should rate high in tangibles. Finally, branch managers now know that their Spanish customers value safety, communication, and access more than the other service quality dimensions. By concentrating on the service quality dimensions perceived as most important to the ethnic groups served by their retail banks, bank managers can incorporate appropriate investments into their plans for facility improvements, staffing and incentive programs.

Some limitations should be addressed in future research. First, while a large sample contributed to healthy findings for Spanish, Mestizo, Anglo and Caribbeans bank customers in Costa Rica, not enough respondents from the Korean, Indian, and Other Asian ethnic groups participated for us to be able analyze and drawn conclusions about their satisfaction levels or perceptions. If this study is to be repeated in Costa Rica, researchers should collect sufficient data from these important ethnic groups. Another limitation is that data was collected from only three Costa Rican provinces, which may have biased the study's results, particularly if respondents are not representative of Costa Rica's general population. For example, the large percentage of respondents classifying themselves as Anglo does not mirror the country's overall population. A final limitation is reflected in many respondents' obvious misunderstanding of instructions for the final section of the survey. Since a disproportionate number of mistakes were made by Anglos, perhaps an English-language survey should have been provided as an alternative to having non-native English speakers complete Spanish-language surveys.

Recommendations for future research include 1) Repeat this study in Costa Rica, ensuring collection of data from the ethnic groups representing the overall population and clear understanding of survey instructions, 2) Replicate this study in other Central American countries with different banking systems. This could provide new learning about customer satisfaction and service quality as well as aid in the generalization of research results to the region, 3) Conduct a follow-up study in Costa Rica to gain a better understanding of why different ethnic groups perceive the ten service quality dimensions so differently. This could help retail banks enhance customer loyalty and 4) Identify one retail bank in Costa Rica or elsewhere and conduct focused research about its customers' perceptions of the ten dimensions of customer satisfaction. Compare the results by branch or division of that bank that offers different products and services. This could pinpoint details regarding the most important dimensions for buyers of different categories of financial products or services.

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