A PAN-EUROPEAN APPROACH TO CUSTOMER SATISFACTION:
AN OPTIMAL STRATEGY?

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ABSTRACT

- **Purpose** – This study investigates the viability of using a Pan-European approach for professional service offerings in Europe, first establishing measurement equivalence and then exploring the influence of culture on service quality and customer satisfaction.

- **Design/Methodology** – Utilizing scenarios involving a dental office visit, respondents from Portugal, France and Germany participated in a 2X2 factorial experiment in which the researchers manipulated both expectations (low/high) and service performance (low/high).

- **Findings** – Respondents from France and Portugal expressed similar levels of customer satisfaction and perceived service quality, given the same service encounter, which were significantly different from that of the German respondents, except when both expectations and performance were low.

- **Practical Implications** – The finding of this study indicate that a Pan-European approach to service offerings is probably not the optimal strategy for service offerings in the European Union, since culture influences customer satisfaction expressed and perceived service quality.

- **Originality/Value** – Most standardization studies relate to products; this research highlights the importance of culture as a constraint to standardization of service offerings.

- **Research Paper**

  **Keywords:** Service quality, customer satisfaction, standardization
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INTRODUCTION

The first suggestion that a Pan-European approach to marketing might be the optimal strategy was set forth by Elinder in 1961. He contended that firms could save money and still be effective in their marketing of goods to Europe by standardizing their products and promotions to the continent. The premise for his position was that the needs and wants of European consumers were converging due to increased travel and the influence of television. This idea was extended to the whole world by Thomas Levitt in 1983 who advised firms to standardize their product offerings in the global marketplace and enjoy economies of scale and reduced costs in manufacturing and advertising. Daniels (1987) contended that a regional approach would allow companies to standardize a product for a particular region, such as Latin America, Europe or Asia, allowing them to keep costs down and enjoy some economies of scale. The basis for utilizing this approach would be that firms could concentrate on similar cultural values in the region to create similar products and promotions. Thus, Daniel’s regional approach simply applied Elinder’s Pan-European approach to other areas of the world.

For more than four decades, business scholars have sought to characterize and classify the international marketing strategies of firms (Lim, Acito and Rusetski, 2006), with hundreds of journal articles having been written dealing with the issue of globalization/standardization versus localization/adaptation. The majority of these have explored the degree of adaptation necessary to market products effectively (Diamantopoulos, Schlegelmilch and Du Preez, 1995), and to advertise successfully (Okazaki, Taylor and Zhou, 2006; Ueltschy and Ryans, 1997) in various foreign markets. Today, however, there has been a change in the landscape of the world’s output; the services sector now comprises the lion’s share of the total GDP in industrialized
countries. For example, in the European Union (EU), in 2005, the services sector accounted for 69.4 percent of the total GDP of the region (Euromonitor, 2006). If one looks at individual countries within the EU, this increase in importance of the services sector is clearly in evidence. In France in 2005, the services sector accounted for 76 percent of the gross value added across the economy as a whole. In the same year in Portugal, 52 percent of the labor force were employed in the services sector, which accounted for 66 percent of the total GDP. Similarly, in Germany in 2005, the services sector accounted for 70 percent of the total GDP and employed 71.3 percent of the German workforce (Country Profiles, 2006). Thus, an important question in today’s world, particularly in industrialized countries, such as in the United States and in the EU, is the question of whether the Pan-European approach to service offerings by firms operating in the European Union is the best strategy for maximizing profits. Will the same service offerings in all countries generate similar perceptions of service quality and customer satisfaction? The importance of the EU to international business cannot be overemphasized. In 2004, the EU expanded to 25 countries, making it the largest economic integration group in the world, with a total population now in excess of 455 million people (Chung, 2005).

Hence, there are two objectives in this study. The first is to determine if key measures of customer satisfaction are truly applicable in a cross-cultural comparison. Then, if measurement equivalence can be verified, the next goal is to determine if a pan-regional approach is the optimal strategy to use when approaching the European Union with service offerings. National culture will be the unit of analysis because it is the cultural grouping typically used in cross-cultural comparisons (Bang et al., 2005).

To address the objectives of this research, respondents from France, Germany and Portugal were selected as the comparative study groups. These countries are all members of the
European Union (EU), which is generally the focus of the Pan-European approach, and are all industrialized countries within Western Europe, representing important markets for each other. Another important reason for their selection is that using the paradigms of Hall (1977), Hofstede (1980, 1988) and Schwartz (1994), significant cultural differences can be found among these three countries, which is important in realizing the research objectives.

**LITERATURE REVIEW**

**Standardization versus Localization**

While the issue of standardization versus localization has been a topic of debate for more than 40 years (Jain, 1989; Kotler, 1986; Levitt, 1983 and Ryans, 1969), the enlargement of the European Union (EU) has stimulated further interest in the discussion. Researchers have typically studied the issues of marketing standardization in terms of consistent marketing-mix elements used when firms operate in multiple markets (Taylor and Johnson, 2002). Elinder (1961) planted the first seeds for the idea of standardization when he proposed that firms could save money and still be effective if they used the same products and promotions for all of Europe. His belief was that consumers were traveling more and watching television, leading to similar needs and wants among consumers across Europe. In essence, he was proposing that a Pan-European approach would be the optimal strategy for firms to use when marketing their products in Europe. Two decades later, Levitt (1983) said that homogeneous consumers, now refereed to as global consumers, existed worldwide and that companies could enjoy cost reductions and economies of scale by offering the same products and promotions in all markets. However, there have been many (Ryans and Raatz, 1987; Boddewyn, Soehl and Picard; 1986) who have questioned the wisdom of using a standardized approach, with Buzzell (1968)
being one of the first, believing that language and cultural differences are too great to make a
standardized approach feasible. In response to Levitt’s cry for standardization, Sheth (1986)
contended that competition is becoming global, not consumers.

Research on using a Pan-European approach, i.e. a standardized approach to the EU, has
resulted in mixed findings, with the theoretical underpinnings of this standardization/localization
debate centered on the perception of consumer homogeneity and/or the movement toward
homogeneity (Ryans, Griffith and White, 2004). Some researchers have concluded that a Pan-
European approach can be used effectively in the EU (Chen and Wong, 2003; Shaw, 2000).
These studies have contended that a standardized or similar set of marketing programs can be
effective in the EU, even if various differences do exist in the European Union. A recent study
by Okazaki, Taylor and Zou (2006) concluded that advertising standardization can have a
positive impact on the bottom line. However, a significant number of studies have found that a
Pan-European approach to the EU would not be advisable due to cultural and language
differences (Boddewyn and Grosse, 1999; Diamantopoulos et al., 1995). More recently, Kanso
and Nelson (2002) found in a study of Finland and Sweden that almost two-thirds of the foreign
subsidiaries in those countries believe they need to use a localized approach to advertising.
Okazaki in a 2005 study found that of the 206 websites created by American firms for UK,
France, Germany and Spain, the majority were localized to each market, with the only
standardized features being the logo and the layout. Still other studies found mixed results
within the studies themselves. For example, Katsikeas, Samiee and Theodosiou (2006), found
that standardization of the international marketing approach yields improved performance only if
there is a good fit between the MNC’s environmental context and its international marketing
strategy. Wei and Jiang (2005) concluded that use of a standardized creative strategy could be effective if the implementation is localized and accounts for culture.

As can be seen, findings on the use of a Pan-European strategy when approaching the EU countries have resulted in mixed results, which are inconclusive. Hence, further work in this area is certainly justified, particularly in the services sector, which exhibits a void of such research. This study will then make a valuable contribution to the body of knowledge by exploring how feasible a Pan-European approach to service offerings is, using a sample of respondents from three EU countries.

**Service Quality**

In today’s competitive world, where consumers can make instant price comparisons on the internet with a click of a mouse, non-price competitive advantages, such as service quality, become even more important in attracting and retaining customers (Jiang and Rosenbloom, 2005). Also, companies that have goods and services that are perceived as being of high quality typically have greater market share and higher returns on investment than firms whose goods and services are perceived as being of low quality (Kim, Lee and Yun, 2004). Furthermore, service quality has been shown to be an important input to customer satisfaction (Oliver, 1996) and a dominant factor in influencing both relationship duration and repurchase intentions as major drivers of customer lifetime value (Bauer, Falk and Hammerschmidt, 2006). Thus, it should come as no surprise that more than one-half of all corporate training dollars are spent on service quality issues (Babakus, Bienstock and Van Scooter, 2004).

Gonroos (1982, p. 37), in his seminal work, defined service quality as “the outcome of an evaluation process where the consumer compares his expectations with the service he perceived he has received.” Thus, the construct of service quality is viewed as the difference between
expected service and perceived service (Parasuraman, Zeithaml and Berry, 1985) and represents
the consumer’s judgment about the overall excellence or superiority of a service (Zeithaml,
1988). To be noted is the fact that service quality involves perceptions, which are influenced by
the experiences and cultural background that the person brings to the service setting. Hence, it
would be expected that service quality perceptions might differ across cultures.

For consumers, service quality has been shown to be more difficult to assess than product
quality, because there is no tangible evidence related to service (Hong and Goo, 2004).
Evaluation of professional services is even more challenging because they are very people-based,
which leads to an increased level of variability in service quality. However, irregardless of the
challenges, evaluation of service quality in relation to professional services is of paramount
importance, because it has been found to have a more significant impact on customer satisfaction
and customer loyalty than it does across all industries in general (Eskildsen et al., 2004).

In the area of service quality, much research has stemmed from the work of Parasuraman,
Zeithaml and Berry (1985) when they applied gap analysis to the services area, resulting in their
gap model, which views service quality as the gap between consumers’ expectations and their
perceptions of the actual service. Having as its foundation the disconfirmation paradigm of
Churchill and Suprenant (1982), this gap model then leads to SERVQUAL, the well-known
measurement model which has been used successfully across a myriad of industries. This multi-
item scale includes the five dimensions of tangibles, reliability, responsiveness, assurance and
empathy. Many researchers (Weekes, Scott and Tidwell, 1996) view its flexibility as one of its
strengths, while others have taken issue with its validity (Teas, 1993) and others have questioned
the need for the inclusion of the expectations sector at all (Brandy, Cronin and Brand, 2002),
resulting in the SERVPERF model, which focuses on performance. However, not all would
agree with this perspective. Hamer (2006) contends that expectations are positive predictors of perceived service quality and that this relationship is even stronger than much prior literature suggests. Additionally, in today’s technological world, the measurement of service quality has become more complex, with special scales developed to measure perceived service quality with online services (Parasuraman, Zeithaml and Malhotra, 2005; Yoo and Donthu, 2001), as well as the realization that a consumer’s perception of service quality is increasingly being influenced by multiple channels (Sousa and Voss, 2006).

In this study, service quality will be examined from the transaction-specific perspective (Roest and Pieters, 1997) and will use Zeithaml’s (1988) definition, where service quality is the consumer’s judgment about the overall excellence or superiority of a service. The importance of the inclusion of service quality in this study stems from the fact that it has significant effects on customer satisfaction, yet is a separate construct (Ibañez, Hartmann and Calvo, 2006).

Customer Satisfaction

A firm’s ultimate goal must be to satisfy a group of customers by using its competitive advantages, with the key reason being that “returns earned through relationships with customers are the lifeblood of all organizations” (Hitt, Ireland and Hoskisson, 2007, p. 106). Indeed, the development of customer relationships and the maintenance of customer satisfaction is the primary driver of strategic and financial performance (Luo et al., 2004). In fact, a recent study by Homburg, Koschate and Hoyer (2005) found that customer satisfaction had a strong, positive effect on customers’ willingness to pay. Very satisfied customers will not only patronize the same service provider again, but will be willing to pay a premium price to do so. Conversely, Luo and Bhattacharya (2006) concluded that low customer satisfaction does indeed hurt the market value of the firm.
In the customer satisfaction literature, the standard performance disconfirmation paradigm has formed the basis for many empirical studies (Park and Choi, 1998). Satisfaction is said to be the consumer’s response to the evaluation of the perceived discrepancy between prior expectations and actual performance (Tse and Wilton, 1988), with expectations seen as predictions about what is likely to happen (Parasuraman, Zeithaml and Berry, 1988). Thus, satisfaction is all about the individual’s perceptions; it is not inherent in the product or service; hence, intuitively, different consumers will express different levels of satisfaction for the same experience or service encounter. These differences would certainly be expected across cultures, since culture is the lens which filters the perceptions of individuals.

Another reason that satisfaction can be expected to be influenced by culture is that satisfaction is viewed as having both an affective and a cognitive dimension (Ying and Chang, 2006; Oliver, 1996). It is the affective dimension where the influence of culture will most likely be felt, since attitudes and values have been shown to greatly influence an individual’s behavior (Rokeach, 1973). In an interesting, recent study, Homburg, Koschata and Hoyer (2006) found that the impact of cognition on customer satisfaction increases over time, while the opposite is true for the impact of affect on satisfaction over time. In this study, satisfaction will be restricted to transaction-specific judgments (Andaleeb and Conway, 2006), because transaction-specific satisfaction is thought to capture the complex psychological reactions that customers have to a product’s or service provider’s performance for a given time period (Oliver, 1997).

**Culture, Consumer Behavior and Standardization**

Culture has been consistently noted as one of the key constraints to standardizing marketing efforts (Terpstra, Sarathy and Russow, 2006) and one of the main reasons cited by Buzzell (1968) as to why localization of marketing efforts was necessary when firms entered
foreign markets. This should not be surprising since culture has a profound influence on all aspects of behavior (Craig, Greene and Douglas, 2005). Thus, it is a key element to be considered when evaluating whether a standardized approach to a region, like the Pan-European approach, would be an optimal strategy for firms offering services in the European Union.

Although culture is notoriously difficult to define, marketers and international personnel must realize the tremendous impact it has on all facets of global business activity. In fact, it has been noted (Johnson, Lenartowicz and Apud, 2006) that the inability of firms and their managers to make adjustments to the demands of the international business environment, principally due to the inability or unwillingness of managers to appreciate cultural challenges, has been cited as the principal cause of international business failures.

Culture can be defined as “the sum of learned beliefs, values and customs that create behavioral norms of a given society (Yau, 1994, p. 49). Cultural norms, establish rules of conduct and shape values, beliefs and preferences, providing a “blueprint” for daily living and for interacting with others (Craig, Greene and Douglas, 2005). As the basic motivators in life, cultural values are the prescriptions for behavior (Rokeach, 1973), with culture determining how people perceive and interpret phenomena (McCracken, 1986). This is very important in this study, since the evaluation of service quality involves matching a person’s perception of the service received against expectations, which is then a major influence on the customer’s satisfaction.

National culture is perhaps best defined by Nakata and Sivakumar (2001) as patterns of thinking, feeling and acting that are rooted in common values and societal conventions. It is the homogeneity of characteristics that separates one human group from another and provides a society’s characteristic profile with respect to norms, values and institutions (Hofstede, 2001).
National culture is an important construct to investigate, because it has been shown to impact a myriad of marketing and management facets, including relationships (Griffith, Myers and Harvey, 2006), values and lifestyles (Sun, Horn and Merritt, 2004), rate of adoption (Erumban and deJong, 2006), choice of entry mode (Brouthers, 2002), advertising responses (Laroche et al., 2001), online purchasing (Ueltschy, Krampf and Yannopoulous, 2004), and standardization in professional services (Newburry and Yakova, 2006). Thus, national culture is a construct to be explored when considering the optimal strategy for service offerings in Europe.

Although several cultural frameworks appear in a review of the literature (Hofstede, 2001; Trompenaars and Hampden-Turner, 1998; Triandis, 1995; Schwartz, 1994; Clark, 1990 and Hall, 1977), Hofstede (2001), Hall (1977) and Schwartz (1994) will be used to analyze the impact of culture in this study. Hofstede’s (2001) framework focuses on values at the national level and has been used extensively in the marketing and management literature. Doney, Canon and Mullen (1998) contend that there is a striking resemblance between Hofstede’s empirically derived dimensions and those based on theory, which allows researches to integrate theoretical rigor with empirical research. Hofstede uses five dimensions to classify countries: individualism, power distance, uncertainty avoidance, masculinity and long-term orientation. He postulates that a country can be positioned along these five dimensions to give an overall picture of the country’s cultural type, although it is important to note that countries share both similarities and differences across cultural dimensions (Griffith, Myers and Harvey, 2006).

Hall (1977) which is one of the most widely used paradigms in international business research, classifies countries along a contextual continuum. In low-context cultures, such as Germany and the U.S., individual achievement is valued and the welfare of the individual is important; whereas, in high-context cultures, typically found in Asia, Latin America and
Mediterranean Europe, the welfare of the group and group harmony are top priorities. In high-context cultures, the building of relationships and trust comes before business, while in low-context cultures, the opposite is true.

A different approach to finding cultural differences has been taken by Schwartz (1992, 1994), which is based on both theoretical and empirical research and is thought by some (Drogendijk and Stangen, 2006) to overcome many of the apparent limitations of Hofstede’s work. His circumplex model characterizes values as being in a circular framework in which value domains adjacent to each other are more similar, while those across from each other are different. Using his Schwartz Value Inventory (SVI), he asked respondents to assess 57 values as to how important they felt these values were as “guiding principles of one’s life,” with his work separated into individual-level analysis and culture-level analysis. Using data from 63 countries (N=60,000), Schwartz derived 10 distinct value types at the individual-level and seven at the cultural-level, which is the focus of this study. Conservatism (embeddedness) emphasizes maintenance of traditional values and traditional order, i.e. status quo and restraining actions or desires which might disrupt the group. Intellectual and affective autonomy pertain to the extent to which individuals are free to pursue their own ideas and their affective desires, respectively. Hierarchy denotes the extent to which it is legitimate to distribute power, roles and resources unequally; whereas, egalitarian commitment relates to the extent to which individuals are prone to voluntarily relinquish selfish interest to promote the welfare of others. Mastery pertains to the importance of getting ahead and self-assertiveness, while harmony denotes the importance of fitting into the environment (Schwartz, 1999). The SVI was developed in a cross-cultural context and has been demonstrated to be valid across cultures (Kilbourne, Grunhagen and Foley, 2005), with some (Spector, 2004) finding it superior for cross-cultural comparisons within
Western Europe. Thus, one can see both parallels and differences between the work of Schwartz, Hall and Hofstede, with all three shedding light on cultural differences at the national level, including relating to the three countries in this study: Germany, France and Portugal.

**RESEARCH OBJECTIVES AND HYPOTHESES**

As firms enter the European Union (EU) with service offerings, can they expect the same results in terms of the consumers’ acceptance of their offerings? Will a Pan-European approach to service offerings be the optimal strategy? Specifically, will offering the same service situation yield the same results in terms of service quality perceived and satisfaction expressed?

The objectives of this study are (1) to evaluate if measures of service quality and satisfaction are invariant among French, German and Portuguese respondents and (2) if these measures are invariant, to evaluate the cultural sensitivity to these measures among these groups. These questions lead to the following hypotheses:

**H1:** The instruments used to measure customer satisfaction are invariant among French, German and Portuguese respondents.

**H2:** The instruments used to measure service quality are invariant among French, German and Portuguese respondents.

The aim of these two hypotheses is to test the universality of these scales as applied to these three groups. An assumption of direct comparisons is that the ratings from different countries are comparable, i.e. using the same psychological metric (Maurer, Raju and Collins, 1998). This measurement equivalence is of paramount importance, because in its absence, one cannot conclude that differences in ratings are due to true differences, but in fact might be a product of the way the scales were used or interpreted.
H3: There will be no significant differences between the French and Portuguese respondents in terms of service quality perceived and satisfaction expressed given the same service situation.

H4: When performance is low, regardless of expectations, the respondents from France and Portugal will perceive higher service quality and express greater customer-satisfaction than the German respondents will.

Support for these two hypotheses is based on findings that marketing efforts and consumer behavior are influenced by culture (Taylor and Okazaki, 2006). Differences in culture have been shown to impact customer responses to advertising (Laroche et al., 2001), product choice (Watson and Wright, 2000) and sales promotions (Kwok and Uncles, 2005). Thus, it is hypothesized that it will also affect perceived service quality and customer satisfaction. It is further hypothesized that subjects’ responses will be similar in France and Portugal because they are categorized as high-context countries by Hall (1977) and classified similarly by Schwartz (1994) and different than Germany, which is classified as a low-context country by Hall. It is further hypothesized that satisfaction expressed and service quality perceived will be higher among the French and Portuguese respondents because France and Portugal are high-context countries where group harmony is more important.

METHODOLOGY

Experimental Design

To address the research objectives, a simulation with scenarios was created and presented to respondents who were instructed to imagine themselves in a dental setting and then report how they would feel about the service encounter using satisfaction and service quality scales. Researchers (Luo et al., 2006; Kahn and Jain, 2005) have found that this approach is helpful when exploring complex constructs that are difficult to operationalize in a real-world setting. In satisfaction research, this technique has been used extensively (Estelami and Bergstein, 2006;
Bitner, 1990). To be effective, the scenarios must be realistic and familiar to the subjects. A professional service was chosen because although service quality has a significant impact on customer satisfaction across all industries, it is of paramount importance for professional services (Eskildsen et al., 2004). A dental setting was selected because most residents in France, Germany and Portugal regularly visit dentists starting at an early age. A question relating to the frequency of a respondent’s visits to a dental office was included in the questionnaire, for the purpose of eliminating from the study any respondents unfamiliar with a dental setting. The scenarios were developed in conjunction with two dentists and were pretested with 23 French respondents, 28 German respondents and 21 Portuguese respondents.

The expectation scenarios (see Ueltschy and Krampf, 2001) created high and low expectations using a description of the dental office and its surroundings, and a description of a previous visit to that dental office. The service environment was made part of the scenarios because it has been shown to affect service quality perceptions (Williams and Anderson, 2005; Bitner, 1992). In fact, some researchers, such as Dabholkar and Overby (2005) believe that service process is the missing link between the concepts of service quality and customer satisfaction. “A reality of service consumption is that customers buy the service before they actually experience it” (Berry, Wall and Carbone, 2006, p. 48). Rust and Oliver (1994) discussed the service encounter with respect to two dimensions, namely service performance and service environments, with the latter referring to the impact of atmospherics on encounter satisfaction. Mechanic clues come from inanimate objects and offer a physical representation of the intangible service to follow. They have a potentially important role in that they help to create the first impression which will influence customers’ choice of a service provider. These include such things as facility design, equipment, furnishings, sounds, lighting, landscaping and the
neighborhood in which the facility is located. Next, respondents were presented with scenarios detailing the actual visit (high performance and low performance, see Ueltschy and Krampf, 2001). A 2x2 full factorial experimental design between subjects resulted, with each of the treatments (T1 through T4) representing independent samples. Each subject was randomly assigned to a treatment and given the questionnaire in their native language: French, German or Portuguese. Each of the four treatment cells represents real-life situations that could occur in any dental setting. For each of the conditions, subjects were instructed to evaluate the service encounter using validated scales for customer satisfaction and service quality.

Sample and Procedure

The data for this study (n= 564) was collected from undergraduate and graduate business students in Osnabruck, Germany, Boulogne, France, and Lisbon, Portugal. It was deemed that university students were appropriate for this study because they are more likely to be homogeneous on certain demographic characteristics; they allow for more precise predictions and provide a stronger test of theory (Calder, Phillips and Tybout, 1981); they also represent the upwardly mobile middle and upper classes, which are the target markets of most corporations that want to do business in foreign countries. Finally, because most students are familiar with the professional service chosen in this research, their participation does not seem to compromise the validity of the study. Of the German sample (n=160), 94.4 percent were 18 to 29 years of age; of the French sample (n=204), 95.1 percent were 18 to 29 years of age; and for the Portuguese sample (n=200) 47.0 percent were 18 to 29 years of age. Approximately, 55 percent, 62 percent and 55 percent of respondents were female in the German, French and Portuguese samples, respectively.
Measurement

The questionnaire was first developed in English and then translated into French by one of the researchers to ensure that all idioms and local expressions were included and properly stated. The French version was then back translated by another researcher who was familiar with the subject content and fluent in English and French. For the German version, the questionnaire was translated into German by a bilingual graduate student. When deemed necessary, consultation via the phone with dental practices were done to ensure that the original meaning of the questionnaire was respected. The complete German version of the questionnaire was then back-translated into English by a native speaker and English professor and differences were dealt with by consultation with a second English professor. The Portuguese version was translated by the Portuguese researcher, who is also fluent in English and then back translated by a graduate student who is fluent in Portuguese and English and familiar with the subject matter. The French, German and Portuguese versions were all pretested with the appropriate samples with minor changes made.

Thirteen items appropriate for use with the scenario of a dentist setting from the performance-only SERVPERF inventory of measures were selected. The seven-point questions were anchored by 1= “strongly disagree” and 7 = “strongly agree.” (The wording of each question appears in Figure 1). The first measure of customer satisfaction was on a seven-point scale: “With respect to the quality of this dental practice, I feel terrible/unhappy/mostly dissatisfied/mixed/mostly satisfied/pleased/delighted.” (Spreng, MacKenzie and Olshavsky, 1996). The second measure of satisfaction (Crosby and Stephens, 1987) was a four item, seven-point semantic differential ratings scale with Cronbach’s alphas of more than .96, which indicates high reliability: “With respect to the quality of dental care I have just received, I am:
disgusted/contented, dissatisfied/satisfied, displeased/pleased, I didn’t like it at all/I liked it very much.” All five items had affective components that are usually associated with the measurement of consumer satisfaction (Oliver, 1996). Please see Figure 1 for the complete list of items.

**ANALYSIS AND RESULTS**

**Manipulation Checks**

To ascertain that the respondents who received different experimental treatments perceived the desired effects, manipulation checks were performed on both the expectation and the performance scenarios. One seven-point question was used to assess respondents’ expectations: “Overall, your expectations of having the cavity filled correctly are low/high.” Another seven-point question was used to check the performance scenarios: “Overall, how would you rate the performance of the dentist?” (poor/excellent). Using t-tests, significant mean differences at $p < .001$ were noted between respondents assigned to the high-expectations (6.21) and low-expectations (3.20) scenarios ($t= 25.2$) and between the high-performance (5.66) and low-performance (2.32) scenarios ($t=34.9$), indicating that the scenarios were achieving the desired effects.

**Measurement Reliabilities**

The reliability analyses performed on the thirteen measures of service quality yielded a Cronbach alpha of .97 for the three samples. Cronbach alphas for the five measures of service satisfaction were .98 for the French and Portuguese samples and .99 for the German sample. Given the difference in age composition of the Portuguese sample relative to the other two countries, we tested for differences in the age distribution of responses to the eighteen
measurement questions in the Portuguese sample by running a series of Anovas for each of the questions. No significant differences at $p < .05$ were detected in the way each age group responded to the questions under study.

**Invariance Testing of the Model**

The EQS confirmatory factor analysis (CFA) procedure was used to test the invariance of the measurement instruments and the factorial structure. The model was estimated with the reweighted generalized least squares (ERLS) method. An examination of the data revealed 2 multivariate outliers in the German sample and one in the Portuguese sample. These three cases were therefore removed from the analysis. It was hypothesized a priori that the 13 items measuring the quality construct would load on one factor, that the 5 items measuring the satisfaction construct would load on another factor, and that quality would be an antecedent to satisfaction. The service quality-satisfaction relationship has been the subject of much debate, but Brady, Cronin, and Brand’s (2002) study has lent further support to this causal order. To assess the group invariance of the two constructs, we followed the steps advocated by Steenkamp and Baumgartner (1998), that is, when the goal of a study is to conduct a comparison of means, configural invariance must be established first, and then metric (factor loadings) and scalar (item intercepts) invariance must be determined. This procedure is recommended because of differences in the interpretation of content and/or endorsement of particular items, item measurements and intercepts may not be equivalent across cultures.

In all the subsequent analyses, practical and statistical considerations guided the model fitting. Given the known sample-size dependency of the $\chi^2$ statistics, the statistical indexes of choice for assessing model fit were the comparative fit index (CFI), $\chi^2$/degrees of freedom, and the RMSEA. A ratio of $\chi^2$ to degrees of freedom that ranges from 1.00 to 5.00 and a CFI value...
greater than .90 both indicate an acceptable fit to the data (Bentler, 1995). RMSEA’s values less than .05 are indicative of close fit and values up to .08 of reasonable fit (Browne and Cudeck, 1993). Ill-fitting parameters were identified by means of the Lagrange multiplier (LM) test.

The hypothesized model for each of the three groups showed a satisfactory fit of the data; however, an error covariance involving Q48 and Q49 yielded large $\chi^2$ values in all three samples. When respecified as a freely estimated parameter, an improvement in overall model fit was noticeable in the three samples. Fit statistics for the three baseline models are presented in Table 2, with Figure 1 showing a summary of the model estimates for the three groups. For the German respondents, the model accounted for 89 percent of the variance in satisfaction, while for the Portuguese and French respondents it accounted for 64 percent and 78 percent, respectively.

Convergent validity was supported, as all the factor loadings are high and are statistically significant ($p<.01$). Furthermore, the average variance captured by each of the constructs was greater than .50, indicating that the variance due to measurement error is smaller than the variance captured by the construct (Fornell and Larcker, 1981). For the quality construct, the average variance extracted was .77, .71, and .75 for the German, French and Portuguese samples respectively. Likewise, for the satisfaction construct, the average variance extracted amounted to .93, .88, and .93 for the German, French and Portuguese samples respectively.

**Discriminant Validity**

Discriminant validity was assessed for the quality and satisfaction constructs by fixing at 1 the correlation between these two latent factors in the model, as suggested by Bagozzi (1981) and Anderson and Gerbing (1988). Looking at the differences in $\chi^2$ in Table 3 for the three samples, the constrained model produced a poor fit compared to the model in which the
correlation was unconstrained. In all samples, significant increases in $\chi^2$ were noted. Thus, there is evidence of discriminant validity between the two constructs.

**Configural Invariance.** For this test, no equality constraints are included and the model serves as a useful baseline model to which more restrictive models can be compared. The test of configural invariance yielded a good fit: $\chi^2/df$ ($785/399 = 1.97$), CFI = .99, and RMSEA = .042 which indicates the same factor patterns across the three countries and that all factor loadings are significant.

**Metric Invariance.** Based on the final model for each group, we tested for metric invariance by constraining all factor loadings to be equal across groups in the following order Portugal, France and Germany as groups 1, 2, 3 respectively, and then we compared the model in a simultaneous analysis of the data. We based judgment of replicability on two criteria: (1) goodness-of-fit of the constrained model and (2) probability level of the equality constraints as determined by the LM test (in which $p < .05$ is untenable). The result of this analysis revealed a good fit to the three-group constrained model: CFI = .99, $\chi^2/df$ (873/431) = 2.03. However, we found three constraints to be untenable between groups 1 and 3 (Q41, Q55 and Q60) and five constraints between groups 1 and 2 (Q44, Q50, Q51, Q53, and Q54). Releasing these constraints produced a satisfactory measurement model that was partially metric invariant across the three culture groups with $\chi^2/df$ (807/423) = 1.91, CFI=.99 and RMSEA=.040. The difference in $\chi^2$ between this model and the configural model was 22 with 24 degrees of freedom ($p > .10$), which indicates that the fit of this model is not significantly worse than that of the configural model. Thus partial metric invariance was supported. Table 4 summarizes the metric constraints released.
Scalar Invariance. In the same manner as above, we tested the invariance of intercepts by concomitantly constraining the intercepts of all invariant item measurements across groups. The results from this run yielded $\chi^2/df (912/448) = 2.04$, CFI = .99 and RMSEA = .043. Ten intercepts across some groups showed clearly demarcated high LM$\chi^2$ values. Releasing these ten constraints produced a model partially invariant with a $\chi^2/df (823/438) = 1.88$, a CFI = .99 and a RMSEA of .040. The change in $\chi^2$ (47) and 39 degrees of freedom ($p > .10$) indicated that this model did not differ significantly from the configural model, in support of partial scalar invariance. Table 4 summarizes the scalar constraints released.

The above tests supported our assumption of partial invariance. Of the 18 non-invariant parameters, 10 involved inequivalencies between the French and German samples, and 8 involved inequivalencies between the Portuguese and German samples. The equivalence of the service quality $\rightarrow$ satisfaction structural path was also tested by concomitantly constraining this parameter and all invariant item measurements across groups. The path was found to be noninvariant across the three samples. Thus, the first and second hypotheses were supported, for the most part.

Comparison of Means

Next, comparisons were conducted between the French, German and Portuguese respondents’ assessments of satisfaction and service quality, given the same service situation. On the basis of the partial measurement invariance results obtained, latent means comparisons were conducted in which the German sample was the “reference group” (Byrne, 1994; Bentler, 1995) for each treatment. Table 5 shows the results of the latent mean comparisons for each treatment as well as the unweighted means for the three fully invariant measures of service quality (Q48, Q56, Q59) and the two fully invariant measures of service satisfaction (Q40, Q42).
In addition, using Anova, pairwise comparisons between the German and the Portuguese sample and the German and the French sample were conducted using the unweighted mean of the three invariant measures of quality and the unweighted mean of the two invariant measures of satisfaction. To maintain the overall Type I error level at $\alpha=.05$, each comparison was tested at $\alpha=.025$ using the Bonferroni adjustment (Tabachnick and Fiddell, 2001). The results can be seen in Table 5.

The third hypothesis was strongly supported in that the service quality perceived and the customer satisfaction expressed by the French and Portuguese respondents were not significantly different, with one exception only. In the $T_1$ cell (low expectations and low performance), the French respondents perceived significantly lower service quality than did the Portuguese respondents. This was verified by doing the latent means comparison using the Portuguese sample as the reference group.

Looking again at Table 5, one can see that the last hypothesis was supported. The French and Portuguese respondents perceived higher service quality and expressed greater satisfaction than did the German respondents when performance was low, regardless of expectations.

**DISCUSSION**

This study was motivated by the research question: Will a Pan-European approach be the optimal strategy for service offerings in Europe? Our findings offer insights into this issue, providing managerial guidelines and future research directions.

There are two principal findings in this study. First, three measures of service quality and two measures of customer satisfaction were found to be fully invariant across the three groups, which demonstrates that some measures of both service quality and customer satisfaction can be
nonequivalent across cultures. It is possible that a measure may not perform correctly or comparably in all markets even though it works well in the country in which it was created. Frequently researchers have assumed that concepts and measures developed in one country are relevant in other countries without examining how applicable they truly are cross-nationally. Applicability means that a construct is expressed in a similar way in all countries being studied and therefore has similar levels of reliability and validity. When the assumption of applicability is not verified, the likelihood of invalid cross-national inferences increases (Durvasula et al., 2006) and conclusions based on the scale may actually represent untruths based on the scale’s unreliability. It has been found that the interpretation, translation and connotation of particular items can vary across cultures, thus introducing response bias. Raajpoot (2004) found this problem when he tried to measure service quality in Pakistan using the scales validated in the Western world. He subsequently developed a culturally sensitive multi-item version of SERVQUAL and named it PAKSERV.

Thus, firms which are operating in the global arena should use caution when interpreting customer satisfaction surveys. Instead of taking them at face value, managers should consider the cultural differences associated with the various countries before using the results to make important decisions about quality improvement interventions, compensation, promotion or retention of management.

The second finding is that a standardized approach to Europe for professional service offerings, i.e. a Pan-European approach, does not appear to be the optimal strategy. Significant differences in perceived service quality and customer satisfaction were noted among the respondents from Germany, France, and Portugal given the same service encounter. This concurs with the work of Seitz and Johar (1993) whose study was done in five Western European
countries: Germany, France, Italy, Spain and the U.K. It was found that the Pan-European approach to advertising apparel was not the optimal strategy, with standardization not well received in the European countries studied. Similarly, in a more recent study by Tixier (2005), which examined foreign firms’ strategies in creating websites for France, Germany, U.K. and Spain, it was found that firms typically localized, not standardized, their websites in Europe, tailoring them to the local culture, particularly in France.

In the current study, there were significant differences in satisfaction expressed between the German respondents and at least one of the other groups in all four cells, or service encounters. This was anticipated since, as previously mentioned, Germany is considered a low-context country (Hall, 1977) and France and Portugal high-context countries; also using Hofstede’s dimensions, France and Portugal are more similar culturally and different from Germany. For example, in service encounters where performance was low, regardless of expectations, the Germans expressed significantly lower satisfaction than did the French or Portuguese respondents. This could be explained by the fact that in Germany, a low-context culture, people are more forthright and say exactly what is on their mind and are more concerned with their own individual needs; so if performance is poor, they will show no hesitation in expressing their dissatisfaction. The French and Portuguese respondents, on the other hand, are not as likely to express harsh criticism of poor performance, since they belong to high-context cultures where the welfare of the group and group harmony are more important. Using Hofstede’s (1980) dimensions, these differences might be explained by using the masculinity dimension, which refers to the acceptance of or tendency to display assertiveness. Germany is a masculine country, where displays of assertiveness, including complaints about poor service, would be more commonplace than in France and Portugal, which would be classified as feminine
countries. The uncertainty avoidance dimension might also yield insights in that high uncertainty avoidance countries, like Franc and Portugal (see Table 1), place more emphasis on trust based relationships with their service providers; so if service is poor, they will not be as critical because of the relationship. Gutierrez, Martinez-Lopez and Fernandez (2006) found this to be true in Spain, another Mediterranean European country where the value of the dimensions of perceived service quality were a function of the length of the relationship with the service provider. These differences could also be accounted for by using Schwartz’s SVI (1999) and the conservatism dimension. Conservatism, which is predominant in the French and Portuguese societies, is based on close-knit, harmonious relations in which the interests of the person are not viewed as distinct from those of the group (Maercher, 2001); thus, individuals in these societies would be hesitant to criticize others, including service providers; German is not classified as conservative.

What do these results mean to managers? First and foremost, the same service offering in Europe will not produce the same results in terms of service quality perceptions and customer satisfaction. The service quality provider in Germany is going to have to work harder to “delight” their customers to improve service quality perceptions and customer satisfaction. For U. S. firms attempting to provide services in Germany, managers will do well to remember that German products are known for their high quality, so this same high quality would likely be expected by German consumers in terms of service offerings. Interestingly, if one looks at Table 5, it appears that expectations do have an impact. For the most part, customer satisfaction is greater and service quality is perceived as being higher when expectations are higher. Thus, managers need to identify the antecedents of what consumers in a particular market perceive as quality service (Malhotra et al., 2005). Homburg et al. (2005b) found that both the formation
and the perception of benefits differ greatly among cultures. Similarly, the results of our study concur with the work of Matzler, Renzl and Rothenberger (2006) who found cross-cultural differences in service satisfaction, concluding that the customer’s nationality was a strong moderator. The impact of the servicescape (the physical surroundings of the service environment) has been found to play a greater role in influencing service quality perceptions than was previously thought (Reimer and Kuehn, 2005). Hence managers might consider enhancing the appearance of their service environment as a preliminary step toward improving service quality perceptions.

Lastly, although a Pan-European approach does not appear to be the best strategy for service offerings in Europe, we know that standardization occurs along a continuum; it is not an all or nothing proposition. Hence, managers might consider offering similar services to clusters or groups of countries in Europe which are culturally similar. Here, we see that France and Portugal might be potential candidates for such a strategy. This would allow the firm to keep costs down while customizing their offering. It has been said that the success of firms hinges on their ability to cater to local differences while maintaining scale efficiencies (Rigby and Vishwanath, 2006). A U. S. firm entering the EU could also look for countries which are culturally similar to the U. S., so as to minimize the adaptation necessary. As can be seen in Table 1, the U. S. and Germany are very similar using Hofstede’s dimensions and are both classified as low-context countries by Hall (1977). Thus, when well-executed, localization can provide a competitive edge for service providers entering the EU, yet allow for some economies of scale.

Some limitations of this study should be acknowledged, which can also be considered opportunities for future research. Our study analyzes whether a Pan-European approach would
be the optimal strategy for service offering in the EU, focusing on France, Germany and Portugal. There are now 25 countries in the European Union. Future research might focus on some of the new members in Central and Eastern Europe, since they represent new markets for many industrialized countries outside the EU, and might be culturally more dissimilar than the original EU members in Western Europe. Lastly, because customer satisfaction has been found to vary across industries (Gilbert and Veloutsou, 2006), future work might use different scenarios to explore the influence of culture on the feasibility of using a Pan-European approach in relation to a different professional service.

In conclusion, although standardization has been touted as a powerful strategy in consumer markets, it appears to have reached the point of diminishing returns. Consumers are growing more diverse in wealth, lifestyle and cultural values; one size definitely does not fit all (Rigby and Vishwanath, 2006). In response, smart firms are customizing their offerings to local markets, and this needs to be true of service offerings as well. This study has taken a preliminary step towards answering the question of whether a Pan-European approach to service offerings in Europe is the optimal strategy and the answer appears to be “no.”
Table 1

Hofstede’s Dimensions

<table>
<thead>
<tr>
<th>Country</th>
<th>Power Distance</th>
<th>Individualism</th>
<th>Uncertainty Avoidance</th>
<th>Masculinity</th>
<th>Long Term Orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>68</td>
<td>71</td>
<td>86</td>
<td>43</td>
<td>31</td>
</tr>
<tr>
<td>Germany</td>
<td>35</td>
<td>67</td>
<td>65</td>
<td>66</td>
<td>31</td>
</tr>
<tr>
<td>Portugal</td>
<td>63</td>
<td>27</td>
<td>104</td>
<td>31</td>
<td>29</td>
</tr>
<tr>
<td>USA</td>
<td>40</td>
<td>91</td>
<td>46</td>
<td>62</td>
<td>29</td>
</tr>
</tbody>
</table>

Table 2

Summary of fit statistics for the baseline models

<table>
<thead>
<tr>
<th>Groups</th>
<th>CFI</th>
<th>RMSEA</th>
<th>$\chi^2$/df</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Portugal</td>
<td>.990</td>
<td>.070</td>
<td>272/133=2.05</td>
</tr>
<tr>
<td>2. France</td>
<td>.988</td>
<td>.079</td>
<td>299/133=2.25</td>
</tr>
<tr>
<td>4. Germany</td>
<td>.994</td>
<td>.063</td>
<td>214/133=1.61</td>
</tr>
</tbody>
</table>

Table 3

Discriminant validity of the Quality and Satisfaction Constructs

<table>
<thead>
<tr>
<th>Sample</th>
<th>Unconstrained Model $\chi^2$</th>
<th>Constrained Model $\chi^2$</th>
<th>$\Delta \chi^2$</th>
<th>$\Delta$ Degrees of Freedom</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portugal</td>
<td>272</td>
<td>1,646</td>
<td>1,375</td>
<td>1</td>
<td>$P&lt;.001$</td>
</tr>
<tr>
<td>France</td>
<td>299</td>
<td>1,081</td>
<td>782</td>
<td>1</td>
<td>$P&lt;.001$</td>
</tr>
<tr>
<td>Germany</td>
<td>214</td>
<td>671</td>
<td>457</td>
<td>1</td>
<td>$P&lt;.001$</td>
</tr>
</tbody>
</table>
### Table 4
Summary Statistics for Non-Invariant Parameters Across the Three Culture Groups

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Factor Loadings Non-invariant Groups</th>
<th>Factor Intercepts Non-invariant Groups</th>
<th>Item Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor 1</strong> (Quality)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V36Q49</td>
<td>1,2</td>
<td></td>
<td>The dental facilities are visually appealing.</td>
</tr>
<tr>
<td>V37Q50</td>
<td>1,2</td>
<td>1,3</td>
<td>When the dental practice promises to do something by a certain time, it does so.</td>
</tr>
<tr>
<td>V38Q51</td>
<td>1,2</td>
<td>1,3</td>
<td>When you have a problem, the dental practice is sympathetic and reassuring.</td>
</tr>
<tr>
<td>V39Q52</td>
<td></td>
<td>1,2</td>
<td>The described dental practice keeps accurate records.</td>
</tr>
<tr>
<td>V40Q53</td>
<td>1,2</td>
<td></td>
<td>The dental practice tells patients exactly when and what services should be performed.</td>
</tr>
<tr>
<td>41Q54</td>
<td>1,2</td>
<td></td>
<td>You received prompt service from the dental practice.</td>
</tr>
<tr>
<td>V42Q55</td>
<td>1,3</td>
<td></td>
<td>Employees in this dental practice are always willing to help patients.</td>
</tr>
<tr>
<td>V44Q57</td>
<td>1,2</td>
<td></td>
<td>You can rust the employees of this dental practice.</td>
</tr>
<tr>
<td>V45Q58</td>
<td>1,3; 1,2</td>
<td></td>
<td>The employees of the dental practice are polite.</td>
</tr>
<tr>
<td>V47Q60</td>
<td>1,3</td>
<td></td>
<td>Employees in the dental practice understand your needs.</td>
</tr>
<tr>
<td><strong>Factor 2</strong> (Satisfaction)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V28Q41</td>
<td>1,3</td>
<td>1,2</td>
<td>Quality of dental care: disgusted/contented.</td>
</tr>
<tr>
<td>V30Q43</td>
<td>1,3</td>
<td></td>
<td>Quality of dental care: displeased/pleased.</td>
</tr>
<tr>
<td>V31Q44</td>
<td>1,2</td>
<td>1,3</td>
<td>Quality of dental care: I didn’t like it at all.</td>
</tr>
</tbody>
</table>
### Table 5
Comparison of Means by Treatments (within experimental cells)
Service Quality and Satisfaction

<table>
<thead>
<tr>
<th>Treatments</th>
<th>Portugal (P) (N = 50)</th>
<th>France (F) (N = 51)</th>
<th>Germany (G) (N = 39)</th>
<th>Comparisons t-Value (Significance)</th>
<th>Significance (Bonferroni Adj.)</th>
<th>Latent Means Comparisons</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>T₁</strong> Low Expectations/ Low Performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality</td>
<td>3.28</td>
<td>2.24</td>
<td>2.07</td>
<td>4.38 (.000)</td>
<td>Significant</td>
<td>P↑G (t=3.78)</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>2.67</td>
<td>2.35</td>
<td>1.90</td>
<td>3.22 (.002)</td>
<td>Significant</td>
<td>N.S.</td>
</tr>
<tr>
<td><strong>T₂</strong> Low Expectations/ High Performance</td>
<td>(N = 50)</td>
<td>(N = 51)</td>
<td>(N = 40)</td>
<td>- .66 (.513)</td>
<td>N.S.</td>
<td>N.S.</td>
</tr>
<tr>
<td>Quality</td>
<td>4.75</td>
<td>4.58</td>
<td>4.95</td>
<td>-1.26 (.211)</td>
<td>N.S.</td>
<td>N.S.</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>5.24</td>
<td>5.28</td>
<td>5.79</td>
<td>2.38 (.018)</td>
<td>Significant</td>
<td>P↓G (t=-1.91)</td>
</tr>
<tr>
<td><strong>T₃</strong> High Expectations/ Low Performance</td>
<td>(N = 49)</td>
<td>(N = 51)</td>
<td>(N = 41)</td>
<td>3.24 (.001)</td>
<td>Significant</td>
<td>P↑G (t=3.37)</td>
</tr>
<tr>
<td>Quality</td>
<td>3.63</td>
<td>3.84</td>
<td>2.89</td>
<td>4.24 (.000)</td>
<td>Significant</td>
<td>F↑G (t=4.25)</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>2.45</td>
<td>2.74</td>
<td>1.77</td>
<td>3.44 (.001)</td>
<td>Significant</td>
<td>P↑G (t=1.97)</td>
</tr>
<tr>
<td><strong>T₄</strong> High Expectations/ High Performance</td>
<td>(N = 50)</td>
<td>(N = 51)</td>
<td>(N = 38)</td>
<td>-1.48 (.140)</td>
<td>N.S.</td>
<td>N.S.</td>
</tr>
<tr>
<td>Quality</td>
<td>5.57</td>
<td>5.48</td>
<td>5.82</td>
<td>-2.08 (.039)</td>
<td>N.S.</td>
<td>F↓G (t=-1.96)</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>5.61</td>
<td>5.83</td>
<td>6.16</td>
<td>-3.20 (.002)</td>
<td>Significant</td>
<td>P↓G (t=-2.07)</td>
</tr>
</tbody>
</table>

a) Significant differences at p < .05 for two planned comparisons (1) Portugal and Germany, and (2) France and Germany using the Bonferroni adjustment for two comparisons.

b) Germany used as a reference group.
Figure 1
Final Model of Factorial Structure of Quality-Satisfaction for the Portuguese, French and German Samples

Q48 The dental practice has up-to-date equipment
Q49 The dental facilities are visually appealing
Q50 When the dental practice promises to do something by a certain time, it does so
Q51 When you have a problem, the dental practice is sympathetic and reassuring
Q52 The described dental practice keeps accurate records
Q53 The dental practice tells patients exactly when and what services should be performed
Q54 You received prompt service from the dental practice
Q55 Employees in this dental practice are always willing to help patients
Q56 Employees in this dental practice are never too busy to respond to customer requests promptly
Q57 You can trust the employees of this dental practice
Q58 The employees of the dental practice are polite
Q59 A dental practice provides you with individual attention
Q60 Employees in the dental practice understand your needs
Q40 Quality of this dental practice: terrible/delighted
Q41 Quality of dental care: disgusted/contented
Q42 Quality of dental care: dissatisfied/satisfied
Q43 Quality of dental care: displeased/pleased
Q44 Quality of dental care: didn’t like it at all/liked it very much

*No t-values are reported because this item was used to set the metric for the construct.
Note: Results shown in the following order: Portuguese, French and German samples. Standardized coefficients are shown. Values in parentheses represent t-values. All parameters are statistically significant at p < .01.
REFERENCES


*Portugal: Country Profile* (2006), The Economist Intelligence Unit Limited.


_____________ and Johnson, C. M. (2002), “Standardized vs. specialized international advertising campaigns: What we have learned from academic research in the 1990’s?” *New Directions in International Marketing*, Vol 9 No 4, pp. 111-131.


