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Affect and Cognition as Predictors of Behavioural Intentions Towards Services.

ABSTRACT

Purpose: To examine alternative approaches to measuring service evaluation across cultures. Research aims to assess (i) differences between cognitive and affective measures and their ability to predict behavioral intentions and (ii) the impact of service features on these measures.

Design/Methodology/Approach: A self completion survey of African (East/West), Chinese and English higher education students includes service quality, satisfaction, affect (emotions/feelings) and behavioral intentions scales relating to retail banking.

Findings: For all groups overall quality, satisfaction and positive affect predicted behavioral intentions. Negative affect was significant for English consumers. Differences across cultures are identified in the determinants of service evaluation, for example, assurance and responsiveness, but these were antecedents of affect and not of overall service quality or satisfaction.

Research Limitations/Implications: The sample is drawn from cultural groups (based on Hofstede's (1980) individualism continuum) of higher education students in the UK. The implications for generalizability of findings to wider populations and the need to recognize the considerable diversity within the cultural sample groupings is emphasized.

Practical Implications: Service providers should include measures of affect in surveys which aim to assess the role of service features in overall evaluation and behavioral intentions towards the service. This will provide valuable data for managerial decision making and resource allocation. Cultural comparisons derived from cognitive-based Western measures may fail to identify elements of service quality which impact on behavioral intentions.

Originality/Value: No other studies have directly compared a range of alternative service-related measures as predictors of behavioral intentions across cultures, or included African consumers who are rarely represented in service evaluation studies.

Key words: Behavioral intentions, Cross-cultural, Affect/Emotions, Service quality, Satisfaction

Research paper

1. INTRODUCTION

The accelerating trend towards globalization/internationalization of services has been identified by many authors (see for example, Bolton and Myers, 2003; Javalgi and White, 2002). Malhotra et al (2005) argue that there is a need for managers and researchers to examine how consumers from different cultures evaluate the services they receive. Information regarding consumers' satisfaction/service quality evaluation is vital for service redesign/development (Edvardsson and Olson, 1996), motivating staff (Voss et al, 2004) and decision making generally (Gronroos, 2000). Furthermore, studies (see for example, Patterson, 2004; Zeithaml et al, 1996) have established relationships between consumers'

service evaluation and their behavioral intentions towards the service provider. Such studies, however, are usually based on theoretical models and frameworks developed in a Western environment (usually the U.S.) and may not be relevant to all cultures (Laroche et al, 2004). Many cross-cultural service quality researchers adopt similar scales and measures to those described in mono-cultural studies, focusing on consumers' cognitive evaluations of perceptions, expectations or both. Yet others have questioned the universal applicability of measurement instruments generally (Douglas and Nijssen, 2003; Wong et al, 2003) and service quality measures in particular (Smith and Reynolds, 2002; Ueltschy et al, 2004).

The primary purpose of this paper is to examine alternative approaches to measuring service evaluation across cultural groups. In particular the emphasis is on differences between cognitive and affective measures and their ability to predict behavioral intentions towards the service. A second objective is to assess how service dimensions such as responsiveness and assurance relate to overall measures of service quality, satisfaction and affect (emotions/feelings). In particular, the paper adds to the growing body of knowledge which suggests that consumers' affective or emotional responses are more relevant to service providers and tests this in a cross-cultural context.

Services are consumed as they are produced. Consequently many organizations have to manage a potential 'inter-cultural service gap' (Stauss and Mang, 1999) when serving consumers from diverse cultures. This study focuses on the higher-education student market for retail banking services, described by Donthu and Yoo (1998) as one of the most dramatic examples of service internationalization. Students in higher education represent both a global market segment and, because of their potential, the target markets of many corporations that want to do business in foreign countries (Laroche et al, 2004). Additionally, a focus on this

market helps to establish sample equivalence through the use of relatively homogeneous samples which is essential in this type of comparative cross-cultural research (Reynolds et al, 2003). African (East and West), Chinese and English respondents were included in the study. The increasing importance of the Chinese market is reflected in the work of marketing authors focusing on the features of Chinese culture (Leung and Chan, 2003; Yau, 1988); the growing number of cross-cultural service quality and consumer behavior studies comparing Chinese and Western consumers (see for example, Malhotra and McCort, 2001; Poon et al, 2004); and, the number of studies examining the generalizability of established models to Chinese populations (Spreng and Chiou, 2002; Tam, 2005). Conversely, relatively little is known about African consumers with exceptions focusing on South Africa (e.g., Abratt and Goodey, 1990; Grier and Deshpande, 2001; Nel et al, 1997) or ritual consumption in Ghana (Bonsu and Belk, 2003). There is some qualitative evidence, however, that affective evaluations of service encounters may differ between English and West African consumers (Smith, 2006).

Few studies have directly addressed cultural differences in the perceived service quality – behavioral intentions relationship (for exceptions see Liu et al, 2001) and none have directly compared a range of alternative measures as examined in the present study. The findings here have implications for managers of organizations that deliver services to an international audience and those who seek to understand cultural differences in consumers' evaluations. In addition, a cross-cultural examination of the relative impact of affect and cognition in overall service quality evaluation has implications for both the development of service quality measurement and services marketing theory.

The remainder of the paper is structured as follows. First, the literature review focuses on how researchers have examined consumers' service evaluations from both a cognitive and affective perspective, the relationship between service evaluation and behavioral intentions and how this might differ across cultures. A number of studies are reviewed which have examined cultural differences in the service features which impact on overall consumer evaluation. The methodology is then described and the findings are presented. Finally, conclusions are drawn and implications, criticisms and suggestions for further research are outlined.

2. CONCEPTUAL BACKGROUND

2.1 Predicting Behavioral Intentions: Cognitive and Affective Approaches to Service Evaluation across Cultures.

Consumers' behavioral intentions, as outcomes of service evaluation, are described as 'a set of multiple (behavioral and non-behavioral) responses' (Cronin et al, 2000; Singh, 1990; Zeithaml et al, 1996). These include the propensity to engage in word-of-mouth and complaining behaviors, service switching, repurchase etc. Links between customer satisfaction and increased shareholder value have been established (Anderson et al, 2004; Gruca and Rego, 2005). The positive effect of consumer satisfaction with health services on future health behavior (Laing et al, 2002) is a further example of the relevance of this relationship across a wide range of organizations and service contexts.

A question therefore arises as to the best way to assess consumer evaluations so as to strengthen the observed relationship between that evaluation and intentions. Establishing

such relationships is essential if both theoretical and measurement validity are to be established. Authors have assessed, and claimed superiority for, a variety of measures with respect to their ability to predict scores on scales of behavioral intentions (see for example Brady et al, 2001; Cronin and Taylor, 1992; 1994; Parasuraman et al, 1994a). An examination of the services and marketing literature highlights three main approaches to assessing consumers' continuous service experiences.

First, for more than two decades, research on consumers' experiences with services has focused on the conceptualization of service quality as a 'gap' and emphasized cognitive appraisals where consumers compare their expectations with their perceptions (Gronroos, 1984; Lewis and Booms, 1983; Parasuraman et al, 1985; 1988; 1991; 1994a). Overall service quality scores are then used to predict behavioral intentions. A second approach, which is fundamental to marketing metrics, is to focus on customer satisfaction with services. The problems in defining 'satisfaction/dissatisfaction' have been highlighted (Oliver, 1981). Early definitions (e.g., Anderson, 1973; Engel and Blackwell, 1982) focused on cognitive evaluations similar to those later adopted by service quality researchers. Others argued that satisfaction includes an affective as well as a cognitive component (Mano and Oliver, 1993) and contrasted the affective nature of satisfaction with the cognitive nature of service quality evaluation (Liljander and Strandvik, 1997). A third approach has been to focus further on affect (i.e., feelings and emotions). Researchers have shown that scales including emotional responses will predict consumers' behavioral intentions (e.g., Andrade, 2005; Dube et al, 2003) although, as with other measures, the relationship may be complex (Louro et al, 2005). Bagozzi et al (1999a, p. 201) argue "the implications of emotional reactions in purchase situations on complaint behaviors, word-of-mouth communication, repurchase and related

actions may differ from various positive and negative emotions and be of more relevance than reactions to satisfaction or dissatisfaction, per se."

Although many cross-cultural service quality studies adopt a cognitive approach, that involve application or adaptation of the SERVQUAL scale (see Appendix), there is considerable variation. Kettinger et al (1995), for example, measure both expectations and perceptions. Others (Cunningham et al, 2002; Laroche et al, 2004) adopt Cronin and Taylor's (1992) SERVPERF approach and measure only perceptions. The former assesses overall satisfaction and behavioral intentions with one item for each measure whereas the latter includes five items for the measurement of overall satisfaction. Still others (e.g., Espinoza, 1999) adopt an overall service quality scale, and purchase and word-of-mouth intentions as suggested by the SERVQUAL authors (Parasuraman et al, 1988). Despite a lack of consistency in approach, a number of differences in the ways in which cultural groups evaluate the services they receive have been identified.

Kluckhohn (1949) argues that 'culture' refers to the distinctive ways of life of groups of people (or societies). Research has shown that typical assumptions, such as the relationships between satisfaction and word-of-mouth communication and complaining behavior, do not necessarily transcend cultures (Money and Gilly, 1998; Richins and Verhage, 1985; Rose, 1999). Similarly, the nature of feelings and emotions and how they are expressed are also known to differ cross-culturally (Bagozzi et al, 1999b; Dube et al, 2003; Trompenaars and Hampden-Turner, 1997; Wierzbicka, 1992; Williams and Aaker, 2002).

Triandis (1994, p. 286) describes individualism-collectivism as "the most important worldview that differentiates cultures." Further, he suggests a number of contexts where

collectivists can be expected to experience more positive or negative emotions. These include situations when participants lose or save face, when social behavior is inappropriate or when working with unfriendly people. These perceptions can readily be transposed to the service environment. Service encounters are purposive, task- and goal-oriented (Bitner et al, 1990; Keaveney, 1995; Solomon et al, 1985). They often involve social interaction based on learned behaviors, or scripts (Abelson, 1981) between actors (usually the consumer and the service employee) and thus offer potential for conflict, loss of face and/or perceived inappropriate behaviors. Studies have, however, provided conflicting results. Mattila (1999) found that expressed emotions, as an indicator of how the customer feels about the service, might be restricted to Western customers. Yet Voss et al (2004) argue that U.K. culture is characterized by a low expression of emotion.

A key question addressed in this paper is whether researchers should adopt cognitive or affective measures to assess service evaluation of consumers from different cultures. Hypothesis one is as follows:

H_1a: For consumers from individualist cultures cognitive measures will be more effective than affective measures as predictors of behavioral intentions towards services.

H_1b: For consumers from collectivist cultures affective measures will be more effective than cognitive measures as predictors of behavioral intentions towards services.

2.2 Cross-cultural Differences in Determinants of Service Evaluation.

A growing body of knowledge addresses the determinants, or service features, which impact on consumers' evaluations and form the basis of their expectations. Many cross-cultural

studies adopt the framework of service quality determinants/dimensions measured by SERVQUAL (Parasuraman et al, 1988; 1991; 1994a); that is, reliability, responsiveness, assurance, empathy and tangibles (see Appendix for item content). A considerable amount of debate surrounds this classification, with many mono-cultural researchers (Babakus and Boller, 1992; Carman, 1990) suggesting alternative frameworks. Additionally, researchers have found mixed support for SERVQUAL's five factor structure during applications outside the U.S. (e.g., Nel et al, 1997) and when making comparisons across cultural groups (Caruana et al, 1998; Kettinger et al, 1995; Laroche et al, 2004; Ueltschy et al, 2004; Witkowski and Wolfinbarger, 2002). Further difficulties in comparison arise as some studies focus on expectations, others on perceptions, and yet others on 'gaps' between perceptions and expectations. Finally, researchers who adopt alternative methodologies, such as in-depth interviews or focus groups (Imrie et al, 2000; Winsted, 1997), highlight differences in determinants across cultures and a greater depth and complexity to the service evaluation process.

Despite its limitations, the SERVQUAL model offers a well-established, widely recognized, parsimonious tool for the assessment and comparison of service quality evaluation. In particular, there is some agreement amongst researchers as to the way in which dimensions differ in importance and how they differentially impact on expectations, perceptions, overall evaluation and behavioral intentions between cultures. Studies indicate, for example, that consumers from individualistic cultures value 'responsiveness' (i.e., willingness to help and prompt provision of service) (Espinoza, 1999; Furrer et al, 2000) and this is particularly important to American consumers (Witowski and Wolfinbarger, 2002). Cunningham et al (2005) argue that convenience is very much a Western, or even a U.S., concept. Westerners are generally found to be more interested in rapid completion of service processes and more

focused on outcomes (Mattila, 1999). Conversely, the African concept of time is flexible and very different to that of the West (Usunier, 1996). Eastern consumers are more focused on process (Mattila, 1999) and in particular courtesy/politeness. Studies (Furrer et al, 2000; Imrie et al, 2000; Kettinger et al, 1995) have found that consumers from collectivist cultures are therefore more likely to value 'assurance' (i.e., knowledge and courtesy of employees and ability to inspire trust and confidence). This evidence suggests that differences will be identified in the determinants of overall service evaluation by cultural orientation. Our study aims to examine how such determinants vary as predictors of overall service evaluation when alternative evaluation measures are adopted. The hypotheses are as follows and the argument is summarized in Figure 1.

H_2a: For consumers from individualist cultures responsiveness will be a major determinant of service evaluations.

H_2b: For consumers from collectivist cultures assurance will be a major determinant of service evaluations.

Take in Figure 1

3. **RESEARCH DESIGN**

The research objectives require the selection of cultural groups which differ on dimensions likely to impact on the nature of service quality evaluations and their relationship with behavioral intentions. England is comparable to the U.S. on Hofstede's (1980) individualism continuum. Chinese (Hong Kong, Singapore and Taiwan) and West and East African countries are, however, located towards the opposite end of the continuum and described as

collectivist societies. By sampling two collectivist cultural groups and an individualist cultural group, we are able to test for both differences and similarities across cultures. If there are differences in constructs across cultures, finding differences between similar groups (i.e., East and West African, and Chinese) is a stronger test of the theory than finding differences between highly dissimilar groups (i.e., East and West African and English, or Chinese and English). In contrast, if constructs are universal, then no difference between dissimilar groups is a stronger test of the theory than no differences between similar groups (Van de Vijver and Leung, 1997). Consequently, at the macro-sampling level, three cultural groups were selected: (a) an 'Anglo-Western' group (English respondents) that is culturally similar to the U.S. where the majority of scales and models have been developed; (b) an 'Eastern' cultural group where increasing research and commercial interest is focused (Chinese respondents); and, (c) an under researched cultural group (West and East African respondents).

At the micro-sampling level, university students fulfilled the study requirements. That is, they are likely to have experience of the service being studied and they also help to fulfill a key sampling objective of minimizing the differences between groups on variables other than culture such as income and social class (Reynolds et al., 2003). However, although student samples provide similarities with respect to age range, we found statistically significant age differences between groups (i.e., African, 26, Chinese, 24, and English, 20). The African and Chinese groups had, on average, held their bank accounts for less than 1.5 years, indicating recent arrival in the UK.

A self-completion questionnaire was developed and pre-tested, initially with groups and subsequently with individuals from each of the three cultural groups. Questionnaires were then distributed during lectures at a number of UK universities where time (approx. 25

minutes) was allowed for completion. All respondents were studying business and management courses. Questionnaires were in English thus avoiding many of the problems of achieving translation equivalence (Green and White, 1976). Respondents were asked to report their nationality and the country in which they spent their childhood, only if the two matched were they considered to belong to a particular cultural group (Hofstede, 1991). The final sample consisted of 378 respondents: African (83), Chinese (142) and English (153).

3.1   Questionnaire Development and Measurement Scales

Service-related measurement scales for perceived service quality, satisfaction and behavioral intentions were chosen from those validated and published in high quality marketing journals.

Behavioral Intentions: The behavioral intentions items included those developed by Zeithaml et al (1996) to measure five dimensions – loyalty, external and internal response, pay more and switching – configured so as to reflect behaviors relevant to the student banking context and measured on a seven-point likelihood scale anchored by 'extremely likely' and 'not at all likely'.

Quality: Overall service quality was measured using a seven-point scale with four items drawn from Cronin et al (1997). The adjective pairs were excellent-poor, superior-inferior, poor quality-high quality, and high standards-low standards.

Satisfaction: The satisfaction scale comprised the four items validated by Spreng and MacKoy (1996) measured on a nine-point scale. The adjective pairs were very satisfied-very

dissatisfied, delighted-terrible, very dissatisfied-not at all dissatisfied, and very satisfied-not at all satisfied.

Affect/Emotions: A list of emotional words derived from Izard's (1977) 'universal emotions', Richins' (1997) 'consumption specific emotions' and Shaver et al's (1987) 'emotional words' were compiled and pre-tested with groups representative of the final sample. Several feelings and emotions, such as fear or loneliness, were not considered salient to the banking context, whereas others such as feeling valued (or respected) as a customer were considered crucial. Consequently, subjective evaluations in addition to emotions were included. The nine resulting items were evaluated on a nine-point scale ranging from not at all (1) to extremely (9). The affective items were divided into positive (good, safe, confident, relaxed and valued) and negative factors (shy, angry, irritated and unhappy).

Perceptions of Service Quality/Dimensions: The SERVQUAL dimensions of assurance, empathy, reliability, responsiveness and tangibles (Parasuraman et al, 1988; 1991; 1994a) have been adopted in the majority of cross-cultural service quality studies and form the basis for much of the discussion of differences in service evaluations (e.g., Caruana et al, 1998; Cunningham et al, 2002; Donthu and Yoo, 1998; Espinoza, 1999; Furrer et al, 2000; Imrie et al, 2000; Kettinger et al, 1995). For each of 21 statements (see Appendix) respondents were required to assess their perceptions on a nine-point scale anchored by low and high (Parasuraman et al, 1994a).

4. FINDINGS

The findings are presented in three sections. The first assesses whether a sufficient level of measurement equivalence is present in order to enable analysis across the three groups. The second considers how well the three measures (quality, satisfaction, and affect/emotion) predict behavioral intentions. The third focuses on the determinants of consumers' service evaluations and whether these differ across cultural groups or type of overall service evaluation.

4.1 Measurement Equivalence

To achieve a sufficient level of measurement equivalence to enable comparisons of relationships across cultural groups it is first necessary to determine that metric (or at least partial metric) and factor variance equivalence are present. For this study several measurement models needed to be assessed. The first hypothesis considers the relationships between behavioral intentions and quality, satisfaction, and affect/emotion. Multi-group confirmatory factor analysis of the five behavioral intentions sub-dimensions using AMOS 7.0 showed unacceptably low model fit indices. An examination of the individual relationships between observed and latent variables indicated that three sub-dimensions (external response, pay more and switching) did not perform well in the multi-cultural context. Examination of the internal consistency of these dimensions showed unacceptably low reliability in at least one of the three cultures concerned (external response, English = .455; pay more, African = .447, Chinese = .278, English = .276; switching, African = .381, English = .340), and as such these three dimensions could not be considered further. Next the metric invariance of the remaining two behavioral intentions dimensions, loyalty and internal

response, was examined. This analysis indicated that the internal response sub-dimension was unsuitable for cross-cultural analysis as the minimum number (i.e., two) of invariant factor loadings to achieve partial metric equivalence was not achieved with acceptable levels of model fit. In addition, multi-group CFA indicated that the factor loadings of the affect/emotion item 'shy' did not consistently load on either negative or positive affect/emotion cross-culturally. The measurement models concerning behavioral intentions were, as such, reduced to loyalty and its antecedents (quality, satisfaction and affect/emotion) and 'shy' was removed from the measure of affect/emotion.

Full metric invariance was not achieved with any of the three measurement models (quality-loyalty, satisfaction-loyalty and affect/emotion-loyalty). However, in each case partial metric invariance was achieved and these models showed no significant differences from the CFA that allowed item loadings to vary freely across the groups ($\Delta\chi^2$=7.933, df=6, p=.243 for quality-loyalty; $\Delta\chi^2$=7.061, df=6, p=.315 for satisfaction-loyalty; $\Delta\chi^2$=9.918, df=12, p=.623 for affect/emotion-loyalty). The tests for the factor variance equivalence of the latent variables (quality, satisfaction, negative/positive affect/emotion and loyalty) showed that differences were present between the freely varying models and those where partial metric and factor variance were constrained to be equal ($\Delta\chi^2$=19.147, df=10, p=.038 for quality-loyalty; $\Delta\chi^2$=21.570, df=10, p=.017 for satisfaction-loyalty; $\Delta\chi^2$=30.176, df=18, p=.036 for affect/emotion-loyalty). However, in each case, the model fit indices for the factor invariant models remained acceptable (quality-loyalty χ^2=149.019, df=88, p=.000, χ^2/df=1.693, CFI=.971, RMSEA= .043; satisfaction-loyalty χ^2=188.125, df=88, p=.000, χ^2/df=2.138, CFI=.950, RMSEA= .055; affect/emotion-loyalty χ^2=372.282, df=204, p=.000, χ^2/df=1.825, CFI=.941, RMSEA= .047), and comparative indicators were generally marginally improved by restricting the factor variance to equality across the groups (quality-loyalty: vary

freely/factor variance equivalence models AIC=243.872/243.019, BCC=254.792/252.792; satisfaction-loyalty: vary freely/factor variance equivalence models AIC=280.555/282.125, BCC=291.474/291.128; affect/emotion-loyalty: vary freely/factor variance equivalence models AIC=516.105/510.282, BCC=540.419/529.565). The acceptable model fit indices, and the marginal improvement in the comparative indicators, indicate that the factor invariant model is suitable for use in cross-cultural comparisons. In addition, the average variance extracted results provided further support for the measurement models (loyalty = .613; quality = .642; satisfaction = .627; affect/emotion = .703 (negative), .551 (positive)).

As we expected differences across the three constructs with respect to their relationships with the five sub-dimensions of service quality, we tested metric and factor variance equivalence separately for each. In all five cases, the models with partial metric equivalence and factor variance equivalence were found not to differ from the model that allowed factor loadings and the variance of the latent variables to vary freely (Assurance $\Delta\chi^2$=11.448, df=8, p=.178; Empathy $\Delta\chi^2$=7.631, df=4, p=.106; Reliability $\Delta\chi^2$=7.303, df=6, p=.294; Responsiveness $\Delta\chi^2$=8.073, df=6, p=.233; Tangibles $\Delta\chi^2$=4.954, df=6, p=.550). Four of the factor variance equivalence models also showed generally acceptable levels of fit (Assurance χ^2=16.140, df=14, p=.305, χ^2/df=1.153, CFI=.993, RMSEA=.021, AVE = .452; Reliability χ^2=18.149, df=12, p=.111, χ^2/df=1.512, CFI=.983, RMSEA=.039, AVE = .484; Responsiveness χ^2=14.968, df=12, p=.243, χ^2/df=1.247, CFI=.991, RMSEA=.027, AVE = .480; Tangibles χ^2=13.178, df=12, p=.356, χ^2/df=1.098, CFI=.996, RMSEA=.017, AVE = .470). The fifth factor variance equivalence model, empathy, had marginally good fit indices (χ^2=61.786, df=19, p=.000, χ^2/df=3.252, CFI=.924, RMSEA=.081, AVE = .510). All were therefore used in further analysis.

4.2 Consumers' Service Evaluations as Predictors of Behavioral Intentions

The cross-cultural structural models for quality, satisfaction and affect/emotion all showed good fit (quality-loyalty χ^2=15.700, df=2, p=.000, χ^2/df=1.646, CFI=.973, RMSEA=.041; satisfaction-loyalty χ^2=188.418, df=88, p=.000, χ^2/df=2.141, CFI=.950, RMSEA=.055; affect/emotion-loyalty χ^2=365.629, df=202, p=.000, χ^2/df=1.810, CFI=.943, RMSEA=.046). This indicated that all three constructs measuring consumers' evaluations of services (i.e., quality, satisfaction and affect/emotion) were able to predict loyalty. When the relationship(s) between the antecedent(s) and loyalty were fixed to equality across groups, there was a significant deterioration in the fit of all the models (quality-loyalty $\Delta\chi^2$=15.700, df=2, p=.000; satisfaction-loyalty $\Delta\chi^2$=20.360, df=2, p=.000; affect/emotion-loyalty $\Delta\chi^2$=10.961, df=4, p=.027) indicating that differences exist in the relationships between the antecedents (i.e., quality, satisfaction, affect/emotion) and loyalty across the three cultural groups.

Table 1 shows the path coefficients for each antecedent of loyalty for each group. These results clearly show cross-cultural differences in the affect/emotion antecedents. For English respondents negative affect/emotion was related to a decrease in loyalty, whereas with the African and Chinese respondents the relationship between negative affect/emotion and loyalty was not significant. To determine where the cross-cultural differences in path coefficients occur with the remaining antecedents, and if the strength of the significant relationships between antecedents and loyalty differed within each cultural group, t-statistics were calculated to make pair-wise comparisons. Using the standard errors of the path coefficients for each relevant pair (i.e., the same antecedent-loyalty relationship across cultural groups, and different antecedent-loyalty relationships within cultural groups) one additional significant cross-cultural difference was identified – the relationship between

satisfaction and loyalty was weaker with the Chinese group than with the African and English groups. It should be noted that although pair-wise comparisons of the path coefficients did not indicate cross-cultural differences in the quality-loyalty relationship, the model fit indices showed that forcing them to be equal across groups was detrimental to the fit of the model, indicating differences between groups. Overall, these results indicated that the more affective antecedents – satisfaction and affect/emotion – show clearer differences across cultural groups than the cognitive antecedent of quality.

Take in Table 1

4.3 Service Determinants as Antecedents of Consumers' Service Evaluations

The analysis (using AMOS 7.0) indicated poor overall model fit indices for the five service quality dimensions as predictors of overall service evaluation (quality, satisfaction and affect/emotion). This was not entirely unexpected. As discussed earlier, many cross-cultural studies have indicated some differences in the SERVQUAL factor structures between cultures. However, another potential explanatory factor is the relatively small sample size. Consequently we adopted bootstrapping in smartPLS (Ringle et al, 2005) to directly compare models across the three groups and to investigate the path coefficients between all five determinants of service quality and consumers' service evaluations. Only the significant path coefficients are shown in Table 2. These results reveal that service quality dimensions were better at predicting affective responses than cognitive responses, and that cross-cultural differences were present in the specific dimensions that impact on consumers' service evaluations. More specifically the service quality dimensions did not impact on overall service quality for any of the three cultural groups, and the pattern of significant path

coefficients showed that the impact on positive affect/emotion is more consistent than on satisfaction or negative affect/emotion. For African and Chinese respondents increasing assurance increased positive affect/emotion. In contrast, for English respondents, increasing empathy and responsiveness increased positive affect/emotion. Reliability also had an impact on affect/emotion with both the Chinese and the English. For the English group increasing reliability decreased negative affect/emotion – so a more reliable level of service decreased feelings of unhappiness, anger and irritation. However, for the Chinese group, an increase in reliability decreased positive affect/emotion. This result was counter to expectations, but is consistent with the significant negative path coefficient from reliability to satisfaction found within the Chinese group. More in line with expectations, the path coefficient from reliability to satisfaction for the African group was positive.

Take in Table 2

These findings are discussed further in the final section

5. DISCUSSION, CONCLUSIONS AND IMPLICATIONS

Our findings reflect the increasing emphasis in the marketing literature on consumers' affective, as opposed to cognitive, evaluations. As hypothesized (H_2a and H_2b), differences were identified with respect to the determinants of consumers' service evaluations (summarized in Table 3). Assurance (i.e., knowledge and courtesy of employees and ability to inspire trust and confidence) was a determinant of overall positive affect/emotion for both African and Chinese respondents. Conversely, responsiveness (i.e., willingness to help and provision of prompt service) was a significant factor only for English consumers. Yet these

differences were not identified as determinants of overall quality or satisfaction. We also hypothesized (H_1a and H_1b) that for collectivist cultures affect/emotion would be a greater predictor of behavioral intentions. However, this was not supported. All three scales (quality, satisfaction and affect/emotion) had significant positive relationships with behavioral intentions (i.e., consumer loyalty) for all three groups. The only differences related to the relationship between the negative emotion scale and behavioral intentions (significant only for the English group) and the weaker satisfaction/behavioral intentions relationship for Chinese respondents.

Take in Table 3

While not hypothesized, differences between cultural groups were also identified for other service quality determinants. Empathy (i.e., individualized attention and convenience) had a positive relationship with positive affect/emotion only for English respondents. This concurs with other studies (Cunningham et al, 2002; Furrer et al, 2000; Witkowski and Wolfinbarger, 2002) which highlight the importance of empathy to individualist Western cultures. Others, however, describe this as an Eastern factor (Donthu and Yoo, 1998; Kettinger et al, 1995). The disparities with respect to empathy may be attributable to the combination of individual/personal attention (similar to assurance) and convenience (similar to responsiveness) in the perceptions of consumers. Indeed, Raajpoot (2004) replaces empathy with factors such as sincerity and personalization when reconceptualizing service quality in an Asian context. For the English group, lower levels of reliability (i.e., ability to perform the promised service dependably and accurately) increased negative emotions and feelings such as anger, irritation and unhappiness. For African consumers, however, higher levels of service reliability impacted, not on emotions, but on higher reported satisfaction levels,

whereas assurance determined affect/emotions. These findings may reflect the perspective suggested by Johnston's (1995) two factor approach where individual service elements are not necessarily evaluated on the same continuum or measure (e.g., satisfaction/dissatisfaction). Reliability relates to the service outcome, is the core service (Parasuraman et al, 1991) and is highlighted as an important determinant of expectations (Witkowski and Wolfinbarger, 2002) and overall evaluations and intentions (Cunningham et al, 2002) across cultural groups. The suggestion in this study is that the absence of reliability will cause negative emotions whereas a reliable service is expected and will not cause positive emotion. However this was not consistent across cultures.

The negative relationship between reliability and measures of satisfaction and affect/emotions for Chinese consumers is difficult to explain. Poon et al (2004) emphasize how attribution for good or poor service experiences varies between cultures (e.g., between self and organization). Consequently, consumers may perceive service reliability as poor but feel that they are themselves responsible. Laroche et al (2004) argue that consumers from collectivist cultures will not voice criticism, and Patterson (2004) highlights differences in switching barriers, such as the availability of alternatives. These could lead to an over-reporting of satisfaction. Additionally, differences in the propensity to accept duality could mean that Chinese consumers could be more at ease with experiencing apparently conflicting feelings and emotions towards the service provider. Thus negative feelings or beliefs would not necessarily result in intentions to switch (Bagozzi et al, 1999b; Williams and Aaker, 2002).

There are implications for theory development. A substantial amount of work has focused on differentiating the constructs of 'consumer perceived service quality' and 'service satisfaction' in terms of patterns of antecedence, causality and nature of determinants (e.g.,

Bitner and Hubbert, 1994; Brady, 2001; Cronin et al, 2000; Oliver, 1993; Parasuraman et al, 1988; 1994a; 1994b; Spreng and Mackoy, 1996; Zeithaml et al, 1996). Our findings indicate that such relationships are likely to differ across cultural groups as the relative roles of affect/emotion and cognition differ. The emphasis on the role of feelings and emotions as determinants of goal-directed consumer behavior is growing (see for example, Perugini and Bagozzi, 2001; Shiv and Fedorikhin, 1999) and 'satisfaction' is only one of Shaver et al's (1987) 135 emotional words. The current study shows that the ways in which different cultural groupings evaluate services is complex. Emotions vary across cultures and cultural models may affect which aspects of antecedent events should be the focus of attention (Mesquita and Walker, 2003). Whereas the services marketing literature often identifies cultural differences by comparisons across cognitive Western-derived measures, this may fail to identify elements of service quality which impact on behavioral intentions. A more considered approach to the development of measures for service evaluation is necessary, providing a challenge for assessing comparability and equivalence in both constructs and measures.

Organizations, including retail banks, are increasingly offering their services to an international audience. Our findings indicate that a greater understanding of differences and similarities can be gained from the inclusion of affective responses in consumer feedback. Such feedback is necessary to inform the nature and content of customer communications and decisions regarding service design/adaptation and staff training.

6. LIMITATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

More empirical work is needed to increase understanding of the service evaluation –
behavioral intentions relationship across cultures. Our findings question the measurement
equivalence of the behavioral intentions scale (Zeithaml et al, 1996) as only one dimension is
internally consistent and stable across cultures. Consequently there exists a need to develop
sound cross-cultural behavioral intentions measures. These measures may need to consider
the role of word-of-mouth, a behavior currently subsumed within the loyalty dimension of
Parasuraman et al's (1996) item battery. Word-of-mouth is important in collectivist cultures
(Liu et al, 2001; Money and Gilly, 1998), and Africans emphasize the fundamental and
important positive institution of the (extended) family and of community and storytelling
(Gyekye, 1997) and simply love to talk (Usunier, 1996).

Full factor variance equivalence was not demonstrated with some of the measurement
models. However as the factor invariant model fit indices were acceptable, and no significant
differences ($\alpha = .01$) between these models and the freely varying models were found, we
decided to proceed with the analysis. Ideally, clearer evidence of metric invariance and factor
variance equivalence would be desired. In addition, structural model fit problems with the
service quality dimensions led us to use a technique that made fewer assumptions concerning
the data. While this allowed us to extract meaningful results concerning the path coefficients,
it did not allow us to compare the models' overall fit. These model fit problems could be
related to sample size, and further research with larger sample sizes may provide a solution
and enable comparisons of overall model fit.

The sampling approach raised a number of issues. In common with earlier studies (for a review see Sin et al, 1999) at the macro level these involved equating nation with culture. Although a culture may be described as predominantly collectivist or individualistic (Bandura, 2002; Triandis, 1994), considerable diversity within cultures can exist. Hofsede's (1980) grouping of East and West African countries, and Bond and Hwang's (1986) argument that fundamental Chinese values remain intact across national boundaries, led to our labelling these two groups as collectivist. Yaprak (2008), however, argues for more advanced conceptualizations of culture. While this initial study suggests some differences between African, Chinese and English customers with respect to affective evaluations, further research is needed to explore the nature of service consumption and evaluation across cultures while recognizing the considerable diversity and complexity of the cultural context.

Cross-cultural student samples have both strengths and limitations (Winsted, 1997). The benefits of perceived homogeneity of comparative groups have led many researchers (Cunningham et al, 2002; 2005; Furrer et al, 2000; Kettinger et al, 1995; Laroche et al, 2004; Liu et al, 2001; Smith, 2006; Ueltschy et al, 2004; Winsted, 1997) to adopt this approach, while at the same time recognizing the limits of generalizability to wider populations. In common with some of these studies we found age differences between cultural groups. This could present an alternative rival hypothesis; although, if this were the case, the similarities between the oldest and youngest groups (Africans and English respectively) would be unlikely. In addition, this study did not assess the impact of gender. Future research should aim to match samples for age, and consider the impact of gender and other demographic variables on the relationships concerned.

This study assessed differences within the higher education student market in the U.K., and it could be argued that our findings are only pertinent to cultural groups living in the U.K. However, similar findings for Chinese respondents are reported in service quality studies conducted in indigenous countries (Kettinger et al, 1995). Conversely, no comparable studies exist for East and West African populations. Consequently, even though we allocated respondents according to where they spent their childhood (the time when cultural norms are learnt and assimilated (Hofstede, 1991)), and the length of bank account ownership reflects relatively little time spent in the U.K., the role of acculturation must be considered when generalizing these findings.

Using exclusively English language questionnaires may also be criticized. While this avoided translation equivalence problems and was clearly relevant to the sample, evidence exists for distinctions between 'equivalent' words, especially when language is acquired through formal learning (Ji et al, 2004). Nevertheless, as many service organizations administer customer evaluation questionnaires in a limited number of languages (often English), our intention is to suggest that such surveys should be adapted to include affective responses.

These findings may be restricted to low involvement, utilitarian, routine problem solving services, particularly with respect to the affective scale item content. In addition, our study does not consider individual service encounters, where valence, or strength, of emotion is often greater and may highlight differences between cultures, but instead focuses on an overall evaluation of extended service transactions. Finally, the interaction between cognitive and affective elements of consumers' service evaluation, and how these contribute to attitude formation over time, needs consideration in a cross-cultural context. All three present possible areas for future research.

REFERENCES

Abelson, R.P. (1981), "Psychological status of the script concept", *American Psychologist,* Vol. 36, No. 7, pp. 715-29.

Abratt, R. and Goodey, D. (1990), "Unplanned buying and in-store stimuli in supermarkets", *Managerial and Decision Economics*, Vol. 11, No. 2, pp. 111-21.

Anderson, R.E. (1973), "Consumer dissatisfaction: The effect of disconfirmed expectancy on perceived product performance", *Journal of Marketing Research,* Vol. 10, No.1, pp. 38-44.

Anderson, E.W., Fornell, C. and Mazvancheryl, S.K. (2004), "Customer satisfaction and shareholder value", *Journal of Marketing,* Vol. 68, No. 4, pp. 172-85.

Andrade, E.B. (2005), "Behavioral consequences of affect: Combining evaluative and regulatory mechanisms", *Journal of Consumer Research,* Vol. 32, No. 3, pp. 355-62.

Babakus, E. and Boller, G.W. (1992), "An empirical assessment of the SERVQUAL scale", *Journal of Business Research*, Vol. 24, No. 3, pp. 253-68.

Bagozzi, R.P, Gopinath , M. and Nyer, P.U. (1999a), "The role of emotions in marketing", *Journal of the Academy of Marketing Science*, Vol. 27, No. 2, pp. 184-206.

Bagozzi, R.P, Wong, N. and Yi, Y. (1999b), "The role of culture and gender in the relationship between positive and negative affect", *Cognition and Emotion*, Vol. 13, No. 6, pp. 641-72.

Bandura, A. (2002), "Social cognitive theory in cultural context", *Applied Psychology: An International Review*, Vol. 51, No. 2, pp. 269-90.

Bitner, M.J., Booms, B.H. and Tetreault, M.S. (1990), "The service encounter: Diagnosing favorable and unfavorable incidents", *Journal of Marketing*, Vol. 54, No. 1, pp. 71-84.

Bitner, M.J. and Hubbert, A.R. (1994), "Encounter satisfaction versus overall satisfaction versus quality", in Rust, R.T. and Oliver, R.L. (Eds), *Service Quality: New Directions in Theory and Practice*, Sage, New York, pp. 72-84.

Bolton, R.N. and Myers, M.B. (2003), "Price-based global market segmentation for services", *Journal of Marketing*, Vol. 67, No. 3, pp. 108-28.

Bond, M.H. and Hwang, K.-K. (1986), "Chapter 6: The social psychology of Chinese people", in Bond, M.H. (Ed), *The Psychology of the Chinese People*, Oxford University Press China, pp. 213-66.

Bonsu, S.K. and Belk, R.W. (2003), "Do not go cheaply into that good night: Death-ritual consumption in Asante Ghana", *Journal of Consumer Research*, Vol. 30, No. 1, pp. 41-55.

Brady, M.K. (2001), "Some new thoughts on conceptualizing perceived service quality: A hierarchical approach", *Journal of Marketing*, Vol. 65, No. 3, pp. 34-49.

Brady, M.K., Cronin, J.J. and Brand, R. (2001), "Performance-only measurement of service-quality: A replication and extension", *Journal of Business Research*, Vol. 55, No. 1, pp. 17-31.

Carman, J.M., (1990), "Consumer perceptions of service quality: An assessment of the SERVQUAL dimensions", *Journal of Retailing*, Vol. 66, No. 1, pp. 33-55.

Caruana, A., Ramaseshan, B., Ewing, M.T. and Fariba, R. (1998), "Expectations about management consultancy services: Testing the assumption of equivalence across Australian and Singaporean firms", *Journal of Professional Services Marketing,* Vol. 18, No. 1, pp. 1-10.

Cronin, J.J. Jr. and Taylor, S.A. (1992), "Measuring service quality: A re-examination and extension", *Journal of Marketing*, Vol. 56, No. 3, pp. 55-68.

Cronin, J.J. Jr. and Taylor, S.A. (1994), "SERVPERF versus SERVQUAL: Reconciling performance-based and perceptions-minus-expectations measurement of service quality", *Journal of Marketing*, Vol. 58, No. 1, pp. 125-31.

Cronin, J.J. Jr, Brady, M.K., Brand, R.R., Hightower, R. Jr. and Shemwell, D.J. (1997), "A cross-sectional test of the effect and the conceptualization of service value", *Journal of Services Marketing,* Vol. 11, No. 6, pp. 375-91.

Cronin, J.J. Jr, Brady, M.K., Hult, G. and Tomas, M. (2000), "Assessing the effects of quality, value and customer satisfaction on consumer behavioral intentions in service environments", *Journal of Retailing,* Vol. 76, No. 2, pp. 193-216.

Cunningham, L.F., Young, C.E. and Moonkyu, L. (2002), "Cross-cultural perspectives of service quality and risk in air transportation", *Journal of Air Transportation*, Vol. 7, No. 1, pp. 3-26.

Cunningham, L.F., Young, C.E. and Moonkyu, L. (2005), "Customer perceptions of service dimensions: American and Asian perspectives", *The Service Industries Journal*, Vol. 25, No. 1, pp. 43-59.

Donthu, N. and Yoo, B. (1998), "Cultural influences on service quality expectations", *Journal of Service Research,* Vol. 1, No. 2, pp. 178-86.

Douglas, S.P. and Nijssen, E.J. (2003), "On the use of borrowed scales in cross-national research: A cautionary note", *International Marketing Review*, Vol. 20, No. 6, pp. 621-42.

Dubé, L., Cervellon, M.-C. and Han, J. (2003), "Should consumer attitudes be reduced to their affective and cognitive bases? Validation of a hierarchical model", *International Journal of Research in Marketing*, Vol. 20, No. 3, pp. 259-72.

Edvardsson, B. and Olsson, J. (1996), "Key concepts for new service development", *The Service Industries Journal,* Vol. 16, No. 2, pp. 140-64.

Engel, J.F. and Blackwell, R.D. (1982) *Consumer Behavior* (4th Ed.), Holt-Saunders International Editions, New York.

Espinoza, M.M. (1999), "Assessing the cross-cultural applicability of a service quality measure: A comparative study between Quebec and Peru", *International Journal of Service Industry Management*, Vol. 10, No. 5, pp 449-68.

Furrer, O., Liu, B.S.-C. and Sudharshan, D. (2000), "The relationships between culture and service quality perceptions: Bases for cross-cultural market segmentation and resource allocation", *Journal of Service Research*, Vol. 2, No. 4, pp. 355-71.

Green, R.T. and White, P.D. (1976), "Methodological considerations in cross-national consumer research", *Journal of International Business Studies*, Vol. 7, No. 2, pp. 81-8.

Grier, S.A. and Deshpande, R. (2001), "Social dimensions of consumer distinctiveness: The influence of social status on group identity and advertising persuasion", *Journal of Marketing Research,* Vol. 38, No. 2, pp. 216-24.

Gronroos, C. (1984), "A service quality model and its marketing implications", *European Journal of Marketing,* Vol.18, No. 4, pp. 36-44.

Gronroos, C. (2000), *Service Management and Marketing: A Customer Relationship Management Approach* (2nd Ed.), John Wiley and Sons Ltd, England.

Gruca, T.S. and Rego, L.L. (2005), "Customer satisfaction, cash flow and shareholder value", *Journal of Marketing*, Vol. 69, No. 3, pp. 115-30.

Gyekye, K. (1997), *Tradition and Modernity: Philosophical Reflections on the African Experience*, Oxford University Press, New York.

Hofstede, G. (1980), "Motivation, leadership and organization: Do American theories apply abroad?", *Organizational Dynamics*, Vol. 9, No. 1, pp. 42-63.

Hofstede, G. (1991), *Cultures and Organizations: Intercultural Cooperation and its Importance for Survival*, Harper Collins, London.

Imrie, B.C., Durden, G. and Cadogan, J.W. (2000), "Towards a conceptualization of service quality in the global market arena", *Advances in International Marketing*, Vol. 10, No. 1, pp. 143-62.

Izard, C.E. (1977), *Human Emotions,* Plenum Press, New York.

Javalgi, R.G. and White, D.S. (2002), "Strategic challenges for the marketing of services internationally", *International Marketing Review*, Vol. 19, No. 6, pp. 563-81.

Ji, L-J., Zhang, Z. and Nisbett, R.E. (2004), "Is it culture or is it language? Examination of language effects in cross-cultural research on categorization", *Journal of Personality and Social Psychology,* Vol. 87, No. 1, pp. 57-65.

Johnston, R. (1995), "The determinants of service quality: Satisfiers and dissatisfiers", *International Journal of Service Industry Management*, Vol. 6, No. 5, pp. 53-71.

Keaveney, S. M. (1995) "Customer switching behavior in service industries: An exploratory study", *Journal of Marketing*, Vol. 59, No. 2, pp.71–82.

Kettinger, W.J., Lee, C.C. and Lee, S. (1995), "Global measures of information service quality: A cross-national study", *Decision Sciences,* Vol. 26, No. 5, pp. 569-88

Kluckhohn, C. (1949), *Mirror from Man,* McGraw-Hill, New York.

Laing, A., Fischbacher, M., Hogg, G. and Smith, A. (2002), *Managing and Marketing Health Services,* Thomson, London.

Laroche, M., Ueltschy, L.C., Shuzo, A. and Cleveland, M. (2004), "Service quality perceptions and customer satisfaction: Evaluating the role of culture", *Journal of International Marketing,* Vol. 12, No. 3, pp. 58-85.

Leung, T.K.P. and Chan, R.Y.K. (2003), "Face, favor and positioning – a Chinese power game", *European Journal of Marketing,* Vol. 37, No. 11/12, pp. 1575-98.

Lewis, R.C. and Booms, B.H. (1983), "The marketing aspects of service quality", in Berry
L.L., Shostack, G.L. and Upah, G. (Eds), *Emerging Perspectives on Services Marketing*,
American Marketing Association, Chicago, pp. 99-104.

Liljander, V. and Strandvik, T. (1997), "Emotions in service satisfaction", *International
Journal of Service Industry Management*, Vol. 8, No. 2 pp. 148-69.

Liu, B.S.-C., Furrer, O. and Sudharshan, D. (2001), "The relationship between culture and
behavioral intentions toward services", *Journal of Service Research*, Vol. 4, No. 2 pp.
118-29.

Louro, M.J., Pieters, R. and Zeelenberg, M. (2005), "Negative returns on positive emotions:
The influence of pride and self-regulatory goals on repurchase decisions", *Journal of
Consumer Research*, Vol. 31, No. 4, pp. 833-40.

Malhotra, N.K. and McCort, J.D. (2001), "A cross-cultural comparison of behavioral
intention models – theoretical consideration and an empirical investigation", *International
Marketing Review*, Vol. 18, No. 3, pp. 235-69.

Malhotra, N.K., Ulgado, F.M., Agarwal, J. and Lan Wu S. (2005), "Dimensions of service
quality in developed and developing economies: Multi-country cross-cultural
comparisons", *International Marketing Review*, Vol. 22, No. 3, pp. 256-78.

Mano, H. and Oliver, R.L. (1993), "Assessing the dimensionality and structure of the
consumption experience: Evaluation, feeling and satisfaction", *Journal of Consumer
Research,* Vol. 20, No. 3, pp. 451-66.

Mattila, A.S. (1999), "The role of culture and purchase motivation in service encounter
evaluations", *Journal of Services Marketing,* Vol. 13, No. 4/5, pp. 376-89.

Mesquita, B. and Walker, R. (2003). "Cultural differences in emotions: A context for
interpreting emotional disturbances". *Behavior Research and Therapy,* Vol. 41, No. 7, pp.
777-793.

Money, R.B. and Gilly, M.C. (1998), "Explorations of national culture and word-of-mouth referral behavior in the purchase of industrial services in the United States and Japan", *Journal of Marketing,* Vol. 62, No. 4, pp. 76-87.

Nel, D., Pitt, L.F. and Berthon, P.R. (1997), "The SERVQUAL instrument: Reliability and validity in South Africa", *South African Journal of Business Management*, Vol. 28, No. 3, pp 113-33.

Oliver, R.L. (1981), "Measurement and evaluation of satisfaction processes in retail settings", *Journal of Retailing,* Vol. 57, No. 3, pp. 25-48.

Oliver, R.L. (1993), "A conceptual model of service quality and service satisfaction: Compatible goals, different concepts", *Advances in Services Marketing and Management*, Vol. 2, pp. 65-85.

Parasuraman, A., Berry, L.L. and Zeithaml, V.A. (1991), "Refinement and reassessment of the SERVQUAL scale", *Journal of Retailing,* Vol. 67, No. 4, pp. 420-50.

Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1985), "A conceptual model of service quality and its implications for future research", *Journal of Marketing,* Vol. 49, No. 4, pp. 41-50.

Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1988), "SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality", *Journal of Retailing,* Vol. 64, No. 1, pp. 14-40.

Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1994a), "Alternative scales for measuring service quality: A comparative assessment based on psychometric and diagnostic criteria", *Journal of Retailing,* Vol. 70, No. 3, pp. 201-30.

Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1994b), "Reassessment of expectations as a comparison standard in measuring service quality: Implications for future research", *Journal of Marketing*, Vol. 58, No. 1, pp. 6-17.

Patterson, P.G. (2004), "A contingency model of behavioral intentions in a services context", *European Journal of Marketing*, Vol. 38, No. 9/10, pp. 1304-15.

Perugini, M. and Bagozzi, R.P. (2001), "The role of desires and anticipated emotions in goal-directed behaviors: Broadening and deepening the Theory of Planned Behavior", *British Journal of Social Psychology*, Vol. 40, No. 1, pp. 79-98.

Poon, P.S., Hui M.K. and Au, K. (2004), "Attributions on dissatisfying service encounters: A cross-cultural comparison between Canadian and PRC consumers", *European Journal of Marketing*, Vol. 38, No. 11/12, pp. 1527-40.

Raajpoot, N. (2004), "Reconceptualizing service encounter quality in a non-Western context" *Journal of Service Research,* Vol. 7, No. 2, pp. 181-201.

Reynolds, N.L., Simintiras, A. and Diamantopoulos, A. (2003), "A theoretical justification of sampling choices in international marketing research: Key issues and guidelines for researchers", *Journal of International Business Studies,* Vol. 34, No. 1, pp. 80-9.

Richins, M. and Verhage, B. (1985), "Cross cultural differences in consumer attitudes and their implications for complaint management", *International Journal of Research in Marketing,* Vol. 2, No. 3, pp. 197-206.

Richins, M.L. (1997), "Measuring emotions in the consumption experience," *Journal of Consumer Research*, Vol. 24, No. 2, pp. 127-146.

Ringle, C.M., Wende, S. and Will, S. (2005), *SmartPLS 2.0 (M3) Beta*, Hamburg, http://www.smartpls.de

Rose, G.M. (1999), "Consumer socialization, parental style and developmental timetables in the United States and Japan," *Journal of Marketing*, Vol. 63, No.3, pp. 105-19.

Shaver, P., Schwartz, J., Kirson, D. and O'Connor, C. (1987), "Emotion knowledge: Further exploration of a prototype approach", *Journal of Personality and Social Psychology,* Vol. 52, No. 6, pp. 1061-86.

Shiv, B. and Fedorikhin, A. (1999) "Heart and mind in conflict: The interplay of affect and cognition in consumer decision making", *Journal of Consumer Research*, Vol. 26, No. 3, pp. 278–92.

Sin Leo, Y.M., Cheung, G.W.H. and Lee, R. (1999), "Methodology in cross-cultural consumer research: A review and critical assessment", *Journal of International Consumer Marketing,* Vol. 11, No. 4, pp. 75-96.

Singh, J. (1990), "Voice, exit and negative word-of-mouth behaviors: An investigation across three service categories", *Journal of the Academy of Marketing Science,* Vol. 18, No. 1, pp. 1-15.

Smith, A.M. (2006), "A cross-cultural perspective on the role of emotion in negative service encounters", *The Service Industries Journal*, Vol. 26, No. 7, pp. 709-26

Smith, A.M. and Reynolds N.L. (2002), "Measuring cross-cultural service quality: A framework for assessment", *International Marketing Review*, Vol. 19, No. 5, pp. 450-81.

Solomon, M.R., Surprenant, C., Czepiel, J.A. and Gutman, E.G. (1985) "A role theory perspective on dyadic interactions: The service encounter", *Journal of Marketing*, Vol. 49, No. 1, pp. 99–111.

Spreng, R.A. and Chiou, J. (2002), "A cross-cultural assessment of the satisfaction formation process", *European Journal of Marketing*, Vol. 36, No. 7, pp. 829-839.

Spreng, R.A. and Mackoy, R.D. (1996), "An empirical examination of a model of perceived service quality and satisfaction", *Journal of Retailing*, Vol. 72, No. 2, pp. 201-14.

Stauss, B. and Mang, P. (1999), "Culture shocks in inter-cultural service encounters?", *Journal of Services Marketing,* Vol. 13, No. 4/5 pp. 329-46.

Tam, J.L.M. (2005), "Examining the dynamics of consumer expectations in a Chinese context", *Journal of Business Research*, Vol. 58, No. 6, pp. 777-86.

Triandis, H.C. (1994), "Chapter 9: Major cultural syndromes and emotion", in Kitayama, S. and Markus, H.R. (Eds), *Emotion and Culture: Empirical Studies of Mutual Influence*, American Psychological Association, Washington, pp. 285-306.

Trompenaars, F and Hampden-Turner, C. (1997), *Riding the Waves of Culture: Understanding Cultural Diversity in Business,* (2nd Ed.), Nicholas Brealey Publishing, London.

Ueltschy, L.C., Laroche, M., Tamilia, R.D. and Yannopoulos, P. (2004), "Cross-cultural invariance of measures of satisfaction and service quality", *Journal of Business Research,* Vol. 57, No. 8, pp. 901-12.

Usunier, J-C. (1996), *Marketing Across Cultures,* (2nd Ed.), Prentice Hall, Europe.

Van de Vijver, F. and Leung, K. (1997), *Methods and Data Analysis for Cross-Cultural Research*, Sage Publications: Thousand Oaks, California.

Voss, C.A., Roth, A.V., Rosenzweig, E.D., Blackmon, K. and Chase, R.B. (2004), "A tale of two countries' conservatism, service quality and feedback on customer satisfaction", *Journal of Service Research*, Vol. 6, No. 3, pp. 212-30.

Wierzbicka, A. (1992), *Semantics, Culture, and Cognition: Universal Human Concepts in Culture-Specific Configurations.* Oxford University Press, New York.

Williams, P. and Aaker, J.L. (2002), "Can mixed emotions peacefully coexist", *Journal of Consumer Research*, Vol. 28, No. 4, pp. 636-49.

Winsted, K.F. (1997) "The service experience in two cultures: A behavioral perspective", *Journal of Retailing*, Vol. 73, No. 3, pp. 337-60.

Witkowski, T.H. and Wolfinbarger, M.F. (2002) "Comparative service quality: German and American ratings across service settings", *Journal of Business Research*, Vol. 55, No. 11, pp. 875-81.

Wong, N., Rindfleisch, A. and Burroughs, J.E. (2003), "Do reverse-worded items confound measures in cross-cultural consumer research? The case of the Material Values Scale", *Journal of Consumer Research*, Vol. 30, No. 1, pp. 72-91.

Yaprak, A. (2008), "Culture study in International Marketing: A critical review and suggestions for further research, *International Marketing Review*, Vol. 25, No. 2, pp. 215-29.

Yau, O.H.M. (1988), "Chinese cultural values: Their dimensions and marketing implications", *European Journal of Marketing*, Vol. 22, No. 5, pp. 44-57.

Zeithaml, V.A., Berry, L.L. and Parasuraman, A. (1996), "The behavioral consequences of service quality", *Journal of Marketing*, Vol. 60, No. 2, pp. 31-46.

Table 1: Relationships between consumers' service evaluations and loyalty

Cultural group	Antecedent		Path Coefficient	Significance
African	Quality		.815	p=.000
	Satisfaction		.810	p=.000
	Affect/Emotion	Positive	.729	p=.000
		Negative	-.145	p=.278
Chinese	Quality		.601	p=.000
	Satisfaction		.527	p=.000
	Affect/Emotion	Positive	.709	p=.000
		Negative	.059	p=.472
English	Quality		.788	p=.000
	Satisfaction		.775	p=.000
	Affect/Emotion	Positive	.625	p=.000
		Negative	-.208	p=.025

Table 2: Relationships between SERVQUAL dimensions and quality, satisfaction and affect/emotion (please note that only significant path coefficients are shown)

Country	SERVQUAL dimension		Path Coefficient	t-value
Africa	Reliability	Satisfaction	.426	1.836
	Assurance	Positive affect/emotion	.471	2.371
China	Reliability	Satisfaction	-.268	1.716
	Assurance	Positive affect/emotion	.494	3.751
	Reliability	Positive affect/emotion	-.375	2.676
England	Reliability	Negative affect/emotion	-.306	1.925
	Empathy	Positive affect/emotion	.251	1.920
	Responsiveness	Positive affect/emotion	.320	2.355

Table 3: Summary of hypotheses

	Hypotheses		**Comment**
H_1a	For consumers from individualist cultures cognitive measures will be more effective than affective measures as predictors of behavioral intentions towards services	✖	Affect/emotion, satisfaction and quality all predictors of loyalty
H_1b	For consumers from collectivist cultures affective measures will be more effective than cognitive measures as predictors of behavioral intentions towards services	✖	Affect/emotion, satisfaction and quality all predictors of loyalty
H_2a	For consumers from individualist cultures responsiveness will be a major determinant of service evaluations	✓	Responsiveness is a determinant of positive affect/emotion for English respondents
H_2b	For consumers from collectivist cultures assurance will be a major determinant of service evaluations	✓	Assurance is a determinant of positive affect/emotion with African and Chinese respondents

Appendix: Service quality perceptions items

Sub-dimension	Items
Assurance	Employees who instill confidence in their customers
	Employees who have the knowledge to answer customers' questions
	Making customers feel safe in their transactions
	Employees who are consistently courteous
Empathy	Having the customer's best interests at heart
	Employees who deal with customers in a caring fashion
	Employees who understand the needs of their customers
	Convenient business hours
	Giving customers individual attention
Reliability	Performing services right the first time
	Dependability in handling customers' service problems
	Providing services at the promised time
	Providing services as promised
Responsiveness	Readiness to respond to customers' requests
	Willingness to help customers
	Prompt service to customers
	Keeping customers informed about when services will be performed
Tangibles	Visually appealing materials associated with the service
	Employees who have a neat, professional appearance
	Modern equipment
	Visually appealing facilities

Figure 1: The relationship between cultural orientation and behavioral intentions towards services: Alternative determinants and measures