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Beyond Service Attributes: Do Personal Values Matter?

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Abstract:

Purpose *– Service firms constantly look for ways to differentiate their offering. Recently, personal values have emerged as a way to understand how customers fulfill deeper needs when consuming a service. This paper aims to examine how personal values operate in the evaluation of higher education services. Like other services, marketing has become essential to higher education as universities compete aggressively for students and differentiate their service offerings. Although attribute-based measures such as SERVQUAL provide useful information to service providers, personal values may offer a deeper understanding of how customers judge the quality and desirability of an educational institution's services. This study seeks to determine whether personal values in higher education affect perceptions of overall value, satisfaction, and behavioral outcomes including loyalty and intention to recommend.*

Design/methodology/approach *– A survey measured student personal values, service quality, satisfaction, and behavioral outcomes in the USA –*

the largest exporter of higher educational service, and India – the largest net importer. Data were analyzed using confirmatory factor analysis, path analysis, and t-tests.

***Findings** – The results describe the impact of personal values on satisfaction and behavioral outcomes, while showing differences between India and the USA.*

***Research limitations/implications** – The paper provides implications for applying the personal values concept to the marketing of a university. It also serves as a basis for future research on the impact of personal values in other service sectors.*

***Originality/value** – The study fills an important gap in the literature by showing that personal values are an important dimension in services. Service firms need to move beyond attributes and measure personal values, as these values do impact customer satisfaction and loyalty.*

Keywords: Consumer behaviour, Individual behaviour, Higher education, Customer services quality, Customer satisfaction, Customer loyalty

Introduction

Although the service sector has established itself as a major part of the US economy, firms are constantly looking for ways to differentiate their offering for competitive advantage (Bharadwaj *et al*., 1993). Measuring service quality and customer satisfaction has been one route to determine a service firm's deficiencies in order to make improvements. While this approach has become ubiquitous amongst firms, firms continue to search for other means to gain differential advantages. Building more intimate relationships with customers has emerged as key strategy towards this end. Recently, research on services has found that personal values may play a significant role in how consumers evaluate the quality of a service in their relationship with the firm (Lages and Fernandes, 2005). Personal values deal with the end states of our existence or the ultimate goals that people wish to achieve in their lives. Through an understanding of these values, firms may be able to determine how consumers make judgments about the quality of the services they receive and then redesign their service to maximize positive judgments. In this research, we use the concept of human values as a means to examine how students (i.e., consumers) evaluate the service quality of their higher education

experience with their present institution. We use the education industry since it comprises a major sector in services that continues to witness growth while experiencing accelerating competition among institutions. We also examine how these personal values affect their satisfaction, word of mouth, and retention in response to the quality they perceive.

The higher education sector has all the hallmarks of a service industry. Universities can be likened to service providers that develop marketing strategies to target potential students and develop marketing mixes that will be appealing. Education is a people-based performance with students as the center of the simultaneous production and consumption process. As students participate in the delivery of the educational service, it is much like any other service: intangible, heterogeneous, inseparable from those who deliver it, perishable, and variable. The challenge for those who develop marketing activities in this sector is to determine how the service is being perceived, consumed, or enacted. Conceptualizing what service quality means to students, however, may be more elusive than originally thought. Since the service concept in education has abstract qualities, measuring its perceptions presents a challenge.

Higher education institutions are involved in much more than delivering course materials to students. Indeed, these institutions are also involved in an ongoing relationship with students. How these relationships are developed and maintained may play a major role in fulfilling a student's personal values. Failure to satisfy these values may result in a discontented student. Gyure and Arnold (2001), for example, emphasize the efficacy of relationship marketing theory to develop more effective means of recruiting students. Helfert *et al*. (2002) argue that universities should improve service quality and build relationships with students in order to be effective, as these relationships lead to student satisfaction. Satisfied students, in turn, are less prone to transfer to other universities, thereby increasing the retention rate. Satisfied students also provide positive referrals to future students (Elliot and Shin, 2002). As international competition for students intensifies, differentiating the service offerings through quality management and building strong relationships with students has become imperative for providers of higher education service.

The services literature underscores the connection between quality management and relationship building. Clearly, the impetus behind developing measures of service quality is rooted in trying to understand the relationship that the customer perceives with the service provider. Quality measurement in different service sectors has tended to focus predominantly on attributes of the service provider such as tangibles, reliability, responsiveness, empathy, etc. But, one may ask: "Are these attribute-based measures sufficient to understand student-university relationships in light of the personal values that students wish to fulfill?" We argue that the conventional approach in measuring these attributes may not be probing deeply enough into a student's personal values. In fact, Litten (1991) captured the abstract idea of quality in education provocatively by observing that students consider more than attributes in their college choice decision:

> College choice appears to be grounded in a sort of holistic pragmatism. Some specific benefits and costs seem to be given consideration, *but the final choice is likely to be based as much on a feeling of well-being*, or at least a lack of discomfort, as on any rational calculation of costs and benefits or systematic ratings of institutional characteristics.

This notion of "well being" is an abstraction that is ostensibly rooted in a student's personal values. Students' personal values are likely to have a notable impact on the development and furtherance of their relationship with their university since such values deal with the ultimate purpose of life. A university education may be viewed by students as a stepping stone to achieve an end state or goal that has a personal dimension to those students beyond just education.

Research in consumer behavior offers insights into how understanding personal values may enhance our knowledge about students' behavioral outcomes such as satisfaction and loyalty. According to this stream of research, personal values are extremely relevant to consumers because they represent desirable goals that serve as guiding principles in people's lives (Schwartz, 1992). Homer and Kahle (1988) argue that an assessment of consumersw' personal values (e.g., self-reliance, concern for others, harmony of purpose, stability in life) is pivotal to understanding consumer attitudes and behavior. Since personal values are at the higher end of the evaluation hierarchy that connects service attributes to personal values, they

provide a deeper insight about why consumers choose a service or select a service provider (Zeithaml, 1988). Based on this stream of research, Lages and Fernandes (2005) developed a 12-item scale to measure service personal values called SERPVAL; their results showed that the personal values measured by this scale do play a pivotal role in the evaluation of a service. Despite the evidence linking personal values to purchase behavior, no study has thus far measured students' personal values associated with higher educational services and linked them to behavioral outcomes. Our paper attempts to fill this important gap in the literature.

This paper has multiple goals. First, we assess the cross-national applicability of the SERPVAL scale for assessing service personal values that students associate with their higher education service providers (i.e., universities). Second, we explore the relationship of service personal values with satisfaction and behavioral outcomes such as loyalty and favorable word of mouth. Third, we explore cross-cultural differences in (mean) personal values that students associated with their universities. We focus on the tertiary educational sector where universities are now competing for students more aggressively than at any time before and where university offerings are becoming increasingly commoditized. Given the growing importance of the higher education sector, our study contributes to the literature by examining how personal values affect the relationships that students may have with the university as a service provider. To give the study a more international focus, we present cross-national findings that have implications for the contenders in the global higher education service sector.

This paper is structured as follows. We begin by examining the importance of marketing to higher education and how the international arena is providing growth in foreign trade of educational services. Then, we turn our attention to the measurement of service quality in light of personal values. We posit that an understanding of personal values permits a much more penetrating focus on how such values may be a strong driving force in the perception of the elusive nature of quality in education. Next, our methodology discusses the cross-national samples we used, the instruments, and the statistical methods applied. Finally, we present the results, implications, and future research opportunities.

Importance of marketing in higher education

The use of marketing in higher education has exhibited a long evolutionary process that continues to unfold (McGrath, 2002). Mackey (1994) noted that universities use many of the marketing techniques more commonly associated with consumer product marketing while Rogers (1998) documented the aggressive promotional activities used by leading universities such as Northwestern and Cambridge to market themselves. Nonetheless, how marketing should be used in higher education has been subject to some debate. Brooks and Hammons (1993), for example, argued that higher education needs to be marketed more like a service product. Higher education service providers have clearly caught on to the business implications of their enterprise as exemplified by referring to international students as "export industries" (Gatfield, 1998) and courses as "educational products" (Adler, 1998) while new delivery methods such as Internet courses are classified as "distribution methods (Gatfield, 1998). Given the competitive environment in which universities now operate, Levy and Edlin (1995) suggest that they now function more like traditional businesses versus traditional educational institutions. Recent research has put in the limelight the importance of building strong relationships with students so as to increase satisfaction, loyalty, positive word of mouth, and retention (Al-Alak, 2006; Helgesen, 2008; Yang *et al*., 2008). Hence, application of service marketing principles to the delivery of superior quality that is of value to students has become a principal objective of many higher education institutions. This marketing of higher education services is now a part of the global arena as discussed below.

The value of trade in higher education was estimated at $30 billion in OECD countries, which was about half the size of the trade in financial services and 3 percent of all service exports (Larsen *et al*., 2002a; Srivastava, 2006). According to World Trade Organization (WTO), the major exporters of higher education services are the USA, the UK, Germany, France, Australia, Japan, and Canada (World Trade Organization, 2007). The major importers are China, Korea, India, Greece, Germany, and France, as students from these countries go abroad to pursue higher education. Foreign students contributed $14.5 billion to the US economy during the 2006-2007 academic year (Bhandari and Chow, 2007), $3.8 billion or 3.2 percent of total exports

in services in the UK, and $2.2 billion or 11.8 percent of total exports in services in Australia (Larsen *et al*., 2002b). Within these expenditures, Indian students alone spent nearly $4 billion on overseas education (Srivastava, 2006). Over a five-year period, the number of students studying abroad increased by close to 50 percent, from 1.64 million in 1999 to 2.45 million in 2004 (Bashir, 2007).

The higher education sector is poised for continual growth as knowledge workers proliferate and as developing countries emphasize the role of higher education for economic development. It is predicted that the number of students worldwide pursuing higher education will increase at an annual rate of 6.2 percent to reach 5.8 million by 2020 with most of that growth occurring in Asia. With this growth has come increasing competition by universities to attract students. As higher education undergoes rapid globalization, universities are recognizing that developing relationships with students may be an important strategic consideration for recruiting and enrollment management (Gyure and Arnold, 2001). For example, universities in the European Union have begun to offer American-style degree programs taught in English, posing formidable competition to long established American universities for students (Dillon, 2004).

International students are highly sought after by US universities for several reasons, not the least of which is economic. Foreign students generally pay "out of state" tuition which means that they offer a higher contribution margin than in state students (Dessruisseaux, 1998). Furthermore, international students are often the best and brightest from their country which adds to the academic environment in a very positive way. Lastly, as argued by administrators in US universities, they provide diversity within the student body, which may contribute to a better experience for other students who learn about the ways of people who are non-American.

Yet, there is some evidence that the campus experience for foreign students does not measure up to the expectations they developed from university influences such as recruiting literature (Joseph *et al*., 2003). Since most colleges and universities are keen to attract the best foreign students, it is crucial that administrators develop as much insight as possible. As competition among universities intensifies, how to differentiate the service offering and better anticipate the needs of students are becoming essential issues

in the marketing of higher education services. Understanding the decision making behavior and thought process of students allows a university to tailor its offering more effectively. Tomovick *et al*. (1996), for example, found that service quality issues were of concern to students coming from different cultures and these issues influenced their choice process.

Understanding student expectations

In the face of the increasing global competition for students, a key challenge for universities is to determine how to attract and retain students using marketing methods (Brooks and Hammons, 1993). In particular, identifying and then satisfying students' expectations have become key in competing against other institutions (Coccari and Javalgi, 1995). Such an understanding can assist universities in developing compelling messages to attract prospective students or in tuning their offering to make it more appealing. Previous studies have given some insight into the application of marketing to higher education. For example, Parameswaran and Glowacka (1995) recommend that higher education service providers should develop a distinct image to create a competitive edge.

Kotler and Fox (1995) challenge the notion that prospective students base their decisions on actual quality of service providers. Instead, they propose that prospective students form images of higher educational institutions based on limited or even inaccurate information. These images, in turn, affect their enrollment decisions. In contrast, research by Gavin (as cited by Kotler and Fox, 1995) shows that a university's prestige or reputation is more important to students when they choose a university than actual quality. We examine the importance of such social recognition as a personal value in our study. Gavin recommends that universities focus on measuring perceived service quality in order to differentiate their service from competitors. LeBlanc and Nguyen (1999) stress the importance of value (which we examine in our study) in higher educational services in terms of service quality expectations.

For these reasons, service quality has emerged as a key consideration in how universities develop their offering (Zammuto *et al*., 1996). Several studies have applied SERVQUAL or other instruments to measure perceptions or expectations of service quality

(see Browne *et al*., 1998, Clemes *et al*., 2001; Gatfield, 2000; Mostafa, 2006; Prugsamatz *et al*., 2007). These studies have looked at more "objective" attributes concerning higher education. Other studies sought to identify and evaluate salient attributes that students consider important in their perceptions of a university (Comm and LaBay, 1996). Few of these studies, however, have looked at the deeper personal values that may be operating in students' choices and evaluation of schools.

An exception to the more conventional examination of attributes was a study conducted by Romm *et al*. (1994); they used the Disconfirmation of Expectations Model to examine the gaps between pre-purchase expectations and product performance and post-purchase satisfaction levels for overseas students studying in Australia. Of all the studies conducted in such a manner, their study is the closest in probing aspects of personal values associated specifically with education. They examined four welfare dimensions involving end states of personal values: economic well-being, personal well-being, social well-being, and learning well-being. They found that students have well defined expectations along these four major dimensions and that learning well-being is the most important determinant of overall satisfaction. While theses dimensions seem very important since they relate to student values, no study has gone further in examining how human values impact a range of behavioral outcomes with higher educational services.

Another unconventional study by Ledden *et al*. (2007) also looked at personal values in education to see if they differed from perceived value of an education. They did find that personal values were of definite importance to students. Our study seeks to go a step further in this direction by examining how personal values are associated with satisfaction and behavioral outcomes in higher education.

The impact of personal values on behavioral outcomes

Examining personal values facilitates a richer understanding of how such values may affect expectations about higher education services and concomitant behavioral outcomes such as satisfaction and loyalty. Personal values are a part of a person's life and provide

guidance in how to live. Dibley and Baker (2001) suggest that personal values determine, regulate, and modify relationships between individuals, organizations, institutions and societies. Personal values are often defined as beliefs and relatively stable cognitions that strongly impact emotions. Values are regarded as "enduring beliefs that a particular mode of behavior or end-state of existence is preferable to opposite modes of behavior or end-state" (Rokeach, 1973, p. 5). According to Schwartz and Bilsky (1990), they can be conceptualized as cognitive representations of universal human requirements which include social interaction requirements and social institutional demands experienced by the individual. Although the possession of these values is universal, the importance attached to each one is likely to vary to some degree according to the culture that shaped the individual. Value systems represent the whole range of values that describe human beings. So, while it may be true that Christians value the next life as an end state of existence vs Hindus who value reincarnation, these beliefs systems do not negate the theoretical underpinnings of the universal values that humans possess. Religion (among various mediating forces) is likely to have an impact on how the values will be ordered in importance. Our research uses the established theoretical understanding of values that is well accepted in the literature especially in the field of consumer behavior.

There are ample studies illustrating the importance of personal values in shaping consumer behavior as noted by Kropp *et al*. (2005). These include car ownership, mall shopping, brand choice, clothing and fashion, food consumption, gift giving, travel and tourism, and pet ownership. In the realm of social marketing, values have also been found to operate on an individual's choice behavior including smoking, drinking, and ethics. Finally, personal values also impact other marketing aspects such as the performance of a salesperson, and susceptibility to interpersonal influence among university students (Kropp *et al*., 2005).

No study, however, has examined the personal values of students cross culturally regarding education. In one study, Voss *et al*. (2007) applied means-end models to examine the role of student expectations on service quality in higher education. They found that students want to satisfy values of well-being, security, satisfaction, universalism, self esteem and hedonism. However, their study was

based on a US sample, and the focus of the study was not on examining the links between personal values and behavioral outcomes. Of the studies done on personal values, the great majority has used US samples; hence, it is important to extend this concept cross culturally. Although no research could be found that specifically examines personal values regarding service in education, several studies do point to its potential significance. The studies reported above, therefore, establish the significance of personal values in probing consumer behavior.

Means end chains or attributes-consequences-values chains

The means-end chain model is a conceptual tool that permits understanding how consumers perceive the self-relevant outcomes of product use and consumption (Gutman, 1982). The model examines the connection between attributes and personal values in the context of consumer evaluations such as educational services. The means-end chain features a sequence in how consumers categorize information in a hierarchical fashion from attributes (at the most simple level) to more complex personal values (at the highest level). Specifically, consumers evaluate product attributes at the lower level of the hierarchy based on the impact of these attributes on certain consequences which is the intermediate level. Consumers then judge if these consequences can provide desired end states or core values, which is the highest level of the process. The last level dealing with personal values is the most abstract level in the chain and can be classified as either terminal values or instrumental ones according to Rokeach (1973). In terms of education, a likely means-end chain would be how various attributes (e.g., If I attend a university with a well known reputation) are connected to consequences (e.g., I will get a higher paying job) which finally satisfy certain values (e.g., I will have a more fulfilling career/life or I will be more respected).

Evidence suggests that means-end theory can be used to develop more effective and persuasive advertising that link all levels in the means-end hierarchy (Rosen and Greenlee, 2001). Conceptually, the means end model is very different from the traditional multi-attribute model of choice. The multi-attribute model focuses on determining if and to what degree particular product attributes are

important. SERVQUAL, which focuses on attributes of services, looks at the gap between expectations of a service and what is actually perceived. The means-end approach, in contrast, concentrates on why and how product attributes are important in terms of personal values.

Previous research on how students evaluate universities has tended to focus on attributes and not on personal values. For example, the well-known Student Satisfaction Inventory distributed by US Group Noel-Levitz focuses more on attributes (e.g., academic advising, campus support service, instructional effectiveness, and service excellence) than on personal values. Gatfield (2000), too, looked at student perceived quality variables such as fairness of grading, course content, food services, among others, but these again were only attributes.

Lages and Fernandes (2005) used Zeithaml's (1988) framework and the conceptualization of means-end chains to suggest that any evaluation of a service provider is made at four abstract levels of a hierarchy, ranging from simple attributes of the service offering (e.g., wired student dorms, job placement success), service quality, value, and lastly to more complex personal values. The conceptualization by Lages and Fernandes (2005) was also based on previous research by Rokeach (1973) and Kahle (1983) and identified personal values regarding services into three broad groups of individual dimensions. These three levels are:

1. service value to peaceful life (SVPL) which operates at the self-oriented level;

2. service value providing social recognition (SVSR) which operates at the social-oriented level; and

3. service value related to social integration (SVSI).

According to these authors' conceptualization, SVPL was based on an amalgam of values identified in the Rokeach's (1973) RVS scale which specifically was designed to measure general individual values. This personal value applies to an individual when he/she experiences the service as promoting a pleasurable life, providing or improving tranquility, safety and/or harmony. Stated differently, this personal value is satisfied when the service improves the user's pleasure in life

while it shields the person from threats or pressures to their harmony in life.

The other two dimensions (SVSR and SVSI) were based on the LOV scale by Kahle (1983) (which was developed to assess consumer values) and the RVS scale by Rokeach. Social recognition (SVSR) implies that the service assists the person in gaining respect from others, social recognition and status, and permits an individual to achieve and potentially demonstrate to others a more fulfilling and stimulating life. Social recognition also allows a person to avoid disapproval from others socially. These outcomes are more likely to provide a higher level of social integration for that person. If the benefits of the service provide social integration (SVSI), that person is more likely to perceive stronger friendships, greater likelihood of integrating with established groups while facilitating better relationships at various levels such as social, professional and family. Hence, when the service provides improved or better social integration, the individual has satisfied a higher level personal value on this basis.

Despite the evidence linking personal values to purchase behavior, no study has thus far measured students' personal values associated with higher education service providers using the conceptualization of Lages and Fernandes (2005). The purpose of our research, therefore, is to assess students' personal values and examine the association of these values with service quality, value, and behavioral outcomes such as satisfaction, loyalty and positive referrals.

About the data and survey measures

We collected data in the USA (n = 176) and India (n = 242) from university students (i.e., customers) in higher education to provide a cross-cultural perspective. These students were all graduating business majors and represented a matched sample. It is important in cross-national studies to collect data from matched samples in order to make valid comparisons. The US school represented a good cross section of American students at the university level. Specifically, this school was a medium sized university with an undergraduate enrollment of about 8,000 students in addition to 3,000 graduate students studying in Masters and PhD programs.

The students were from most of the 50 states in the USA in addition to foreign students. The Indian school, too, admits students from all four regions of India (i.e., North, East, West, and South). Its student body includes students from 20 of the 28 Indian states and some overseas students. The school also has an international exchange program with foreign universities as well as a program in place to bring foreign faculty and business executives to give seminars. The Masters program at this school is also highly regarded in India.

A cross-national study involving India and the USA is insightful because of the underlying differences between the two countries in terms of trade in higher educational service. While WTO categorizes the USA as a net exporter of educational service, India is labeled as one of the major net importers. In 2004, the USA had the most number of international students as compared to any other country. Within this group, Indian students make up the largest percentage at 16 percent.

Of late, US universities are reporting a drop in international student enrollment as they are experiencing stiff competition from universities in Europe and Australia (Dillon, 2004). At the same time, the number of Indian students seeking higher educational services is expected to increase 20 percent by 2008 and 100 percent by 2020 (Kemp, 2007). Although these Indian students have the option to pursue higher education in Indian institutes, this group is also courted aggressively by institutes located not only in the USA, but also those in Europe, Australia, and New Zealand.

The survey included measures of service personal values, service quality, satisfaction, loyalty, value, repurchase likelihood, and recommendation to others (i.e., positive referral). Respondents' frame of reference in evaluating the service was their present institute of higher education. Personal values were measured using a modified version of the 12-item SERPVAL scale developed by Lages and Fernandes (2005) to measure personal values regarding services. We used this scale since it has been established as having acceptable psychometric properties and in keeping with Becker's (1998) admonition that established scales be used with known reliability and validity parameters. The Appendix presents the adapted SERPVAL scale that we used in our study. Service satisfaction was also measured using a three-item scale (e.g., satisfied, pleased, happy with

present educational institute). Single item scales were used to measure service loyalty, service value, repurchase likelihood, and recommendation. All these survey items were measured using seven-point Likert scales (1 = strongly disagree and 7 = strongly agree). Overall service quality was also measured on a seven-point rating scale (1 = poor and 7 = excellent). While multi-item scales are preferred, there is support for using single item (as opposed to multi-item) measures in service research. For example, Rossiter (2002) as well as Bergkvist and Rossiter (2007) examined the predictive validity of single-item and multiple-item scales and concluded that for many constructs in marketing, single-item measures are sufficient. Further, Drolet and Morrison (2001) presented evidence to show that even the second or third item of a scale contributes little to the information obtained from the first item.

Results

Dimensionality, validity, and reliability of the personal value measure

Our first objective was to assess the cross-national applicability of SERPVAL scale in the service sector of higher education. We started with psychometric analysis to examine the dimensionality and reliability of the 12-item service personal value (SERPVAL) measure using a series of confirmatory factor analyses. The hypothesized model posits that the SERPVAL measure has three correlated dimensions – peaceful life (SVPL), social role (SVSR), and social integration (SVSI). Tables I and II and Figure 1 feature the results when this model was applied to the samples from the US and India. The fit indices, Tucker-Lewis index (TLI) and comparative fit index (CFI), are useful for evaluating model fit. When these indices are above 0.9 and the χ2/df ratio is less than 5, the fit of the model is considered to be good (see Hu and Bentler, 1995, Kline, 2005). Based on this yardstick, we can say that the hypothesized model does fit the data in both India and the USA, thus supporting dimensionality of the SERPVAL measure. Correlations among the three dimensions ranged from 0.63 to 0.86 in India and 0.38 to 0.62 in the USA. None of the confidence intervals surrounding these correlations contained the value of 1, implying that even though the three dimensions are correlated, they are still distinct (Anderson and Gerbing, 1988). Hence, this analysis supports

discriminant validity of peaceful life, social role, and social integration dimensions. Parenthetically, if any of the confidence intervals contained the value of 1, then the corresponding two dimensions could not be considered as distinct, hindering their discriminant validity.

Further support of the scale was found in the reliability indices of the three SERPVAL dimensions, as shown in Tables I and II; all were above 0.7 in both India and the US, supporting scale reliability (see Bagozzi, 1980). The standardized loadings of individual scale items with their respective service value dimensions were large and significant (average loading size is about 0.77 in India and 0.72 in the USA), thereby providing support for convergent validity. As part of psychometric analysis, we also examined correlations of SERPVAL measure with a 12-item measure of service quality (e.g., knowledgeable, trustworthy, provide individual attention, have students' best interests at heart, visually appealing facilities), a single-item measure of overall quality (poor/excellent), and a single-item measure of overall value, all of which were on seven-point rating scales. As shown in Table III, all these correlations were statistically significant, thus supporting the nomological validity of the SERPVAL measure.

Consistent with the methodology applied by Lages and Fernandes (2005), we then performed a second-order confirmatory factor analysis, with SERPVAL being the second-order factor and the three dimensions of peaceful life, social role, and social integration as the three first-order factors. As shown in Figure 2, the loadings of these three first-order factors on the second-order factor ranged from 0.78 to 1.0 in India and 0.58 to 0.84 in the USA. Both fit indices (TLI and CFI) were above 0.9, and $\chi 2/df$ ratio is less than 5, suggesting a good fit of the model to the data. Since only three first-order factors exist, it is not a surprise that the fit indices for the second-order factor model were the same as those reported for the first-order model with three correlated factors. We, therefore, concluded that the second-order model was supported, as it is equivalent to the first-order model. The implication of this result is that student as consumers assess higher education services according to the three dimensions of personal values. Moreover, SERPVAL is a higher order factor and that it has three basic dimensions as perceived by students.

As a last step we performed several multiple group analyses whose results are shown in Tables I and II. Several SERPVAL models were examined based on the results. Applying the same yardstick for CFI and TLI of 0.9 for a good model we fit, we concluded that the scalar-invariance model, which assumes invariant item loadings, factor correlations and item intercepts, fits the data as well as any of the preceding models (e.g., configural invariance, metric invariance). Establishing support for scalar invariance is a necessity before cross-national mean comparisons of personal values can be made (Steenkamp and Baumgartner, 1998). Parenthetically, we preferred to use fit indices instead of $\chi 2$ difference tests for evaluating alternative models because $\chi 2$ tests are sensitive to larger sample sizes. This approach of evaluating model fit based on fit indices is also recommended by other researchers (Marsh, 1994). The various analyses we have presented thus far supported the cross-national applicability of SERPVAL scale in higher educational service.

Impact of personal values on satisfaction and behavioral outcomes

Since confirmatory factor analyses supported the existence of the three service personal value dimensions, we obtained composite indices for the three service personal value dimensions in both the USA and India. Likewise, we obtained a composite index of the three-item service satisfaction measure, after ensuring its dimensionality and reliability (i.e., value above 0.7). Subsequently, we examined the impact of these personal values on service satisfaction and behavioral outcomes (repurchase intention or loyalty, favorable word of mouth or recommendation) via path analysis. The results of this analysis addressed the second objective of our paper as discussed below. Results of path analysis are presented in Figure 3.

The results show that personal values in general do have an impact on satisfaction and behavioral outcomes of loyalty (i.e., repurchase intention) and recommendation (i.e., favorable word of mouth) although the impact was moderate in some cases and was not consistent across the two samples. This result suggests that personal values, while they do operate on some of the outcomes, must be seen in a more specific context. Some of the personal values seem to be more powerful than others in influencing the behavior outcomes. Our

conclusion is based on the finding that 14 out of 18 paths across the two samples are significant although only five of the nine paths were simultaneously significant for both samples. Specifically, SVPL seems to have a definite influence on the outcomes, unlike SVSR, which operated for Americans for all the paths but only for two paths for the Indian sample. SVSI had the least influence. These results suggest that personal values operate selectively in their impact.

For the US sample, SVPL (service value to peaceful life) and SVSR (social recognition) have a significant impact on all of the outcomes. SVSI (social integration), however, affects only the loyalty outcome. These results differ to some extent for the Indian sample. For India, SVPL had an impact on all the behavioral outcomes, but SVSR did not affect recommendations and SVSI did not impact loyalty. The lack of a significant relationship between SVSI and loyalty implies that the personal value of social integration does not seem to be connected to students' likelihood of choosing the same institution, if they were making the same decision all over again. Nonetheless, these results are rather definitive in showing that the three personal values do influence important behavioral outcomes despite the absence of a few significant path estimates among the many relationships.

Between and within country analysis of personal value mean responses

Our third objective was to compare mean responses to the three personal value dimensions, both between and within countries. The results are presented in Figure 4. For all three personal value measures (i.e., peaceful life, social role, and social integration), the means were well above the neutral point of 4. Moreover, between-country analyses revealed no statistically significant differences between the two samples for any of the personal value measures. Within-country repeated measures analyses were then performed to determine the relative ordering of the three personal value measures. For example, within each country, the results would show which personal value measure had the highest mean and which one had the lowest mean. In both India and the USA, subjects rated their educational institution the highest on social integration (SVSI scale items: higher integration in the group, better professional relationships), followed by social role (SVSR scale items: respect from

others, social recognition, respect, admiration, social approval, more status) and peaceful life (SVPL scale items: more tranquility, family security, stable life, pleasurable life, comfortable life, enjoyable life). These results suggest that a way for higher education service providers to attract and retain students is by improving along the dimensions of peaceful life and social role. Educational institutes in both countries are rated relatively lower on these two dimensions (vs social integration dimension).

Discussion

The means-end theory suggests that consumers organize information in a hierarchical fashion that connects service attributes to consequences, which then leads to the linkages with personal values. Because personal values are at the higher end of this hierarchy, they are expected to have a strong impact on the decision making process. Hence, we anticipated that personal values would be significant drivers of satisfaction, loyalty, and they would generate a favorable word of mouth. Proving this understanding was one of the major objectives of our study. To test this model, we employed the service personal value measure (SERPVAL) consisting of three value dimensions (peaceful life, social role, and social integration). Prior to testing the model, we established the measure's dimensionality and reliability cross-nationally by using data from the USA and India. The path analysis that followed the dimensionality tests indeed supported our expectation that personal values were related to satisfaction and behavioral outcomes.

When discussing these findings, it is important to distinguish between currently enrolled students and high school students who are likely to be recruited through university publications and activities. It is possible that high school seniors have a different set of personal values associated with education unlike students who are presently experiencing the higher education environment. The scale we used asked the respondent to reply to how they are experiencing their present institution. If the scale were used on high school students, they would respond to the experiences of their high school. Such an understanding was beyond the realm of this study. Lastly, it is possible that the values that we identified among university students are ones that are common to many students and the ones that would be of importance to high school students in making their selection of a

university. Since the scale deals with the experiences of an enacted service, it could not be used to ask high school students to project their feelings about a university that they have not experienced (or have yet to experience). Another study could be conducted asking high school students about their personal values and how they expect to satisfy these by attending a university.

These findings also imply that when students in both the USA and India evaluate higher educational services, they pay greater attention to whether or not a university allows them to integrate more effectively with others in the community, whether that be professionally or in other groups and enables them to gain social recognition such as respect from others and admiration. Given this finding, one way for universities to satisfy the personal values of students (i.e., SVSI and SVSR) is for them to distinguish their university from others (via positioning / advertising) by emphasizing the school's rankings and reputation, institutional image, and the presence of a strong alumni network. These qualities could be positioned as those that are vital to a future graduate's success in this era of globalization. In addition, it would also be advantageous for universities to query students about actions and activities that would fulfill their SVSI and SVSR values. Understanding these factors would permit a university to be more "marketing oriented" by first identifying students' personal values and subsequently proceeding to satisfy these by their offering.

Both US and Indian students share similar values in this regard; while both groups consider having a pleasurable, stable, and enjoyable life that they gain from university education as important, in a relative sense, their choice is driven more by social values. The value that is the most crucial is social integration. Consequently, students are likely to be influenced more if a university has strong alumni/social networks because such networks enable graduates to accelerate their success and move up the career ladder faster.

Large universities may have a disadvantage regarding social integration since their size may hinder student interactions and the feeling of being "connected" while smaller schools are more likely to facilitate such integration. Nonetheless, larger universities can overcome this tendency by fostering activities that allow students to "bond" or feel a common connection with the school and one another.

University sport teams such as basketball or football can create a commonality amongst students that may help to foster integration. Different colleges within a university can also encourage student integration among those who are studying for a degree within that college. Hence, a feeling of collectivity can be nurtured at the university and the college levels. Identifying well known alumni and using them as role models can also serve as a way to bond students to forge a more shared social meaning both at the college and university level.

Our study established significant relationships between the three personal values and the overall value. For the US students, the highest correlation with overall value was for SVSR or social recognition, followed by peaceful life (SVPL) and social integration value (SVSI). Hence, it seems as if US students view the social recognition of an education as being the strongest correlate with the value they derive from their education. For the Indian sample, peaceful life (SVPL) has the highest correlation with overall value, followed closely by the correlation for social role (SVSR). For both samples, the social integration personal value had a much lower correlations with value. This result is somewhat at variance with the means that we reported. Social integration had the highest level of importance compared to the other two personal values. Yet, such social integration was not seen as being as strongly connected to overall value of an education. This apparent contradiction can be explained by the notion that students want to be integrated socially when they are students, but they recognize that such integration per se is not the key to value of an education. Instead, the social role value (particularly for Americans) was found to have the highest correlation with overall value suggesting that social recognition emanating from the respect they receive socially and professionally is what counts. The implication of this finding is that universities, in promoting their offering, should balance the appeals used in featuring social integration along with the social and professional recognition students will receive after they graduate and use their university degree (from that specific university) to find a job.

Conclusion

This paper began with the premise that personal values can be used as a way of differentiating a service that goes beyond the

measurement of satisfaction and service quality. We chose to use the higher education service industry since it is growing in size, in revenues and importance to the US economy. In particular, personal values are important to students as they experience the educational process at a university, and understanding them offers a useful and penetrating lens into the mindset of students. Moreover, we posited that these values may have an impact on important behavioral outcomes such as satisfaction and retention and on perceptions of quality and value. The results are clear in showing that the three personal values are statistically distinct and psychometrically sound and do operate mostly as we conjectured. While SERVQUAL and related approaches to measuring service quality are important, they lack the means to identify the more basic human values that reside within a student. Such approaches are excellent in identifying various attributes that are important to students. But how these attributes then lead to consequences and finally to terminal and instrumental personal values is unknown. To go beyond the attribute level, this study focused on the last stage of the means-end chain model by looking at the end states of values.

One concern deals with the practicality in using personal values as a differentiating approach by some universities. It is likely that smaller, private schools can implement these findings more easily. These schools can develop a position in the marketplace that sends a clear signal to would-be students that their school has a defined philosophy that seeks to gratify various personal values of students. Such schools could project and perpetuate an embedded set of value satisfiers aimed at a niche market of prospective students. So called "liberal arts" schools may exemplify this type of school. There may be some larger private universities that can also implement this approach. Nonetheless, larger state public institutions may not have such a luxury of adopting an overall university value posture. Instead, these schools could train recruiters, advisors, or counselors to be more conscious of the personal values of students. Such a consciousness might resonate well with some students who have certain personal values to fulfill. Clearly, executing such an approach requires careful thinking and strategizing.

Our study answers the call for broadening research in the services area and for examining how more complex relationships can

be developed through an understanding of an individual's psyche. Since the literature has already established the linkage between service quality and satisfaction, our study goes into a deeper level by looking at student personal values and how they are related to behavioral outcomes, besides service quality and satisfaction. The results of our study offer implications to providers of higher educational service – some of which we discussed as we presented the findings of the study. We believe that our study provides higher education service providers with a deeper understanding of student-customers in their choice process. Such an understanding can help to differentiate a university's service from that of their competitors and help determine the best messages to deliver to prospective students. Jesuit universities, for example, use a differentiation approach based on personal values that gives such schools a niche in the marketplace. These schools emphasize the undergraduate experience and the education of the "whole person" and an education based on "a way of being" (Fain, 2006).

The topic of human values seems particular germane to today's students. MacDonald (2005), for example, reports studies that show that 2/3s of first year college students believe that it is important for colleges to help them develop their personal values:

> Students are seeking a development of their internal lives and experience as well as the external, cognitive, rational analysis of reality, which tends to dominate much of modern education and culture.

The former chancellor of the University of Massachusetts offers more evidence on the importance of personal values:

> I think as we go into the future here, an institution's ability to be responsive to these issues [personal value], which clearly is an increasing need amongst students, probably will be an important recruiting tool (MacDonald, 2005).

Pritchard (2005) also contends that as universities restructure to be more market oriented (especially those outside the USA), keener attention must given to students' personal issues for reasons of satisfaction.

The main premise of this study is that personal values are deeply embedded forces within an individual that operate to guide that person in how they conduct their lives. Knowing these embedded values permits a university to be more strategic in how they develop their offering to students and/or advertise their offering to prospective students. Clearly the quote by Litten (1991) that "the final choice (of a university) is likely to be based as much on a feeling of well-being, or at least a lack of discomfort, as on any rational calculation of costs and benefits or systematic ratings of institutional characteristics" deserves to be repeated. Personal values are significant forces that can permit a university to penetrate the psyches of students in terms of what they hold to be the most important. The well-being that students derive from a peaceful, pleasing or harmonious life is one reason that a university education is of value. Moreover, the social recognition and social integration they derive from their education is another driving force satisfying deep personal values within the individual.

In sum, the results imply that service providers not only in higher educational institutes but also in other service industries should pay attention to their customers' personal values associated with the delivery of services. For higher education institutions, a better understanding of these values can help them improve customer loyalty and guide them in formulating differentiation strategies to set their university services apart from competing ones. As globalization continues and relationship marketing becomes even more central in higher education, these results offer timely guidance for institutions wishing to develop more effective marketing programs.

Future research

This study has only scratched the surface in terms of investigating personal values and services. Although personal values do have an impact on satisfaction and behavioral outcomes, there are other determinants that affect these dependent variables that could be explored in future studies. Further studies could also be launched in understanding the personal values that might operate when people choose financial/brokerage services or health care services, among others. Additional research is also needed in higher education. More attention needs to focus on differences among various colleges within a university. For example, those studying in professional schools such a engineering are more likely to have different values than those

studying in the humanities. We also do not know the cross-cultural differences among other countries that sends students overseas such as Singapore, China, or other Asian countries. Lastly, more research needs to focus on how different positioning statements are likely to serve as "hot buttons" in promising to fulfill various personal values. Future studies should also employ the laddering technique, a type of in-depth interviewing method, to study the linkages among service quality attributes and personal values and assess whether those linkages exist cross-nationally.

Parenthetical comments

While personal values are of significance to foreign exchange students, it must be noted that the visa rules after the 9/11 terrorist event have had a significant impact on the ease with which students can enter the USA as a student. Foreign exchange students who were keen to study in the USA, therefore, have been compelled to apply to other countries. The lessened number of exchange students might imply that US universities must compete with one another even more aggressively to recruit them. Being sensitive to their personal values might be the edge that allows one university to succeed over another in recruiting a student.

Notes

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- An executive summary for managers and executive readers can be found at the end of this article.

- The authors wish to acknowledge the helpful comments of the reviewers and editor in giving direction in the revision.

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Appendix

Survey measures

Service personal values (SERPVAL)

The educational service I receive from my present institute allows me to achieve:

1. More tranquility.

2. More family security.

3. More harmony and stability in life.

4. 4 A more pleasurable life.

(These four items measure "service peaceful life" or SVPL dimension.)

5. More respect from others.

6. The feeling that the world is more agreeable.

7. More social recognition.

8. More status.

9. A more stimulating and adventurous life.

(These five items measure "service social recognition" or SVSR dimension.)

10. A higher integration in my group.

11. Better relationships.

12. Stronger relationships.

(These three items measure "service social integration" or SVSI dimension.)

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Executive summary for managers and executives

This summary has been provided to allow managers and executives a rapid appreciation of the content of the article. Those with a particular interest in the topic covered may then read the article in toto *to take advantage of the more comprehensive description of the research undertaken and its results to get the full benefit of the material present.*

Measuring service quality and customer satisfaction has been one route to determine a service firm's deficiencies in order to make improvements. While this approach has become ubiquitous, organizations continue to search for other means to gain differential advantages. Building more intimate relationships with customers has emerged as a key strategy towards this end.

Personal values – often defined as beliefs and relatively stable cognitions that strongly impact emotions – are a part of a person's life and provide guidance how to live. They determine, regulate, and modify relationships between individuals, organizations, institutions and societies. Although the possession of these values is universal, the importance attached to each one is likely to vary to some degree according to the culture which shaped the individual.

In "Beyond service attributes: do personal values matter?" Srinivas Durvasula *et al*. use the concept of human values as a means to examine how consumers (in this case US and Indian students) evaluate the service quality of their higher education experience and found support for their expectation that personal values were related to satisfaction and behavioral outcomes.

Education is a people-based performance with students at the center of the simultaneous production and consumption process. As students participate in the delivery of the service, it is much like any other service: intangible, heterogeneous, inseparable from those who deliver it, perishable, and variable. The challenge for those who develop marketing activities in this sector is to determine how the service is being perceived, consumed, or enacted. Conceptualizing what service quality means to students, however, may be more elusive than originally thought. Since the service concept in education has abstract qualities, measuring its perceptions presents a challenge.

Higher education institutions are involved in much more than delivering course materials: they are also involved in an ongoing relationship with their students. How these relationships are developed and maintained may play a major role in fulfilling a student's personal values. Failure to satisfy these values may result in a discontented student. Others have argued that universities should improve service quality and build relationships with students in order to be effective, as these relationships lead to student satisfaction. Satisfied students, in turn, are less prone to transfer to other universities. Satisfied students also provide positive referrals to future students. As international competition for students intensifies, differentiating the service offerings through quality management and building strong relationships with students has become imperative for providers of higher education services.

When students in both the USA and India evaluate such services, they appear to pay greater attention to whether or not a university allows them to integrate more effectively with others in the community, whether that be professionally or in other groups, and enables them to gain social recognition such as respect from others and admiration. Given this finding, one way for universities to satisfy students' personal values is for them to distinguish their university from others (via positioning/advertising) by emphasizing the school's rankings and reputation, institutional image, and the presence of a strong alumni network. These qualities could be positioned as those that are vital to a future graduate's success in this era of globalization. In addition, it would also be advantageous for universities to query students about actions and activities that would fulfill their values. Understanding these factors would permit a university to be more "marketing oriented" by first identifying students' personal values and subsequently proceeding to satisfy these by their offering.

Both US and Indian students share similar values in this regard. While both groups consider having a pleasurable, stable, and enjoyable life that they gain from university education as important, in a relative sense, their choice is driven more by social values. The value that is the most crucial is social integration. Consequently, students are likely to be influenced more if a university has strong alumni/social networks because such networks.

Large universities may have a disadvantage regarding social integration since their size may hinder student interactions and the feeling of being "connected" while smaller schools are more likely to facilitate such integration. Larger universities can overcome this tendency by fostering activities that allow students to "bond" or feel a common connection with the school and one another. University sport teams can create a commonality amongst students that may help to foster integration. Different colleges within a university can also encourage student integration among those who are studying for a degree within that college. Hence, a feeling of collectivity can be nurtured at the university and the college levels. Using well-known alumni as role models can also serve as a way to bond students to forge a more shared social meaning.

Table I: Results of confirmatory factor analysis

Fit index	India	USA
χ^2 (51)	121.70	142.53
χ^2/df ratio	2.39	2.79
TLI	0.98	0.91
CFI	0.98	0.93
IFI	0.98	0.93
ϕ (SVPL-SVSR)	0.90	0.59
ϕ (SVPL-SVSI)	0.71	0.40
ϕ (SVSR-SVSI)	0.78	0.49
Range of loadings (SVPL)	0.53-0.80	0.66-0.82
Range of loadings (SVSR)	0.62-0.78	0.46-0.86
Range of loadings (SVSI)	0.68-0.85	0.54-0.93

Note – SVPL represents service value – peaceful life, SVSR represents social role, and SVSI represents social integration

Table II: Results of multiple group confirmatory factor analysis

Model	χ^2	df	TLI	CFI
Configural invariance model	334.26	102	0.96	0.95
Metric invariance model	373.97	114	0.95	0.95
Factor variance invariance model	391.25	117	0.94	0.95
Scalar invariance model	475.82	126	0.94	0.93
Error variance invariance model	680.47	138	0.91	0.90

Notes: Configural invariance model assumes that factor model is the same in India and the USA; metric invariance model assumes that factor loadings are invariant in the two samples; factor variance; invariance model assumes that factor covariances are invariant; scalar invariance model assumes that item intercepts are invariant; error variance invariance model assumes that error variances are invariant

Table III: Nomological net − correlations of service personal values with related variables

Variable	Peaceful life − SVPL	Social role − SVSR	Social integration − SVSI
Indian sample			
Overall value	0.39*	0.38*	0.30*
Service quality	0.33*	0.31*	0.32**
Overall quality	0.46*	0.41*	0.37*
US sample			
Overall value	0.38*	0.47*	0.27*
Service quality	0.39*	0.53*	0.34*
Overall quality	0.37*	0.49*	0.36*

Note: * implies significance at 0.05 level and ** implies significance at 0.10 level

## Figure 1: First order confirmatory factor model of service personal values
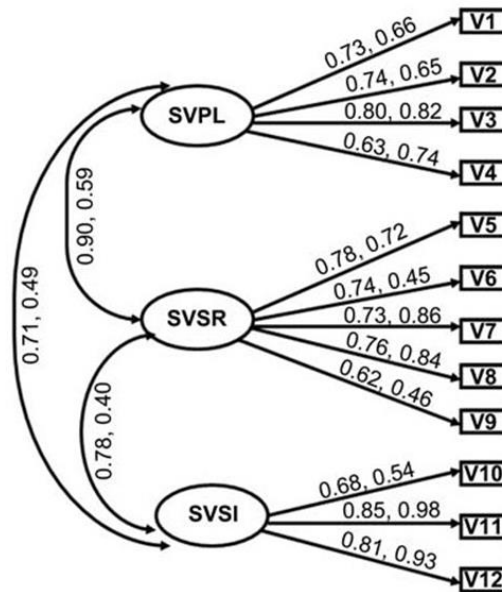
Notes: Fit Stats (India) − χ2 (51) = 121.70; CFI = 0.98, IFI = 0.94; TLI = 0.98; χ2/df = 2.39. Fit Stats (US) − χ2 (51) = 142.53; CFI = 0.93, IFI = 0.93; TLI = 0.91; χ2/df = 2.79. SVPL represents service value − peaceful life, SVSR represents social role, and SVSI represents social integration

Figure 2: Second order confirmatory factor model of service personal values
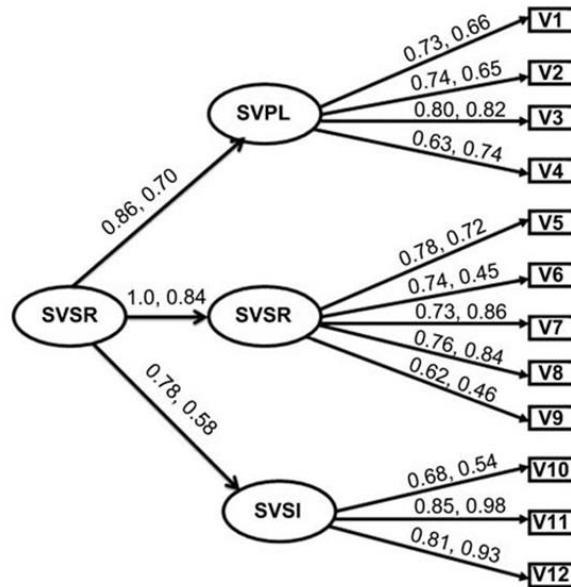
Notes: Fit Stats (India) – χ2 (51) = 121.70; CFI = 0.98, IFI = 0.94; TLI = 0.98; χ2/df = 2.39. Fit Stats (US) – χ2 (51) = 142.53; CFI = 0.93, IFI= 0.93; TLI = 0.91; χ2/df = 2.79. SVPL represents service value – peaceful life, SVSR represents social role, and SVSI represents social integration

Figure 3: Impact of service personal values on satisfaction, loyalty, and recommendation
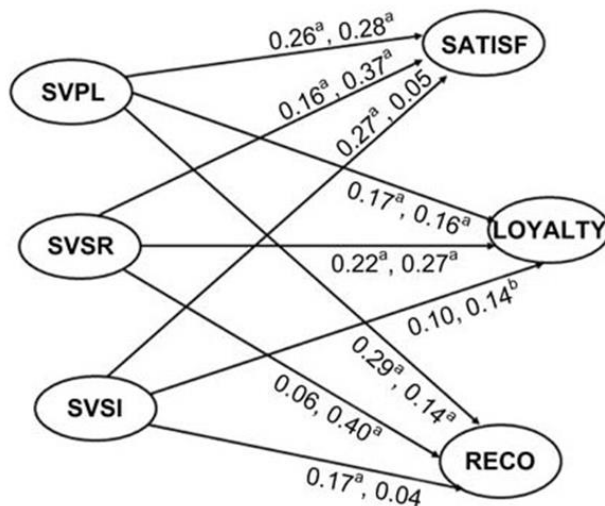
Notes: Standardized path estimates are shown for India, United States. [a]implies significance at 0.05 level and; [b]implies significance at 0.10 level.

SVPL represents service value – peaceful life, SVSR represents social role, and SVSI represents social integration

Figure 4 Mean scores of service personal value dimensions
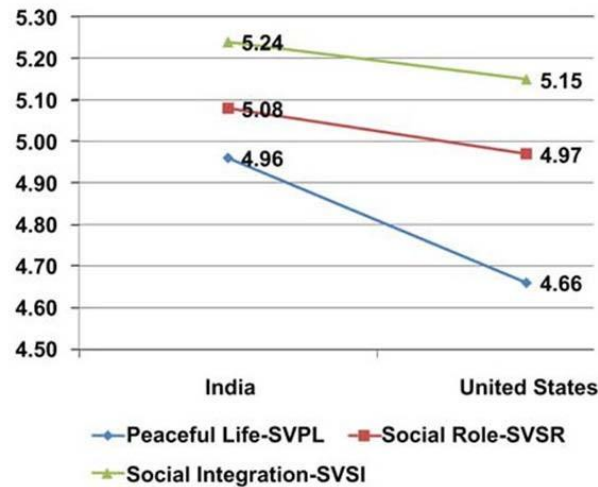
Notes: Between-country analyses revealed no significant differences in mean responses to personal values between the U.S. and the Indian samples (*p* > 0.05). Within-country repeated measures analysis of variance revealed significant differences in mean responses to personal values in India (*p* > 0.05) as well as in the U.S. (*p* > 0.05). In India, the mean values of social integration and social role are significantly higher than the mean of values of peaceful life (*p* > 0.05). The mean of social integration is also significantly higher than the mean of social role. In the United States also, social integration and social role have significantly higher mean values than peaceful life. Moreover, in the US, social integration has a significantly higher man than social role (*p* > 0.05)