HRMARS
Exploring Intellectual Capital

The Customer's Cognitive Evaluation of Service Experience: An Empirical Comparison between Service Personal Values and Service Value

Wan Salmuni Wan Mustaffa
Sultan Idris Education University, Malaysia

Rafiduraida Abdul Rahman
Sultan Idris Education University, Malaysia

Noor Lela Ahmad
Sultan Idris Education University, Malaysia

Hariyaty Ab Wahid
Sultan Idris Education University, Malaysia

Abstract
The objective of this research is to empirically compare two important concepts of service experience, namely Service Personal Values (SPV) and Service Value (SV). Higher education was selected to represent the service sector, and the registered international students were selected as respondents. The quota sampling technique was applied to select the respondents. The data were gathered using a questionnaire. Ultimately, 331 usable questionnaires were gathered for the data analysis process. An exploratory factor analysis (EFA) and a confirmatory factor analysis (CFA) using AMOS were performed to validate SPV and SV concepts. The results revealed that SPV and SV are two different constructs and, thus, should be treated differently. Both concepts are valid for evaluating customers' cognitive experiences in the service context. However, SPV can be treated as a more valuable construct than SV. This research also discusses the theoretical and practical implications as well as directions for future research.
Keywords: Service Personal Values, Service Value, Customers' Cognitive Levels, Service Experiences, Higher Education.

Introduction
Recently, a concept of customer experience has become increasingly important as a generic strategic tool to attract and retain the customers with the organization (Garg, Rahman, & Qureshi, 2014; Shaw, Dibeehi, & Walden, 2010). As stated by Berry, Carbone and Haeckel (2002), *'Offering services alone isn't enough these days: Organizations must provide their customers with satisfactory experience' (p. 1).* The previous research has discussed a concept of

service experience from the customers' cognitive perspective. Service experience is evaluated in the customers' cognitive at several levels of abstraction, including service personal values (SPV), service value (SV) and service quality (SQ) (Lages & Fernandes, 2005; Zeithaml, 1988). Each cognitive level evaluates different types of service experience.

SPV is the highest level of customers' cognitive structure. SPV refers to customers' beliefs or conceptions about end goals or desirability (Lages & Fernandes, 2005). An intermediate level is SV. SV is defined as a cognitive trade-off between customers' perceptions of benefits and sacrifices (Cronin et al., 1997). SQ is the lowest level of customers' cognitive structure. SQ is conceptualized as a customer's evaluation about an entity's overall superior (Parasuraman et al., 1985, 1988, 1991).

Although, SQ has been extensively investigated through the established models such as SERVQUAL, SERVPERF and HedPERF, there is a clear research gap exists at the highest levels of abstraction. First, SPV and SV are rarely explored and validated as indicators of customers' evaluation of service experiences (Lages & Fernandes, 2005; Durvasula, Lysonski, & Madhavi, 2011). Second, the concepts of SPV and SV have been used interchangeably in the service context (Ledden, kalafatis & Samouel, 2007). Thus, the objective of this research is to empirically compare the concepts of SPV and SV from the customers' cognitive evaluation of service experience.

Literature Review
Service Delivery in Higher Education
The concept of Service Delivery System (SDS) in higher education was derived from Total Quality Management (TQM) philosophy, which adopts the 'Input-Process-Output' (IPO) framework (Chua, 2004; Gupta, 1993; Idrus, 2011; Jain, Sinha, & Sahney, 2011). In higher education context, inputs are the resources in the form of human and physical facilities. The process refers to service delivery activities, including teaching, learning, research, administrative and knowledge transformation while outputs refer to service produced or delivered, such as tangibles outcomes, additional value and intangible outcomes.

Service in higher education involves customer contact. A customer is anyone to whom a product or service is provided (West-Burnham, 1992). The higher education deals with different group of customers or stakeholders, including students, parents, industries, faculty staffs, and tax payers (Madu & Kuei, 1993). Out of these customers, students are the primary customers who experience the educational services (Lewis & Smith, 1994; Pariseau & McDaniel, 1997; Wiklund & Wiklund, 1999; Yeo, 2009). The role of student as the main customer has shifted the power in making decision from service provider to students (Abili *et al.*, 2011; Eriksen, 1995; Spanbauer, 1995).

Theory underpinning the customers' cognitive evaluation
According to Means-End Chain (MEC) theory, service experience is retained in the customer's memory at three levels of abstraction (Gutman, 1982; Lages & Fernandes, 2005). The lowest level of abstraction is SQ, which is defined as the discrepancy between customers' perceptions and their expectations of services offered (Parasuraman et al., 1988). Customers assess the SQ

by considering various attributes, both intangible and tangible (Gutman, 1997). A significant contribution has already been made to the marketing field via the development of the SERVQUAL model (Parasuraman et al., 1985, 1988, 1991). At the second level, SV is another construct found in the service management and marketing literature. SV is defined as a cognitive trade-off between perceptions of quality and sacrifice (Cronin et al., 1997). Zeithaml (1988) stated that service value is defined as the customer's perceptions of the service received and given. Finally, at the highest level, SPV refer to the customers' beliefs or perceptions about end goals or desirability (Rokeach, 1973). Each cognitive level evaluates different types of service experience.

Although the lowest levels have been extensively investigated, particularly through the SERVQUAL, SERVPERF and Grönroos model (Cronin & Taylor, 1994; Grönroos, 1984; Parasuraman et al., 1985, 1988, 1991), a clear research gap exists at the highest level of abstraction (Lages & Fernandes, 2005; Liu, Ma & Zhao, 2007; Thuy & Hau, 2010). SPV and SV are rarely explored and validated as indicators of customers' evaluation of service experiences (Lages & Fernandes, 2005; Durvasula, Lysonski, & Madhavi, 2011). Moreover, the concepts of SPV and SV have been used interchangeably in the service context (Ledden, kalafatis & Samouel, 2007).

The Conceptualization and Operationalization of the Investigated Variables
i.   Service Personal Values (SPV)
Rokeach (1973) defined values as 'an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence' (p. 5). According to Rokeach, values are categorized into two types. First, object values are referred to the values of the object which gained through a comparison with other object. The object values have a significant meaning with the amount individuals paid when acquired the object. Second, individual values are concerned with the values owned by individuals. Among these types of values, the individual or personal values, such as self-reliance and stability in life, can increase our understanding of individuals' behavior (Clark & Mickens, 2002; Chou *et al*., 2011; Long & Shiffman, 2000).

Several established quantitative scales have tried to operationalize personal values, including Rokeach Value System (RVS), Values of Lifestyle (VALS), and Lists of Values (LOV) (Rokeach, 1973; Mitchell, 1983; Kahle, 1983). Although aforementioned scales have been widely used and tested cross-culturally (Arambewela & Hall, 2011), only few scales have been developed to measure personal values behind services usages. In 2005, Lages and Fernandes developed the personal values scale in mobile services sector, known as SERPVAL (service personal values). According to Lages and Fernandes (2005), service personal values are defined as 'customer's overall assessment of the use of a service based on the perception of what is achieved in terms of his own personal values' (p. 1564). SERPVAL suggest that personal values deal with the end states of our existence or the ultimate goals that people wish to achieve in their lives. The operationalization of SERPVAL includes three broad groups of individual values dimensions, namely service personal values to peaceful life (SVPL), service personal values to social recognition (SVSR), and service personal values to social integration (SVSI).

ii. Service Value (SV)

The trade-off framework by Zeithaml (1988) has been widely used to conceptualize the service value in product or service context. According to trade-off framework, service value is conceptualized as the result of a customers' cognitive trade-off between the benefits (gets) and sacrifices (gives). When applied in service context, the consumers may cognitively integrate their perceptions of what they get and what they have to give up from the service experience (Kuo, Wu, & Deng, 2009). The benefits refer to the quality of the service, whereas sacrifices are concerned with the money expended, time and effort. The benefits and sacrifices might vary across customers. Money is often utilized as a key indicator to measure what customers have to sacrifice to obtain the services. Sacrifices mean more than the money paid for a certain goods or services. In service context, sacrifices are a broader concept, which covers the non-monetary costs, such as time, effort and risk consumption (Cronin *et al.*, 1997; Cronin, Brady, & Hult, 2000; Li, Dong & Chen, 2011; Lovelock, 2001). Besides the monetary cost, it is crucial to consider the non-monetary cost as well to measure the sacrifices made by customers to obtain the service.

Methodology

i. Sample and data collection

This research was carried out at Malaysian Public Universities. The quota sampling technique was employed to select the sample elements that involve the registered international students. A questionnaire was utilized to gather the data. After eliminating unusable collected questionnaires, a total of 331 completed questionnaires were proceed to data analysis.

ii. Instrumentation

In this research, SPV and SV were operationalized based on the adapted scales. The questionnaire consists of three sections. Section I and II are intended to assess the level of the international students' cognitive evaluation of service experience in higher education. Section III contained the questions regarding the respondents' demographic profile. The adapted SERPVAL scale (Lages & Fernandes, 2005) was adapted to operationalize SPV. SERPVAL is a multidimensional scale that specifically developed to operationalize customer experience behind the service usage based on their individual values. SERPVAL was operationalized through 12 items represents the international students' individual values. SV was operationalized using 13 items to assess the service experiences among international students as a result from the tradeoff between benefits (quality) and sacrifices (cost) (Zeithaml, 1988 & Cronin et al. 1997).

iii. Data Analysis

Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) using AMOS were performed to validate and compare the concepts between SPV and SV. Specifically, EFA is conducted to reduce a large number of items to a smaller set of underlying factors that summarize the essential information contained in the variables (Coakes & Steed, 2003),

whereas, CFA using AMOS was performed to determine the unidimesionality, validity and reliability of each variable (Byrne, 2010; Hair et al., 2010; Zainudin, 2012).

iv. Pilot Test

At a pilot test stage, a total of 100 completed questionnaires were analyzed to examine the reliability of the investigated variables. Next, EFA was performed to underlying factors that summarize the essential information contained in the variables. The results revealed that SPV and SV variables had achieved the internal consistency, with cronbach' alpha values were greater than 0.70 (Nunnally, 1978). The EFA results also illustrated that 12 items of SPV were extracted and divided into three factors namely, Service Values Peaceful Life (SVPL), Service Values Social Recognition (SVSR), and Service Values Social Integration (SVSI). A total of 13 SV items were extracted and divided into two factors namely, Cost Value (CV) and Quality Value (QV).

Results and Discussion

The main objective of this research is to validate and contrast the concepts of SPV and SV. Therefore, CFA technique using AMOS was performed for each investigated variables (Zainudin, 2012). Figure 1 and 2 illustrate the results of CFA analysis for SPV and SV. Two types of validity were examined, namely convergent validity and construct validity. The convergent validity was assessed through Average Variance Extracted (AVE). The value of AVE should be 0.50 or higher to achieve convergent validity (Fornell & Larcker, 1981).
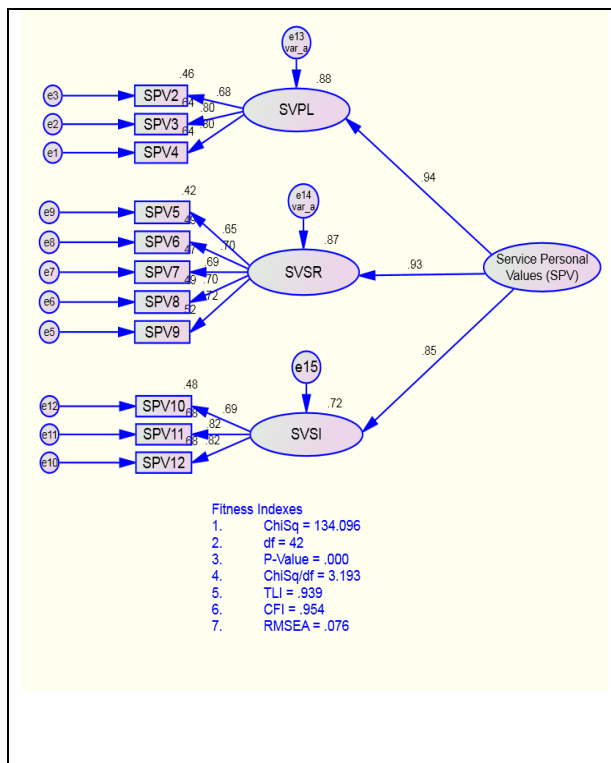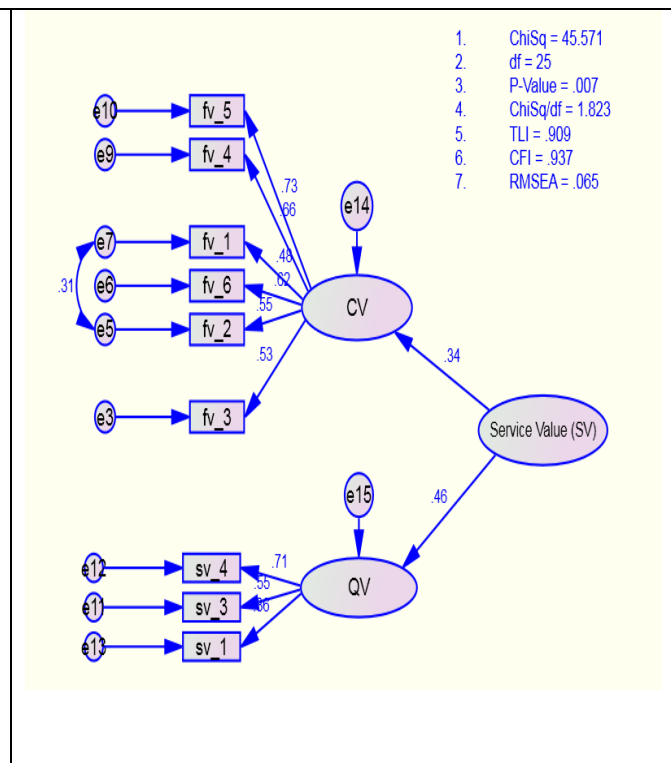

Fig 1: CFA model for SPV   Fig 2: CFA model for SV

708

The results indicate that the value of AVE for SPV and SV was 0.869 and 0.681, respectively. Nevertheless, the value of AVE for SPV is greater than SV. This indicates that all items that measure SPV have a high percentage of shared common variance as compared to SV. On the other hand, the construct validity is achieved when the fitness indices achieved the required levels. In this research, all fitness indices for SPV and SV had achieved the required levels as follows: CFI > 0.90, TLI > 0.90, RMSEA < 0.08, and the ratio of χ^2/df < 5.0. Table 1 shows the results of fitness indices. The results of fitness indices have revealed that SPV variable is truly captured theoretical basis rather than SV.

Table 1: Results of fitness indices

Service Personal Values (SPV)	Service Value (SV)
CFI=0.939; TLI=0.954; RMSEA=0.074; χ^2/df =3.193	CFI=0.909; TLI=0.937; RMSEA=0.065; χ^2/df =1.823

Conclusion

SPV and SV are two crucial variables used to evaluate the customers' cognitive evaluation of service experience. However, the concepts of SPV and SV are rarely explored and have been used interchangeably in the previous studies. This research was carried out to empirically compare both concepts. Higher education was selected to represent the service sector, and the registered international students were selected as respondents.

The results revealed that SPV and SV are two different constructs and, thus, should be treated differently. Both concepts are valid for evaluating customers' experiences in the service context. However, SPV can be treated as a more valuable construct than SV. SPV are the nature of an enduring feeling system (Rokeach, 1973; Lages & Fernandes, 2005). The international students who pursue their education at Malaysian public universities have different value systems as compared to local students. Consequently, the university should focus not only on quality attributes to measure students' service delivery experience, but also on the aspects of personal values. Malaysian public universities must address the elements of values and attitudes that needs in delivering educational service to international students such as the ability of the service experience to enable allow students to achieve peaceful in life as well as gain more respect from others (Jalali, Islam and Ku Ariffin, 2011).

This research offers the theoretical and practical implications. For theoretical implications, this research will be able to enlarge the body of knowledge in the service context by exploring the concept of service personal values and service value. This research also offers important implications for practitioners. The concepts of SPV and SV can be used as guidelines for service providers when implementing effective strategies and enhancing international students' experience towards the service rendered.

Corresponding Author
Wan Salmuni Wan Mustaffa, Dr.
Faculty of Management and Economics
Sultan Idris Education University
Tanjong Malim, Perak, Malaysia
wan.salmuni@fpe.upsi.edu.my

References

Abili, K., Thani, F. N., Mokhtarian, F., & Rashidi, M. M. (2011). Assessing quality gap of university services. *Asian Journal on Quality*, *12*(2), 167–175.

Arambewela, R., & Hall, J. (2011). *The role of personal values in enhancing student experience and satisfaction among international postgraduate students: An exploratory study.* Paper presented at the International Conference on Education and Educational Psychology (ICEEPSY 2011), Turkey.

Berry, L. L., Carbone, L. P., & Haeckel, S. H. (2002). Managing the total customer experience. *MIT Sloan Management Review*, *43*(3), 1–6.

Byrne, B. M. (2001). Structural equation modeling with AMOS, EQS, and LISREL: Comparative approaches to testing for the factorial validity of a measuring instrument. *International Journal of Testing*, *1*(1), 55–86.

Coakes & Steed (2003). *SPSS Analysis without Anguish*. Australia: Wiley

Chou, C. C., Liu, L. J., Huang, S. F., Yih, J. M., & Han, T. C. (2011). An evaluation of airline service quality using the fuzzy weighted SERVQUAL method. *Applied Soft Computing*, *11*(2), 2117–2128.

Chua, C. (2004). *Perception of quality in higher education*. Paper presented at the Australian Universities Quality Forum 2004, Australia.

Clarke, I., & Micken, K. S. (2002). An exploratory cross-cultural analysis of the values of materialism. *Journal of International Consumer Marketing*, *14*(4), 65–89.

Cronin, J Joseph, Brady, M. K., Brand, R. R., Jr, R. H., & Shemwell, D. J. (1997). A cross-sectional test of the effect and conceptualization of service value. *Journal of Service Marketing*, *11*(6), 375–391.

Cronin, J Joseph, & Taylor, S. A. (1994). SERVPERF Versus SERVQUAL : Reconciling performance-based and measurement of service quality. *Journal of Marketing*, *58*, 125–131.

Cronin, J.Joseph, Brady, M. K., & Hult, G. T. M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. *Journal of Retailing*, *76*(2), 193–218.

Durvasula, S., Lysonski, S., & Madhavi, A. D. (2011). Beyond service attributes: do personal values matter? *Journal of Services Marketing*, *25*(1), 33–46.

Eriksen, S. D. (1995). TQM and the transformation from an élite to a mass system of higher education in the UK. *Quality Assurance in Education*, *3*(1), 14–29.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *XVIII*(Febuary 1981), 39–50.

Garg, R., Rahman, Z., & Qureshi, M. N. (2014). Measuring customer experience in banks: scale development and validation. *Journal of Modelling in Management*, *9*(1), 87–117.

Gutman, J. (1997). Exploring the nature of linkages between consequences and values. *Journal of Business Research*, *22*(2), 143–148.

Gupta, S. K. (1993). Quality improvement in teaching. In R. G. Lewis & D. H. Smith (Eds.), *Total Quality in Higher Education* (pp. 64–67). Florida: St. Lucie Press

Grönroos, C. (1984). A service quality model and its marketing implications. *European Journal of Marketing*, *18*(4), 36–44.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis* (7th ed.). Upper Saddle River, NJ: Prentice Hall, Inc.

Idrus, N. (2011). Challenges facing higher education as a service industry in a developing country. *International Journal of Services, Economics and Management*, *3*(1), 104–121.

Jalali, A., Islam, M. A., & Ku Ariffin, K. H. (2011). Service satisfaction : The case of a higher learning institution in Malaysia. *International Education Studies*, *4*(1), 182–192.

Jain, R., Sinha, G., & Sahney, S. (2011). Conceptualizing service quality in higher education. *Asian Journal on Quality*, *12*(3), 296–314.

Kahle, L. R. (1983). *Social Values and Social Change: Adaptation to Life in America*. New York: Praeger publishing.

Kuo, Y. F., Wu, C. M., & Deng, W. J. (2009). The relationships among service quality, perceived value, customer satisfaction, and post-purchase intention in mobile value-added services. *Computers in Human Behavior*, *25*(4), 887–896.

Lages, L. F., & Fernandes, J. C. (2005). The SERPVAL scale: A multi-item instrument for measuring service personal values. *Journal of Business Research*, *58*(11), 1562–1572.

Ledden, L., Kalafatis, S. P., & Samouel, P. (2007). The relationship between personal values and perceived value of education. *Journal of Business Research*, *60*(2007), 965–974.

Lewis, R. G., & Smith, D. H. (1994). *Total Quality in Higher Education*. Florida: St. Lucie Press.

Li, M., Dong, Z. Y., & Chen, X. (2011). Factors influencing consumption experience of mobile commerce: A study from experiential view. *Internet Research*, *22*(2), 120–141.

Liu, R., Ma, Q., & Zhao, X. (2007). *SERPVAL construct validation in multi-service industries of Chinese context.* Paper presented at the International Conference on Wireless communications, Networking and Mobile Computing, China.

Long, M. M., & Schiffman, L. G. (2000). Consumption values and relationships: Segmenting the market for frequency programs. *Journal of Consumer Marketing*, *17*(3), 214–232.

Lovelock, C. (2001). *Service Marketing*. (4th ed.). Prentice-Hall.

Madu, C. N., & Kuei, C. H. (1993). Dimensions of quality teaching in higher institutions. *Total Quality Management*, *4*(3), 325–338.

Mitchell, A. (1983). *The Nine American Life Styles*. New York: Warner.

Nunnally, J. (1978). *Psychometric Theory*. New York: McGraw-Hill.

Parasuraman, A., Zeithaml, V. A., Berry, L. L. (1991). Refinement and reassessment of the SERVQUAL scale. *Journal of Retailing*, *4*(Winter 1991), 420–450.

Parasuraman, A., Zeithaml, V. A., Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, *64*(1), 12–40.

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, *49*(Fall 1985), 41–50.

Pariseau, S. E., & McDaniel, J. R. (1997). Assessing service quality in schools of business. *International Journal of Quality & Reliability Management*, *14*(3), 204–218.

Rokeach, M. (1973). *The Nature of Human Values*. New York: The Free Press..

Shaw, C., Dibeehi, Q., & Walden, S. (2010). *Customer Experience: Future Trends and Insights*. United Kingdom: Palgrave Macmillan.

Spanbauer, S. J. (1995). Reactivating higher education with total quality management : Using quality and productivity concepts , techniques and tools to improve higher education. *Total Quality Management*, *6*(5), 519–538.

Thuy, P. N., & Hau, L. N. (2010). Service personal values and customer loyalty: a study of banking services in a transitional economy. *International Journal of Bank Marketing*, *28*(6), 465–478.

West-Burnham, J. (1992). *Managing Quality in Schools : A TQM Approach*. Logman, Harlow.

Wiklund, P. S., & Wiklund, H. (1999). Student focused design and improvement of university courses. *Managing Service Quality*, *9*(6), 434–443.

Yeo, R. K. (2009). Service quality ideals in a competitive tertiary environment. *International Journal of Educational Research*, *48*(1), 62–76.

Zainudin, A. (2012). *Structural Equation Modeling*. Malaysia: UiTM Press.

Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. *Journal of Marketing*, *52*(3), 2–22.

Zeithaml, V. A. (1987). *Defining and Relating Prices, Perceived Quality and Perceived Value*. United Kingdom: Marketing Science Institute, Cambridge, MA.