
MAPPING SPIRITUAL CARE SERVICE QUALITY IN MARKETIZATION**Haw-Ran Wong***PhD candidate, Graduate Institute of Business Administration
Fu-Jen Catholic University, Taiwan***Chien-Hsien Lee (Corresponding author)***PhD candidate, Graduate Institute of Business Administration
Fu-Jen Catholic University, Taiwan
briah912@ms41.hinet.net***Tzu-Yang Chang***PhD candidate, Graduate Institute of Business Administration
Fu-Jen Catholic University, Taiwan***ABSTRACT**

Spiritual care service is an indispensable part of the holistic health care approach. However a formal measure of its service quality remains lacking. This research therefore intends to, (1) identify the quality dimensions involved in spiritual care service, (2) understand the structure of customers in relation to the dimensions, and extend the research of service quality into spiritual care service by proposing a workable framework. This research conceptualizes spiritual care service quality as a second-order, five-dimensional construct that reflects consumers' expectation on the service. This research presents the development and validation of a framework for the evaluation of the service. The five dimensions of respect, empathy, credibility, accompaniment and insightfulness can be seen as within a nomological network that illustrates varied demographical effects. The results are consistent to the multidimensional representation of service quality, offering insight into the relationships between each quality dimension and its structure of customers.

Keywords: *Service, Service Quality, Spiritual Care, Spirituality, Holistic Care.*

1. INTRODUCTION

Quality in health care does not depend on technical result alone but also the aspect of service. Providers in the health care service come to the realization that care that focuses only on the physical dimension of a person is both unsatisfactory and inadequate. The concept of "Holistic Care", wherein the human person is considered as an integrated complex of physical, psychological, social and spiritual, is gradually becoming a major concern in the health care world today (Puchalski, Ferrell, Virani, Otis-Green, Baird, Bull, Chochinov, Handzo, Nelson-Becker, Prince-Paul, Pugliese, & Sulmasy 2009).

As part of the holistic approach, many hospitals nowadays would formally provide spiritual care service to their patients, and often also to the internal customers that are the staffs themselves. However, it is the general observation that evaluation from the managerial perspective on the performance in relation to spiritual care service is rather uncommon. Although the spiritual care service has become increasingly vital in the health care system today, and the move to integrate it into the formal health care system is in a developing trend, there is no apparent evaluative tool for it until such a time. The cross-disciplinary nature of the issue may be a reason for this.

In the increasingly competitive environment, service quality is considered to be critical to the organization success. In general, from the patient-centered point of view, quality service will not only improve patients' satisfactions but also medical outcome, patient care and efficiency. As a framework of connections, the quality of the service such as spiritual care, may also affect the quality of health care decision making process (Puchalski et al. 2009). In addition, the pressure from the growing competition in the health care industry may also be another factor that has motivated these organizations toward achieving top quality services. Though the latter may not necessarily a major focus for some institutions that are nonprofit and philanthropic oriented, objectives such as sustainability, efficiency and accountability would still be reasonable motivations for providing high quality holistic and spiritual care service.

Therefore, there is an obvious managerial problem that has to be answered on how the quality of spiritual care service can be evaluated. In order to measure service quality in spiritual care, this study would first focus on the exploration and identification of the dimensions possibly involved in the service. Basing on the framework of Parasuraman, Zeithaml and Berry (PZB) (1988) and the service quality scale developed, this study also intends to propose quality measurement framework for spiritual care service, which hopefully will lay the scope and standard in setting goal and for the evaluation on the performance of spiritual care service. Further, this research intend also to understand the customers' structure involved in relation to the spiritual care quality and its dimensions.

2. REVIEW OF LITERATURES

Service Quality Its Dimensions

The concept of quality has long been discussed in the health care field. Kenagy, Berwick and Shore (1999) have pointed out that quality in health care does not depend on technical result alone but also the aspect of service. Service quality, according to them, consists of the characteristics that shape the experience of care for the patients and their loved ones other than the technical quality of diagnostic and therapeutic procedures. Raposo, Alves and Duarte (2009) have also pointed out that service quality in health care is related closely to issues such as patient's satisfaction, clinician satisfaction, outcomes, patient care and efficiency in terms of lower cost.

A service is a time-perishable, intangible experience performed for a customer, who is acting in the role of a co-producer (Fitzsimmons & Fitzsimmons, 2004). For Lusch and Vargo (2006), service always involves the application of specialized competences, such as knowledge and skills, through deeds, processes, and performances for the benefit of another entity or the entity itself. As part of their research, PZB (1985) have identified ten quality dimensions (e.g. reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding and tangibles) for the evaluation service quality, which they have further purified and reduced into five in 1988, in the order of importance shown in Table 1.

Table 1: The Dimensions of the Service Quality

| | | |
|------------|----------------|---|
| PZB (1988) | Tangibles | The appearance of physical facilities, equipment, personnel and communication materials. |
| | Reliability | The ability to perform the promised service dependably and accurately. |
| | Responsiveness | The willingness to help customers and provide prompt service. |
| | Assurance | The knowledge and courtesy of employees and their ability to convey trust and confidence. |
| | Empathy | The caring individualized attention the firm provides its customers. |

PZB (1988) have suggested that perceived service quality is a global judgment or attitude concerning the superiority of service and is to be measured by subtracting expected from perceived service. Basing on the "gap model" in defining and assessing service quality, they have provided the SERVQUAL scale of PZB (1991) featured a 7 points scale bounded by "strongly agree" and "strongly disagree", 22 expectations questions, 22 perceptions questions, and 5 point-allocation questions. However, this procedure also gives rise to two issues, first, what really is being measured in SERVQUAL with expectations; second, the problematic nature of the resulting difference scores. Cronin and Taylor (1992) have recommended that to resolve the two issues expectation ratings should be eliminated altogether, and have proposed a performance only instrument SERVPERF that shares the similar 5 dimensions of SERVQUAL.

Though different opinions exist on how service quality can be effectively measured, the expectation of the customers remains an important aspect to be identified, wherein the concept of perceived quality involves the idea of conforming to customer's expectation. Armstrong, Mok, Go and Chan (1997) and Furrer, Liu and Sudharshan (2000) have pointed out the importance of the measurement of expectations in service quality evaluation, particularly in a multicultural context.

Spirituality and Spiritual Care

Hsiao (2002), when speak of spirituality as an aspect of patient needs in nursing care, has defined “spirituality” as the relationship with the self and have seen it as the inner resources, self-integrating and self-reflection power. Dyson, Cobb and Forman (1997), from a relational point of view, describe it in term of the interaction with others such as love and forgive. Catanzaro and McMullen (2001), from the personal perspective, see spirituality as a positive state of the psyche - hope, tranquility and contentment; the ethical norm, value and belief; the positive meaning of life - life’s actualization, transcend or growth from difficulty, and the attainment of fullness of life. From a complementary rather than mutually exclusive view, McDonald (2000) has concluded that spirituality consists of five dimensions: 1) beliefs, attitude and perceptions; 2) transcendental experiences; 3) sense of meaning for existence; 4) belief in the paranormal; and 5) religious behavior and practice, which touch on the psychological, the experiential, beliefs, value and the behavioral or expressive aspects of a person.

Golberg (1998) points out that every human person has spiritual need and not only believers of religion. Hermann (2001) in his research on the spiritual needs of the dying patients proposes 6 main categories of needs: religion; accompaniment; to be part of and to be independent; to finish the unfinished business; to feel natural; positive attitude. Spiritual care may be seen as the care given to patient and family members in addressing these needs. Taylor, Highfield and Amenta (1994), in their study on 181 cancer ward nursing staffs, have defined spiritual care as: the care which promote holistic health, respect and support patients beliefs, provides emotional support in the facing of pain, encourages “transcendental quality” such as peace, meaning and strength; promote relationship, and provides activity that satisfy religious need.

Puchalski et al. (2009) have pointed out that spiritual care models offer a framework for health care professionals to connect with their patients; collaborate with their patients as partners in their care; and provide, through the therapeutic relationship, an opportunity for healing, which is the ability of a person to find solace, meaning and purpose in the midst of suffering and pain. Spiritual care is grounded on two important theoretical frameworks, the Biopsychosocial-Spiritual Model and the patient-centered care model. Integral to both of these models is the recognition that there is more to the care of the patient than the physical.

3.RESEARCH METHOD

With the conceptualizations of spiritual care and service quality already established, the remainder of this research presented a three-phased research plan to develop and validate the conceptualization, in line with traditional scale development procedures. Phase 1 consisted of an item generation process. In phase 2, an exploratory factor analysis was used to establish the instrument. Phase 3 consisted of studies to validate the predictive ability of spiritual care in relation to demographical variables and assessed the relationship between the dimensions and the profile of customers, where additional data (n=421) were collected for this.

PHASE 1: Scale Development

The exploratory stage of our research sought to generate a pool of items to characterize the quality of spiritual cares. This study carried out an exploratory research by using the qualitative technique in order to identify some key elements. The research could be sub-divided into two parts, where the first part was directed to the spiritual care providers, focusing on the services provided; and the second part was on the patients, focusing on the determinants used to evaluate the quality of service.

The first part of the exploratory study would like to identify issues such as: What were the services offered by the spiritual care department? Who were those being offered to and how often? What would be the objectives behind these activities? The key informant technique was applied in this research. The research interviewed spiritual care providers of six hospitals in Taiwan with such services (1 medical center, 4 regional teaching hospitals and 1 district teaching hospital). Two trained interviewees were assigned for the task and 15 persons were interviewed. Some guided questions or outlines were given to the interviewer, allowing the respondent to response spontaneously at first, and if necessary questions would be asked.

The second part of the exploratory research focused itself on the elements that the customers would use to evaluate the quality of a service. Here the study tried to identify issues such as: How did the customers feel about the service that they received or knew? Why were they saying so? The semi-structured and in-depth interviews were conducted. Six trained interviewees who were familiar with hospital visit were assigned for the interview with the customers. The interview took place in one of the mentioned regional hospital, using convenient sampling. The subjects however, must have some idea about the services. There were 60 persons participated in the interview, both the internal customers (staffs) and the external customers (the patients and

their family members).

This study had found that most of the hospitals were providing similar services through their spiritual care workers. This can be due to the similar religious background or due to frequent exchange of ideas among themselves. The activities can broadly be divided into four major groups as shown in Table 2.

Table 2: Activities provide by pastoral or spiritual care department.

| Category | Contents |
|--|--|
| Patients and staffs care (for patients' relatives also) | -Visiting, accompanying, conversing and caring the patients or staffs. - Basic counseling. - Bereavement accompaniment. |
| Religious activities (for patients' relatives also) | - Prayer and liturgical services for the patients or staffs. - Evangelization activities. |
| Formative activities (for external students also) | - Conducting training session for staffs. - Clinical Pastoral Education. (C.P.E.) - Groups gathering/study groups. - Internal training. |
| Special events | - Special public events. - Hospital's special events. |

The content of interviews conducted above was transcribed and analyzed in a systematic way. This research complemented this analysis with a review of scales related to the SERVQUAL developed by PZB (1985). There are seven dimensions corresponding to the SERVQUAL dimensions, i.e. understanding, communication, tangibles, credibility, responsiveness, security, and courtesy; and one new dimensions insightfulness were identified. There were occasions respondents had specifically mentioned that through the conversation and visitation they have somehow come to some realization, attain some new insight, or have discovered something they have not aware of before, which made them felt the service was a desirable one.

Table 3: The connotations of the dimensions identified.

| Dimension | Meaning |
|----------------|---|
| Understanding | Making effort to understand the customers and their needs, providing attention, showing considerate and acceptance. |
| Communication | Communicating in a language that the customers can understand, listening to them and explaining the service itself. |
| Accompaniment | The physical present and company of care provider. |
| Credibility | Trustworthiness, believability and honesty. |
| Responsiveness | Willingness, readiness, promptness and timeliness. |
| Security | Freedom from risk and confidentiality is guaranteed. |
| Courtesy | Politeness, consideration and friendliness. |
| Insightfulness | Bringing insight, awareness, new information and helpful in clarified confusions. |

From this qualitative analysis, an initial battery of statements was generated that reflected the topics addressed in the interviews plus important aspects of service quality adapted from previous research. This set was reduced by eliminating ambiguous, redundant, and misleading statements. The final set of 40 statements retained for further analysis was transformed into a questionnaire of five-point (strongly important 5 to strongly unimportant 1) Likert scales, which included 8 dimensions and each dimension with 5 questions.

PHASE 2: Exploratory Factor Analyses

Data were collected from voluntary customers (patients and their families) from one of the regional hospital mentioned ($n = 200$). Respondents completed the self-administered questionnaire based on their experience in the hospital. Exploratory factor analysis was used to suggest dimensions and to construct a scale on the basis of the resulting factor loadings (Churchill 1979). The factors solution was subjected to oblique rotation to allow for inter-correlations among the dimensions. The research eliminated items that loaded on more than one factor as well as those with factor loadings below .70. After the processes of item deletion and reassignment, the final analysis of the screen plots suggested five underlying dimensions. This process reduced the scale to 20 items, with each of the five factors represented by three to five items, as depicted in Table 4. The remained dimensions were the accompaniment (4 items), credibility (3 items) and insightfulness dimensions (4 items). The understanding and communication dimension were reassigned together, would then be renamed as the “empathy” dimension (5 items). The security and courtesy dimensions were renamed as the “respect” dimension (4 items), where the rights of the customers were guaranteed and respected.

The overall reliability *Cronbach's* alpha coefficient was 0.94. The total variance explained is 73.97%, rotated variance explained ranging from 17.84, 16.48, 15.01, 13.20 to 11.45%. The loadings are ranging from 0.713 – 0.945. The final pattern matrix can be shown as below:

Table 4: Summary Results from Scale Purification

| Components / Dimensions | Original Items | Communality | Variance Explained | Factor Loading |
|--------------------------------|-----------------------|--------------------|---------------------------|-----------------------|
| Respect | sec27 | 0.80 | 17.84 | 0.95 |
| | sec28 | 0.81 | | 0.84 |
| | sec29 | 0.78 | | 0.89 |
| | cou30 | 0.80 | | 0.86 |
| Empathy | und1 | 0.76 | 16.48 | 0.83 |
| | und3 | 0.77 | | 0.85 |
| | und4 | 0.76 | | 0.88 |
| | und5 | 0.69 | | 0.83 |
| | com7 | 0.60 | | 0.71 |
| Insightfulness | ins37 | 0.72 | 15.01 | 0.85 |
| | ins38 | 0.69 | | 0.86 |
| | ins39 | 0.82 | | 0.83 |
| | ins40 | 0.79 | | 0.90 |
| Accompaniment | acc11 | 0.69 | 13.20 | 0.72 |
| | acc12 | 0.83 | | 0.89 |
| | acc13 | 0.69 | | 0.87 |
| | acc15 | 0.68 | | 0.71 |
| Credibility | cre18 | 0.74 | 11.45 | 0.78 |
| | cre19 | 0.82 | | 0.90 |
| | cre20 | 0.74 | | 0.75 |

PHASE 3: Tests of Validity and Cluster Analysis

This section outlined a nomological network for service quality of spiritual care and tested the theoretical hypotheses regarding the validity of the construct through a series of studies. Nomological validity testing to confirm hypothesized relationships within a formal theoretical framework was critical to establish the external validity of constructs (Diamantopoulos & Winklhofer, 2001; Netemeyer, Bearden, & Sharma, 2003).

PZB (1988) indicated that the perception of service quality was very much influenced by the expectations of customers, which was shaped by customers' personal needs, past experience and knowledge or information possessed; and customers typically relied on the experience properties when evaluating service quality. It was proposed that the more one was aware of one's needs, had experience and knowledge, the more one would expect on the quality. On the other hand, spiritual needs as proposed by Hermann (2001) and Hsiao (2002) were interactive, self-reflective and value oriented, thus were related to the psychological, experiential and value aspects of a person. Further, Demetriou and Kazi (2006) proposed that self-awareness, which was vital in spiritual needs, was found to develop with age and in the cumulative consolidation of experiences.

The research therefore tested the nomological validity of the spiritual care service framework by examining the hypothesized variations of the expected spiritual care service quality in general based on the demographical factors of age and role, which were seen as related to the experience possessed, self-awareness, needs and knowledge of a person.

H1: The overall expectation of spiritual care service varied according to (a) age and (b) role.

Additional assessment of the framework:

The research conducted additional empirical research to further examine the framework's structure and properties, specifically, on the relative importance of the various dimensions in influencing overall expected quality. Furrer, Liu and Sudharshan (2000) pointed out that the relative importance of the service quality dimensions was subjective and relativistic, based on people values, beliefs and culture. Thus it was important to the measurement of expectations in service quality evaluation, particularly in a multicultural context. This research thus also tested the hypothesized variations in the five service quality dimensions in relation to the demographical factors of age, role and religious background.

H2: The dimensions of spiritual care service (a) empathy, (b) accompaniment, (c) credibility, (d) respect and (e) insightfulness varied according to the age of the person.

H3: The dimensions of spiritual care service (a) empathy, (b) accompaniment, (c) credibility, (d) respect and (e) insightfulness varied according to the role played by the person.

H4: The dimensions of spiritual care service (a) empathy, (b) accompaniment, (c) credibility, (d) respect and (e) insightfulness varied according to the religious background of the person.

Cluster Analysis:

This research then followed a two-stage clustering technique to develop the profiles of customers of spiritual care service in relation to the different dimensions involved. This research used the factor scores obtained in EFA for clustering. Specifically, the research combined the use of agglomerative hierarchical cluster analysis and k-means (nonhierarchical) cluster analysis (Cannon and Perreault 1999). The two-stage technique was considered superior to other alternative methods because it combined the advantage of hierarchical approaches with that of nonhierarchical approaches (Hair et al. 1998). First, this research used Ward's method in hierarchical clustering to obtain preliminary cluster solutions. After examining the agglomerate schedule, this research would determine the solution might be appropriate. Second, this research proceeded to the k-means analysis to obtain a solution.

4. RESULTS

To examine the effects of the proposed demographical factors, which shaped customers expectations and perceptions, in relation to the overall expectations on spiritual care service, the research tested on the variations of overall expectation between the various groups of age and role. The research used the Chi test to analyze the data. As reported in Table 5, the research found full support for hypotheses H1a and H1b: The overall expectations (Gen) of spiritual care service were found varied according to the demographical factors of age and role, which would be involved in the shaping of expectations and perceptions of service quality. There was a

significant difference between the age groups in their overall expectation on the spiritual care service. In the analysis based on the role factor, the different role groups showed significant difference in their overall expectation on spiritual care service.

The research also tested the hypotheses on the variations in the five service quality dimensions in relation to the demographical factors of age, role and religious background. The dimensions of spiritual care service empathy, credibility and respect were found significantly varied among the age groups, thus H2a, H2c and H2e were found supported. The dimensions of accompaniment and respect were however found no significant variation across the age groups, thus H2b and H2e were not supported. The dimensions of respect and accompaniment were significantly varied in relation to the role factor. Therefore, H3b and H3d were found supported but not H3a, H3c and H3e. The dimensions of empathy, accompaniment, credibility and insightfulness were significantly varied in relation to the religious background factor. Therefore, H4a, H4b, H4c and H4e were found supported but not H3d.

Table 5: Chi Test on the Variation on Overall Expectation and Dimensions

| Dimension\ Background | Emp | Res | Acc | Cre | Ins | Gen |
|------------------------------|------------|------------|------------|------------|------------|------------|
| Age | 0.00*** | 0.08 | 0.98 | 0.02* | 0.05* | 0.01** |
| Roles | 0.15 | 0.01** | 0.02* | 0.21 | 0.21 | 0.02* |
| Religion | 0.05* | 0.31 | 0.02* | 0.04* | 0.01** | NA |

* p<0.05, **p<0.01 and *** p<0.001

The above results indicated that there were reasonably good nomological validities for the proposed theoretical framework of spiritual care service quality, which consisted of five service quality dimensions. The additional tests also clearly revealed the variations of the expectation on the overall spiritual care service and the five service quality dimensions based on the demographical factors of age, role and religious background, which were consistent to the previous findings though not all.

Using the two-stage clustering technique, this research was able to identify the profiles of customers of spiritual care service in relation to the different dimensions involved. This research used Ward's method in hierarchical clustering to obtain preliminary cluster solutions. After examining the agglomerate schedule, this research determined that a five-cluster solution might be appropriate. Second, this research proceeded to the k-means analysis with a five cluster solution, where cluster 1 (n=50), cluster 2 (n=64), cluster 3 (n=114), cluster 4 (n=132) and cluster 5 (n=61). This research cross-tabulated the results of the five clusters with factors such as age, roles, prior experience of the service (Prior Exp.), education received (Edu.) and religious background (Religion), as shown in Table 6; and the importance given by these clusters to various dimensions, as shown in Table 7. The results were as below:

Table 6: Profiles of Customers

| Background \ Cluster | Age | Role | Prior Exp. | Edu. | Religion |
|-----------------------------|------------|-------------|-------------------|-------------|-----------------|
| Cluster1 | | Patients | No | | Buddhist/Folk |
| Cluster2 | Older | Patients | No | | |
| Cluster3 | Younger | | No | | |
| Cluster4 | Older | Care giver | | High | Christian |
| Cluster5 | | Staffs | | High | |

Customers in cluster 4 generally give importance to all the dimensions, whereas customers from clusters 1 and 3 give importance only on the empathy and credibility dimensions and having mixed feeling on the other dimensions. Customers from cluster 2 give great importance to the respect dimension. Customers of cluster 5

give importance to all the dimensions besides insightfulness.

Table 7: Importance Given to the Dimensions

| Dimension \ Cluster | Emp | Acc | Cre | Res | Ins |
|----------------------------|------------|------------|------------|------------|------------|
| Cluster1 | ◆ | | ◆ | | |
| Cluster2 | ◆ | | ◆ | ◆ | |
| Cluster3 | ◆ | | ◆ | | |
| Cluster4 | ◆ | ◆ | ◆ | ◆ | ◆ |
| Cluster5 | ◆ | ◆ | ◆ | ◆ | |

5. DISCUSSIONS

Informed by insights from the existing literatures on spiritual care and based on the general service quality framework as the theoretical foundation, this research set out to conceptualize, construct and test a multiple-dimensions framework for the measurement of the expected spiritual care service quality delivered in the health care setting. On the whole, the research finds good support for the hypothesized variations in the expectations on overall service and based the demographical factors of age and role; and the five service quality dimensions based the demographical factors of age, role and religious background. Of the hypothesized effects, the research finds support for 11 of the 17 hypotheses. Of the two tests on the overall expectations, which the research expects to be significant, all are found supported. On the other hand, although the hypothesized variations among the service quality dimensions are partially supported, where 9 out of 15 are supported, the not supported hypotheses are not totally beyond explanation.

The research has found that the overall expectation on the spiritual care service is relative high, with the average score at 4.34. Among which, the dimension of respect (4.30) has the highest mean score and followed by the empathy (4.20), credibility (4.13), accompaniment (3.94) and insightfulness (3.91) dimensions. The results of analyses indicate that different age groups who presumed to be different in life's experience and self-aware; and different roles with varied knowledge in spiritual care and with different needs, are having varied expectations on the service. The results of the additional assessments on factor of religious background suggest that different religious traditions differ in the belief, value system, symbols and practices, which may in turn form varied expectation and perception on the service. These are consistent to the findings of previous studies (Fontaine, Luyten, & Corveleyn, 2000; Roccas, 2005).

The five dimensions of service quality identified are also consistent either to the findings of the previous studies on service quality or spirituality. The dimensions of respect, which is a combination of the security and courtesy elements, and the credibility dimension are seen to be in line with the assurance dimension proposed by previous researches (PZB, 1988) that is found to be rather common across different services such as in tourism and nursing (Chou, Chen, Woodard & Yen, 2005; Jiang, Klein & Crampton, 2000). The respect dimension is the politeness and consideration shown to the customers, where the rights of the customers such as privacy and confidentiality are guaranteed and respected. The credibility dimension on the other hand is to be understood as the trustworthiness, believability and honesty, which involves having the best interests of customers at heart. As contrast to the reliability and tangibles dimensions, which are rather common in other services and emphasize more on the consistency of service performance and the physical aspects, the two dimensions of respect and credibility in this case have strong indication on the relational and interactive aspects instead that are specific in spirituality and spiritual care.

The results of the cluster analyses show that all clusters tend to have high expectations on the dimensions of credibility. The results of chi test indicate that the age and religion factors seem related to the expectation of the dimension. In contrast, only customers from clusters 2, 4 and 5 give more importance to the respect dimension. Cluster 2 consist majority of patients and their family members, who are generally more advanced in age. Cluster 4 seems to consist of customers with higher education, advanced in age, with professional knowledge and majority from the Christian religious tradition. Cluster 5 on the other hand, seems formed by staffs with higher education background. Further, the chi test results show that role factor may be related to the expectation

of the respect dimension. Thus the expectation on respect dimension seems to be related more on the life's experience, the needs and the education received.

The empathy dimension identified is another dimension that is consistent to the findings in other services. This research has also suggested that empathy as one of the dimension for spiritual care service, rather than the original "understanding" or "knowing" dimension, first and foremost is parallel to the finding of PZB (1988). The research has proposed the usage of empathy due to the reason that it is closer to the general practice in the medical, psychological, and spiritual or pastoral care fields. Empathy carries within it not only the feature of understanding but also caring, acceptance without being judgmental. Hojat, Gonnella, Mangione, Nasca, Veloski, & Erdmann (2002) have defined empathy in the patient-care context as a cognitive attribute that involves an ability to understand the patient's inner experiences and perspective and a capability to communicate this understanding. Empathy, thus from the clinical perspective, consists not only the emotive components, but also the cognitive, moral and behavioral components. Empathy has been demonstrated to enhance the doctor-patient relationship, to improve both patient and doctor satisfaction, and to play the mediating role in improving clinical outcomes (Mercer & Reynolds, 2002; Hojat et al. 2002).

All five clusters' customers generally have high expectation on the empathy dimension. From the results of chi test, the customer with different age and religious background tend to be significantly varied in the expectation of this dimension. The age and religious tradition factors seem to be important factors in forming the perception and expectation on the empathy aspect.

The accompaniment dimension, which involves the physical present and company of the care provider, is a dimension newly identified in this study. Though it is not found in other services' quality dimension, it is consistent to the nature and practices of spiritual care service (Hermon, 2001). The dimension of accompany may also be seen as parallel to the tangible dimension of SERVQUAL, where tangibles is referring more to The appearance of physical facilities and equipments, accompaniment is referring to the presence and the company of the care providers. This dimension is associated to the concrete expression of the relatedness and interactive aspects of spiritual care, which not only alleviating loneliness but also have the supportive and affirmative functions to the clients (Taylor, 2006). It is also indicated that the accompaniment dimension may have a role in the enhancement of care provider-patient relationship, patient satisfaction, and in mediating the improvement of clinical outcomes (Dossey & Keegan, 2008).

Only the customers from clusters 4 and 5 give importance to the dimension of accompaniment. From the role and religious factors age factors point of view, according to the results of chi test, there are significant differences found on the expectation of the accompaniment dimension. Clusters 4 and 5 are formed majority by staffs and care providers with high education and Christian background. The dimension thus seems to be related more to the knowledge, awareness of needs and tradition ones possess. The relatively low average score of the accompaniment dimension seems to be consistent to the Chinese culture that is comparatively less expressive in affection and feelings (Zhong, 2008; Kitayama & Cohen, 2007).

Similarly, the dimension of insightfulness is another dimension distinctive to the service. The dimension involves the bringing of insight, awareness, new information and the clarification of confusions in the process of care. The dimension is consistent to the findings of Hermann (2001) and Catanzaro and McMullen (2001) on spiritual needs and spirituality, in particular to the aspects such as value and belief; meaning of life; growth from difficulty, and the attainment of fullness of life. Further, previous researches have shown that different services may involve different quality dimensions due to the specific nature of the service. The insightful dimension may also be seen as closely related to the process of healing, where people recognize that life's experiences, whether positive or negative, provide the opportunities to learn, grow and transcend to who one meant to be. (Taylor, 2006)

From the cluster analysis, only customers in cluster 4 give more importance to the insightfulness dimension. Cluster 4 is generally formed by people more advanced in age, care providers, higher education and Christian religious background. In addition, the results of chi test also indicate that people with different age and religion groups are significantly varied with regarding to the expectation on the insightfulness dimensions. Thus, the insightfulness dimension may be related to the life's experience, knowledge and cultural background ones hold. The significant variation observed on the dimension in relation to religious background may be seen as a further support on its relation to the value, belief and the meaning of life aspects.

The variations generally found in relation to the factors of age, role and religious background may be an indication of the possible cultural elements involved. Furrer, Liu and Sudharshan (2000) have pointed out that the relative importance of the service quality dimensions is subjective and relativistic, basing on people values and beliefs that change from one culture to another. The determinants of customer's expectations on services, such as the physical, social, and psychological needs, are strongly influenced by the social and cultural environment of customers. Thus, culture has an important influence on service quality expectations and the relative importance of its various dimensions. The strong influence of culture (subculture) on human behaviors suggests that culture will shape social interaction and through which the values, lifestyles and personalities. Therefore it is particularly critical in the process such as service, which involves a high degree of interaction between customers and service providers, the cultural elements will have the greatest influence (Furrer, Liu & Sudharshan, 2000).

The implications of the results presented above highlight the important aspects of service quality in the management of spiritual care service. Besides the key findings on the dimensions of the spiritual care service, the findings add to the growing support for the general conceptualization of service quality as a second order, multidimensional construct, which is believed to be an antecedent of consumer satisfaction that could contribute to the purchase intentions (Brady, Cronin & Brand, 2002). For the providers and managers of spiritual care service, the above findings may suggest the direction for their prevailing goal in conforming and surpassing their customer's expectations, such as the dimension of service and the possible segments to focus upon.

In addition to the above service dimensions, managers of spiritual care service must also consider other factors, such as the environment and the uncontrollable factors of the behavior of other employees within the service venue, which may also potentially affect the perceptions with the service. Further, although the study has provided a set of activity that may positively contribute to the perception of the service, it is by no way an exhaustive one and need to be explored further. In relation to the measurement of service quality, the five dimensional, twenty items expectation framework may represent a substantial opportunity for service managers to be more efficiently measure the quality of the services offered by their organization.

The framework is useful for managerial strategic and operational decision making. The framework not only provides a way to measure quality as such but the information needed for continuous improvement. This framework may also be useful in tracking quality over time. Moreover, the instrument has value as means of identifying areas needing improvement within a specific institution and in comparing levels of spiritual care quality service among institutions.

In this study, though with every effort to minimize the potential threats to the reliability and validity of the results, does not ensure that all threats are eliminated. Generalizations beyond the particular context examined, the Taiwan's Christian health institutions, should be approached cautiously. In the nomological validity testing, this research focuses on the impact various demographical factors on service quality and its dimensions. Further research might study the impact of perceived service quality on other consequences, such as customer's satisfaction that reflects the purchasing intention. Most of the implications made is basing on the demographical data, further study can analyze directly in relation to the cultural and psychographical aspects.

6.CONCLUSION

As the concept of holistic care is becoming a major concern in the health care world today, spiritual care service becomes an indispensable part of the approach. Care that neglects the spiritual aspects is seen as both unsatisfactory and inadequate. Care with quality improves patients' satisfactions, medical outcome, patient care and decision making process. Building upon the past efforts on spiritual care and service quality, this research examines the theoretical dimensions of spiritual care service quality, and has found that it consists of respect, empathy, credibility, accompaniment and insightfulness five dimensions. Customers of different age group, role and religious background are also observed to be varied in the expectations of the service. People with different age group tend to vary in giving importance to the empathy, credibility and insightfulness dimensions; people with different roles tend to vary in the expectation on accompaniment and respect dimensions; and customers with different religious background are also found to be varied in their expectation on empathy, accompaniment and insightfulness dimensions. This research therefore, (1) has identified the quality dimensions involved in spiritual care service, (2) has identified possible structure of customers in relation to respective dimensions of quality, and (3) has extended the research of service quality into spiritual care service with a valid, reliable and workable framework.

REFERENCES

1. Armstrong Robert W., Mok Connie, Go Frank M. & Chan Allan (1997). The importance of cross-cultural expectations in the measurement of service quality perceptions in hotel industry, *International Journal of Hospitality Management*, 16(2), 181-190.
2. Andreas Demetriou & Smaragda Kazi (2006). Self-awareness in "g" (with processing efficiency and reasoning), *Intelligence*, 34(3), 297-317.
3. Bolton, R.N. & Drew, J.H. (1991). Drew, A Longitudinal Analysis of the Impact of Service Changes on Customer Attitudes, *Journal of Marketing*, 55, 1-9.
4. Brady, M. K., Cronin J. J. & Brand R. R. (2002). Performance-only measurement of service quality: a replication and extension. *Journal of Business Research*, 55(1), 17-31.
5. Caruana Albert (2000). Service loyalty: The Effects of Service Quality and the Mediating Role of Customer Satisfaction. *European Journal of Marketing*, 36(7/8), 811-828.
6. Catanzaro, A. M. & McMullen, K. A. (2001). Increasing Nursing Student's Spiritual Sensitivity, *Nurse Educator*, 26(5), 221-226.
7. Chang Tze-ling & Han Chu-ping (2009). Assessing the Service Quality of the University Library from the Perspective of Users: A Survey at the National Taiwan University Library. *University Library Quarterly*, 13 (2), 136-163.
8. Chou, S. H., Chen, T. F., Woodard, B., & Yen, M. F. (2005). Using SERVQUAL to Evaluate Quality Disconfirmation of Nursing Service in Taiwan. *Journal of Nursing Research*, 13(2), 75-84.
9. Churchill, G.A. (1979). A Paradigm for Developing Better Measures of Marketing Constructs. *Journal of Marketing Research*, 16, 64-73
10. Cronin, J. Joseph, Jr. & Steven A. Taylor (1992). Measuring Service Quality: A Reexamination and Extension. *Journal of Marketing*, 56 (July), 55-66.
11. Curlin, F.A., Roach, C.J. Gorawara-Bhat, R. Lantos, J.D. & Chin, M.H. (2005). How are religion and spirituality related to health? A study of physicians' perspectives. *Southern Medical Journal*, 98(8), 761-766.
12. Diamantopoulos, A. & Winklhofer H. (2001). Index construction with formative indicators: An alternative to scale development. *Journal of Marketing Research*, 37, 269-277.
13. Dossey, B.M., & Keegan, L. (2008). *Holistic nursing: A handbook for practice* (5th ed). Sudbury, MA: Jones and Bartlett.
14. Dyson, J., Cobb, M. & Forman, D. (1997). The Meaning of Spirituality: A literature Review. *Journal of Advanced Nursing*, 26(6), 1183-1188.
15. Fitzsimmons, J.A. & Fitzsimmons, M.J. (2004). *Service Management: Operations Strategy and Information Technology*. 4th Ed. New York: McGraw Hill/Irwin.
16. Fontaine, J. R. J., Luyten, P., & Corveleyn, J. (2000). Tell me what you believe and I'll tell you what you want. Empirical evidence for discriminating value patterns of five types of religiosity. *The International Journal for the Psychology of Religion*, 10, 65-84.
17. Furrer, O., Liu, B.S. & Sudharshan, D. (2000). The relationships between cultural and service quality perceptions – Basic for cross-cultural market segmentation and resource allocation. *Journal of service research*, 2(4), 355-371.
18. Gerbing, D.W. & Anderson, J.C. (1988). Structural equation modeling in Practice: a review and recommended two step approach. *Psychological Bulletin*, 103, 411-423.
19. Golberg, B. (1998). Connection: An Exploration of Spirituality in Nursing Care. *Journal of Advanced Nursing*, 27(4), 836-842.
20. Hermann, C.P. (2001). Spiritual needs of dying patients: A qualitative study. *Oncology Nursing Forum*, 28, 67-72.
21. Hojat, M., Gonnella, J.S., Mangione, S., Nasca, T.J., Veloski, J.J., Erdmann, J.B. (2002). Empathy in medical students as related to academic performance, clinical competence and gender. *Medical Education*, 36, 522-527.
22. Hsiao, Y.C. (2002). Cognition and Application of Spiritual Concept. *Hang Gung Nursing*, 13(4), 346-347.
23. Javaheri, F. (2006). Prayer Healing: An Experiential Description of Iranian Prayer Healing. *Journal of Religion and Health*, 45(2), 176-182.
24. Jiang, J. J., Klein, G., & Crompton, S. M. (2000). A note on SERVQUAL reliability and validity in information system service quality measurement. *Decision Sciences*, 31(3), 725-744.
25. Kenagy, Berwick & Shore. (1999). Service Quality in Health Care, *Journal of the American Medical Association*, 281(7), 661-664.

26. Kitayama Shinobu & Cohen Dov. (2007). *Handbook of Cultural Psychology*, Guilford press, New York, 691-713
27. Landrum, H. Prybutok, V. Zhang, X. & Peak D. (2009). Measuring IS System Service Quality with SERVQUAL: Users' Perceptions of Relative Importance of the Five SERVPERF Dimensions. *The International Journal of an Emerging Transdiscipline*, 12, 17-35.
28. Lusch R.F. & Vargo S.L. (2006). Service-dominant logic: reactions, reflections and refinements, *Marketing Theory*, 6(3), 281-288
29. MacDonald Douglas A. (2000). Spirituality: Description, Measurement, and Relation to the Five Factor Model of Personality. *Journal of Personality*, 68(1), 153-197.
30. Mercer, S.W. & Reynolds, W. (2002). Empathy and quality of care. *British Journal of General Practice*, 52(Supplement), S9-S12.
31. Netemeyer, R.G., et al. (2003). *Scaling procedures: Issues and applications*. Thousand Oaks, CA: Sage Publications, Inc.
32. Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York: McGraw-Hill.
33. Olson, M.M., Sandor, M.K., Sierpina, V.S., Vanderpool, H.Y. & Dayao, P. (2006). Mind, Body and Spirituality Family Physicians' Beliefs, Attitudes and Practices Regarding the Integration of Patient Spirituality into Medical Care. *Journal of Religion and Health*, 45(2), 235-237.
34. Parasuraman, A., Zeithaml V. A., & Berry, L. L. (1985). A Conceptual Model of Service Quality and Its Implication for Future Research. *Journal of Marketing*, 49, (fall), 41-50.
35. Parasuraman, A., Zeithaml V. A., & Berry, L. L. (1988). SERVQUAL: A Multiple-Item Scale for Measuring Customer Perceptions of Service Quality. *Journal of Retailing*, 64(spring), 12-40.
36. Parasuraman, A., Zeithaml V. A., & Berry, L. L. (1991). Refinement and Reassessment of the SERVQUAL scale. *Journal of Retailing*, 67(winter), 420-450.
37. Puchalski et al. (2009). Improving the Quality of Spiritual Care as a Dimension of Palliative Care: The Report of the Consensus Conference. *Journal of Palliative Medicine*, 12(10), 885-904.
38. Raposo, Mário, Alves, Helena & Paulo, Duarte. (2009). Dimensions of Service Quality and Satisfaction in Healthcare: A Patient's Satisfaction Index. *Service Business*, 3(1), 85-100.
39. Rocas Sonia. (2005). Religion and Value Systems, *Journal of Social Issues*, 61(4), 747—759.
40. Taylor Carol. (2006). Healing Presence: Creating a Culture that Promotes Spiritual Care. *Supportive Voice*, 11(2), 1-10.
41. Taylor, E.J., Highfield, M. & Amenta, M. (1994). Attitudes and beliefs regarding spiritual care: A survey on Cancer Nurses, *Cancer Nurs*, 17, 479-487.
42. Zhong, Cong. (2008). Application of Proverbs in Psychotherapy for the Chinese. *World Cultural Psychiatric Research Review*, 3(1), 16-19.
43. Hair, Joseph F., Jr., Rolph E. Anderson, Ronald L. Tatham, and William C. Black (1998), *Multivariate Data Analysis*, 5th ed. Upper Saddle River, NJ: Prentice Hall.
44. Cannon, Joseph P. and William D. Perreault Jr. (1999). Buyer-Seller Relationships in Business Markets. *Journal of Marketing Research*, 36 (November), 439-60.