PERCEIVED SERVICE QUALITY AND SATISFACTION WITHIN U.S.A. LONG-TERM HEALTH CARE

by

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Abstract

This study uses SERVQUAL, a Multiple Item Scale for measuring consumer Perceptions of Service Quality and the SCLES Salaman-Con te Life Satisfaction measure to study the linkage between service quality and satisfaction within a long-term health care context.

Two hundred and seventy residents from ten nursing homes were administered to SERVQUAL and SCLES instruments on a one to one basis. The study identified which dimensions of perceived quality contribute significantly to overall life satisfaction and how dimensions of life satisfaction relate to the resident's satisfaction with the nursing home.

Introduction

Marketing researchers and managers acknowledge the importance of quality in the success or failure of services. It is also increasingly accepted that quality should be evaluated by the consumer—in the case of this paper, by the residents of nursing homes (long term care facilities, homes for the aged). One of the fastest growing service sectors in the United States is long term health care. Since many older people spend at least a part of their later life in a nursing home, it is important both to services marketing strategy and health care policy to study the quality of service provided by nursing homes and how service quality relates to general life satisfaction.

This study of over 200 nursing home residents examines the usefulness of the SERVQUAL measure of perceived quality and identifies the dimensions which contributed most to the overall quality measure. Furthermore, the study identifies which dimensions of perceived quality contribute significantly to overall life satisfaction. Finally, the study studies how dimensions of life satisfaction relate to the resident's satisfaction with the nursing home. The study holds particular significance for managers, researchers, and policy makers interested in the well being of the elderly living in long-term care facilities.

Background and Purpose

By the year 2,000, an additional 700,000 nursing home beds may be required if the current demographic trend in the United States continues. This projected demand requires that one nursing
home, averaging 100 beds, must be built each day for the next 20 years. "Society must decide whether future expenditures for long term care will result in a satisfactory return (i.e., quality of care at a lower cost) for the investment" [16]. However, efforts to identify the characteristics of

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high quality nursing homes has been hindered because researchers are using poor measures of service quality. One generally accepted measure of quality care in the long-term care industry is the degree of compliance with state and federal standards of care [13, 20, 22]. The flaw with this measure is that standards are generally set to insure a minimum level of quality care. This approach provides no measure of quality beyond the threshold or minimum level. Other measures of quality, such as levels of psychosocial activities [7], physical condition [21] are obviously surrogate measures of quality. Some researchers have chosen to measure quality in terms of resource input munificence. They assume that more resources, e.g., more staff, equates with better quality [4, 6, 8, 15, 18, 23]. In earlier research, this investigator found empirical evidence to challenge this belief.

A different approach to quality definition can be found in the studies which substitute morale or satisfaction measures for quality measures [1, 2, 9, 12]. While satisfaction is an important research topic in long term care, it cannot provide a basis for comparing or critiquing service providers. It is not a basis for comparison because satisfaction is an affect determined not only by perceptions about service quality, but also by the individual's physical condition, family visitation pattern, and the alternatives open to him if he were to leave the nursing home. These are only a few of the proposed variables intervening between the level of perceived quality service and the feelings of satisfaction. Satisfaction is a construct which can have a specific connotation, e.g., "I like/dislike this facility" or a general well being connotation, e.g., "I feel satisfied with my life as it is." While a review of the long term care literature reveals only flawed measures of service quality, the marketing literature presents a psychometrically sound scale for studying the service quality construct. This study attempts to apply the theory and measure of general service quality from marketing to the context of long term care. The general model of the service delivery system used in operations management puts the service quality construct in a systems perspective showing it as both an output of the service system and a determinant of satisfaction.

Definition and Objectives
The general service operations model used in this study is a modification of the Fitzsimmons Sullivan model (Figure 1) [5]. The scope of this study entails only a study of the service output section: service quality and satisfaction.

Service quality is defined as the measure of how well the level of service delivered matches the consumer's expectations. The construct is operationalized by finding the difference between the consumer's expectations of services and the consumer's perceptions of the services delivered. The service quality construct has five subconcepts derived from earlier research:

1. Tangibles - Physical facilities, equipment, and appearance of personnel.
2. Reliability - Ability to perform the promised service dependably and accurately.
3. Responsiveness - Willingness to help customers and provide prompt service.
4. Assurance - Knowledge and courtesy of employees and their ability to convey trust and confidence.
5. Empathy - caring, individualized attention the firm provides to its customers [17].

Resident satisfaction-with-the-institution is the like/dislike feeling of the resident toward the specific nursing home in which they live.

Life Satisfaction or morale refers to the broad overall positive state of a resident. It is a subjective measure of resident well-being [3] and has the following dimensions:

1. Pleasure in daily activities--satisfaction with unspecified daily activities.
2. Meaningfulness of life--attitude toward life as a result of feeling useful, or having purpose.
3. Goodness of fit between desired and achieved goals.
4. Mood tone--degree of happiness or optimism with regard to environmental or social situation.
5. Self-concept--degree of personal self-regard and positive self-appraisal.
7. Financial security--satisfaction with present and recent financial situation.
8. Social contact--level of satisfaction with the number and quality of usual social contacts.

The purpose of this research is to study service quality and satisfaction in the long term health care setting. The study examines the influence of various service quality dimensions on resident satisfaction-with-the-institution and ultimately the impact of resident satisfaction-with-the-institution on general feelings of well being (life satisfaction).

**Research Design**

Survey instruments were used. SERVQUAL, a Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality, measures the 5 previously designed dimensions of service quality using a Likert rating scale. The scale's reliability, factor structure and validity may be found in article by Parasuraman, Zeithaml and Berry [17]. Satisfaction-with-the-institution was
operationalized as the subjective feeling of like or dislike the resident has for the nursing home he or she lives in on a 7 point Likert scale.

Resident Life Satisfaction: Life satisfaction is a subjective measure of morale, the level of well-being experienced by the elderly individual. The Salaman-Conte Life Satisfaction measure was used to operationalization this construct (3). Evaluations of the measure may also be found in [3].

Two hundred and seven residents of 10 intermediate care facilities in central Texas were administered the survey instruments by two doctoral research assistants with training in psychology and gerontology. Interviews were conducted on either an individual or small group basis. They lasted from 1-2 hours. The respondents were all the residents who were both willing and cognitively able to answer the survey questions. The analyses were correlational and stepwise multiple regression.

Discussion

Two separate stepwise multiple regression analyses were conducted in order to determine the relative contribution of service quality dimensions to both residents' satisfaction-with-institution and to residents' overall life satisfaction. A third multiple regression analysis was performed to assess the relative contribution of life satisfaction dimensions to residents' satisfaction-with-institution. In all analyses, the significance level for entry into the model was .05. The results of the first regression analysis revealed that the outcome variable, satisfaction-with-institution, was significantly predicted by a combination of three of the five service quality dimensions, $F(3, 189) = 41.07, p < .001, R^2 = .39$. Variables contributing significantly to the regression model were responsiveness, tangibles, and empathy (see Table 1).

In the second regression analysis, the outcome variable, overall life satisfaction, was significantly predicted by only one of the five service quality dimensions, namely responsiveness ($F(1, 194) = 49.71, p < .001, R^2 = .20$; however, the model only accounted for 20% of the variability of overall life satisfaction scores (see Table 2).

The results of the third regression analysis showed that satisfaction-with-institution was significantly predicted by only one of the eight dimensions of life satisfaction, meaning, $F(1, 202) = 181.94 p < .001, R^2 = .47$ (see Table 3). The results of this study are significant to managers of nursing homes, researchers, and policy makers. The usefulness of the SERVQUAL scale for measuring quality service has been demonstrated. The relative importance of various quality dimensions has been shown and the connection between quality and satisfaction has been identified.
Figure 1
### Table 1

**Stepwise Regression:** Satisfaction-with-Institution as a Function of Service Quality Dimensions.

<table>
<thead>
<tr>
<th>Entry Order</th>
<th>Beta Weight</th>
<th>$R^2$</th>
<th>Change $R^2$</th>
<th>$F$ of Inclusion</th>
<th>$p$</th>
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<tr>
<td>Responsiveness</td>
<td>.3643</td>
<td>.3319</td>
<td>.3319</td>
<td>94.88</td>
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<tr>
<td>Tangibles</td>
<td>.3036</td>
<td>.3711</td>
<td>.0392</td>
<td>11.84</td>
<td>.0007</td>
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<tr>
<td>Empathy</td>
<td>.3156</td>
<td>.3946</td>
<td>.0235</td>
<td>7.85</td>
<td>.0073</td>
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### Table 2

**Stepwise Regression:** Overall Life Satisfaction as a Function of Service Quality Dimensions.

<table>
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<th>Entry Order</th>
<th>Beta Weight</th>
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<th>Change $R^2$</th>
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<td>Responsiveness</td>
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### Table 3

**Stepwise Regression:** Satisfaction-with-Institution as a Function of Life Satisfaction Dimension.

<table>
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<th>Entry Order</th>
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<th>Change $R^2$</th>
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<td>Meaning</td>
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<td>.4739</td>
<td>.4739</td>
<td>181.94</td>
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Bibliography


