

Service Quality Dimensionality: Exploring a High-Involvement, On-Going Service Context

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Abstract

Despite increased interest in service quality research the dimensionality of service quality remains elusive for many service contexts. This paper begins to address this gap by exploring the dimensionality of service quality within a complex, high involvement, on-going service environment. The results of this study suggest that service quality may be conceptualised as multidimensional and hierarchical. Service quality is found to comprise four primary dimensions: interpersonal quality, technical quality, physical environment quality and supplementary quality. In turn ten sub-dimensions define these four primary dimensions. These findings have important implications for progressing service quality theory and improving service quality in practice.

Introduction

The purpose of this exploratory study is to broaden and deepen the conceptual domain of service quality. This research examines the composition and structure of service quality dimensionality within a service environment that has received limited research attention. The development of a context specific service quality model will assist managers in generating data that is useful in improving the service provided to customers.

Literature Review

Customer evaluations of service quality are critical to service providers. The recognition of this has led to an increase in service quality research during the past two decades. Despite this, service quality remains an elusive and abstract concept that is difficult to define and measure (Brady and Cronin, 2001; Cronin and Taylor, 1992, Parasuraman, Zeithaml and Berry, 1985). Research into the dimensionality of service quality can be divided into two streams. The first stream conceptualises service quality as comprising three dimensions: technical quality, interaction quality and physical environment quality (e.g., Brady and Cronin, 2001; McAlexander, Kaldenberg and Koenig, 1994; McDougall and Levesque, 1994; Rust and Oliver, 1994). The second stream of research focuses on the replication and modification of the SERVQUAL scale (Parasuraman, Zeithaml and Berry, 1985; 1988). Rust and Oliver (1994) posit service quality as comprising three factors: the service product, the service delivery and the service environment. As in the earlier conceptualisation advanced by Grönroos (1982) the service product refers to the outcome of the service process (technical quality) and service delivery refers to the interaction during the service encounter (functional quality). Extending Grönroos (1982) service quality model Rust and Oliver (1994) conceptualise a third service quality dimension that reflects the physical setting in which the service takes place. Rust and Oliver (1994) do not offer an empirical test of their model.

The aim of this research was to explore the dimensionality of service quality within a high-involvement, on-going service environment. Haematology and Oncology clinics were chosen as the context for this study due to the nature of their service offering (i.e., high-involvement, complex, high-contact, on-going). The research method comprised four focus group interviews. The purpose of these interviews was to gain insights into the following question: what do patients perceive to be the key attributes of quality in a Haematology and Oncology service? The number and composition of dimensions within this setting were explored. Participants were recruited from two large metropolitan private hospitals. A purposive sampling frame guided hospital selection. Participants were randomly selected from the list of patients attending each hospital clinic. The Human Research Ethics Committees of all participating institutions granted ethical approval. The procedures used to form the focus groups were in accordance with the guidelines used in traditional marketing research (e.g., Morgan, 1987). Content analysis was initially conducted manually to gain a feel for the data. Further analysis was conducted using NUD*IST to add rigor to the data analysis.

Research Methodology

Proposing a similar conceptualisation McDougall and Levesque (1994) find empirical support for conceptualising service quality as comprising the service outcome, the service process and the physical environment. McAlexander, Kaldenberg and Koenig (1994) also forward empirical results suggesting service quality comprises a technical dimension, an interaction dimension and a physical facility dimension. More recently Brady and Cronin (2001) model service quality as comprising outcome quality, interaction quality and physical environment quality. On the basis of these conceptualisations service quality can be modelled as comprising three dimensions: interpersonal, technical and physical quality. Despite this few studies have specifically explored the attributes comprising these dimensions.

A second research stream evident in the literature centres on replicating and/or advancing modified versions of the SERVQUAL scale (Parasuraman, Zeithaml and Berry, 1985; 1988). Consisting of five dimensions (i.e., reliability, assurance, tangibles, responsiveness and empathy) the SERVQUAL scale is posited as a generic service quality model. Despite widespread application of this model a number of criticisms have been forwarded (Babakus 1990; McAlexander, Kaldenberg and Koenig, 1994). These criticisms bring into question the generic applicability of the SERVQUAL dimensions and give rise to recent calls for the development of context specific service quality models (e.g., Brady and Robertson, 2001; Dabholkar, Thorpe and Rentz, 1996). Irrespective of these criticisms research centred on the SERVQUAL scale is a dominant theme in the service quality literature.

Reviewing the literature indicates that researchers have generally advanced modified versions of either Gronroos (1984) two-component technical and functional conceptualisation or Parasuraman, Zeithaml and Berry's SERVQUAL model (1985; 1988). Despite much research and debate 'conceptual work on service quality can best be described as divergent' (Brady and Cronin, 2001, p. 44). Research is needed to synthesise these past research efforts and extend current thought, specifically with respect to service quality dimensionality at an industry specific level (McDougall and Levesque, 1994). This study addresses this gap.

Exploratory Research Results

The results of the exploratory study identified four primary dimensions and a number of sub-dimensions that are post as components of service quality. Figure 1 depicts research model. The following section discusses these findings and presents future research hypotheses.

Interpersonal Quality

Interpersonal quality was considered an important dimension of service quality by patients. The importance of this dimension is well supported in the literature (e.g., Brady and Cronin, 2001; Grönroos, 1984; McAlexander, Kaldenberg and Koenig, 1994; McDougall and Levesque, 1994). In-depth examination of the focus group sessions indicated three distinct factors constituting perceptions of interpersonal quality. These included: interpersonal manner, communication and relationship. Consider these comments: "the staff are supportive, caring and empathetic (interpersonal manner)", "they have good communication skills (communication)" and "you know them (the staff) by their first names...you know who is having a baby, who's this and who's that", "you become part of the furniture and they (the staff) become like family (relationship)".

Technical Quality

The exploratory research provided strong support for including technical quality as a distinct dimension of service quality. The literature provided support for this conceptualisation (e.g., Brady and Cronin, 2001; Grönroos, 1984; McAlexander, Kaldenberg and Koenig, 1994; McDougall and Levesque, 1994). The exploratory research further indicated that technical quality comprised two sub-dimensions: outcome and expertise. Consider these comments: "a measure of outcome quality is if the treatment is working as planned, be that positive or negative" or "if you just feel better and more positive as a result of coming and having treatment" (outcome), and the staff are "obviously competent", they are "dedicated and professional as shown by the spirit of collaboration at the clinic" (expertise).

Physical Environment Quality

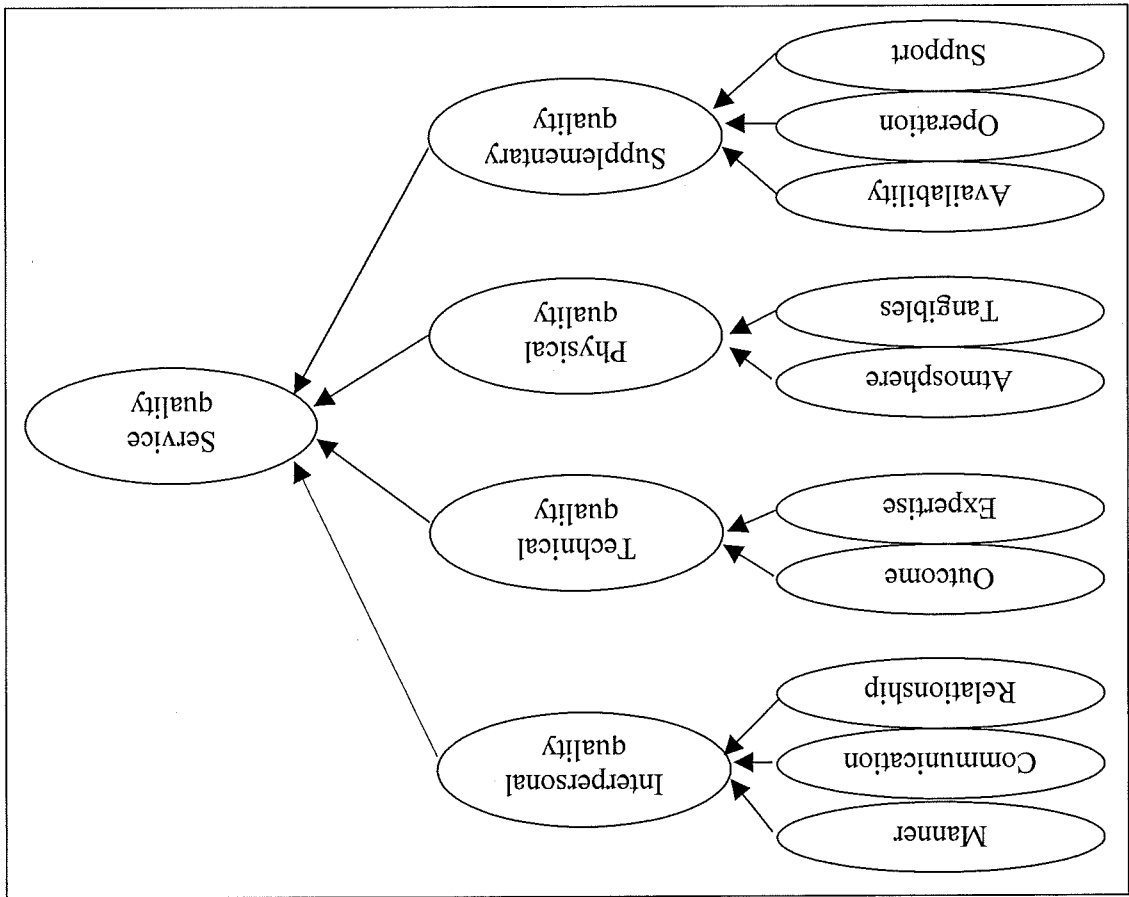
The quality of the physical environment was also identified as an important dimension of service quality. A review of the literature indicated support for this dimension (e.g., Baker, 1986; Bitner, 1992; Brady and Cronin, 2001; McAlexander, Kaldenberg and Koenig, 1994; McDougall and Levesque, 1994). The results of the exploratory study indicated that physical environment quality is determined by two factors: atmosphere and tangibles. Consider these comments "the atmosphere is pleasant" (atmosphere), and "I think the whole layout is very well thought out" (tangibles).

Supplementary Service Quality

The results of the exploratory study indicated that supplementary service was an important dimension in service quality perception. The existence of a service quality dimension reflecting supplementary service elements has received only tentative support within the literature (e.g., McDougall and Levesque, 1994). The exploratory study suggested that supplementary service quality could be conceptualised as comprising three sub-dimensions: availability, operation and support. Consider the following comments: "the waiting involved in getting your treatment is the worst part of their service", "you can get an appointment when

you need an appointment (availability)", "I sometimes find that they're not right on top of the billing here (operation)" and "they offer additional support activities that are open to all patient and their families (support)";

Figure 1: Service Quality Dimensionality: The Research Model



The results of this study suggest that four primary dimensions comprise service quality perceptions within the high-involvement, high-contact, on-going service environment studied in this research. Interpersonal quality, technical quality and physical environment quality are well supported as dimensions of service quality within the literature (e.g., Brady and Cronin, 2001; McAlexander, Kaldenberg and Koenig, 1994; McDougall and Levesque, 1994; Rust and Oliver, 1994). The fourth dimension identified in this study (i.e., supplementary quality) is tentatively supported in the literature (e.g., McDougall and Levesque, 1994).

There has been limited effort in the literature to identify the attributes that comprise these primary dimensions. The results of this study begin to fill this gap by identifying a number of sub-dimensions for each primary dimension. These findings are important for three reasons. First, they suggest that service quality may be multidimensional and hierarchical. Thus service quality may have a more complex factor structure than evident in many service quality models. Second, the findings suggest that the SERVQUAL dimensions may be better conceptualised as factors under the four primary dimensions identified in this study rather than dimensions in themselves. Third, this conceptualisation will allow for a more sensitive and detailed analysis of service quality than evident in many models.

The conceptual model developed in this study synthesises past service quality research. The results of this exploratory study identified ten sub-dimensions that define four primary determinants of service quality. These sub-dimensions reflect the composite set of factors customers consider when evaluating service quality within the high-involvement, high contact, on-going service environment studied in this research. Synthesising past research efforts this study begins to answer recent calls for the development of industry specific service quality models (e.g., Brady and Robertson, 2001). The exploratory research presented in this paper can assist managers in understanding the framework oncology patients use to assess the quality of their service experience. In an effort to integrate the literature and move service quality research forward this paper provides the foundation for investigating the hypotheses presented here. Analysis of these hypotheses using structural equation modelling will be available in 2003. Results of this second stage will ultimately assist managers in understanding the importance of the various dimensions and sub-dimensions of service quality. This will assist managers in understanding how service quality perceptions and ultimately behavioural intentions can be enhanced.

Implications and Conclusions

- H₁ the quality of the interpersonal process and overall patient perceptions of service quality.
- H_{1a} patient perceptions of interpersonal manner and perceptions of interpersonal quality.
- H_{1b} patient perceptions of communication and perceptions of interpersonal quality.
- H_{1c} patient perceptions of relationship and perceptions of interpersonal quality.
- H₂ technical quality and overall patient perceptions of service quality.
- H_{2a} patient perceptions of outcome and perceptions of technical quality.
- H_{2b} patient perceptions of expertise and perceptions of technical quality.
- H₃ physical environment quality and overall patient perceptions of service quality.
- H_{3a} patient perceptions of ambience and perceptions of physical environment quality.
- H_{3a} patient perceptions of tangibles and perceptions of physical environment quality.
- H₄ supplementary service quality and overall patient perceptions of service quality.
- H_{4a} patient perceptions of availability and perceptions of supplementary service quality.
- H_{4b} patient perceptions of operation and perceptions of supplementary service quality.
- H_{4c} patient perceptions of support and perceptions of supplementary service quality.

There is a significant positive relationship between:

The results of the exploratory study presented in this paper led to the development of a number of research hypotheses to be tested in future research:

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