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**THE IMPACT OF COMMUNAL BEHAVIORS ON THE JUDGEMENT OF
SERVICE QUALITY**

A Dissertation

**Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy**

in

The Interdepartmental Program in Business Administration

by

**Barbara Ross Wooldridge
B.A., James Madison University, 1982
M.P.S., Cornell University, 1990
May 1999**

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ABSTRACT

This research addressed the question of the importance of the service encounter (both functional and social support components) and the importance of the technical component in consumers' judgements of service quality. To date in the literature no one has attempted to measure in a field setting, the relative contribution to the judgement of service quality of each of these components.

This research switched the focus of the service quality's definition from the provider's point of view to the consumer. By measuring the three service components' importance, the researcher hoped to obtain a clearer understanding of the consumer's determination as to the important aspects of service quality. The Marketing Science Institute (MSI) published list of research priorities 1998-2000 and its capital topic 2 – was understanding the customer experience.

Given the growing importance of services and the role the service encounter plays in the consumer's service quality perception, the central research question became how does the "communal" component of the service encounter impact the consumer's overall perception of service quality? To garner a clearer picture of this impact, one must determine whether the presence or lack of communal aspects in service encounters increases/decreases the consumer's overall perception of service quality.

The findings supported communal behaviors addition to a consumer's perceived service quality via positive affect. This result was important as it provided service providers a new component to incorporate into their service offering in an endeavor to gain a sustainable competitive advantage via a service quality increase. The revealed link between affect and service quality was an important finding, as this would allow a

service provider to increase service quality judgments without altering their technical or functional service delivery. Increased service quality was linked to positive behavior intentions, of word-of-mouth and repeat purchase intentions. As services are projected to grow in importance and become increasingly competitive, this research's findings have potential important strategic implications.

CHAPTER ONE

INTRODUCTION AND BACKGROUND

Services continue to grow in importance in the US economy, accounting for approximately 74% of gross domestic product, 79% of all jobs, and they produce a balance-of-trade surplus as opposed to deficits produced by goods (Henkoff 1994). The North American Market experienced significant changes in consumer spending during the 1973-93 period. During this time consumers purchased a greater amount of services and durables, with the largest increase occurring in health related services. Consumer expenditures also experienced significant growth in recreation and travel (Pfleeger 1996). Consumer spending is projected to grow at about 3 per cent per year in real terms until the year 2005. Additionally, the forecast is that spending on essentials (food, drink, tobacco, clothing, housing, and energy) will decline while spending on health, leisure goods, services, and consumer durables will increase (Global 1996).

Consequently, the importance of service quality for firms whether in health care, tourism/travel, finance, education, or any other service field is becoming and will remain of strategic importance in the future. This is due to the continual growth, which has fueled increased competition in the service industry, creating the need for marketing strategies to retain or to gain market share (Amirani and Baker 1995; Rust and Zahorik 1993). Service quality is one strategy that can be used to gain a competitive advantage. Service quality has been linked to consumer behavior intentions towards firms (Zeithaml, Berry, and Parasuraman 1996; Mittal and Lasser 1998). The above forecasted growth in services and the potential competitive advantage service quality

can provide indicates that service quality is and will remain an important strategic variable.

Much research has been done in the field of service quality (Parasuraman, Zeithaml, and Berry 1985, 1988; Cronin and Taylor 1992; Bolton and Drew 1991; Hartline and Jones 1996; Ostrom and Iacobucci 1995). Previously, much of this research has focused on the service firm and has ignored the need to focus on the consumer's point of view. Guiry (1992) states that the consumer's experience with the service process is an important determinant of his/her satisfaction. Moreover, he states most service quality research has focused on the employee's part in the service encounter. Price, Arnould, and Deibler (1995) noted that very little research has been done that examines the emotional content of service encounters. The Marketing Science Institute (MSI) in its 1998 published list of research priorities has as its capital topic two - understanding the customer experience. The mission of the MSI is to support high quality research that provides a bridge between academics and the corporate market. The research priorities report for 1998-2000 lists fifteen areas that are considered relevant topics for current research. Of these fifteen topics, two are selected as capital topics - the highest priority level. Understanding the customer experience is a capital topic two. Additionally, the report further delineates important research topics, the amount of relationship customers need or want and what drives satisfaction.

The purpose of this dissertation is to examine the impact the technical, functional, and communal components of a service have on a consumer's overall service quality judgement. This chapter serves as a brief overview of the development

of the research questions, the model, and the dissertation's potential contributions to the study of marketing.

Dissertation Overview

This research addresses the question of the service encounter's importance (both functional and communal components) in conjunction with the technical component's importance in consumers' service quality judgements. It is the generally held belief a "good" service encounter might not compensate for poor technical delivery, but it can contribute to the consumer's attitude regarding service quality (Iacobucci 1998). To date, no one has attempted to measure the relative contribution of all three components to service quality judgement simultaneously in a field setting.

Definition of Service

Services can be defined as any activities or benefits, which one party can offer to another, that are essentially intangible and do not result in the ownership of anything (Kotler and Armstrong 1996, 660). Thus, it is believed the evaluation of services is more difficult than of products. The difficulty arises from the three basic service characteristics: intangibility, heterogeneity, and inseparability (Zeithaml 1981; Parasuraman, Zeithaml, and Berry 1985). Intangibility refers to the fact that services can not be sensed (seen, felt, tasted, and touched) in the same manner that goods can be sensed. Heterogeneity results due to the fact that humans perform services, thus services are difficult to standardize whereas employees' moods and skill levels can vary. Inseparability occurs because services are first purchased, then produced and consumed simultaneously. Additionally, the consumer participates in the production of the service (Zeithaml 1981). Due to the difficulty in service evaluating services caused

by intangibly, heterogeneity, and inseparability, any extrinsic attribute/characteristic that could be manipulated to create a competitive advantage would of great benefit.

Service Quality

One focus of services research is service quality (Bolton and Drew 1991; Taylor and Baker 1994; Zeithaml, Berry, and Parasuraman 1996). Service quality has been defined as the consumer's judgement of an entity's overall excellence or superiority (Zeithaml 1988; Bitner 1990). The driving force behind this research was important managerial applications; service firms can use service quality to achieve a competitive advantage. Due to the intangible nature of services, quality provides an attribute that firms can manipulate to obtain a competitive advantage. Eric Mittelstadt, President and CEO of Fanuc Robotics of North America, states that due to increasing competitiveness of firms one area a firm can distinguish itself is in the service provided (Henkoff 1994). Therefore, understanding how consumers make service quality judgements becomes of vital importance to firms.

This focus on service quality generated a stream of research in service quality measurement (Parasuraman, Zeithaml, and Berry 1985, 1988; Parasuraman, Berry, and Zeithaml 1991; Cronin and Taylor 1992, 1994; Teas 1993, 1994; Brown, Churchill, and Peter 1993). Though it has gained widespread acceptance in the literature, SERVQUAL has been criticized for its dimensions, indicators/cues, which comprise each dimension, and failure to replicate across different service industries (Babakus and Boller 1992; Cronin and Taylor 1992, 1994; Oliver, 1993; Teas 1993, 1994). Due to these limitations, some researchers have taken a more narrow approach, focusing on specific aspects of service quality. Much of this research has focused on critical

incidents in the service encounter (Bitner, Booms, and Mohr 1994; Bitner, Booms, and Tetreault 1990; Bitner 1990; Mittal and Lassar 1996). As a result, it has been posited the “service encounter” becomes the service in many consumers’ minds (Bitner, Booms, and Tetreault 1990). Shostack (1985) defined the service encounter as the period of time that a customer directly interacts with the service. This view of the customer interacting with the firm and the service encounter’s importance is supported in services research (Czepiel, Solomon, and Surprenant 1985; Lovelock 1983; Solomon et al. 1985; Surprenant and Solomon 1987).

Importance of the Service Encounter

The “social aspect” of the service encounter’s importance is gaining recognition in the literature. Bitner, Booms, and Mohr (1994) posit that in services, customer satisfaction is often influenced by the quality of interpersonal interaction between the consumer and the service provider. Price, Arnould, and Deibler (1995) propose that consumers enter service interactions for two main reasons. The first reason is largely motivated by the expected technical benefits of the service, while the second reason is motivated by the expected emotional benefits. One emotional benefit, which can be derived from service encounters, is the social support aspect of communality. Goodwin (1996) defines “communality” as the extent to which friendship behaviors are present in a service encounter. These behaviors help to establish a perception of integration or belonging. A sense of community can be fostered through repeated interactions with service providers (Adelman, Ahuvia, and Goodwin 1994). Previous services research acknowledged the importance of the social function while recent research aimed at

identifying the specific aspects of the service encounter (consumption) process that translate into service quality evaluations.

Research Question

Given this background of the growing importance of services and the role the service encounter plays in the consumers perception of service quality, the central research question becomes how does the “communal” component of the service encounter impact the consumer’s overall perception of service quality? To garner a clear understanding of this impact, it becomes desirable to assess the contribution of each component of a service (technical, functional, and communal) to overall service quality. One must determine whether the presence or lack of communal aspects in service encounters increases/decreases the consumer’s overall perception of service quality to answer this question. In order to ascertain the impact/contribution of communality (social support) in the service encounter, this research measured the evaluations of service quality in services where it was reasonable to believe the communal, technical, and functional components will vary.

Methodology

Structural equation modeling was employed to test the hypothesized model. The model depicts the role of each component (functional, technical, and communal) in a consumer’s overall judgement of service quality. The role of these components is shown in the model that has been created to depict the research question (see Figure 1). The model testing was conducted using a questionnaire administered to an appropriate sample.

Structural Equation Modeling

The use of structural equation modeling (SEM) in the research of service quality has been widely adopted or suggested as an appropriate methodology (Zeithaml, Berry, and Parasuraman 1996; Cronin and Taylor 1992; Boulding et al. 1993; Hui and Bateson 1991; Hartline and Jones 1996). SEM has the advantages of being able to estimate a series of separate but interdependent, multiple regression equations simultaneously, to represent unobserved concepts in these relationships, and to account for measurement error in the estimation process (Hair et al 1998).

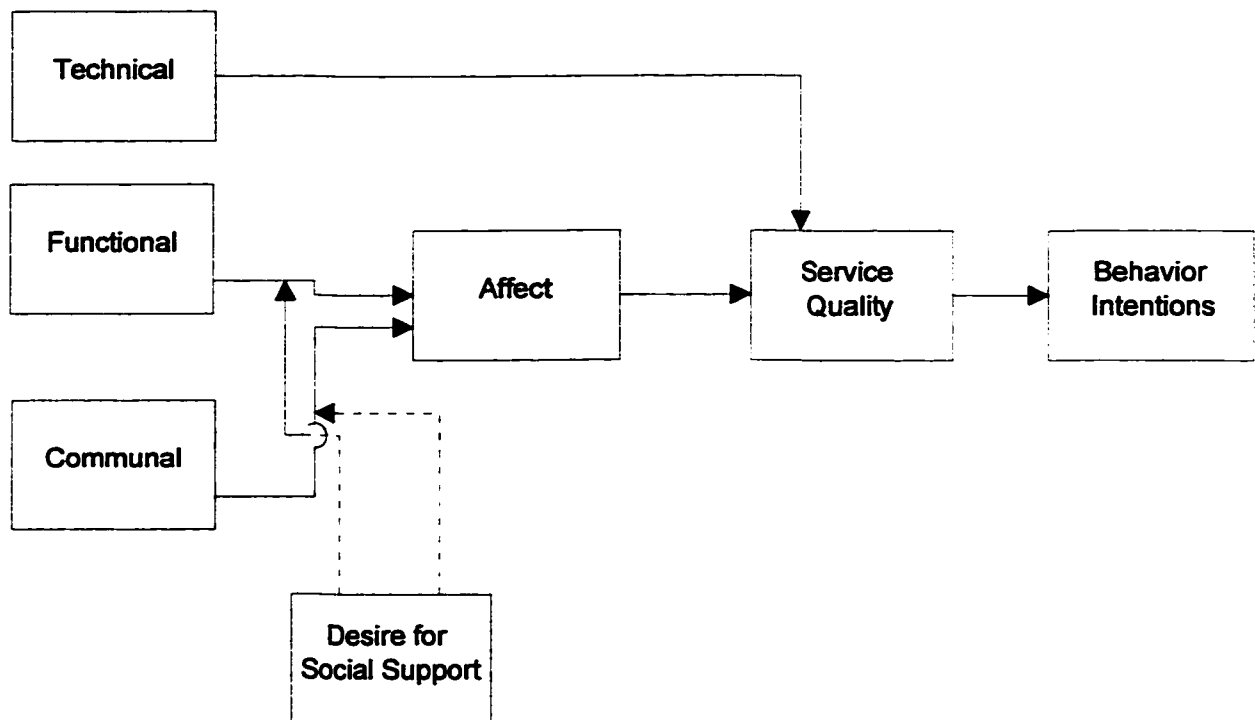


Figure 1-Components of the Dissertation Model

Hypothesized Model

This model concerns the contributions of the technical, the functional, and the communal aspects of a service, and the impact each has on an overall judgement of service quality. The model will be discussed in greater depth in chapter two. One

major focus of the model is the communal aspect's impact on service quality judgment. The division of service quality into components is well supported in the literature. The model depicts as exogenous variables functional, communal, and technical components. Service quality has been found in the literature to lead to loyalty (Goodwin and Gremler 1996; Zeithaml, Berry, and Parasuraman 1996). The impact of the communal component on affect is hypothesized to vary depending on the consumer expectations (social support desired or not desired). Thus, if a consumer goes into a service encounter desiring social support and experiences it, this situation will create an increase in positive affect and will increase the perceived service quality judgement. If a consumer goes into a service encounter not desiring social support and receives attempts to provide it, these attempts will either not have any impact or will have a negative impact on affect. Depending on the affect's impact, this in some cases causes service quality judgements to decrease.

Anticipated Research Contribution

As noted in the introduction, services are becoming increasingly important to the U.S. economy, consumers continue to spend more and more of their income on services. While profit has not been directly empirically linked to service quality, a number of important consumer behaviors are known to flow from positive service encounters. Some of the behaviors are loyalty, word-of-mouth, and increased patronage. Therefore, the proposed research holds promise of further documenting and explaining the relationship of service encounters and service quality with specific behavioral consequences on the part of consumers. The proposed research has several unique aspects, which should provide potential contributions to the services literature.

Contributions

One of the major criticisms of service quality research is each service is unique, consequently what determines service quality varies with each service (Babakus and Boller 1992; Oliver 1993). Using Bowen's (1990) taxonomy as a guideline, the author's research should have the ability to be generalized to services that have high contact and highly personalized service. Examples of these types of services are dentists, nurses, bank tellers, hair stylists, and insurance agents (Goodwin and Frame 1989). This split, low versus high contact, and personalization was performed in several studies attempting to determine the importance of different components to service quality (Mittal and Lasser 1996, 1998). It was suggested that social support (communal behaviors) can influence service quality judgements in services with moderate contact and standardized service. Goodwin and Gremler (1996, 252) state that communality can appear in a variety of services, including those not traditionally associated with deep personal interaction. The proposed research has direct application for services, which are high contact and highly personalized, thus moving beyond the one service industry studied in the research. Additionally, future research could possibly link moderate-contact standardized services to the findings.

The need to focus on the service encounter from the consumer point of view was noted earlier in the introduction. Bitran and Hoech (1990) assert that contact skills can be used as a strategic tool. In a 1988 Gallup poll of 1,005 consumers, one-third of all respondents named employee contact skills as the most important component. They go on to note that high contact services must satisfy higher order human needs to a much larger extent than low contact services. Yet, Bitran and Hoech state that few authors

have analyzed the interpersonal interaction in service delivery independent of the underlying core service.

The author's proposed research investigates the service encounter from the consumer viewpoint and separates the "core" technical aspect from the service delivery's process aspect. Price, Arnould, and Deibler (1995) state that very little research has addressed consumers' emotional response to services. They comment, this is unfortunate for two reasons. First, research suggests that a greater understanding of consumer satisfaction can be obtained by examining emotional content of the service encounter. Second, since it is viable to study consumer emotions in advertising and consumption experiences, much can be learned from studying emotions in services where the consumer's emotions should be engaged to a larger extent. The proposed research addresses the concerns of the authors noted above in viewing the encounter from the consumer point of view, acknowledging the role of emotion, and separating the process from the technical core of the service.

Managerial Implications

The practical significance of being able to accurately determine what creates service quality has gained in prominence for, as recent research has demonstrated, a link between service quality and potential profits. It has been shown that service quality and satisfaction are related to customer switching intentions (Bitner 1990; Boulding et al. 1993; Mittal and Lasser 1998). The retention of customers is vital to service firms as research has shown customer switching to have a negative effect on a firm's profitability and market share (Rust and Zahorick 1993). The impact of service quality has been divided into offensive and defensive impacts. The link to profitability is much

clearer, if one reviews the defensive impact, since it is easier for firms to calculate the contribution of the retention of customers to profitability. Offensive contributions are more difficult to calculate, because it is difficult to determine service quality's precise contribution to garnering new customers (Zeithaml, Berry, and Parasuraman 1996). Recent studies have demonstrated that service quality and service satisfaction can lead to positive word of mouth, customer loyalty, and reduced switching behavior (Zeithaml, Berry, and Parasuraman 1996; Mittal and Lasser 1998). These three behaviors have been linked to increased profits (Zeithaml, Berry, and Parasuraman 1996; Rust and Zahorick 1993). Hence, a service encounter that develops the perception of communality for the consumer should have a "defensive" impact in the retention of the customer, and this retention can be linked to increased profitability.

CHAPTER TWO

DIMENSIONS OF SERVICES

As noted in chapter one, a service can be defined as any activity or benefit that one party can offer to another that is essentially intangible and does not result in the ownership of a tangible good. Services have been posited as being more difficult to evaluate due to heterogeneity, intangibility, and inseparability. To develop a clearer conceptualization of service evaluation process, numerous authors have divided services into distinct components. Grönroos (1982) divided quality (services) into technical and functional components. The technical component is the “what” portion of the service; it is related to the outcomes of the service and often has a tangible aspect. Some examples of the technical component are the meal obtained at a restaurant and the type of haircut received at a beauty salon. The functional component is the “how” portion of the service; it comprises the method in which the technical component is transferred to the consumer, the style of the delivery. Examples of the functional component are answering questions about the service and greeting the customer. Other authors have stated the fact that services can be divided in components. Sasser, Olsen, and Wyckoff (1978) discuss three components: levels of material, facilities, and personnel. Lehtinen and Lehtinen (1982) theorize three elements of service: physical, corporate, and interactive. All proposed divisions of services include some core part (material, physical, technical) and some interactive/process part (personnel, interaction, functional). These views allow the study of consumers’ evaluations to be dismantled into components, whereby a clearer understanding of the evaluation process is gained.

Current research goes one step further splitting the functional (process) as discussed by Gönroos (1982) into two components, one component being the communal aspects and the other component being the process aspects of the service delivery (Goodwin and Gremler 1996; Adelman, Ahuvia, and Goodwin 1994). Table 1 summarizes the different components of services found in the current literature. The process aspect of the service delivery is essential for the service's production/consumption and necessary to accomplish the delivery of the service's technical portion. Answering questions, taking orders, and replying to the customer's requests are examples of the process aspect. The communal component does not further the service delivery and is non-essential. Rather, it is the content of the interaction as opposed to the style of the interaction. The communal component is purely social in nature, and the service provider's actions can be perceived as providing social support. Examples of communal behaviors are non-task-related conversation, nonessential self-disclosure, and long term relationship commitment. Often communal behaviors are activities frequently associated with friendship.

Although numerous authors used different terminology and had various justifications for the split between process (functional) and outcome (technical), they employed the same basic rationale for the split as Grönroos (1982, 1990). Ergo, the technical component hypothesized by Gönroos (1990) will be used in the author's research. Goodwin and Gremler (1996) diverge from much of the literature (Mittal and Lasser 1996, 1998; Price, Arnould, and Tierney 1995) and split the functional quality into process (functional) and communal components. This division makes intuitive sense as communal components are not inherent nor are they necessary to the delivery

of a service. This dissertation developed a model that examines the relative importance of these three potential components (discussed above) in determining a customer's judgement of service quality.

Importance of the “service encounter”

The importance of the service encounter, sometimes referred to the “moment of truth,” is well accepted in the literature (Bitner and Hubbert 1993; Bolton and Drew 1991; Oliver 1993). Bitner, Booms, and Mohr (1994) postulate that in services, customer satisfaction is often influenced by the quality of the interpersonal interaction between the service provider and the consumer. In fact, it has been stated that often the service encounter becomes the service for the consumer (Bitner, Booms, and Tetreault 1990). The importance of the service encounter has been linked to the intangibility of the outcome of services; consequently, the encounter becomes the service and the aspect of the service that a consumer can readily judge. Grönroos (1982) states there are three characteristics of services that make them more difficult to evaluate. These characteristics are: (1) physical intangibility (as well as in the case of credence services-mental intangibility), (2) an activity rather than a thing, and (3) production and consumption and simultaneous activities. Therefore, consumers of service firms face a different evaluation situation. Since physical and mental intangibility exists making the service difficult to evaluate, the consumer will be influenced by what happens during the service encounter (the simultaneous activities of consumption and production) (Grönroos, 1982).

Table 1-Summarization of Service Components Literature

Author(s)	Component	Description
Czepiel (1990) Gönroos (1982, 1990) Parasuraman, Zeithaml, and Berry (1985)	Process (functional)	The manner in which the outcome is transferred to the consumer.
	Outcome(technical)	What the consumer receives during the exchange.
Goodwin, Gremler (1996) Adelman, Ahuvia, and Goodwin (1994) Price, Arnould, and Tierney (1995)	Outcome	What the consumer receives during the exchange.
	Process (functional)-interaction style	The manner in which the outcome is transferred to the consumer.
	Process-boundary closed	Transactional relationship.
	Process-content of the interaction	Communal behaviors-those behaviors that have a friendship type quality.
	Process-boundary open	Transaction that has a feeling of friendship.

The quality of the service and the customer's evaluation of it depends almost entirely on the service encounter (Czepiel, Solomon, and Surprenant 1985). For example, Sasser and Arbeit (1976) state:

“At McDonalds the technology provides a supportive environment-but to the customer the service is sold, produced and delivered by the service employee. Even if the hamburger is succulent, if the employee is surly, the customer will probably not return.”

Service encounters can be posited as first and foremost social encounters, thus focusing on the transaction aspect provides an insufficient conceptual framework for researching the issues facing service marketers (Czepiel 1990). Because service firms have direct contact with their customers, they have the ability to build parallel economic and personal ties with their customer base (Czepiel 1990). The exchange relationship in the context of a service encounter has both elements of economic exchange and social

exchange. This duality allows the relative weighting of the interplay between the core (technical), which is comprised of the exchange of economic value, and the supporting interactional (functional) framework within which the exchange occurs (Czepiel 1990).

A firm can utilize its employees' contact skills as a competitive weapon by distinguishing its service from its competitor's service via service encounter quality (Bitran and Hoech 1990). Viewing the service process as an active relationship between the server and the customer changes the focus from a one-way delivery process to an active interchange. The benefit of this viewpoint is it encourages researchers to look at things from a consumer's perspective (Bitran and Hoech 1990).

Social Exchange Theory

The notion that social or emotional benefits are derived from a service encounter is explained by social exchange theory. Social exchange theory posits that when one individual gives to another, he/she trusts the other party will reciprocate. Unlike economic exchange, it is not an explicit, contract-based agreement; rather, it is informal and understood by the parties. Many disciplines incorporate social exchange theory in their research. This theory has its roots in the work of Mauss, who in the 1950s wrote an essay entitled *The Gift* (Mauss 1950). The essay explored tribal gift giving networks on an island nation. A difference was discovered between gift exchanges and everyday barter. In barter, negotiation preceded simultaneous exchanges of equivalent items, while in gift exchanges these aspects were absent and in fact were "forbidden." Homans (1961) and Gouldner (1960) built on this work. Homans (1961) integrated economic principles by evaluating exchanges between group members in terms of profits (rewards minus costs). Gouldner (1960) introduced the concept of reciprocity;

which is when one is given something of value; there is an implied obligation to reciprocate regardless of a cost-benefit analysis. Blau (1964) extended social exchange by separating social exchanges from economic exchanges. According to Blau (1964), the major differences between social and economic exchanges are: (1) only in social exchanges are feelings of personal obligation, gratitude, and trust engendered and (2) social exchange does not have a standard value against which gifts, favors, or contributions can be measured.

Only recently has social exchange theory been applied in academic marketing research on services. Goodwin and Gremler (1996) employ exchange theory and relational theory in their research on satisfaction with service encounters. Goodwin (1996) adapted social exchange concept when discussing “communality” behaviors, which can be described as behaviors that are friendship inducing behaviors such as non-essential conversation, self-disclosure, and helping behaviors not related to the service delivery. Social exchange theory is important to the proposed research because feelings of personal obligation, gratitude, and trust are developed. The process component of services is where social exchange comes into play. The interaction with service employees can engender these feelings of trust, gratitude, and personal obligation. For example Goodwin and Gremler (1996) report this statement by respondent DC:

“[My hair stylist] is friendly and she knows me. We keep caught-up on each other’s lives, since I see her on a regular basis. I would have a hard time leaving her, even though I’ve found someone else who I also like and who does a real good job cutting hair.” (Pg. 265)

Thus, social exchange provides a non-economic rationale for why consumers engage in exchanges with certain service providers. Social exchange provides the overall theoretical justification for the belief that consumers not only enter into service transaction for the technical benefit but also for social benefits. The non-technical benefits that consumers may hope to obtain in service encounters can be explained by social support theory.

Social Support Theory

This theory has been heavily researched in social psychology, sociology, public health, and communications. When applied to services, it is the “subjective” experience, not the objective value of the goods received that determines whether an action is perceived as social support. Three distinct themes are used to create the following definition of social support in relationship to services. Consumers receive social support when a service provider’s verbal or nonverbal communication does at least one of these: (1) reduces consumer uncertainty, thus increasing a sense of control, (2) improves self-esteem, or (3) creates a sense of social connection. While these themes have interconnections, they are used separately to provide conceptual boundaries for understanding the concept of social support (Adelman, Ahuvia, and Goodwin 1994).

The concept of social support or the need for social aspects in the service encounter is gaining recognition in the services literature. However, this is not a new concept in marketing research. The fact that consumers may shop for the social interaction dates back to the work of Stone (1954) and Webster (1968) and the concept of the “personalizing shopper.” Several recent articles have employed the concept to

explain consumer's perceptions of service quality (Adelman, Ahuvia, and Goodwin, 1994, Goodwin and Gremler 1996; Ahuvia, Adelman, and Schoroeder 1991).

The concept of social support is receiving more attention in the literature due to several emerging demographic trends. The first trend is that people born after WWII have an increasing preference for warm, personal interactions over formal ones (Inglehart 1990). The second trend is an increasing number of singles (Adelman and Ahuvia 1991; Ahuvia and Adelman 1992, Ahuvia, Adelman, and Schroeder 1991). The third trend is an increase in the number of elderly consumers. As consumers age and retire, their number of social contacts is reduced and service encounters increase in importance (Leech 1992). The fourth trend relates to the increasing mobility of the US population and its urbanization. These factors contribute to consumers looking to services as opposed to family and friends during times of stress (Adelman, Ahuvia, and Goodwin 1994; Gentry and Goodwin 1995).

The author's research applies the definition of social support that incorporates the consumer's use of service encounters to develop a sense of social connection. Goodwin (1996) terms the social support aspects of a service encounter as being communal behaviors. These behaviors, not essential to the service delivery, create ties that are similar to those of family and friends. Communal behaviors include non-task-related conversation, non-essential self-disclosure, and long-term relational commitment (Goodwin and Gremler 1996). Communal behaviors can impact the evaluation of service encounters, consequently impact the evaluation of overall service quality. Research has shown the type of relationship between the participants in an encounter can influence attribution. Folkes (1984) studied attribution in relation to

service encounters. The type of relationship desired by the consumer when entering the service encounter will influence his/her interpretation and evaluation of the encounter. For example, if a consumer enters an encounter not desiring social support, even a sincere offer of social support will be seen as manipulative (Hobfoll and Stokes 1988). Not all consumers entering a service encounter desire social support, but those that do enter the service encounter for social support do so because it provides a “weak tie” form of support. “Weak ties” can be defined as those social interactions that are not integrated into the persons primary support network of family and friends (Adelman, Ahuvia, and Goodwin 1996). A wide range of supporters can provide weak ties. Weak ties minimize obligations and limit relational development. Three consumer benefits “weak ties” offer are: (1) a sense of community can be fostered through repeated interactions with service providers, (2) “weak ties” can provide support when primary ties are disrupted due to death, divorce, relocation, or unemployment, and (3) since they are removed from primary ties and provide a sense of being anonymous, they can provide “confidences” without judgement (Milgram 1977). “Weak ties” allow the consumer to gain the benefit of social support from non-traditional sources.

The development of weak ties can lead to boundary open transactions. Boundary open transactions are ones in which the consumer believes that the service provider is interested in him/her as a person, hence creating a feeling of friendship rather than merely a transaction (Price, Arnould, and Tierney 1995). Boundary open transactions move the encounter from being strictly economic in nature to one that includes a social basis too. Price, Arnould, and Tierney (1995) using an extended service encounter (white water rafting), demonstrate the positive impact of boundary

open transactions on service satisfaction. It has yet to be empirically demonstrated that boundary open transactions occur during a short duration service encounter, or if they do, how they would impact the encounter. This research hypothesizes that boundary open transactions (provision of social support) can occur in short duration service encounters and when desired by the consumer will lead to increased judgements of service quality.

The Role of the Technical Component of Services

As stated earlier, services have been conceptualized as having two major dimensions. The first dimension is the “what” component, which is comprised of the outcome the customer receives during the exchange (the technical component), and the second dimension is the “how” component or the manner in which the technical component is transferred (Czepiel 1990; Grönroos 1990; Parasuraman, Zeithaml, and Berry 1985). The technical/outcome is the reason for the firm being on the market (Grönroos 1987). Although the service encounter has been termed the “moment of truth” (Bitner, Booms, and Tetreault 1990), it is important to note that much of the research states that the service encounter only adds or subtracts from the service. Keaveney (1995) in her study of switching behaviors in service industries found the largest category of service switching was caused by core (technical) service failures. Over 44% of her respondents stated that either mistakes, billing errors, or service catastrophes caused them to switch. Eleven percent of this group reported that core (technical) service failures were the only factor that contributed to their switching. Service encounter failures accounted for 34% of the respondents switching, and of these, 9% stated that only the service encounter failure was the reason for switching.

Czepiel (1990) states all exchanges by definition involve a relationship and exchange relationships vary from social relationships in that exchange relationships have both social and economic elements. He adds the content can be broken down into two elements: the content of the core (economic) exchange and the content of the social exchange. He further delineates that while the economic aspects are dominant, this fact does not diminish the content of the relational aspects. This research explores the importance of the three elements not in relation to switching behaviors (Keaveney 1995) but in respect to judgements of service quality.

Behavioral Consequences of Service Quality

The study of service quality is deemed important as managers and researchers believe that improving service quality will lead to higher profits. The link between improved service quality and profitability seems to make intuitive sense, but no research was done on the relationship until the early 1990s. In 1993, Rust and Zahorik tested the concept and obtained mixed results. From the research in the early 1990s, it has become apparent that there is not a direct link between service quality and profits (Greising 1994; Rust, Zahorik, and Keiningham 1995). However, behavioral consequences have been linked to service quality and these behaviors have been linked to profitability.

Zeithaml, Berry, and Parasuraman (1996) switched the research focus from profitability to behavioral consequences and their link to service quality. These behavioral consequences include customer loyalty, word of mouth, and increased patronage. The value of customer retention and its positive impact on profitability has been documented (Fornell and Wernefelt 1987). Research has shown that retaining

customers is cheaper than acquiring new customers, and the longer the customer has a relationship with a firm, the more likely he/she is to buy additional services (Reichheld and Sasser 1990). Loyalty to service firms has been associated to “personal” relationships with the service provider. Goodwin and Gremler (1996) found that for some customers loyalty can be overriding and compensate for inadequate delivery of service. Even though there is no direct connection between service quality and profits, there are links between service quality and the behavioral consequences of loyalty, increased patronage, and word of mouth. These behavioral consequences have been linked to increased profits.

Affect

Affect in services and various consumption situations has been studied in the past. Gardner (1985) reviewed the literature on mood and its relevance to consumer behavior, and she identified three areas mood affects are likely to emerge. These areas are service encounters, point-of-purchase, and communications. Arnould and Price (1993) and Price, Arnould, and Tierney (1995) explored the impact of emotions on the judgement of service quality in extended service encounters. Siehl, Bowen, and Pearson (1992) researched the need for integration in service encounters and the emotional affect produced. Derbaix and Pham (1991) studied the affective side of consumption; stating that affective reactions need to be researched, since they may be an essential process in understanding consumer behavior. Westbrook and Oliver (1991) evaluated how emotional experience and consumer judgements of satisfaction are related. All of these studies indicate a connection between affect and service quality’s judgements.

Arnould and Price (1993) state that emotion refers to distinctive categories of emotional experience and expression that may or may not accompany a judgement of satisfaction and may appear in complex patterns of both positive and negative feelings. Recent research suggests that connecting with the consumer's life and sharing personal exchanges lead to perceptions of empathy and understanding. These feelings can lead to boundary open transactions that resemble the interaction between friends (Price, Arnould, and Tierney 1995). This creation of boundary open exchanges moves the transaction out of the economic realm and into a social exchange. Price, Arnould, and Deibler (1995) adapted existing scales by Edell and Burke (1987), Holbrook and Batra (1987) to measure emotion in the service encounter. These adapted scales will be used to measure both positive and negative emotion during the service encounter in this research. Positive emotional responses are influenced by whether the service provider provides extra attention and mutual understanding (Price, Arnould, and Deibler 1995). They note that more work needs to be done in determining how to deliver systematically the perception of extra attention.

Siehl, Bowen and Pearson (1992) discuss the need for integration (which is analogous to communality). They posit that consumers engaged in high involvement service encounters want to feel the service provider cares about them. These consumers will compare their psychological involvement with the encounter to their expectations. These expectations will either be positively confirmed leading to positive affect or conversely will not be confirmed leading to negative affect. In their research the type of service encounter has a tremendous impact on the consumer expectations of integration. They do not discuss the affective response of consumers in high involvement service

encounters that receive integration behaviors and do not want them. The author's research investigates consumers' affective responses to high involvement service encounters. The research will explore the affective evaluations of those consumers desiring and those consumers not desiring social support.

Potential Moderator

Guiry (1992) asserted the role a consumer desires in the service encounter will impact how he/she judges the interaction. He identifies two potential roles consumers play in the service encounter; these are dependence and autonomy. The dependent consumer wants the service provider to take an active role in the encounter. This consumer especially desires responsiveness, assurance, and empathy. Not only does the consumer expect the service provider to facilitate the consumption experience but also to make him/her more comfortable in the service setting. Consumers desiring autonomy want to be left alone and prefer self-serve options. They want to be able to do their shopping without attention. Service providers are expected to be responsive to their need for independence by giving the customer space to shop, although the service provider should be close by if help is desired. A person's age (Inglehart 1990; Leech 1992), their marital status (Adelman and Ahuvia 1991; Ahuvia and Adelman 1992; Ahuvia, Adelman, and Schroeder 1991), and the availability of strong ties are possible influences on a consumer's desire for autonomy or independence (Adelman, Ahuvia and Goodwin 1994; Gentry and Goodwin 1995).

Hypothesized Model

The above concepts from the literature lead to the following proposed model. The model has the unique aspect in that it adds communal behaviors as an independent

antecedent of service quality (i.e., it is split from the functional component).

Additionally, it is designed to test the importance of each component (technical, functional, and communal) in determining service quality in high contact services.

One major focus of the model is the impact of the communal aspect on the service quality judgment. The model depicts functional, communal, and technical components as exogenous variables. The impact of the communal component on affect is hypothesized to vary depending on the consumer expectations (social support desired or not desired) and whether or not social support was provided. Thus, if a consumer goes into a service encounter desiring social support and receives it, this will have a positive effect on affect and will increase the perceived experience service quality judgement. If a consumer goes into a service encounter not desiring social support and receives attempts to provide it, this encounter will have less effect on affect and could potentially detract from the service quality judgement. Positive affect should create positive evaluations of service quality. Service quality has been found in the literature to lead to loyalty (Goodwin and Gremler 1996; Zeithaml, Berry, and Parasuraman 1996).

Research Hypothesis

The model can be broken down into the following overarching research questions and hypotheses. The research question addresses the issue of whether communal behaviors added to a service encounter will increase the consumers' overall evaluation of service quality and can be stated as follows:

Does the addition of communal behaviors by the service provider during the service encounter contribute to the overall evaluation of service quality?

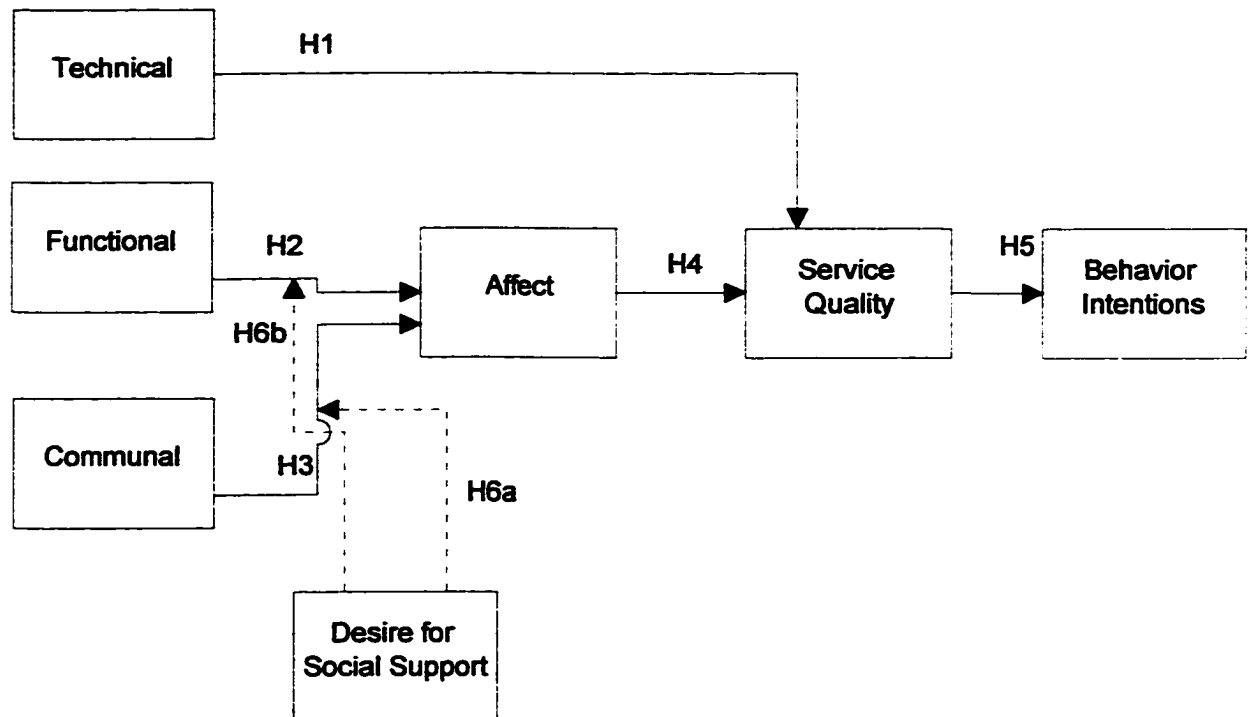


Figure 2-Dissertation Model with Hypothesis Noted

The paths in the model can be illustrated by the following hypothesis (the hypothesis number is entered by the path for illustrative purposes).

- H2:** During the service encounter, the better the service provider’s performance on the functional component the higher the level of affect.
- H3:** During the service encounter, the more communal behaviors offered by the service provider the higher the overall level of affect.
- H4:** Higher levels of affect will lead to an increase in the overall judgement of service quality.

In the model the behavioral intentions of positive word of mouth and repeat purchase are not broken out into two separate constructs. The literature models these constructs at times individually and at other times collectively. The author has modeled the constructs collectively but has added two individual hypotheses in order to be complete.

- H5:** As the overall judgement of service quality increases, consumers should have increased positive behavioral intentions.

H5_a: As the overall judgement of service quality increases, consumers' intentions to recommend the service provider should increase.

H5_b: As the overall judgement of service quality increases, consumers' intentions to patronize the service provider should increase.

The last hypothesizes are designed to explore the potential moderation of the path between the communal component and affect.

H6_a: The greater the desire for social support the stronger the relationship between the communal component and affect.

H6_b: The greater the desire for social support the weaker the relationship between the functional component and affect.

The methodology used to test these hypotheses is described in the following chapters.

CHAPTER THREE

RESEARCH METHOD AND PRETEST RESULTS

Chapter Three reviews the research methods and the design used in the dissertation research, and it also reviews the results from the pretest studies. There are several unique aspects of this research that impacted the services studied and the methods utilized to interpret the results. First, the data was gathered through a field survey. Much of the services research studying consumer service evaluations has either employed critical incidents to explore the issues or experiments which allow manipulation of the service encounter (Ostrom and Iacobucci 1995; Keaveney 1995; Surprenant and Solomon 1987; Mohr and Bitner 1995). Since the encounter cannot be manipulated in the field, services where variations occur naturally needed to be selected. Second, this research embraced a multidisciplinary approach using concepts and constructs from not only marketing research but sociology and social psychology. The previous research using these concepts was exploratory in nature and focussed only on the social aspect (communal) in respect to service quality nor did it try to incorporate the technical and function aspects (Adelman, Ahuvia, and Goodwin 1994; Goodwin, 1996; Adelman and Ahuvia 1995; Goodwin and Gremler 1996). Third, the results of the model are posited to differ depending on the type of interaction relationship the consumer desires (i.e., social support or no social support). Prior to the present study, there have not been any studies that have looked at all these concepts to determine how the relationships between some of the concepts may be moderated.

Selection of Service Industries

In Adelman and Ahuvia's (1995) study of social support in the service sector, the authors make a distinction between services where one would expect to receive social support as part of the service and those services where social support would be potentially an additional benefit. Adelman and Ahuvia (1995) discuss "urban agents" and "community agents". Community agents are found in those services in which the service encounter provides a formal setting for social support. Teachers, ministers, lawyers, psychologists, and counselors are examples of community agents. While urban agents tend to be found in those services that may or may not provide social support and if found, it would be provided in a less structured manner. In these sources, social support is not inherent in the service. Examples of potential urban agents are bartenders, hairdressers, and cabdrivers.

The author's research is focused on those services where social support may or may not be present and where consumers may or may not desire it. Using the terminology of Adelman and Ahuvia (1995), the author is interested in services that have potential urban agents. The research looks at the contribution technical, functional, and communal components add to service quality; ergo, the service selected must have potential variation in all three components.

Given the above guidelines, several potential services were selected for review. Services that could feasibly contain urban agents included real estate agents, bank customer service representatives, hair stylists, cosmetic surgeons, nurses/technicians, veterinarians, and flight attendants (Keaveney 1995; Suprenant and Solomon 1987; Goodwin and Gremler 1996, Ostrom and Iacobucci 1995; Mohr and Bitner 1995;

Bitner, Booms, and Tetreault 1990). The following criteria were used to judge the services selection for the pretest. First, the service needed to have variation in the three components. Second, enough time had to elapse during the service encounter so social support could be offered. Third, it had to be feasible to obtain a sample for data analysis in a reasonable time frame, and fourth, the service needed to be included in previous research. After carefully reviewing each service against the four criteria, real estate agents and hairdressers were determined to have the best potential for research. The two were selected as the most likely to be conducive for the proposed research for the reasons listed below.

1. From a review of the relevant literature, it is reasonable to expect that there will be variation in the technical and functional components. These services tend to be placed (Keaveney 1995; Siehl, Bowen, and Pearson 1992) in a mid-range category meaning that neither the technical or functional component should dominate; rather, each would play a fairly equal role in determining service quality. Additionally, it is conceivable that in some situations the service provider would offer social support or it would be desired by the consumer (this is indicative of the urban agent potential).
2. The technical component has some degree of importance to the consumer (appearance, money, health, and travel) and each of these services has low enough credence properties such that the consumer can evaluate the quality of this component of the service.
3. Both services provide an opportunity for the service provider to display and offer social supportive behaviors that are not related to the functional and technical components of the service over the course of the service encounter.

Sample and Pre-test Procedures

The study was designed to refine and to adapt existing scales for use in measurement of social support in service encounters. The author worked with three service companies located in Baton Rouge, Louisiana. Two of the companies were

small to mid-sized real estate firms and the other company was a beauty salon enterprise with four salons and a beauty school.

Real Estate

A total of 190 surveys were distributed between the two real estate agencies. After three months of data collection, six surveys had been returned. Several factors contributed to this low return rate. The pre-test timing coincided with a traditionally slow/down time in this industry (October, November, December); consequently, the amount of potential customers to ask to participate was low. A real estate agent's relationship with his/her agency is similar to that of an independent contractor, and the agents may not have been convinced there was a benefit for the extra work. The author tried to overcome these problems by attending agent meetings, giving fifteen minute talks at agent meetings, working closely with the agency owners, and using two different companies. None of these actions appeared to have been effective.

Beauty Salon Data Collection

The data collection was successful in the second service industry (beauty salons), and the results were used as the basis of the pre-test. The pretest was conducted with the cooperation of a local beauty salon company that is comprised of four local salons and a beauty school. November 1998, to December 23, 1998, was the period for pretest data collection. A total of 280 surveys were distributed to five units within the chain. One unit (the beauty school) did not participate. The remaining four salons distributed 195 surveys. A total of 73 surveys were returned yielding a response rate of 37%. The breakdown of surveys distributed and returned by salon can be reviewed in Table 2. No incentives were given for customers to fill out the survey.

The following procedure was used to collect the data. At the time of making an appointment, the client was asked if he/she is a first time customer to either the salon or the stylist. If the answer was yes, this was noted in the client database. When the client was paying his/her bill, the receptionist would ask first-time clients if they would be willing to participate in the survey. The client was assured of complete confidentiality by the receptionist and in the cover letter. The client was given the survey to take home and fill out. Surveys were returned directly to the author via a self-addressed stamped envelope stapled to the back of each survey (the survey and cover letter can be viewed in Appendix A). No incentive was offered to the salons for distributing the surveys.

Table 2-Breakdown of Distribution and Return of Surveys by Salon

Salon	Number Given to Distribute	Number not distributed	Number Distributed	Number Returned	Percent Return Rate
LSU	75	27	48	22	46%
Country Club	65	33	32	20	63%
Sherwood	50	0	50	9	18%
Jefferson	65	0	65	22	34%
Overall Totals	280	85	195	73	37%

Profile of Respondents

A total of 11 males (16.2%) and 57 females (83.8%) responded to the gender question on the survey. Five subjects did not reveal their gender on the survey. This breakdown of gender in the pretest sample is similar to the marketing manager's estimate of gender breakdown of customers (80% female, 20% male). It also is in line with the 1996 Mediamark Research Inc. (MRI) report stating that 15.3% of beauty salon customers nationwide are male, while 84.7% are female (MRI 1996). Even though the majority of respondents is female, the sample is representative of the population in

respect to gender. The average age of a respondent was 34.39 years and the ages of respondents ranged from 12 to 64 years old. The pretest sample was skewed more towards a younger age group than the national figures reported by the MRI. One factor that could have contributed to this result is the location of a salon adjacent to Louisiana State University. This salon caters primarily to the university's population. Another factor is that all of the respondents may not have reported their true age. For example, the author's mother answered the survey but none of the surveys reported an age corresponding to hers (over 64). This deviation from the national figure should not impact the results, since 26% of the respondents fall into the senior citizen classification, and it was predicted both younger and older clients would be more likely to desire social support. Of the respondents 28.6 percent had some college education; this finding was in line with the national figure of 29.4 percent. The some college education category represented the largest response group. The sample deviated from the population in that more of the sample had graduated from college. This difference can be explained by the location of the salons near a major university. Different income categories were used from those of sample taken for the MRI statistics, but it appears that the national income levels and the sample income levels are similar. The profile of the pretest respondents appears to be a fairly representative sample of the population that frequents beauty salons.

Components of the Questionnaire

Demographics

The survey began with general demographic questions, which were included for future research potential and as part of the conditions of obtaining the survey sites.

These questions could be of future research interest, as it has been speculated in the social support literature that several demographic variables could be potential indicators of someone's desire for communal behaviors from service providers. These items were also included as potential validity checks for the measures of desire for social support.

Global Evaluation of Service Quality, Satisfaction and Value

The next main section of the questionnaire was the overall evaluation of service quality. In the literature, the measurement of overall service quality is normally placed at the beginning of the instrument, so the questions asked about service components will not bias the overall evaluation. Deciding which scales to use in this area was slightly problematic. SERVQUAL is the most widely accepted measure, yet this measure could not be utilized, since a scale adapted from it by Mittal and Lasser (1996) was used to measure the functional and technical components. Thus, a global measure was needed that would be distinct from SERVQUAL. Often a measure using a nine-point scale has been employed when SERVQUAL is not applied (Zeithaml, Berry, and Parasuraman 1996) or researchers employ several questions anchored by extremely poor/extremely good, awful/excellent, and very low/very high (Spreng and Mackoy 1996; Wong and Tjosvold 1995). The Delight/Terrible scale measures overall satisfaction/service quality (Westbrook 1980). Westbrook (1980) conducted three empirical studies that supported (one study used banking services) the application of this scale in the measurement of consumer satisfaction/service quality. Satisfaction measures were included to be used instead of service quality, if discriminant validity can not be obtained between the component measures (technical and functional) and the overall measure of service

quality. Satisfaction measures were adapted from Bitner 1990 and Cronin and Taylor 1992.

Evaluation of specific actions

The global measures of service quality and satisfaction were followed by the measurement of the functional and technical aspects of the service. Scales that were developed as an adaptation of SERVQUAL by Mittal and Lassar (1996) measured the functional and technical components in the model. Mittal and Lassar (1996) combined several of the SERVQUAL factors and added a personalization factor. Only the technical and functional scales were used in this research.

Due to the communal component's importance to the research, two scales were included to attempt to measure these behaviors. One scale, the Inventory of Socially Supportive Behaviors (ISSB), is used in psychology research of social networks and support. ISSB is used to measure communal behaviors or the offer of social support in various situations and in various types of relationships. The scale was modified by the removal of any item that pertained to social support provided by family members, as this was not applicable to the research (Barrera, Sandler, and Ramsay 1981). Since the ISSB scale had not been used in marketing research, the author added three more questions from another established marketing scale. The second set of items came from Crosby, Evans, and Cowles (1990) and their study of the interpersonal influence on service quality. The items were taken from the indicators of relational selling behavior section of this scale.

Affect

Price, Arnould, and Deibler (1995) state that marketing researchers have studied in-depth consumers' emotional responses to advertising, but have paid scant attention to consumers' emotional responses to services. They comment that this lack of research is unfortunate, because most of the measures that are currently available are superficial. To overcome this lack of in-depth measures of emotional responses to services, they developed their own scale adapted from the works of Edell and Burke (1987), and Holbrook and Batra (1987) (Price, Arnould, and Deibler 1995). They developed this scale while they were studying extended service experiences (white water rafting) and the resulting positive and negative emotions were used to measure affect in their model. Consequently, this scale was chosen because it was developed in a service setting where communal behaviors could potentially occur. Also, it was developed in a service setting to specifically measure the emotional response to a service encounter.

Behavioral Intentions

Purchase intention items were taken from the Behavioral Intention Scale and Purchase Intention Scale (Bruner and Hensel 1996). Word-of-mouth items were adapted from Hartline and Jones (1996) and Goodwin and Ross (1992). The-word-of-mouth items were selected from Hartline and Jones (1996) because this study used structural equation modeling and contained a path from service quality to word-of-mouth. The author's dissertation model (see Figure 1) has a path from overall service quality to behavioral intentions (positive word of mouth and repeat purchase intentions).

Desire for Social Support

Due to the importance of this construct (the moderator construct), two scales were pre-tested. One scale, the Revised UCLA Loneliness Scale, was selected from social psychology literature (Russell, Peplau, and Cutrona 1980). This scale was selected because it was designed to measure loneliness in a field setting as opposed to measuring the results of an experimental manipulation. This was a vital criterion as it is designed to detect loneliness in everyday life, and the research instrument needed to be able to detect the desire for social support in a non-manipulated everyday occurrence. Loneliness scales have been used to measure relationship quality or network density.

The second scale tested was the CAD Scale (compliant, aggressive, detached), which was taken from the marketing literature (Bearden, Netemeyer, and Mobley 1993). Only the compliant and detached items were used. The complaint and detached items were chosen from this scale because they were developed based on the premise that varying scores on the complaint, detached, or aggressive dimensions would predict a consumer's decision making. Since the proposed research is studying the consumers' service quality judgements and the potential impact communal behaviors on these judgements, the scale had a high level of face validity. This is a valid criterion for scale selection according to Bearden, Netemeyer, and Mobley (1993).

Social Desirability

The Crown Marlowe Social Desirability Scale was included in view of the desire for social support constructs. Personality researchers in psychology have noted that subjects at times attempt "to fake" responses to personality questions (King, Bruner, and Hensel 1992). These fake responses can take the form of the respondent

answering certain questions to present himself/herself in either a positive or negative manner. Social desirability scales (such as Crowne Marlowe) were created in an attempt to identify any bias in the respondents' answers. Although other scales measuring social desirability exist such as the Martin-Larsen Approval Motivation Scale (Larsen et al. 1976) and the Other-Deception Questionnaire by Sackeim and Gur (1988), the Crowne-Marlowe Scale was used because it has been much more widely validated and tested. The shortened version used in the survey was developed in a marketing context. Hence, it seemed prudent to follow the advice of DeVellis (1991) to add questions to the scale development process that could potentially detect problems.

DATA ANALYSIS

The data analysis of the pretest results can be broken down into four components. The first component is scale purification. The second component is testing for discriminant validity between the constructs. Discriminant validity is vital since the proposed model is to be tested using Structural Equation Modeling. After the scales were created from the items retained in confirmatory factor analysis, they were checked for discriminant validity. The third component is the review of the correlation between constructs. The proposed structural model could not be tested, as the sample size was too small. Instead of testing the structural model to obtain some indication of potential model performance, correlations between the constructs were reviewed. Though this is not a "true" test of the structural model, it does provide some indication of how it would potentially perform. The fourth component of the analysis is the testing of the potential moderator in the model. The path between the communal component and affect is posited to vary (is moderated) depending on the desire for social support.

It is only after performing these three components of analysis that changes to the pretest could be determined in respect to the final questionnaire development.

Scale Purification

The pretest was designed to refine and to adapt already existing scales for the use in the author's research. Given the above objective of the pretest, the analysis was based on the two-step method (Anderson and Gerbing 1988). A two step approach was chosen, as it facilitates the development of a sound measurement model before estimating the structural model. The limited sample size prevented the development of the structural model, but the steps used to develop a measurement model in the two step approach were employed. A covariance matrix was created for the 109 items from the pretest questionnaire. These items represented potential constructs in the model. The covariance matrix was imported into LISREL VIII (Jöreskog and Sörbom 1993) in order to perform confirmatory factor analysis. The goal of the analysis was to optimize scale length, to assess the discriminant validity of the constructs, which at times is problematic with service quality research, and to check the internal consistency of the scales (DeVellis 1991). The following iterative confirmatory procedures were used to test all of the scales in the pretest. The limited sample dictated that each scale be subjected to confirmatory factor analysis individually. The first step was to perform a confirmatory factor analysis with all scale items included. The results of the analysis were reviewed, if any item had a nonsignificant t-value it was dropped from the scale and the analysis was re-run.

The next step was to look for problematic items; one indication that an item should be deleted is if it has a high standardized residual (>2.50) (Bagozzi and Yi

1988; DeVellis 1991). When reviewing the individual items with offending standardized residuals, the “face validity” of the items was considered to determine which item should be dropped. This process was continued until all items had standardized residuals of less than 2.50. Additionally, if a scale had five or more items left after all items with high residuals were deleted, then the items with completely standardized factor loadings below .50 were deleted. This process was continued as necessary until no less than four items remained. The four-item criterion was based on the minimum number of items for good psychographic property (three) with the addition of one extra item as a form of insurance because of the relatively small sample size of 73 respondents. All of the scales were analyzed using the above outline procedure.

Technical and Functional Constructs

Measures for the technical and function constructs were taken from Mittal and Lassar’s (1996) adaptation of SERVQUAL. A total of seven items was used to measure the technical construct. These items are listed below in Table 4 and were answered using the following scale: 1=Strongly disagree, 2=Disagree, 3=Neutral, 4=Agee, and 5=Strongly Agree. The seven items were entered into a confirmatory factor analysis. Four of the items were retained (1, 4, 5, and 6) and three of the items were dropped (2, 3, and 7). The results can be viewed in Table 3.

Table 3-Results of Confirmatory Factor Analysis of Technical Items

Items Retained and Factor Loadings	Reliability	AVE	Cronbach’s Alpha
1 (.63), 4 (.72), 5 (.75), 6 (.63)	.87	.45	.87

Table 4-Technical Items Included in Pretest

Your stylist:

1. Was knowledgeable about the type of service you desired (i.e., hair cut, waxing, coloring, perms, relaxing, trimming of beards, etc.).
2. Was knowledgeable about different types of hair and appropriate cuts.
3. Cut hair well/ turned out as expected (or permed, or colored, or waxed).
4. Appeared well trained and qualified.
5. Provided the service that was agreed upon.
6. Was dependable.
7. Did not make any mistakes (no nips with scissors, hairdryer was not too hot, no burns from curling iron, etc.).

The functional construct measures were taken from the work of Mittal and Lassar (1996). A total of six items was used to measure the functional construct. These items are listed below in Table 5 and were answered using the following scale: 1=Strongly disagree, 2=Disagree, 3=Neutral, 4=Agree, and 5=Strongly Agree. The six items were entered into confirmatory factor analysis. Four of the items were retained (9, 11, 12, and 13) and two of the items were dropped (8 and 10). The results can be reviewed in Table 6.

Table 5-Functional Items Included in the Pretest

Your stylist:

8. Had a courteous and pleasant manner.
9. Listened and discussed what you wanted.
10. Was willing to respond to your requests.
11. Gave you his/her undivided attention.
12. Was friendly and pleasant.
13. Was prompt for the scheduled appointment or gave an explanation for the delay.

Table 6-Results of the Confirmatory Analysis of Functional Items

Items retained and Factor Loadings	Reliability	AVE	Cronbach's Alpha
9 (.82), 11 (.83), 12 (.94), 13 (.31)	.84	.59	.87

Communal Construct (Offer of Social Support)

Two scales were pre-tested for the measurement of the communal construct. The first scale tested was the Inventory of Socially Supportive Behaviors (ISSB) by Barrera, Sandler, and Ramsay (1981). The nine items from the ISSB are listed below in Table 7 and were answered using the following scale: 1=Not at all, 2= Once, 3=Occasionally, 4=Often, and 5=Numerous Times. The nine items were entered into a confirmatory factor analysis. Five of the items were retained (3, 4, 5, 6, and 7) and four of the items were dropped (1, 2, 8, and 9). The results can be reviewed in Table 8.

Table 7-ISSB Items included in the Pretest

How often did the stylist:
1. Tell you a personal story?
2. Offer some non-salon information?
3. Joke or kid with you?
4. Tell you how he/she felt in a situation similar to yours?
5. Listen to you talk about your personal feelings?
6. Express interest and concern for your well being?
7. Talk to you about some interest of yours?
8. Tell you that she/he would keep what you talk about private-just between the two of you?
9. Ask questions of a personal nature?

Table 8-Results of the Confirmatory Factor Analysis of the ISSB items

Items retained and Factor Loadings	Reliability	AVE	Cronbach's Alpha
3 (.60), 4 (.62), 5 (.80), 6 (.77), 7 (.76)	.74	.51	.74

The second set of items came from Crosby, Evans, and Cowles (1990). The four relational selling behavior items are listed below in Table 9 and were answered using the following scale: 1=Not at all, 2=Once, 3=Occasionally, 4=Often, and 5=Numerous times.

Table 9-Relational Selling Behavior Items Included in the Pretest

<p>How often did your stylist:</p> <ol style="list-style-type: none"> 1. Confide in you information about his/her background, personal life, and family situation? 2. Confide in you a lot about his/her job (e.g., responsibilities, failures, accomplishments, likes and dislikes for the occupation)? 3. Tell you a humorous story about being a hair stylist? 4. Confide in you a lot of information about his/her goals, objectives and hopes for the future?

The four items were entered into a confirmatory factor analysis. All four of the items were retained with the results listed below (see Table 10).

Table 10-Results of the Confirmatory Factor Analysis for Relational Selling Items

Items retained and Factor Loadings	Reliability	AVE	Cronbach's Alpha
1 (.63), 2 (.80), 3 (.51), 4 (.60)	.73	.41	.83

Affect

The Happy and Sad scales from Price, Arnould, and Deibler (1995) were used to measure affect. These two scales consisted of six items apiece. The twelve items that comprised the Happy and Sad scales are listed below in Table 11 and were answered using the following scale: 1=Not at all, and 5=Very Strongly.

Table 11-Affect Items included in the Pretest

Happy Items					Sad Items				
1. Happy	①	②	③	④ ⑤	1. Sad	①	②	③	④ ⑤
2. Elated	①	②	③	④ ⑤	2. Sorry	①	②	③	④ ⑤
3. Pleased	①	②	③	④ ⑤	3. Regretful	①	②	③	④ ⑤
4. Warm-hearted	①	②	③	④ ⑤	4. Angry	①	②	③	④ ⑤
5. Caring	①	②	③	④ ⑤	5. Worried	①	②	③	④ ⑤
6. Affectionate	①	②	③	④ ⑤	6. Confused	①	②	③	④ ⑤

The six items for Happy were entered into a confirmatory factor analysis. Four of the items were retained (3, 4, 5, and 6) and two of the items were dropped (1 and 2). The results can be view in Table 12.

Table 12-Results of the Confirmatory Factor Analysis of the HAPPY Items

Items retained and Factor Loadings	Reliability	AVE	Cronbach's Alpha
3 (.40), 4 (.88), 5 (.98), 6 (.83)	.87	.65	.85

The six items for Sad were entered into a confirmatory factor analysis. Four of the items were retained (1, 2, 3, and 5) and two of the items were dropped (4 and 6). The results can be viewed in Table 13.

Table 13-Results of the Confirmatory Factors Analysis of the SAD Items

Items retained and Factor Loadings	Reliability	AVE	Cronbach's Alpha
1 (.97), 2 (.98), 3 (.96), 5 (.25)	.90	.72	.81

Behavioral Intentions

Purchase intention items were taken from the Behavioral Intention Scale and Purchase Intention Scale (Bruner and Hensel 1996). Word-of-mouth items were adapted from Hartline and Jones (1996) and Goodwin and Ross (1992). The items that comprise the behavior intention portion can be viewed in Table 14. A nine-point response scale was used with varying anchors (strongly agree/disagree, not at all likely/very likely).

Table 14-Behavioral Consequence Items Included in the Pretest

How likely are you to:	
RP01	Continue to use the stylist as your regular stylist?
RP02	Use the same stylist the next time I need a haircut (waxing, color, perm)?
RP03	Patronize the same stylist the next time I need some special service?
POM01	Tell others positive impressions about this stylist?
POM02	Recommend this stylist to your friends?
POM03	Given your experience with this stylist to recommend him/her to your friends?
POM04	Tell them to try this stylist if your friends were looking for a stylist?

*POM=positive word of mouth, RP=repeat purchase

The eight behavioral consequence items were entered into a confirmatory factor analysis. Five of the items were retained (RP02, RP03, POM01, POM02, and POM03) and three of the items were dropped (RP01, RP04, and POM04). The results can be viewed in Table 15.

Table 15-Results of the Confirmatory Factor Analysis of the Behavioral Items

Items retained and factor loadings	Reliability	AVE	Cronbach's Alpha
RP02 (.91), RP03 (.89), POM01 (.94), POM02 (.98), POM03 (.96)	.97	.88	.97

Desire for Social Support

Due to the importance of this construct, two scales were pre-tested. One scale, the Revised UCLA Loneliness Scale, was selected from social psychology literature (Russell, Peplau and Cutrona 1980). The response scale was 1=Never, 2=Rarely, 3=Sometimes, and 4=Often. The second scale tested was the CAD Scale, which was taken from the marketing literature (Bearden, Netemeyer, and Mobley 1993). Only the compliant and detached items were used. The response scale was 1=Extremely not desirable, 2=Not desirable, 3=Somewhat not desirable, 4=Somewhat desirable, 5=Desirable, and 6=Extremely desirable. Table 16 lists the complaint and detached items used in the pretest questionnaire.

Confirmatory factor analysis was done for the CAD scale but the results were not interpretable. Both positive and negative loadings were obtained. According to the scale, only positive loadings should have been obtained. The data were checked for coding errors, and none were found. Although item 8 was eliminated (it was an aggressive item) and the analysis was redone, the same results were obtained. Further

research into the scale revealed that it was problematic at best (Noerager 1979; Tyagi 1983). Analysis of this scale was stopped and it was dropped from the questionnaire.

Table 16-Complaint and Detached Items Included in the Pretest

<p>How desirable is it to:</p> <ol style="list-style-type: none"> 1. Give comfort to those in need of a friend? (C) 2. Be free of emotional ties with others ? (D) 3. Base your life on duties to others ? (C) 4. Enjoy a good movie by yourself? (D) 5. Share your personal feelings with others ? (C) 6. to pay attention to what others may think of you? (D) reverse coded 7. be able to work hard while others elsewhere are having fun ? (D) 8. correct people who express an ignorant belief? (C) 9. repay others through actions of friendship? (C) 10. be free of social obligation? (D) 11. work alone? (D) 12. feel that you like everyone you know? (C) 13. give aid to the poor and underprivileged ?(C) 14. plan to get along with others ? (D) reverse coded 15. know that others pay little attention to your affairs? (D) 16. be fair to people who you consider to do things wrong? (C) 17. have something good to say about everybody? (C) 18. live in a cabin in the woods or mountains ? (D) 19. avoid situations where others can influence you? (D) 20. know most people would be fond of you at all times ? (C)
--

(C)=complaint and (D)=detached

The second scale tested was the Revised UCLA Loneliness Scale, which consists of twenty items. The twenty scale items are listed in Table 18.

The 20 items were entered into a confirmatory factor analysis. Eight of the items were retained (1, 2, 6, 8, 9, 11, 16, and 18) and twelve of the items were dropped (3, 4, 5, 7, 10, 12, 13, 14, 15, 17, 19, and 20). The results can be reviewed in Table 17.

Table 17-Results of the Confirmatory Factor Analysis of Overall Quality Items

Items retained and Factor Loadings	Reliability	AVE	Cronbach's Alpha
1 (.59), 2 (.63), 6 (.64), 8 (.59), 9 (.52), 11 (.69),16 (.69), 18 (.52)	.83	.37	.79

The results indicate that items retained from the UCLA scale would do an adequate job, though they are somewhat weak.

Table 18-Revised UCLA Loneliness Scale Items Included in the Pretest

- How often do you feel:**
1. in tune with the people around you?
 2. a lack companionship?
 3. There is no one you can turn to?
 4. Alone?
 5. Part of a group of friends?
 6. You have a lot in common with the people around you?
 7. You no longer close to anyone?
 8. Your interests and ideas are not shared by those around you?
 9. That you are an outgoing person?
 10. Left out?
 11. Your social relationships are superficial?
 12. There are people you feel close to?
 13. One really knows you well?
 14. Isolated from others?
 15. That can find companionship when you want it?
 16. There are people who really understand you?
 17. Unhappy about beings so withdrawn?
 18. People are around you but not with you?
 19. There are people you can talk to?
 20. There are people you can turn to?

Overall Service Quality and Overall Satisfaction

Questions using a nine-point scale were employed using several different anchors such as extremely poor/extremely good, awful/excellent, and very low/very high were used to measure the construct (Zeithaml, Berry, and Parasuraman 1996; Spreng and Mackoy 1996; Wong and Tjosvold 1995). The questions used to measure service quality can be found in Table 19. Four items were retained (1, 2, 3, and 4) and one item was dropped (5). The results can be reviewed in Table 20.

Table 19-Global Service Quality Items Included in the Pretest

Below are questions concerning your overall evaluation of your experience with the stylist?

- The overall quality of the service received from the stylist was:
Very Poor ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Excellent
- How would you rate the service you received from your stylist as compared to other stylist you have used?
Extremely low quality ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Extremely high quality
Average
- The service quality provided by the stylist was much better than expected.
Strongly disagree ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Strongly agree
- How do you feel about the quality of service received from your stylist?

①	②	③	④	⑤	⑥	⑦
Terrible	Unhappy	Mostly dissatisfied	Mixed	Mostly satisfied	Pleased	Delighted
- How satisfied are you with the overall quality of the service provided by the stylist?
Not at all satisfied ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Very Satisfied

Table 20-Results of the Confirmatory Factor Analysis of Overall Quality Items

Items retained and Factor Loadings	Reliability	AVE	Cronbach's Alpha
1 (.57), 2 (.84), 3 (.75), 4 (.71)	.81	.52	.80

The four items were included to measure overall satisfaction as a back up measure in case the measures for overall quality proved problematic. The items used to measure overall satisfaction can be found in Table 21.

Table 21-Overall Satisfaction Items Included in the Pretest

Below are questions concerning your overall evaluation of your experience with the stylist

- My feelings towards the stylist can best be described as:
Very unsatisfied ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ very satisfied
- As a whole, I am satisfied with the performance of the stylist.
Strongly disagree ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Strongly agree
- How satisfied are you with the overall experience with your stylist?
Not at all satisfied ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Very Satisfied
- How satisfied are you with the overall quality of the service provided by the stylist?
Not at all satisfied ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Very Satisfied

The above four items were entered into a confirmatory factor analysis. All four items were retained with the following results. The results can be reviewed in Table 22.

Table 22-Results of the Confirmatory Analysis of the Overall Satisfaction Items

Items retained and factor loadings	Reliability	AVE	Cronbach's Alpha
1 (.87), 2 (.93), 3 (.99), 4 (.90)	.96	.85	.95

Discriminant Validity

To determine whether the constructs had discriminant validity, the Average of the Average Variance Extracted (AVE) was compared to the squared correlations of the two constructs (see Table 23). This is the most exacting test for discriminant validity (Bagozzi and Yi 1988).

Table 23-Results of the test for Discriminant Validity

Constructs	Average of AVE	Squared Correlation	Discriminant Validity
Tech and Func	.52	.51	Yes
Tech and Social	.48	.12	Yes
Func and Social	.48	.17	Yes
Func and Happy	.62	.17	Yes
Tech and Happy	.55	.15	Yes
Social and Happy	.58	.19	Yes
Social and UCLA	.44	.01	Yes
UCLA and Happy	.51	.01	Yes
Happy and OverQ	.59	.27	Yes
Happy and OverSat	.75	.26	Yes
OverQ and Behav	.70	.67	Yes
OverSat and Behav	.87	.74	Yes
OverQ and OverSat	.69	.75	No

* The following scales are the following constructs in the model: Tech=Technical, Func.=Functional, Social=Communal, Happy=Affect, UCLA=Desire for Social Support, OverQ=Overall Service Quality, OverSat=Overall Service Satisfaction, and Behav=Behavioral Intentions.

All of the constructs demonstrated discriminant validity except for Overall Satisfaction and Overall Service Quality. This result was not surprising, as whether or not

consumers can make a distinction between them has been argued in the literature. This was not a problem, as only one was used in the final model.

Correlations Between Constructs

Due to limited sample size, a structural model could not be developed for the constructs. Instead, the correlations between the constructs were reviewed as a simple “heuristic” to determine if the results were supportive of the model. Though these correlations cannot be viewed as path estimates, they provide some indication of the potential feasibility of the model and its hypothesized paths. The correlations were reviewed for both overall quality and overall satisfaction. Only one of these constructs would be used in the final model. The correlations between the constructs in the model can be found in Tables 24 and 25. The correlations indicated that the hypothesized relationships in the model should be found.

Table 24-Correlations for the Constructs in the Model-Using Overall Service Quality

CONSTRUCTS	CORRELATION
Technical and Overall Service Quality	.63
Functional and Affect	.44
Communal and Affect	.44
Affect and Overall Service Quality	.52
Overall Service Quality and Behavioral Consequences	.82

Table 25-Correlations for Constructs in the Model-Using Overall Satisfaction

CONSTRUCTS	CORRELATION
Technical and Overall Satisfaction	.71
Functional and Affect	.44
Communal and Affect	.44
Affect and Overall Satisfaction	.51
Overall Satisfaction and Behavioral Consequences	.86

Desire For Social Support As A Potential Moderator

Due to the small sample size, regression equations were run to test if the desire for social support moderated the path between the communal component and affect in the pretest sample. The results of the regression did not provide a definitive answer, rather served as a heuristic as to the potential results in the main study. In order to create the groups, the sample was split using respondent scores on the Revised UCLA Loneliness Scale. Lower scores should indicate a potential desire for communal behaviors during the service encounter, while higher scores should indicate that communal behaviors would be less desirable, and the functional component should become more relevant to the respondent (the coding of the scale determines whether high or low scores indicate loneliness). Table 27 reveals a potential problem with the UCLA scale in that 22 respondents had a score of 2.88 (the median score on the scale). Splitting the sample by removing those respondents with a score of 2.88 resulted in a loss of 30.1% of the sample. Since a large sample size is important for confidence in the results of structural equation modeling and subgroup analysis, it is vital that as many responses as possible are retained. Consequently, the analysis for potential moderation was done with two different splits. One split used all respondents that scored equal to or less than 2.75, and the other split used all respondents that scored equal to or less than 2.88. These splits allow the examination of the potential moderation effect of social support's desire on affect. To completely examine the question, one must analyze the regression equation results when one does not desire social support. Therefore, the sample was split and all respondents with a score equal to or higher than 3.00 were selected.

When all respondents that scored 2.75 or less on the Revised UCLA Loneliness Scale were selected, the functional and social summated scales were regressed on the dependent variable happy (affect) social was significant ($p \leq .05$) and functional was not (see Table 26). This result was hypothesized to occur if social support's desire functioned as a moderator.

When the split was done using all respondents that scored 2.88 or less on the Revised UCLA Loneliness Scale, the results are not as strong in support of the moderation effect. Table 28 lists the results from this regression.

Table 26-Results of Regression when respondents scored 2.75 or less on the Revised UCLA Loneliness Scale

Model 1	Unstandardized Coefficients		Standardized Coefficients	T	Significance
	B	Std. Error	Beta		
(Constant)	.694	.855		.811	.425
Functional	.172	.220	.122	.781	.442
Social	.538	.130	.647	4.126	.000

Table 27-Distribution of Responses on the Revised UCLA Loneliness Scale

Score	Frequency	Percent	Cumulative Percent
1.75	1	1.4	1.5
2.13	1	1.4	2.8
2.25	2	2.9	5.7
2.38	3	4.4	10.1
2.50	8	12.0	22.2
2.63	9	13.1	35.3
2.75	8	12.1	47.4
2.88	22	32.2	79.6
3.00	4	5.9	85.5
3.13	3	4.4	89.9
3.14	1	1.4	91.3
3.25	3	4.4	95.7
3.38	1	1.4	97.1
3.50	2	2.9	100.00
Total	68		100.00

Table 28-Results of the regression when respondents scored 2.88 or less on the Revised UCLA Loneliness Scale

Model 2	Unstandardized Coefficients		Standardized Coefficients	T	Significance
	B	Std. Error	Beta		
(Constant)	.493	.939		.526	.602
Functional	.382	.236	.236	1.620	.112
Social	.357	.149	.348	2.386	.021

The results indicate that it is possible to retain all of the respondents in the sample, but it must be noted that the resulting influence on affect by communal behaviors is not nearly so strong when the split is conducted on 2.88 or less. This can be seen when the split was performed on 2.88, the t- value was 2.386 with a significance level of .021, whereas when the sample was split on 2.75 or less the resulting t-value for the communal component was 4.126 with a significance level of .000. In both regression equations the functional construct was not significant.

When the regression was completed on the group that scored 3.00 or more, the results were as expected (See Table 29). The communal aspect became non-significant and the functional aspect became significant.

Table 29-Results of the regression when respondents scored 3.00 or higher on the Revised UCLA Loneliness Scale

Model 3	Unstandardized Coefficients		Standardized Coefficients	T	Significance
	B	Std. Error	Beta		
(Constant)	-2.353	1.688		-1.394	.194
Functional	1.117	.368	.623	3.039	.012
Social	.349	.184	.389	1.900	.087

From the above results it appears there is potentially a significant difference in the two groups, supporting the moderator role of social support desire in the model.

Summary Of Pretest Results

Given the above results, the pretest of the questionnaire was successful. The results appeared to support the proposed model and its assumptions. Additionally, the pretest allowed the testing of several scales to determine which would be the most effective in measuring the construct of question. The analysis of the pretest data provided the following benefits: scale optimization, proof of discriminant validity, and an indication that the moderator would function as hypothesized. Scale optimization allowed the trimming of unnecessary or problematic items from the scales, so the questionnaire could be reduced in length, yet allow the construct to be captured by the retained items. The reduction of questionnaire length was necessary, as five pages of questions and a completion time of 30 minutes was much too long for a field survey to obtain respondent participation in the numbers needed to test the model.

The scales measuring the constructs demonstrated discriminant validity, which is a key criterion to be able to test the proposed model in Structural Equation Modeling. Regression equations using the moderator supported the hypothesized model. Since the pretest was successful the next step in the process was to move on to the development of the main study data collection.

Although the results supported the proposed model, several caveats must be kept in mind. First the pretest sample consisted of 73 respondents. This size allowed the purification of the individual scales and the selection between scales that measured the same construct but did not allow for testing of the structural model. Also, the testing of

the moderator was done with very small group sizes. These limitations or concerns will be discussed and proposed safeguards will be proposed in chapter four, which will discuss the main dissertation study and survey procedures.

CHAPTER FOUR

MAIN DISSERTATION STUDY

As noted in chapter three, the hair salon field sample was successful and this site was used for the main dissertation study. Although the hair salon pretest sample was successful with respect to measurement development and testing of the potential moderator, there were several areas that needed improvement. One area of concern was the small sample sized obtained ($n=73$) in a two month data collection period. This is a problem since the model was to be tested with structural equation modeling (SEM) and in order to have confidence in the results a sample of roughly 200 respondents was needed (Hair et al 1998). Another area of concern was the performance of the some of the measurement scales. While all of the scales had adequate reliabilities and Cronbach alphas, some scales had Average Variance Extracted (AVE) that was below the .50 heuristic. Since the sample size was small for these low performing scales, some “insurance” measurement items were added. Finally, a return of 73 surveys during approximately two months of data collection period breaks down on average to less than one survey obtained per day; this number is entirely too low and slow to complete the study in a reasonable amount of time. Given the above results and concerns, several changes were made in both the survey instrument and its administration. This chapter begins with changes in administration of the survey, and this discussion is followed by changes in the survey instrument.

Survey Administration Changes

This section begins with the proposed changes in data collection procedures. The pretest data collection took longer than expected and did not result in as many

returned surveys as anticipated. Both the author and the participating company acknowledge that data collection needs to be done more efficiently. Several procedural problems were discovered during data collection and are listed below:

1. The survey was long (five pages) and took over 30 minutes to answer.
2. The survey contained over 50 psychological/personality type questions and customers are not used to seeing these on company surveys.
3. No incentive was offered to complete the survey.
4. The cover letter was too formal and technical.
5. No incentive was given for the salons to distribute the questions; when they were busy they tended not to distribute them.
6. Not all employees understood why the questionnaire was being administered or who could participate.
7. Not all salon managers and employees bought into the importance of the survey.

When reviewing the above problems, it is apparent there are two groups, which were vital to the success of the questionnaire - customers and salon employees.

Consequently, procedure changes were implemented for both groups.

The first and perhaps most important change was at the salon level. If the manager and employees do not embrace the research, it takes longer to obtain the respondents needed, and even when customers take the survey, fewer are returned. This problem can be seen in the Sherwood Salon results (refer to Table 2 in Chapter 3). First, the author introduced the new questionnaire and procedures to all of the salon general managers at a special meeting. At this meeting the results of the pretest were reviewed with the managers, demonstrating the type of information obtained and its application to the salon's business strategy. This made the benefits of research participation more salient to the managers. Previously, the author was not involved in the launch of the pretest; the company general manager introduced and distributed the surveys to the salon general managers. In addition, to promote the managers endorsing

the research, all were asked for their input on questions important to them. These questions were added to the survey. The briefing and the additional questions were added to garner the general managers' support, but to be successful, complete employee participation was needed. A brief one page Frequently Asked Questions (FAQ) sheet was prepared to ease the administration (see Appendix B). This FAQ sheet gave employees a brief overview of how to distribute the survey, why it is important to distribute the survey, and the potential reward for distributing the survey. As an incentive to distribute the survey, the salon receptionists (front desk), who have the highest survey distribution and return rate, win a pizza lunch party and gain corporate-wide recognition of their efforts. Competitions have been used between the salons before to bolster other company actions and promotions.

As requested by the company, the author spent time in each salon (twice a week) to assist in data collection. This idea was "pretested" in December and it was discovered the author's presence and distribution of surveys did not increase the survey return rate. The real benefit is after the author's visits employees tended to give out more surveys and be more enthused about the project, which yielded a higher return rate (this can be seen in the results of LSU and Country Club Salons). Finally, the author e-mailed weekly updates to all managers to help sustain the competition and to encourage participation.

The data collection was divided into four time periods of ten days each. Breaking the data collection into time periods allowed for the creation of short-term survey distribution goals for the salons. Additionally, it helped to develop a sense of urgency, as the managers and receptionists knew more surveys will be delivered at the

beginning of each time period. The four time periods will allowed the author a shorter time frame to discover which salons are lagging and take proactive measures.

Several changes to the survey format and administration were made to improve the acceptance and the response rate of the salons' clientele. The first change was in the cover letter of the survey; the author learned that placing time deadlines and requesting an important favor from the respondent speeded the survey's return. Next, the participating company agreed to offer incentives, a raffle for the respondents. The prizes included a hundred dollar gift certificate, a free hair cut and style, a twenty-five dollar gift certificate, and four fifteen dollar gift certificates. The raffle was explained in the cover letter and in a special entry form listing the prizes, which was attached to the survey. Another change is a small token incentive (a peppermint) was attached to the survey; this was tested in December and found to increase the survey return rate. Each salon was provided a clipboard with a pen attached for those customers who wished to complete the survey in the salon.

Summary of Administration Changes

All of the above actions assisted in obtaining a higher and faster return rate. The four ten day blocks of data collection should yield a distribution of 520 surveys. Each salon was responsible for distributing a minimum of 35 surveys each time period. The number of surveys to distribute was determined based on the number needed to perform Structural Equation Modeling and the pretest return rate (37%). If the main study return rate mirrored that of the pretest, the distribution of 520 surveys should have yielded a sample of approximately 195. Given the survey and administration changes mentioned above, a higher response rate was anticipated.

Questionnaire Changes

The main problem in eliciting participation in the study was the length. The questionnaire was long due to redundancy and duplication. Built-in redundancy and duplication of constructs was necessary in the pretest stage to create an accurate and viable main study instrument. The main change to the questionnaire was scale optimization; many of the scales were reduced in size. Listed below in the following sections is a breakdown of the changes in the measurement scales and supporting measures taken based on the pretest results (the final questionnaire and cover letter can be view in Appendix C).

Demographic Changes

A minor change was be made to the demographic portion of the questionnaire. The modification was the alignment of the income categories to those of the Mediamarket Research sample, so the participating company would be able to form comparisons (MRI 1996). The survey's demographic portion plays a minor role in the dissertation research; it was utilized to compare the dissertation sample against a national sample of hair salon patrons. If needed, it could be employed in further validity checks of some scales.

Main Model Construct Changes

The following changes were made based on the pretest and the dissertation committee's discussion. No changes in the measurement of the technical, functional, communal, behavioral intentions, overall service quality, and overall satisfaction were executed for the main study. Items suggested to be dropped in the pretest were retained for the main study, and the order of the scales within the questionnaire was retained.

Affect Changes

The section that measures affect under went several changes. It appeared from results of the pretest that respondents used only the happy portion to express their range of emotions and did not use the sad portion (no range in responses). The analysis also indicated that four of the happy items should be retained to measure the construct, also it appeared that perhaps the scale could be broken down into two three-item factors, therefore all six items were retained. The question format was changed and the Happy and Sad items were aligned be side by side. In the main study, the six Happy items were listed first followed by the six Sad items. The Sad items will be rechecked and if again there is no distribution of responses; it will not be included in the final analysis.

Changes in the Measurement of the Desire for Social Support

Several changes were made in this section of the questionnaire. To recap the analysis section, the CAD scale was dropped and eight items out of twenty in the Revised UCLA Loneliness Scale were to measure this construct. Due to the importance of this construct, the following was done. First, items thirteen and fifteen of the Revised UCLA Loneliness Scale were added to the final questionnaire. Russell, Peplau, and Cutrona (1980) report a four-item scale consisting of items 1, 13, 15, and 18 has a coefficient alpha of .75, and it produced similar results to the twenty item scale. Second, Wilkes' Involvement (social) scale, which is comprised of three items, was added as a potential back up measure for social support's desire (Bruner and Hensel 1996). Wilke reported a composite reliability of .88. A major concern with the Wilkes' scale is the sample from which the scale was developed ranged in age from 69-79. The scale items are listed below.

Table 30-Involvement (social) scale-answered on a 7-point strong agree/disagree continuum

1. I like to be around and involve myself with other people.
2. Taking part in social and community activities is not very important to me. (reverse)
3. I enjoy having people around.

In addition, the four detached items from the CAD scale that could be reworded into positive items were retained and used in conjunction with Wilkes' scale as a measure of this construct. Listed below are the reworded detached items, which were included in the main study survey.

Table 31-Reversed Detached Items Added to the Survey

1. Having emotional ties with other is important.
2. Planning to get along with others is worthwhile.
3. Working with others is important to me.
4. I care what others think of me.

These items as well as those from Wilkes' (1992) are answered using seven response categories from strongly disagree to strongly agree. These items set forth in Table 31 appear to have "face validity" in capturing one's desire for social support. These additions and changes could provide a potential back up for this measure, should the main study's eight items from the Revised UCLA Loneliness Scale not remain stable.

Non model construct related changes

The pretest questionnaire contained the Crowne Marlowe Social Desirability Scale. This scale could not be analyzed, as the results had negative factor loadings. The author checked for coding errors, and none were found. This scale is not vital to the integrity of the research. It was included because respondents may have been biased to answer the personality questions falsely. The scale can be deleted without negative

consequences for several reasons. First, in marketing the social desirability bias has been found to be more prevalent in laboratory settings (experiments) than in field research (King, Bruner, and Hensel 1992). Second, the questionnaire is anonymous and self-administered, which has been found to reduce the potential of social desirability bias (Sudman, Sudman, and Bradburn 1974). Third, the main scale employed to measure this construct is the Revised UCLA Loneliness Scale and Russel, Peplau, and Cutrona (1980) concluded responses were not confounded by social desirability.

The incentive for both salons and potential respondents combined with a shorter questionnaire and a more structured, intense, distribution schedule should create a quicker return and a higher return percentage. The addition of a new scale and extra items to measure the social support desire ensured this construct would captured, so its hypothesized moderation could be tested. As stated earlier, the pretest results were acceptable and changes should strengthen the final data collection.

Main Study Data Collection Results

As stated above survey distribution was broken down into four time periods. Data collection began January 28, 1999, at which time each participating salon received 35 surveys. The general manager or receptionists contacted the author each time a salon had five surveys remaining to distribute. Survey distribution ceased March 1, 1999. The only change from the proposed administration of the surveys was the four time periods for survey distribution averaged seven days instead of the originally proposed ten-day period. For each time period the raffle deadline was adjusted to a later date. Although the LSU salon had very high survey distribution rates in the

beginning, the distribution equalized out prior to the end of the collection. Table 32 breaks down the distribution and return of surveys by salon.

Table 32-Survey Distribution and Return Rate

Salon	Number Given to Distribute	Number not distributed	Number Distributed	Number Returned	Percent Return Rate
LSU	160	6	154	64	42%
Country Club	140	17	123	61	50%
Sherwood	150	28	122	57	47%
Jefferson	<u>150</u>	<u>56</u>	<u>94</u>	<u>46</u>	<u>49%</u>
Overall	600	107	493	228	46%
Totals					

Profile of Respondents

The respondent profile for the main study was very similar to the pretest respondent. The split between males and female respondents was 15.6% to 84.4% respectively. In the pretest the split was 16.2% males to 83.8% females. This breakdown of gender is in line with the 1996 Mediamark Research Inc. (MRI) report, which stated that 15.3% of beauty salon customers nationwide are male, while 84.7% are female (MRI 1996). Even though the majority of respondents is female, the sample is representative of the population with respect to gender. The average age of a respondent was 32.1 years and ranged from 14 to 74 years old. Once again, this result is similar to the pretest sample, which also was skewed towards a younger age group than the MRI's (1996) national figures. As stated in the pretest results, one factor that possibly contributed to this result was one salon's location adjacent to Louisiana State University. The second factor leading to a younger respondent average age may have been the raffle. Younger patrons may have perceived a greater potential benefit, thus returned the surveys at a higher rate. Of the respondents 41% percent had had some

college education, this figure was much higher than the pretest but could have been driven by the younger respondent profile and/or the higher response level from the salon located next to the university. The some college education category represented the largest response group for the main study, pretest, and for the MRI survey. Income distribution between the main study sample and the MRI sample was similar. Although there are some differences in the respondent profile from the pretest and the main study, the respondent profile still appears to be a fairly representative sample of the population that patronizes beauty salons.

CHAPTER FIVE

MAIN DISSERTATION STUDY DATA ANALYSIS

Data Analysis

The results of the main study's data analysis of the can be broken into three components. These components are scale purification, the structural model development, and the test of moderation by the desire for social support on the paths between the communal component and affect and the functional component and affect.

Scale Purification

Although the pretest was designed to refine and to adapt already existing scales for the main study, scale purification was repeated due to the small pretest sample size and problematic scale results with regard to measuring affect and the desire for social support. The scales were analyzed for internal consistency and reliability, then problematic items were removed to improve the scales' internal consistencies and reliabilities. Next, the scales were entered into confirmatory factor analysis to assess dimensionality and discriminant validity.

Scale Selection for Desire for Social Support

In addition to the above steps, further analysis was preformed for the scales measuring the desire for social support. The scales needed to be reliable, internally consistent, and to possess a range of responses. The range in response was necessary to split the sample for the subgroup analysis. The initial step was to calculate the reliabilities for each of the four scales (Revised UCLA, UCLA-short version, Wilkes' Social Involvement, and Positively worded detached items). Cronbach's alpha is the

most widely used measure (Bearden, Netemeyer, and Mobley 1993). As can be seen in Table 33, the UCLA and Wilkes' scales had acceptable reliability (internal consistency). Nunnally (1979) suggests a score of .70 as a rule of thumb for acceptable internal consistency.

Table 33-Internal Consistency of Scales Measuring Desire for Social Support

Scale Name	Number of Items	Cronbach's Alpha	Acceptable Reliability
Revised UCLA	6 items	.73	Yes
UCLA-short version	4 items	.55	No
Wilkes' Social Involvement	3 items	.77	Yes
Positively worded detached items	4 items	.10	No

The next step was to ascertain the distribution of scores for the six-item UCLA scale and Wilkes' social involvement scale. A uniform or bi-polar distribution was desired so there would be a significant difference in the groups' desire for social support. A review of each scale's histogram and numeric distribution listing checked the scale's distribution. Although the Wilkes' scale items were measured on a seven point scale (with low scores indicating a desire for lack of social involvement and high scores indicating a desire for social involvement), only 14.6% of the respondents scored five or below. A visual review of the histogram revealed a negatively skewed distribution that was almost leptokurtic. The UCLA scale performed better, in spite of a less than ideal distribution. A review of the UCLA histogram revealed a fairly normal distribution. The UCLA scale was measured on a four-point scale with 117 respondents scoring an average of two or less, and 101 respondents scoring an average of 2.17 or

more. The mean score was 1.97. A review of the frequencies revealed the score of 2.00 (37 respondents) had the highest number of responses followed by 2.17 (33 respondents). When these cases were removed, a bi-modal distribution was created. A means test was done for the three groups, high, neutral, and low. The test found there were significant difference between the groups. Group one (does not desire social support) had a mean of 1.52, group two (neutral group) had a mean of 2.08, and group three (desires social support) had a mean of 2.62 ($F=339.438$, $p=.000$). Theoretically, the two groups should behave differently in their need for social support. After reviewing these items, Wilkes' scale was dropped and the UCLA scale was retained.

Development of the Measurement Model

A measurement model was developed, then the structural model was generated and evaluated. This two-step approach facilitated the creation of a sound measurement model before estimating the structural model (Anderson and Gerbing 1988). When testing for moderation, the establishment of a sound measurement model is vital before assessing any structural relationship. The development of a sound measurement model simplified removal and reduction of potential confounds before testing moderation in the structural model.

A covariance matrix was created for the 43 items, which represented the model's constructs. The covariance matrix was imported into LISREL VIII (Jöreskog and Sörbom 1993) to perform confirmatory factor analysis on the six constructs. The goal of the analysis was to assess the scales' dimensionality and discriminant validity (DeVellis 1991). The following iterative confirmatory procedures were employed to develop the measurement model. The first step was to perform a confirmatory factor

analysis with all scale items included. The analysis' results were reviewed for items with non-significant t-values and none were found.

The next step was to look for problematic items; one indication, an item should be deleted, was a high standardized residual (>2.57) (Bagozzi and Yi 1988; DeVillis 1991). When reviewing the individual items that had offending standardized residuals, the "face validity" of the items was examined to determine which item was dropped. This process continued until all items had standardized residuals of less than 2.57 or the item's removal would have detracted from the ability of the scale to capture the construct.

Measurement Model Results

The above procedures were adopted in the determination of the final six-factor measurement model with 23 items. After confirmatory factor analysis, technical, functional, communal, quality, and affect was each measured by four items. Behavior intentions were measured by three items after confirmatory factor analysis. The large number of items dropped (20) was not unexpected, since the pre-test indicated many items should have been dropped but were retained due to small sample size. (Table 34 compares the original and final models). Several different fit statistics were used to judge the final measurement model's adequacy. The first statistic listed is chi-square, and it is designed to assess the difference between observed and estimated matrices. However, the chi-square statistic tends to be overly sensitive to sample size, thus leading to the model's rejection. Samples of over 200 respondents tend to indicate significant differences (Hu and Bentler 1995; Hair et al 1998). This study had a sample size of 227, therefore reducing the reliability of the chi-square difference test as an

indicator of fit. Consequently, a better measure needed to be employed. The root mean square error of approximation (RMSEA) is one measure that attempts to correct the chi-square sensitivity to sample size. The final model had a root mean square error of approximation (RMSEA) of .07, which is adequate; as values between .05 to .08 are acceptable (Rigdon 1996). The goodness of fit (GFI) was .85, where a score of one indicates perfect fit. The adjusted goodness of fit (AGFI) was .81. The nonnormed fit index (NNFI), also called the Tucker-Lewis Index (TLI), and the comparative fit index (CFI) had values of .92 and .93 respectively, values of .90 and greater are recommended for good model fit. A review of the fit indices indicated that the 23 items final measurement model had acceptable fit (Hu and Bentler 1995).

Table 34-Measurement Model Fit Statistics

Model	X²	Df	RMSEA	GFI	AGFI	NNFI	CFI
Original Model 43 items	1182.61	512 p=0.0	.076	.77	.73	.86	.87
Final Model 23 items	456.39	215 p=0.0	.070	.85	.81	.92	.93

Discriminant Validity

Besides an adequate fit, all constructs in the measurement model must demonstrate discriminant validity. The most stringent test for discriminant validity is when the average of the AVE (average variance extracted) between a pair of constructs is greater than the squared correlation (see Table 35 for the model correlation matrix) between the two constructs (Bagozzi and Yi 1988). All constructs demonstrated discriminant validity (see table 36).

Internal Consistency

Once discriminant validity was determined, the measures were analyzed for internal consistency. Cronbach's alpha is the most widely used test for internal consistency. A suggested minimum for this measure is .70 (Nunnally 1979). Peterson (1994) states that the average coefficient alpha used in marketing research is .77.

Table 35-Construct Correlation Matrix

	Affect	B.I.	Functional	Communal	Quality	Technical	D.S.S.
Affect	1.00						
B.I.	.642	1.00					
Functional	.523	.638	1.00				
Communal	.429	.388	.256	1.00			
Quality	.640	.682	.604	.316	1.00		
Technical	.516	.571	.599	.179	.53	1.00	
D.S.S.	-.314	-.125	-.137	-.098	-.129	-.207	1.00

B.I.=Behavior Intentions, D.S.S.=Desire for Social Support

Table 36-Results of the Test for Discriminant Validity Final Measurement Model

Constructs	Average of AVE	Squared Correlations	Discriminant Validity
Technical and Functional	.59	.36	Yes
Technical and Communal	.48	.03	Yes
Technical and Quality	.49	.28	Yes
Technical and Behavior Intentions	.68	.33	Yes
Technical and Affect	.56	.27	Yes
Functional and Communal	.56	.07	Yes
Functional and Affect	.65	.27	Yes
Functional and Quality	.58	.37	Yes
Functional and Behavior Intentions	.77	.41	Yes
Communal and Affect	.54	.18	Yes
Communal and Quality	.47	.10	Yes
Communal and Behavior Intentions	.67	.15	Yes
Affect and Quality	.55	.41	Yes
Affect and Behavior Intentions	.74	.41	Yes
Quality and Behavior Intentions	.67	.47	Yes

Another test employed is the composite alpha measure. The last test used to assess the measures was the average variance extracted (AVE). The average variance extracted should be .50 or greater (Fornell and Larcker 1981). Listed in Table 37 are the

Cronbach's alphas, composite alphas, and the average variance extracted for each of the six constructs (individual items loadings on each factor can be found in Appendix D).

The measures demonstrated internally consistency on all three criteria, except for the communal measure and overall quality.

Table 37-Measures of Internal Consistency

Construct	Number of Items	Cronbach's Alpha	Composite Alpha	Average Variance Extracted
Technical	4	.85	.87	.50
Functional	4	.89	.89	.67
Communal	4	.76	.75	.45
Affect	4	.85	.86	.62
Quality	4	.77	.79	.48
Behavior Intentions	3	.96	.95	.86

Communal measure was close to the .77 heuristic (.76), since the scale was comprised of only four items and Cronbach's alpha is sensitive to total items; this result was judged adequate. The average variance extracted was somewhat low; therefore, the item-to-total correlations were reviewed. Bearden, Netemeyer, and Mobely (1993) suggest as a criterion the item-to-total correlations should not fall below .50. The communal scale had item-to-total correlations of .48, .51, .59, and .67. After reviewing all measures, the communal factor was deemed adequate; however, it was somewhat weak in internal consistency. Overall service quality had an average variance extracted below the .50 heuristic. The item-to-total correlations for overall service quality were .58, .63, .58, and .58. All of these meet or pass the .50 criterion. Upon review of all criteria, the overall service quality measure appeared to demonstrate adequate internal consistency.

Review of the measurement model fit statistics, discriminant validity test, and internal consistency criteria showed the measurement model to be adequate. Once the measurement model was deemed adequate, the measurement model was fixed and the structural model was estimated.

Development of the Structural Model

Following the two-step approach, a structural model was specified using the six factors developed in the measurement model stage. The structural model's development allowed the examination of the hypothesized relationships among the constructs. After the structural model was estimated, the structural model fit was analyzed. The structural model fit statistics indicated acceptable model fit. The RMSEA (root means square error of approximation) was .073, and scores .05 and .08 are acceptable (Rigdon 1996). The goodness of fit index was .84; this fit is measured on a 0 to 1 scale with higher numbers indicating better fit. No absolute acceptability level has been established (Hair et al 1998). The adjusted goodness of fit index (AGFI) is an extension of the GFI measure and takes into account the number degrees of freedom used to achieve the level of fit and values greater than .90 are desired (Hair et al 1998). The model had an AGFI of .80, which was below the recommended level, but it was still adequate. AGFI has been criticized as being sensitive to sampling characteristics (Hoyle and Panter 1994), consequently more credence was given to the nonnormed fit index (NNFI) and the comparative fit index (CFI), which are viewed as more robust to sampling characteristics. Recommended levels of NNFI and CFI are .90 and above. The model had values of .91 and .92, respectively, thus the values of the

indices indicated a model with an acceptable fit. Hypothesis one (γ_{21}), which indicated the technical component had a direct effect on service quality, was supported.

Table 38-Structural Model Fit Statistics

Fit Statistics	X ²	Df	RMSEA	GFI	AGFI	NNFI	CFI
	492.85	222 (p=0.0)	.073	.84	.80	.91	.92

Hypotheses two and three (γ_{12} , γ_{13}), which indicated paths from each component-functional and communal into affect, were supported. Hypothesis four (β_{21}), which indicated a path from affect into overall service quality, was supported. Hypothesis five (β_{32}), which indicated a path from overall service quality into behavior intentions, was supported. Table 39 lists the unstandardized path estimates, t-values, and the completely standardized path estimates for the structural model.

Table 39-Path estimates for the Structural Model

Hypothesis	Path	T-values for Unstandardized Path Estimates	Completely Standardized path estimates
H ₁	Technical→Service Quality (γ_{21})	(t=5.13)	.40
H ₂	Functional→Affect (γ_{12})	(t=7.06)	.50
H ₃	Communal→Affect (γ_{13})	(t=6.02)	.44
H ₄	Affect→Service Quality (β_{21})	(t=6.01)	.65
H ₅	Service Quality→ Behavior Intention (β_{32})	(t=6.21)	.82
Endogenous Construct		Explained Variance	
Affect		.59	
Service Quality		.83	
Behavioral Intentions		.67	

To test hypotheses 6_a and 6_b, subgroup analysis was done.

Subgroup Analysis

In order to test whether the desire for social support moderates the path between communal behaviors and affect in Structural Equation Modeling (SEM), two group (subgroup) analyses were employed. The two groups were created using the six-item UCLA scale. The subjects, who 1.83 or less, were placed in a group that theoretically would not desire social support (80 respondents), and those subjects, who scored 2.20 or higher, were placed in a group that theoretically would desire social support (68 respondents). Respondents, who scored 2.00 and 2.17, had to be removed from the sample in order to create the bi-modal distribution (70 respondents). The criteria for splitting the group were discussed earlier in this chapter in the section on scale selection for desire for social support.

Invariance Testing

Before the structural models could be estimated for subgroup moderation analysis, one must determine if the measurement model is invariant across the groups. If the model is not invariant across the groups, then one can not have confidence in moderation analysis as the variation may be due to measurement differences across the groups. The test for measurement model invariance across groups is assessed using the chi-square statistic. Another indication of invariance is the fit of the models. First, the exogenous variables are tested for invariance (LX=IN), if there is no statistical significance, then the error terms are checked (TD=IN). The models must pass the first test, and it is desirable but not necessary to pass the second. If the second test is not passed, model fit should be reviewed to ascertain whether a large change in fit occurred. To determine if a large change in fit occurred, RMSEA, NNFI, and CFI statistics were

reviewed. There was negligible change in the fit statistics. Table 40 lists the chi-square test results and the comparison of fit statistics. From a review of these results, it can be assumed that the measures are invariant across groups and the subgroup analysis for moderation can be done.

Table 40-Invariance Test Results

Model Tested	Chi-square Degrees freedom	Difference in Chi-square	Significant Difference	RMSEA	NNFI	CFI
PS	775.94 with 430df			.10	.85	.87
LX=IN	796.59 with 447 df	20.65 and 17 df	No p < .25			
TD=IN	845.67 with 470 df	69.73 with 40 df—yes	Yes p <.005	.10	.85	.86

PS=(Phi matrix) correlation among exogenous constructs

LX=IN the corresponding loadings of exogenous indicators are invariant

TD=IN the prediction error for the exogenous construct indicators is invariant

Subgroup model testing

The subgroup models were first estimated using the individual items for each construct then analyzing the results. As a comparison, the subgroup models were created using partial aggregation. Partial aggregation is when one sums the items of a construct to form a single aggregated scale. The error variance is set at 1 minus the reliability, and the model is run as usual (Osterhus 1997). Osterhus (1997) employed aggregated scales to reduce his model's complexity from 22 to items to 8 aggregated items (each scale became a single item construct). Subgroup analysis with partial aggregation was chosen to create the split of high desire for social support versus low desire for social support, and a total of 70 respondents were removed from the sample (228-70=158). The utilization of partial aggregation reduced the author's model from

23 items to 6 aggregated items (6 one item constructs), hopefully reducing the impact of the small sample sizes on the structural model estimation and the test for moderation.

To test for the moderation effect, the first step was estimating the two structural models in a stacked analysis. Stacked analysis creates an overall model fit. This baseline fit can then be a reference point to compare the fit statistics for the models, when the moderation is tested. The chi-square statistic is the fit index that is used across the models as the standard of comparison. The base-line model also develops general path estimates that can be compared to the moderated paths. Once the baseline model was created, the stacked structural models were estimated by constraining one of the hypothesized-moderated paths. By equalizing the hypothesized-moderated path in both models, the constraint was operationalized. The potentially moderated paths were individually constrained, so if a significance difference was found, it could be determined which of the hypothesized-moderated paths was significant.

Subgroup Test for Moderation

The baseline-stacked model was estimated. The resulting model had a chi-square of 679.06 with 450 degrees of freedom. The stacked model was re-estimated with the path between functional and affect constrained (γ_{12}) to be equal across the two models. The resulting stacked model had a chi-square of 680.32 with 451 degrees of freedom. The constraining of the path lead to the following path estimates for the group not desiring social support $\gamma_{12} = .49$ and $\gamma_{13} = .35$ (the path between communal and affect). For the group desiring social support, the following path estimates were obtained $\gamma_{12} = .49$ and $\gamma_{13} = .54$. The difference in the path estimates depended on the desire for social support, but a significant difference in chi-square must be obtained to

support the moderations. The difference between 680.32 with 451 degrees of freedom and 679.06 with 452 degrees of freedom was 1.26 with one degree of freedom, and the chi-square test was non-significant (at the .05 level) and did not support the moderation hypothesis (H6_b). The same procedure was followed for constraining path γ_{13} (communal to affect). The chi-square was 681.73 with 451 degrees of freedom. The following path estimates were obtained from the model of those not desiring social support, $\gamma_{12} = .50$ and $\gamma_{13} = .44$. The path estimates were obtained from the model of those not desiring social support, $\gamma_{12} = .46$ and $\gamma_{13} = .44$. Once again, changes were seen in the paths as hypothesized but the chi-square test was not significant at the .05 significance level (2.67 with 1 degree of freedom). However, it was close to being significant at the .10 level, since 2.706 with 1 degree of freedom was significant. Table 41 has a summary of the findings of the subgroup analysis.

Table 41-Summary of Subgroup Analysis

Model	Chi-square	Degrees Freedom	Significant change in chi-square	Path Estimates
Base	679.06	450		
Equate γ_{12}	680.32	451	No	
			(1.26 , d.f. 1)	
Low desire social support				$\gamma_{12} = .49$
				$\gamma_{13} = .35$
High desire social support				$\gamma_{12} = .49$
				$\gamma_{13} = .54$
Equate γ_{13}	681.73	451	No	
			(2.67, d.f. 1)	
Low desire social support				$\gamma_{12} = .50$
				$\gamma_{13} = .44$
High desire social support				$\gamma_{12} = .46$
				$\gamma_{13} = .44$

Partially aggregated scales were used to estimate the baseline and subgroup models to test for the moderation effect. It was hoped a simplified model would allow the moderation effect to be found. The results of the aggregated models were very similar to the non-aggregated models and neither of the proposed moderations were significant.

In all subgroup models, the changes in the paths were as hypothesized. Additionally, it appeared the change in γ_{13} (the path between communal and affect) had a fairly substantial difference. The question became one of is the moderation non-significant or is there some problem that is confounding the results. One potential area of concern was the sample size for the two groups (not desiring social support, $n=80$ and those desiring social support, $n=68$). Chou and Bentler (1995) noted the problem of sample size and the reliability of structural equation modeling results. Hu and Bentler (1995) state sample size is a crucial determining factor, if model test statistics can be relied upon. They continue that with smaller sample sizes, there may not be enough power to detect differences between models. Hair et al (1998) recommend a sample size of 200. In fact, it has been recommended regardless of the original sample size to estimate the model with the sample size set at 200. This is the critical sample size for the method (Hair et al 1995). Given the above recommendations, it appeared sample size maybe problematic in testing the hypothesized moderation. Following the recommendation that a sample size of 200 is the critical size for reliable results; the test for moderation was rerun with a sample size of 100 indicated for the two groups. This changed the group size for those not desiring social support from 80 to 100 (increase of

20) and changed the group size for those desiring social support from 68 to 100 (increase of 32).

When the test for moderation was re-estimated with a total sample size of 200 (100 per each group), the following results were obtained. The baseline model had a chi-square of 925.54 with 450 degrees of freedom. The constrained model for γ_{12} had a chi-square value of 927.32 with 451 degrees of freedom. The difference in chi-square between the two models is 1.78 with 1 degree of freedom. Even with the increase of sample size, the interaction was not significant. The constrained model for γ_{13} had a chi-square value of 929.14 with 451 degrees of freedom. The difference in chi-square was 3.6 with 1 degree of freedom. The moderation test was significant at the $p \leq .10$ (2.706) and it approached significance at the .05 level (3.841). It appeared from the above results that the moderation by desire for social support on the path between the communal component and affect was present, but due to sample size problems this was not found.

Another potential problem, which may be hindering the test of the moderation effect, is structural equation modeling the method employed. Jaccard, Turrisi, and Wan (1990) state in a review of seven major journals (American Journal of Sociology, American Sociological Review, Social Forces, Journal of Personality and Social Psychology, Journal of Applied Social Psychology, Journal of Experimental Social Psychology, Journal of Applied Psychology) from 1985-1990 yielded 116 articles using structural equation modeling but only eight included interaction effects. Osterhus (1997) chose partial aggregation to test for his hypothesized moderation effect. He stated several authors (Ping 1995; Hayduk 1991; Bagozzi and Heatherton 1994) posited

different methods to test for moderation in structural equation modeling. Jaccard and Wan (1996) present a variation for testing moderation in structural equation modeling, but they caution that although the methods put forth in their monograph have potential, much work is still to be done in their applicability.

Thus, given the sample size issue and the divergent opinion on testing methods for moderation effects in structural equation modeling, the moderation was tested with moderated multiple regression.

Moderated Multiple Regression

Moderated multiple regression was performed to examine the impact of the moderator variable (desire for social support) on the relationship between the communal component and the functional component and affect. The moderation hypothesis is supported if the interaction term is significant (Bedeian and Mossholder 1994).

Another criterion to judge the significance of the moderation is to determine whether the change in R^2 is significant (Hair et al 1998). The following method was employed to test for moderation. First, the main effects (either functional or communal scale plus the desire for social support scale) were entered into the regression equation as a block. Next, the interaction term was entered into the equation as the next block. This method provides an F test for a significant change in R^2 between the models. The above criteria were employed to analyze both hypothesized-moderated paths in the model. The interaction term ($t=2.088$, $p=.038$) and the change in R^2 ($F=.038$) were significant in respect to the moderated path between communal and affect by the desire for social support. Neither the interaction term nor the change in R^2 was significant in respect to

the moderated path between the functional and affect by the desire for social support
(see Table 41 for the regression results).

Table 42-Moderated Multiple Regression Results for Communal to Affect

Model	R square Change	F Change	Degrees of freedom 1	Degrees of freedom 2	Significant F Change
1	.300	30.673	1	143	.000
2 (interaction)	.020	4.252	1	142	.041
	B	Std. Error	Beta	t	Significance
Constant	4.678	.646		7.244	.000
Communal	-2.69E-02	.224	-.027	-.120	.905
Desire Social Support	-1.107	.308	-.672	-3.591	.000
Interaction	.226	.110	.562	2.062	.041

CHAPTER SIX

DISCUSSION

This chapter will present and review the results from the main study. A discussion of the research conclusions and managerial implications of the research will follow. Next, limitations of the present research and future research studies to extend this research will be addressed. The chapter will conclude with a brief summary.

Review of Main Study Results

The model tested in this dissertation explored the contribution of the technical, functional, and communal behaviors to a consumer's overall judgement of service quality. The dissertation used social exchange theory as the overarching theory to explain the addition of communal behaviors to the service. Social support theory provided the rationale for consumer's desiring and valuing communal behaviors in a service encounter. A field study was conducted with the cooperation of a local beauty salon company (four salons participated).

The unique feature of this model from other service quality studies was the inclusion of the communal component. This addition of communal behaviors led to the following research question: Does the addition of communal behaviors by the service provider during the service encounter contribute to the overall evaluation of service quality? Several authors have posited the impact of these behaviors on consumer's perceptions of service quality. To date, none have explored the contribution of communal behaviors simultaneously with contribution of technical and functional components, or how the addition of these behaviors impacted service quality (Adelman, Ahuvia, and Goodwin 1994; Goodwin and Gremler 1996; Ahuvia, Adelman, and

Schoroeder 1991). This research postulated that communal behaviors increased affect leading to increased service quality judgements. It was found the incorporation of communal behaviors to the service encounter does lead to increased affect (γ_{13}). From the results of this study, it appeared communal behaviors contribute to positive affect for consumers, and this positive affect led to an increase in the judgment service quality. In earlier literature, service quality has been linked to behavioral intentions (Zeithaml, Berry, and Parasuraman 1996).

Another aim was to simultaneously examine the contribution of the three service components (technical, functional, and communal) to the over all judgement of service quality. The functional and communal components (service encounter/process components) were hypothesized (H_2 and H_3) to impact service quality via affect (β_{21}), while the technical component (core component) was hypothesized (H_1) to have a direct effect on the judgement of service quality (γ_{21}). These hypothesized paths were supported in the model, and their contributions were discovered to be approximately equal. This was interesting because it appeared to provide support to the literature, which postulated that customer satisfaction is often influenced by the interpersonal interaction's quality (Bitner, Booms, Mohr 1994; Czepiel, Solomon, and Suprenant 1985), instead of the view that the service encounter only adds or subtracts from the service (Keaveny 1995).

Besides examining the potential contribution of communal behaviors to the overall service quality judgement, the desire for social support was hypothesized to moderate the communal component's path to affect (H_{6a}). This was supported in the moderated regression. The hypothesized moderation by the desire for social support on

the path between the functional component and affect (H_{6b}) was not supported. It appeared that whether or not a consumer desires the addition of communal behaviors his/her expectations concerning the delivery (functional component) of the technical component does not vary. Affect was found to influence directly service quality thus H₄ was supported. H₅ stated as overall service quality increases, consumers should have increased positive intentions; this link between service quality and behavioral intentions was supported.

In summary, the structural model supported five of the hypotheses. H_{6a} was supported in moderated multiple regression, and the moderation effect was apparent but not supported by the structural model's sample. H_{6b} was neither supported in the moderated multiple regression nor in the structural model (Table 42 lists the dissertation hypotheses and whether they were supported).

Table 43-Review of Hypothesis Results

HYPOTHESIS	SUPPORTED-TEST USED
H1: During the service encounter, the better the service provider's performance on the technical component the higher the overall judgement of service quality.	Yes-structural model
H2: During the service encounter, the better the service provider's performance on the functional component the higher the level affect.	Yes-structural model
H3: During the service encounter, the more communal behaviors offered by the service provider the higher the overall level of affect.	Yes-structural model
H4: Higher levels of positive affect will lead to an increase in the overall judgement of service quality.	Yes-structural model
H5: As the overall judgement of service quality increases, consumers should have increased positive behavioral intentions.	Yes-structural model
H6a: The greater the desire for social support the stronger the relationship between the communal component and affect.	Yes -moderated multiple regression No-structural model
H6b: The greater the desire for social support the weaker the relationship between the functional component and affect.	No-structural model and moderated multiple regression

Research Conclusions and Managerial Implications

Price, Arnould, and Deibler (1995) theorized consumers enter service encounters for the technical benefit and emotional benefits. It appeared that the model's test results supported the dual reason for entering a service encounter. The technical component did play a direct role in the creation of the impression of service quality. Yet, the model supported the belief that the service encounter plays a vital part in creating overall quality, and the statistically significant path from affect to service quality (.65) provided empirical evidence.

More important, this research posited the type of relationship the consumer desired with the service provided would moderate the path between communal behaviors and affect (H6_b). This was an important component of the research, as it addressed the issue of the amount of a non-service related relationship the consumer desires to have with the service provider (MSI 1998). The results of the moderated regression supported this hypothesis. Those consumers desiring social support have higher levels of affect, when they receive communal behaviors. This finding was important as it provided an opportunity for service providers to create a unique competitive advantage by providing these behaviors.

The ability to create a difference with a non-service element will allow service providers to develop an advantage unique to their firm. Several authors in the marketing literature have asserted it could be possible to utilize employees as a competitive weapon to distinguish services via the service encounter (Bitran and Hoech 1990, Hunt and Morgan 1995). As stated earlier, Goodwin and Gremler (1996) reported one subject in their study declared she would have a hard time switching hair stylist because of the communal connection (she knows me, we keep caught-up each

other's lives...), even though she found another stylist, who did a good job of cutting hair (technical component). Barney (1991) maintains a sustainable competitive resource must be valuable, rare, imperfectly imitable, and non-substitutable. For those customers desiring social support, the provision of communal behaviors and the resulting affective response of integration and friendship would create a sustainable competitive advantage. This advantage would be created by the relationship that was formed. Once the relationship is established, it would be difficult for another firm to imitate it (i.e., she knows me, we catch-up on each other's lives...). Gwinner, Gremler and Bitner (1998) state one reason consumers remain loyal to service providers is to gain these relational benefits.

The current research's results suggested some consumers enter into the service encounter looking for these benefits, and, if found, they intended to continue the relationship. Bendapudi and Berry (1997) stated it is important to understand why consumers are receptive to relationships with service providers. In this article, they stated both sides' desire for a relationship must be reviewed. This study viewed both sides and it analyzed those, who did and did not desire social support. For consumers desiring social support, attainment of these behaviors during a service encounter may be one such reason for maintaining the relationship. Boundary open transactions are those that have a feeling of friendship and move the encounter from transactional to social (Price, Arnould, and Tierny 1995). The results seemed to suggest boundary open transactions could occur in service encounters of a short duration.

Another important result was the functional component (path estimate .50) and the communal component (path estimate .44) contribute almost equally to the consumer's affect level in services, which are high in personalization and high in customer employee contact. This result was interesting in that it indicates that communal behaviors add to the consumer level of affect, which leads to increased levels of service quality judgements even for those consumers, who do not desire social

support. Affect (emotion) played a significant role in the development of service quality judgements. It appeared the communal and function components play almost equal parts in determining affect, and are instrumental in determining service quality judgements.

Limitations and Future Research

One of the criticisms of service quality research is the results are only applicable to the industry where the research occurred (Babakus and Boller 1992, Oliver 1993). Using Bowen's taxonomy, this research attempted to expand the generalizability of the results (Bowen, 1990). Thus, this research may be generalizable to those services with a high degree of interpersonal contact between the service provider and the customer. Examples of potential services these findings should be transferable to are real estate (real estate agents), health care (dental hygienists, nurses, lab technicians) banking/financial services (brokers, bank customer service representatives, loan officers), airlines (flight attendants), and veterinarians. While the present research did not use these service encounter domains, its context is one that has fundamental attributes shared by the services just listed. Although this study's findings are posited to be generalizable to other services, this was not empirically tested. In future research, the author plans to test the model with other samples taken from the list above.

For a firm to create and exploit the competitive advantage created by adding communal behaviors to its service encounter, it must be able to identify which consumers/clients desire these behaviors. This research used a psychological scale to divide respondents into two groups, those desiring social support and those not desiring social support behaviors. The psychological scale was chosen, as it is a method employed in social psychology to analysis network density and to determine the level of

social support in one's life. Those individuals who score low on these network density or loneliness scales, are deemed to be in need of or would benefit from socially supportive behaviors (Jones 1981, Nava and Bailey 1991). These scales measure perceptions of support networks available, since loneliness (or desire for social support) is not always due to the lack of social networks, but rather it is due to the person's perception and evaluation (Jones, 1981). The use of psychological scales to determine customers, who would desire these behaviors, is not a feasible method for service providers. The author plans to explore whether demographic characteristics might be indicators of customers, who would desire social support. The marketing literature suggests certain life events and demographic traits might be indicators. Gender, age, divorce, death in the family, major illness, and relocation to name a few have been sited as potential indicators of desire for social support (Inglehart 1990; Adelman and Ahuvia 1991; Adelman, Ahuvia, and Goodwin 1994; Gentry and Goodwin 1995). Data on these demographic traits was collected, and the author's future research plans include investigating the supposition that these traits could be used as reliable indicators of the desire for social support.

Two potential limitations in the research relate to the sample obtained. One limitation is the skewed gender profile (84% female, though this was representative of the population studied). This is an area of concern because some literature suggests females have a greater desire for social support. This skewed profile did not appear to be a problem in the author's research. Since the group not desiring social support was comprised of 8.9 percent males, cross tab analysis was done and no significant difference was found between male and female respondents in the low desire for social

support (Chi-square = 3.405, degrees freedom=6, p=.749). The group desiring social support was comprised of 16.2 percent males. Cross tab analysis was done for this group and no significant difference was found between male and female respondents (Chi-square = 3.505, degrees of freedom =8, p=.899). Although the gender does not appear to be a factor in the results, gender distribution is an area of future concern. The author would like to repeat the study in an industry, which has a more equal gender distribution in its customer base.

The other area of concern with the sample pertains to the sample size problem. Sample size became an issue when the sample was divided into groups for the moderation test. These results seemed to show a method less sensitive or demanding of a large sample size should be used for exploring the issue of moderation. Another limitation of the model related to sample size and the method employed (structural equation modeling) is the study did not explore the effect of differing levels of social support and its impact on the level of affect. In order to have answered this question in the current research, the sample would have had to been split in four groups, but this was not possible due to the resulting small sample size for each group. In the future, it seems worthwhile to examine the effects of differing levels of communal behaviors offered and the consumer's resulting level of affect. Potentially, this research would create a clearer "blueprint" to firms wishing to include these behaviors in its service offerings.

Another area of concern is the scales used to measure desire for social support and communal behaviors. Established scales were used in this research. The scales performed adequately, but there was room for improvement. With respect to the

measurement of the desire for social support, a total of five scales were tested in an attempt to capture this construct. For the pretest, the Revised UCLA scale and the CAD scale were employed, and upon review of the results the CAD scale was dropped. In the main study, the Revised UCLA scale and three other scales were employed in an attempt to capture this construct (Wilkes' Social Involvement, UCLA-four item, and positively worded items from the CAD scale). From the main study result's analysis, the Revised UCLA scale was selected. The Revised UCLA scale's performance was adequate, but its use resulted in the loss of seventy responses to obtain a clear distinction in response categories. It looked as if the results of the UCLA scale did manage to capture at least part of the construct, but the research would be strengthened if a better measure could be developed.

No reliable scale has been developed to measure socially supportive behaviors (communal behaviors) in services. Several different scales were developed in different research fields, moreover these differences are related to differing definitions of social support (Brandt and Weinert 1981). The Inventory of Socially Supportive Behaviors (ISSB) scale used in this research was developed specifically to address the need for reliable and valid measures of social support (Barrera, Snadler, and Ramsay 1981). The scale's limitation in marketing research of supportive behaviors in services is a large component of what it measured was actions of family members and friends. These items were deleted for this research and from the results it appeared (discriminant validity between functional and communal components) the construct was distinctive from service process behaviors. Yet, the scale had adequate performance at best (.45 average variance extracted, Cronbach's alpha of .76). The development of a scale to

measure communal behaviors in a service encounter would be of benefit in advancing the research area.

Summary and Conclusion

This study tested the contribution of the communal, functional, and technical portions of service quality simultaneously with a field study. To date, this had not been preformed in the literature. The findings supported communal behaviors addition to a consumer's perceived service quality via positive affect. This result was important as it provides a new component for service providers to incorporate into their service offering in an endeavor to gain a sustainable competitive advantage via a service quality increase. It has been hypothesized that a competitive advantage might be developed via utilization of employees (Bitran and Hoech 1990, Hunt and Morgan 1995), and it appeared from the results of this research that the addition of communal behaviors did help to create the potential to gain a competitive advantage. It appeared the addition of the communal component did lead to the potential development of parallel economic and personal ties as discussed by Czepiel (1990). The revealed link between affect and service quality was an important finding, as this would allow a service provider to increase service quality judgments without having to alter their technical or functional service delivery. Increased service quality was linked to positive behavior intentions of word-of-mouth and repeat purchase intentions. As services are projected to grow in importance (Global 1996) and become increasingly competitive (Amirani and Baker 1995, Rust and Zahorik 1993), the findings of this research have potential important strategic implications.

REFERENCES

- Adelman, Mara B. and Aaron C. Ahuvia. 1991. Matchmakers as urban agents: A multimethod study. Paper presented at the Annual Conference of the International Communications Association. Chicago.
- . 1995. Social support in the service sector, the antecedents, processes, and outcomes of social support in an introductory service. *Journal of Business Research* 32: 273-282.
- Adelman, Mara B., Aaron C. Ahuvia, and Cathy Goodwin. 1994. Beyond smiling, social support and service quality. *Service Quality*. Edited by Roland T. Rust and Richard L. Oliver. Thousand Oaks, CA: Sage Publications.
- Ahuvia, Aaron C., and Mara B. Adelman. 1992. Formal intermediaries in the marriage market: A typology and reviews. *Journal of Marriage and Family* 54: 452-463.
- Ahuvia, Aaron C., Mara B. Adelman, and J. E. Schroeder. 1991. Two views of consumption in mating and dating. *Advances in Consumer Research* Vol. 18. Edited by R. H. Holman & M. R. Solomon. Provo, UT: Association for Consumer Research, 532-537.
- Amirani, Shahrzad, and Julie Baker. 1995. Quality cues and retail target market strategy: A conjoint-based application. *International Journal of Retail & Distribution Management* 23 (5): 22-32.
- Anderson, James C., and David W. Gerbing. 1988. Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin* 103 (3): 411-423.
- Arnould, Eric J., and Linda L. Price. 1993. River Magic: Extraordinary experience and the extended service encounter. *Journal of Consumer Research* 20 (June): 24-45.
- Babakus, E., and G. W. Boller. 1992. An emperical investigation of SERVQUAL scale. *Journal of Business Research* 24: 253-268.
- Bagozzi, Richard P., and Todd F. Heatherton. 1994. A general approach to representing multifaceted personality constructs: Applications to state self-esteem. *Structural Equation Modeling* 1 (1): 35-67.
- Bagozzi, Richard P., and Y. Yi. 1988. On the evaluation of structural equation models. *Journal of the Academy of Marketing Science* 16: 74-94.

- Barrera, Manuel, Jr., Irwin N. Sandler, and Thomas B. Ramsay. 1981. Preliminary development of a scale of social support: Studies on college students. *American Journal of Community Psychology* 9 (4): 435-447.
- Barney, Jay. 1991. Firm resources and sustained competitive advantage. *Journal of Management* 17 (1): 99-120.
- Bearden, William O., Richard G. Netemeyer, and Mary F. Mobley. 1993. *Handbook of Marketing Scales: Multi-Item Measures for Marketing and Consumer Behavior Research*. Newbury Park, CA: Sage Publications.
- Bedeian, Arthur G., and Kevin W. Mossholder. 1994. Simple question, not so simple answer: Interpreting interaction terms in modeled multiple regression. *Journal of Management* 20 (1): 159-165.
- Bendapudi, Neeli, and Leonard L. Berry. 1997. Customers' motivations for maintaining relationships with service providers. *Journal of Retailing* 73 (1): 15-37.
- Bitner, Mary Jo. 1990. Evaluating service encounters: The effects of physical surroundings on employee responses. *Journal of Marketing* 54 (2): 69-82.
- Bitner, Mary Jo, Bernard H. Booms, and Lois A. Mohr. 1994. Critical service encounters: The employee's viewpoint. *Journal of Marketing* 58 (October): 95-106.
- Bitner, Mary Jo, Bernard H. Booms, and Mary Stanfield Tetreault. 1990. The service encounter: Diagnosing favorable and unfavorable incidents. *Journal of Marketing* 54 (January): 71-84.
- Bitner, Mary Jo, and Amy R. Hubbert. 1993. Encounter satisfaction vs. overall satisfaction vs. quality. *Service Quality: New Directions in Theory and Practice*. Edited by Roland T. Rust and Richard L. Oliver. Newbury Park, CA: Sage Publications, 71-84.
- Bitran, Gabriel R., and Johannes Hoeh. 1990. The humanization of service: Respect at the moment of truth. *Sloan Management Review* 31 (2): 89-96.
- Blau, P. M. 1964. *Exchange and power in social life*. New York: Wiley.
- Bolton, Ruth N., and James H. Drew. 1991. A multistage model of customers' assessments of service quality and value. *Journal of Consumer Research* 17 (March): 375-384.
- Boulding, William, Ajay Kalra, Richard Staelin, and Valarie A. Zeithaml. 1993. A dynamic process model of service quality: From expectations to behavioral intentions. *Journal of Marketing Research* 30 (February): 7-27.

- Bowen, John. 1990. Development of a taxonomy of services to gain strategic marketing insights. *Journal of the Academy of Marketing Science* 18 (1): 43-49.
- Brandt, Patricia A., and Clarann Weinert. 1981. The PRQ-A social support measure. *Nursing Research* 30 (5): 277-280.
- Brown, Tom J., Gilbert A. Churchill, Jr., and J. Paul Peter. 1993. Improving measurement of service quality. *Journal of Retailing* 69 (1): 127-139.
- Bruner, Gordon C., II, and Paul J. Hensel. 1996. *Marketing Scales Handbook, A Compilation of Multi-Item Measures, Volume II*. Chicago: American Marketing Association.
- Chou, Chih-Ping, and Peter M. Bentler. 1995. Estimates and test in structural equation modeling. *Structural Equation Modeling*. Edited by Rick H. Hoyle. Thousand Oaks, CA: Sage Publications, 37-54.
- Cronin, J. Joseph, and Steven A. Taylor. 1992. Measuring service quality: A reexamination and extension. *Journal of Marketing* 56 (July): 55-68.
- . 1994. SERVPERF versus SERVQUAL: Reconciling performance-based and perceptions-minus-expectations measurement of service quality. *Journal of Marketing* 58 (January): 125-131.
- Crosby, Lawrence A., Kenneth R. Evans, and Deborah Cowles. 1990. Relationship quality in services selling: An interpersonal influence perspective. *Journal of Marketing* 54 (July): 68-81.
- Czepiel, John A. 1990. Managing relationships with customers: A differentiating philosophy of marketing. *Service Management Effectiveness: Balancing Strategy, Organization and Human Resources, Operations, and Marketing*. Edited by Bowen, Chase, and Cummings. San Francisco: Jossey-Bass, 299-323.
- Czepiel, John A., Michael R. Solomon, and Carol F. Surprenant. 1985. *The Service Encounter: Managing Employee/Customer Interaction in Service Businesses*. Lexington, MA: Lexington Books, 3-16.
- Derbaix, Christian, and Michel T. Pham. 1991. Affective reactions to consumption situations: A pilot investigation. *Journal of Economic Psychology* 12: 325-355.
- DeVellis, Robert F. 1991. *Scale Development Theory and Applications*. Newbury Park, CA: Sage Publications.
- Edell, J. A., and M. C. Burke. 1987. The power of feelings in understanding advertising effects. *Journal of Consumer Research* 14 (December): 421-433.

- Folkes, Valerie S. 1984. Consumer reactions to product failure: An attribution approach. *Journal of Consumer Research* 10 (March): 398-409.
- Fornell, Claes, and David F. Larcker. 1981. Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research* 18 (February): 39-50.
- Fornell, Claes, and Birger Wernerfelt. 1987. Defensive marketing strategy by customer complaint management: A theoretical analysis. *Journal of Marketing Research* 24 (November): 337-346.
- Gardner, M. P. 1985. Mood states and consumer behavior: A critical review. *Journal of Consumer Research* 12: 281-300.
- Gentry, James W., and Cathy Goodwin. 1995. Social support for decision making during grief due to death. *American Behavioral Scientist* 38 (4): 553-563.
- Global consumer spending to be up by 45 per cent in 2005, say the EIU. 1996. *International Journal of Retail & Distribution Management* 24 (1): 6 (2).
- Goodwin, Cathy. 1996. Communality as a dimension of service relationships. *Journal of Consumer Psychology* 5 (4): 387-415.
- Goodwin, Cathy, and Charles D. Frame. 1989. Social distance within the service encounter: Does the consumer want to be your friend? *Advances in Consumer Research* Vol. 16. Edited by Thomas K. Srull. Provo, UT: Association for Consumer Research, 64-71.
- Goodwin, Cathy, and Dwayne D. Gremler. 1996. Friendship over the counter: How social aspects of service encounters influence consumer service loyalty. *Advances in Service Marketing and Management Research and Practice*. Edited by Teresa A. Swartz, David E. Bowen, and Stephen H. Brown. Greenwich, CT: JAI PRESS INC.
- Goodwin, Cathy, and Ivan Ross. 1992. Consumer responses to service failures: Influence of procedural and interactional fairness perceptions. *Journal of Business Research* 25: 149-163.
- Gouldner, A. W. 1960. The norm of reciprocity: A preliminary statement. *American Sociological Review* 25: 161-178.
- Greising, David. 1994. Quality how to make it pay. *Business Week*, 8 August, 54-59.
- Grönroos, Christian. 1982. An applied service marketing theory. *European Journal of Marketing* 16 (7): 31-41.

- Grönroos, Christian. 1987. Developing the service offering-A source of competitive advantage. *Add Value to Your Service: The Key to Success*. Edited by Carol F. Surprenant. Chicago: American Marketing Association, 81-84.
- . 1990. *Services management and Marketing: Managing the Moments of Truth in Service Competition*. Lexington, MA: Lexington Books.
- Guiry, Michael. 1992. Consumer and employee roles in service encounters. *Advances in Consumer Research*. Edited by John F. Sherry and Brian Sternthal. Provo, UT: Association for Consumer Research.
- Gwinner, Kevin P., Dwayne D. Gremler, and Mary Jo Bitner. 1998. Relational benefits in service industries: The customer's perspective. *Journal of the Academy of Marketing* 26 (2): 101-114.
- Hair, Joseph F., Jr., Rolph E. Anderson, Ronald L. Tatham, and William C. Black. 1995. *Multivariate Data Analysis*. 4th ed. Upper Saddle River, NJ: Prentice Hall.
- . 1998. *Multivariate Data Analysis*. 5th ed. Upper Saddle River, NJ: Prentice Hall.
- Hartline, Michael D., and Keith C. Jones. 1996. Employee performance cues in a hotel service environment: Influence on a perceived quality, value, and word-of-mouth intentions. *Journal of Business Research* (35): 207-215.
- Hayduk, Leslie A. 1991. *Structural Equation Modeling with LISREL: Essentials and Advances*. 4th Ed. Baltimore: The John Hopkins University Press.
- Henkoff, Ronald. 1994. Service is everybody's business. *Fortune* 129 (13): 48-54.
- Hobfoll, Stevan E., and J. P. Stokes. 1988. The process and mechanics of social support. *Handbook of Personal Relationships*. Edited by Steven W. Duck. New York: John Wiley, 497-517.
- Holbrook, M. B., and R. Batra. 1987. Assessing the role of emotions as mediators of consumer responses to advertising. *Journal of Consumer Research* 14 (December): 404-420.
- Homans, G. C. 1961. *Social Behavior*. New York: Harcourt, Brace and World.
- Hoyle, Rick H., and A. Panter. 1994. Writing about structural equation models. *Structural Equation Modeling*. Edited by Rick H. Hoyle. Thousand Oaks, CA: Sage Publications.

- Hu, Li-tze, and Peter M. Benter. 1995. Evaluating model fit in structural equation modeling. *Structural Equation Modeling*. Edited by Rick H. Hoyle. Thousand Oaks, CA: Sage Publications.
- Hui, Michael K., and John E. G. Bateson. 1991. Perceived control and the effects of crowding and consumer choice on the service experience. *Journal of Consumer Research* 18 (September): 174-184.
- Hunt, Shelby D. and Robert M. Morgan. 1995. The competitive advantage theory of competition. *Journal of Marketing* 59 (April): 1-15.
- Iacobucci, Dawn. 1998. Customer service interaction, poor customer service and prescriptions for improvement. *ServiceScapes*. Edited by John F. Sherry, Jr. Chicago: NTC Business Books.
- Inglehart, R. 1990. *Culture shift in advanced industrial society*. Princeton, NJ: Princeton University Press.
- Jaccard, James, and Choi K. Wan. 1996. *LISREL Approaches to Interaction Effects in Multiple Regression*. Series Number 07-114. Thousand Oaks, CA: Sage Publications.
- Jaccard, James, Robert Turrisi, and Choi K. Wan. 1990. *Interaction Effects in Multiple Regression*. Series Number 07-072. Thousand Oaks, CA: Sage Publications.
- Jones, Warren H. 1981. Loneliness and social contact. *The Journal of Social Psychology* 113: 295-296.
- Jöreskog, Karl, and Dag Sörbom. 1993. *LISREL: Analysis of Linear Structural Relations by the Method of Maximum Likelihood*. Ver. 8. Chicago: National Education Resources.
- Keaveney, Susan M. 1995. Customer switching behavior in service industries: An exploratory study. *Journal of Marketing* 59 (April): 71-82.
- King, Maryon F., Gordon C. Bruner, II, and Paul J. Hensel. Office of Scale Research. 1992. A Social Desirability Bias: A Neglected Aspect of Validity Testing. *Technical Report #9101*.
- Kotler, Philip, and Gary Armstrong. 1996. *Principles of Marketing*. 7th ed. Upper Saddle River, NJ: Prentice Hall.
- Larsen, K. S., H. J. Martin, R. H. Ettinger, and J. Nelson. 1976. Approval seeking, social cost and aggression: A scale and some dynamics. *Journal of Psychology* 94: 3-11.

- Leech, E. 1992. Satisfying the customer of the '90s. *Chicago Tribune*, 5 July, sec. 6, p. 1.
- Lehtinen, Uolevi, and Jarmo R. Lehtinen. 1982. Service quality: A study of dimensions. Working paper, Service Management Institute, Helsinki, Finland.
- Lovelock, Christopher H. 1983. Classifying services to gain strategic insights. *Journal of Marketing* 59 (Summer): 9-20.
- Marketing Science Institute. 1998. *Research priorities, A guide to MSI research programs and procedures, 1998-2000*.
- Mauss, M. 1950. *The gift: The form and reason for exchange in primitive societies*. New York: W. W. Norton and Co.
- Mediamark Research Inc. 1996. *Mediamark Research Shopping & Tobacco Product Report Spring 1996*. Volume P-11, 114.
- Milgram, S. 1977. *The individual in a social world*. Reading, MA: Addison-Wesley.
- Mittal, Banwari, and Walfried M. Lassar. 1996. The role of personalization in service encounters. *Journal of Retailing*. 72 (1): 95-109.
- . 1998. Why do customers switch? The dynamics of satisfaction versus loyalty. *The Journal of Services Marketing* 12 (3): 177-194.
- Mohr, L. A., and M. J. Bitner. 1995. The role of employee effort in satisfaction with service transactions. *Journal of Business Research* 32: 239-252.
- Nava, Gustavo R., and Kent G. Bailey. 1991. Measuring psychological kinship scale refinement and validation. *Psychological Review* 68: 215-217.
- Noerager, Jon P. 1979. An assessment of CAD-A personality instrument developed specifically for marketing research. *Journal of Marketing Research* 16 (February): 53-59.
- Nunnally, J. 1979. *Psychometric Theory*. New York: McGraw-Hill.
- Oliver, Richard L. 1993. A conceptual model of service quality and service satisfaction: Compatible goals, different concepts. *Advances in Services Marketing and Management*. Vol. 2. Edited by T. Swartz, D. Bowen, and S. Brown. Greenwich, CT: JAI PRESS, 65-85.
- Osterhus, Thomas L. 1997. Pro-social consumer influence strategies: When and how do they work? *Journal of Marketing* 61 (October): 16-29.

- Ostrom, Amy, and Dawn Iacobucci. 1995. Consumer trade-offs and the evaluation of services. *Journal of Marketing* 59 (January): 17-28.
- Parasuraman, A., Leonard L. Berry, and Valarie A. Zeithaml. 1991. Refinement and Reassessment of the SERVQUAL Scale. *Journal of Retailing* 67 (4): 420-450.
- Parasuraman, A., Valarie A. Zeithaml, and Leonard L. Berry. 1985. A conceptual model of service quality and its implications for future research. *Journal of Marketing* 49 (Fall): 41-50.
- . 1988. SERVQUAL: A multiple-item scale for measuring customer perceptions of service quality. *Journal of Retailing* 64 (Spring): 12-40.
- Peterson, Robert A. 1994. A meta-analysis of Cronbach's coefficient alpha. *Journal of Consumer Research* 9 (September): 151-162.
- Pfleeger, Janet. 1996. U. S. consumers: which jobs are they creating? *Monthly Labor Review* 119 (6): 7-11.
- Ping, Robert A., Jr. 1995. A parsimonious estimating technique for interaction and quadratic latent variables. *Journal of Marketing Research* 32 (August): 336-347.
- Price, Linda L., Eric J. Arnould, and Sheila L. Deibler. 1995. Consumers' emotional responses to service encounters, The influence of the service provider. *International Journal of Service Industry Management* 6 (3): 34-63.
- Price, Linda L., Eric J. Arnould, and Patrick Tierney. 1995. Going to extremes: Managing service encounters and assessing provider performance. *Journal of Marketing* 59 (April): 83-97.
- Reichheld, Frederick, and W. Earl Sasser, Jr. 1990. Zero defections: Quality comes to services. *Harvard Business Review* 68 (September/October): 105-111.
- Rigdon, E. E. 1996. CFI verses RMSEA: A comparison of two fit indices for structural equation modeling. *Structural Equation Modeling* 3 (4):369-379.
- Russell, Dan, Letitia A. Peplau, and Carolyn E. Cutrona. 1980. The revised UCLA loneliness scale: Concurrent and discriminant validity evidence. *Journal of Personality and Social Psychology* 39 (3): 472-480.
- Rust, Roland T., and Anthony J. Zahorik. 1993. Customer satisfaction, customer retention, and market share. *Journal of Retailing* 69 (2): 193-215.
- Rust, Roland T., Anthony J. Zahorik, and Timothy L. Kenningham. 1995. Return on quality (ROQ): Making service quality financially accountable. *Journal of Marketing* 59 (April): 58-70.

- Sackeim, H. A. and R. C. Gur. 1978. Self-confrontation and consciousness. *Consciousness and Self-Regulation: Advances in Research and Theory*. Vol. 2. Edited by G. I. Schwartz and R. D. Shapiro. New York: Plenum.
- Sasser, W. Earl, Jr., and S. P. Arbeit. 1976. Selling jobs in the service sector. *Business Horizons*. June, 62.
- Sasser, W. Earl, Jr., R. Paul Olsen, and D. Daryl Wyckoff. 1978. *Management of Service Operations: Text and Cases*. Boston: Allyn and Bacon.
- Shostack, G. Lynn. 1985. Planning the service encounter. *The Service Encounter*. Edited by John A. Czepiel, Michael R. Solomon, and Carol F. Surprenant. Lexington, MA: Lexington Books, 243-254.
- Siehl, Caren, David E. Bowen, and Christine M. Pearson. 1992. Service encounters as rites of integration: An information processing model. *Organization Science* 3 (4): 537-555.
- Solomon, Michael R., Carol F. Surprenant, John A. Czepiel, and Evelyn G. Gutman. 1985. A role theory perspective on dyadic interactions: The service encounter. *Journal of Marketing*. 49 (85): 99-111.
- Spreng, Richard A., and Robert D. Mackoy. 1996. An empirical examination of a model of perceived service quality and satisfaction. *Journal of Retailing* 72 (2): 201-214.
- Stone, G. P. 1954. City shoppers and urban identification: Observations on the social psychology of city life. *American Journal of Sociology* 60: 36-45.
- Sudman, S., N. M. Sudman, and Bradburn. 1974. *Response Effects in Surveys*. Chicago: Aldine.
- Surprenant, Carol F., and Michael R. Solomon. 1987. Predictability and personalization in the service encounter. *Journal of Marketing* 51 (April): 86-96.
- Taylor, Steven A., and Thomas L. Baker. 1994. An assessment of the relationship between service quality and customer satisfaction in the formation of consumers' purchase intentions. *Journal of Retailing* 70 (2): 163-178.
- Teas, Kenneth R. 1993. Expectations, performance evaluation, and consumers' perceptions of quality. *Journal of Marketing* 57 (October): 18-34.
- . 1994. Expectations as a comparison standard in measuring service quality: An assessment of a reassessment. *Journal of Marketing* 58 (January): 132-139.

- Tyagi, Pradeep K. 1983. Validation of the CAD instrument: A replication. *Advances in Consumer Research*. Vol. 10. Edited by Richard P. Bagozzi and Alice M. Tybout. Ann Arbor: Association for Consumer Research.
- Webster, F. E., Jr. 1968. Interpersonal communication and salesman effectiveness. *Journal of Marketing* 32: 7-13.
- Westbrook, Robert A. 1980. A rating scale for measuring product/service satisfaction. *Journal of Marketing* 44 (Fall): 68-72.
- Westbrook, Robert A., and Richard L. Oliver. 1991. The dimensionality of consumption emotion patterns and consumer satisfaction. *Journal of Consumer Research* 18 (June): 84-91.
- Wilkes, Robert E. 1992. A structural modeling approach to the measurement and meaning of cognitive age. *Journal of Consumer Research* 19 (September): 292-301.
- Wong, Choy L., and Dean Tjosvold. 1995. Goal interdependence and quality in services marketing. *Psychology & Marketing* 12 (3): 189-205.
- Ziethaml, Valarie A. 1981. How consumer evaluation processes differ between goods and services. *Marketing of Services*. Edited by J. Donnelly and W. George. Chicago: American Marketing, 186-190.
- . 1988. Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. *Journal of Marketing* 52 (July): 2-22.
- Zeithaml, Valaire A., Leonard L. Berry, and A. Parasuraman. 1996. The behavioral consequences of service quality. *Journal of Marketing* 60 (April): 31-46.

APPENDIX A

Pretest Consent Letter

Pretest Survey

November 1, 1998

Dear Lockworks Customer

Lockworks in conjunction with Louisiana State University is studying how consumers evaluate the quality of the service they receive. This study will assist Lockworks in improving its customer service. In order to be able to determine how consumers evaluate their stylist we need your assistance. Attached is a survey that explores how you evaluate the service you receive when using a stylist.

Your answers to this survey will be kept anonymous. To participate, all you need to do is carefully consider and answer each question as accurately as possible. There are no right or wrong answers only your honest opinions. In order to be able to more precisely determine how you evaluate the service; we need you to answer all of the questions, but if at any time you are uncomfortable answering certain questions you are under no obligation to answer that question.

When you have completed the survey, remove the cover letter, and simply place the completed survey in the attached envelope. Then simply mail the survey back to us. No one connected with Lockworks will see your responses. By returning the survey and removing this letter you are giving your consent for your responses to be used in the research.

Thank you in advance for assisting Lockworks and us in conducting this research. We sincerely hope that you are pleased with the results of your visit to the salon and that your answers will be the foundation for future customers receiving even better service. Wishing you a safe and happy Holiday Season.

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Attachment

HAIR STYLIST EVALUATION QUESTIONNAIRE

Once again thank you for taking time to answer the survey; your answers will provide valuable material for my research on how to improve hairstylist performance. When you have completed the survey, please place it in the self-addressed envelope. Once again be assured that your survey will not be seen by anyone connected with the salon and your answers will remain strictly anonymous.

General demographic and background questions

Gender: Male Female

Age: _____ years

Annual household income (before taxes): \$0-15,000 \$15,001-30,000 \$30,001-45,000
 \$45,001-60,000 \$60,001-75,000 \$75,001-90,000
 \$90,001 and above

Your Level of education:

Some High School

High School Diploma

Some college

Undergraduate College Degree

Masters Degree

Professional degree (i.e. JD, MD, Ph.D., etc.)

Have any of the following occurred to you in the past twelve months:

Death in your family Yes No

Divorce Yes No

Change in jobs Yes No

Negative change in income Yes No

Relocation Yes No

Major medical event Yes No

Is this your first visit to any hair salon? Yes No

Have you used this salon before but with a different stylist? Yes No

Concerning your previous experiences with hair stylists did you receive high quality service? Yes No

How did you select to use this hair salon/stylist (select one):

Recommendation of friend

Saw an advertisement/promotion

Yellow pages

Other (list)

Below are questions concerning your overall evaluation of your experience with this stylist

1. The overall quality of the service received from the stylist was:

Very Poor ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Excellent

2. My feelings towards the stylist can best be described as:

Very unsatisfied ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ very satisfied

3. How would you rate the service you received from your stylist as compared to other stylist you have used?

Extremely low quality ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Extremely high quality
Average

4. The service quality provided by the stylist was much better than expected.

Strongly disagree ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Strongly agree

5. How do you feel about the quality of service received from your stylist:

①
Terrible

②
Unhappy

③
Mostly
dissatisfied

④
Mixed

⑤
Mostly
satisfied

⑥
Pleased

⑦
Delighted

Continuation of questions concerning your overall evaluation of your experience with the stylist

6. Did going to this stylist represent a valuable service to you considering the time, effort and money spent?
Strongly disagree ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Strongly agree
7. As a whole, I am satisfied with the performance of the stylist
Strongly disagree ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Strongly agree
8. How satisfied are you with the overall experience with your stylist?
Not at all satisfied ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Very Satisfied
9. How satisfied are you with the overall quality of the service provided by the stylist
Not at all satisfied ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Very Satisfied

This section of the questionnaire is designed to determine which aspects of the performance of the stylist have the greatest impact on your evaluation of the service provided.

Please answer the questions below using the following scale

1=Strongly disagree, 2=Disagree, 3=Feel Neutral, 4=Agree, 5=Strongly agree

Your stylist:

- | | |
|---|-----------|
| 1. was knowledgeable about the type of service you desired (i.e. hair cut, waxing, coloring, perms, relaxing, trimming of beards, etc). | ① ② ③ ④ ⑤ |
| 2. was knowledgeable about different types of hair and appropriate cuts. | ① ② ③ ④ ⑤ |
| 3. cut hair well turned out as expected (or permed, or colored, or waxed). | ① ② ③ ④ ⑤ |
| 4. appeared well trained and qualified. | ① ② ③ ④ ⑤ |
| 5. provided the service that was agreed upon. | ① ② ③ ④ ⑤ |
| 6. was dependable. | ① ② ③ ④ ⑤ |
| 7. did not make any mistakes (no nips with scissors, hairdryer was not to hot, no burns from curling iron etc). | ① ② ③ ④ ⑤ |
| 8. had a courteous and pleasant manner. | ① ② ③ ④ ⑤ |
| 9. listened and discussed what you wanted. | ① ② ③ ④ ⑤ |
| 10. was willing to respond to your requests. | ① ② ③ ④ ⑤ |
| 11. gave you his/her undivided attention. | ① ② ③ ④ ⑤ |
| 12. was friendly and pleasant. | ① ② ③ ④ ⑤ |
| 13. was prompt for the scheduled appointment or gave an explanation for the delay. | ① ② ③ ④ ⑤ |

This section continues the evaluation of the stylist. In this section the focus is to try to determine how often the stylist performed certain behaviors during your appointment.

Please answer the questions below using the following scale

1=Not at all, 2=Once, 3=Occasionally, 4=Often, 5=Numerous times

How often did the stylist:

- | | |
|--|-----------|
| 14. tell you a personal story | ① ② ③ ④ ⑤ |
| 15. offer some non-salon information | ① ② ③ ④ ⑤ |
| 16. joke or kid with you | ① ② ③ ④ ⑤ |
| 17. tell you how he/she felt in a situation similar to yours | ① ② ③ ④ ⑤ |
| 18. listen to you talk about your personal feelings | ① ② ③ ④ ⑤ |
| 19. express interest and concern for your well being | ① ② ③ ④ ⑤ |

Continuation of the evaluation of the stylist. Once again in this section the focus is to try to determine how often the stylist performed certain behaviors during your appointment.

Please answer the questions below using the following scale

1=Not at all, 2=Once, 3=Occasionally, 4=Often, 5=Numerous Times

How often did the stylist:

- | | | | | | |
|--|---|---|---|---|---|
| 20. talk to you about some interest of yours | ① | ② | ③ | ④ | ⑤ |
| 21. tell you that she/he would keep what you talk about private-just between the two of you | ① | ② | ③ | ④ | ⑤ |
| 22. ask questions of a personal nature | ① | ② | ③ | ④ | ⑤ |
| 23. confide in you information about his/her background, personal life, and family situation | ① | ② | ③ | ④ | ⑤ |
| 24. confide in you a lot about his/her job (e.g. responsibilities, failures, accomplishments, likes and dislikes for the occupation) | ① | ② | ③ | ④ | ⑤ |
| 25. tell you a humorous story about being a hair stylist | ① | ② | ③ | ④ | ⑤ |
| 26. confide in you a lot of information about his/her goals, objectives and hopes for the future | ① | ② | ③ | ④ | ⑤ |

Your Feelings And Emotions About The Service Encounter

In this section, the survey is exploring how your experience with the hair stylist may cause you to experience certain feelings or emotions and how these could potentially impact your evaluations.

Listed below are several feelings and emotions you might have felt during and after encounter with the stylist. Circle any number between 1 and 5 to describe how you feel using the following scale:

1=Not at all, 5=Very Strongly

- | | | | | | | | | | | | |
|--------------|---|---|---|---|---|-----------|---|---|---|---|---|
| Happy | ① | ② | ③ | ④ | ⑤ | Sad | ① | ② | ③ | ④ | ⑤ |
| Elated | ① | ② | ③ | ④ | ⑤ | Sorry | ① | ② | ③ | ④ | ⑤ |
| Pleased | ① | ② | ③ | ④ | ⑤ | Regretful | ① | ② | ③ | ④ | ⑤ |
| Warm-hearted | ① | ② | ③ | ④ | ⑤ | Angry | ① | ② | ③ | ④ | ⑤ |
| Caring | ① | ② | ③ | ④ | ⑤ | Worried | ① | ② | ③ | ④ | ⑤ |
| Affectionate | ① | ② | ③ | ④ | ⑤ | Confused | ① | ② | ③ | ④ | ⑤ |

Future Actions

Given your experience with stylist please answer the following questions

How likely are you to:

- continue to use the stylist as your regular stylist.
Strongly disagree ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Strongly agree
- use the same stylist the next time you need a haircut (waxing, color, perm).
Strongly disagree ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Strongly agree
- patronize the same stylist the next time you need some special service
Strongly disagree ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Strongly agree
- tell others positive impressions about this stylist
Not at all likely ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Very likely
- recommend this stylist to your friends
Strongly disagree ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Strongly agree
- use this stylist the next time you are in need of a haircut (waxing, color, perm, etc)
Not at all likely ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Very likely
- given your experience with this stylist to recommend him/her to your friends
Strongly disagree ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Strongly agree
- tell them to try this stylist if your friends were looking for a stylist
Strongly disagree ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Strongly agree

General Attitudes

This part of the survey is trying to discover if certain general attitudes will have an impact on how you evaluate services. Answering these questions provides an idea on how certain general beliefs about life could help determine how one responds to business transactions. There are no "right" or "wrong" answers, only your honest opinion.

Please answer the questions below using the following scale:

1= Extremely not desirable, 2= Not desirable, 3= Somewhat not desirable, 4= Somewhat desirable, 5= Desirable, 6= Extremely desirable.

How desirable is it to:

- 1. give comfort to those in need of a friend? ① ② ③ ④ ⑤ ⑥
- 2. be free of emotional ties with others ? ① ② ③ ④ ⑤ ⑥
- 3. base your life on duties to others ? ① ② ③ ④ ⑤ ⑥
- 4. enjoy a good movie by yourself? ① ② ③ ④ ⑤ ⑥
- 5. share your personal feelings with others ? ① ② ③ ④ ⑤ ⑥
- 6. pay attention to what others may think of you? ① ② ③ ④ ⑤ ⑥
- 7. be able to work hard while others elsewhere are having fun ? ① ② ③ ④ ⑤ ⑥
- 8. correct people who express an ignorant belief? ① ② ③ ④ ⑤ ⑥
- 9. repay others through actions of friendship? ① ② ③ ④ ⑤ ⑥
- 10. be free of social obligation? ① ② ③ ④ ⑤ ⑥
- 11. work alone? ① ② ③ ④ ⑤ ⑥
- 12. feel that you like everyone you know? ① ② ③ ④ ⑤ ⑥
- 13. give aid to the poor and underprivileged ? ① ② ③ ④ ⑤ ⑥
- 14. plan to get along with others ? ① ② ③ ④ ⑤ ⑥
- 15. know that others pay little attention to your affairs? ① ② ③ ④ ⑤ ⑥
- 16. be fair to people who you consider to do things wrong? ① ② ③ ④ ⑤ ⑥
- 17. have something good to say about everybody? ① ② ③ ④ ⑤ ⑥
- 18. live in a cabin in the woods or mountains ? ① ② ③ ④ ⑤ ⑥
- 19. avoid situations where others can influence you? ① ② ③ ④ ⑤ ⑥
- 20. know most people would be fond of you at all times ? ① ② ③ ④ ⑤ ⑥

The questions below are still exploring your general attitudes and how they may impact your evaluations of services. Remember there are no right or wrong answers, what is truly important is that your answers reflect what you truly feel.

Please use the following scale: 1= never, 2=rarely, 3=sometimes, 4=often

How often do you feel:

- 1. in tune with the people around you? ① ② ③ ④
- 2. a lack companionship? ① ② ③ ④
- 3. there is no one you can turn to? ① ② ③ ④
- 4. alone? ① ② ③ ④
- 5. part of a group of friends? ① ② ③ ④
- 6. you have a lot in common with the people around you? ① ② ③ ④
- 7. you are no longer close to anyone? ① ② ③ ④
- 8. your interests and ideas are not shared by those around you? ① ② ③ ④
- 9. that you are an outgoing person? ① ② ③ ④
- 10. left out? ① ② ③ ④
- 11. your social relationships are superficial? ① ② ③ ④
- 12. there are people you feel close to ① ② ③ ④

APPENDIX B

FAQ Sheet

ANSWERS TO QUESTIONS ABOUT THE SURVEY

1. **WHO CAN FILL-OUT THE SURVEY?** Any first time customer either to the salon, or using a new stylist. Age doesn't matter but under 18 it is probably too hard to fill-out. Sex doesn't matter. If the client is satisfied or not doesn't matter. All of these respondents will provide valuable information.
2. **WHAT SHOULD I SAY?** Explain that is being done in cooperation with LSU and is researching customer service quality judgements. Ask them if they would be willing to fill it out. **REMIND THEM ABOUT THE RAFFLE AND POTENTIAL PRIZES TO THANK ALL PARTICIPANTS.** Remind them of the time deadline.
3. **CAN THEY FILL OUT THE SURVEY IN THE SALON?** Yes—if the client is having a service that takes a long time (perm, straightening, color, etc.) ask them if they would like to start while they are at the salon. There are questions that can be answered before the service is completed. Give them the survey on the clipboard to start filling out.
4. **WHY DOES THE CUSTOMER HAVE TO RETURN IT BY A CERTAIN TIME?** —the time deadline is necessary for me to be able to meet the LSU timeline for graduation. Also remember the time deadline is tied into being eligible for the raffle.
5. **WHO SEES THE SURVEY?** —Only myself—Lockworks only gets to see compiled results and not the individual surveys.
6. **HOW WILL THE CUSTOMER KNOW IF HE/SHE WON A PRIZE IN THE RAFFLE—I** will personally call them and inform them.
7. **HOW MANY SURVEYS DO WE HAVE TO GIVE OUT?** Salons will be given 35 surveys every 10 days, which on average means that 3.5 surveys must be given out each day. **CAN YOU GIVE OUT MORE?** Yes—in order to be able to accurately judge customer satisfaction and quality judgements for each salon we need 50 returned surveys per salon. Judging from the pretest to obtain this number each salon needs to give out approximately 140 surveys. **REMEMBER THE MORE YOU GIVE OUT AND THE EARLIER THE FASTER WE SHOULD BE ABLE TO END THE ADMISTRATION OF SURVEYS.**
8. **WHAT SHOULD I DO IF WE RUN OUT OF SURVEYS?** Call Barbara at 767-3809 and leave a message. **BETTER YET!** When you have 5 surveys left call Barbara and request more.
9. **I'M BUSY WHAT'S IN IT FOR ME?** Besides valuable information for the salon manager and Lockworks the salon with the best response rate (not just surveys given out, but surveys returned) will win a pizza lunch.
10. **WHAT IF I HAVE A QUESTION ABOUT THE SURVEY WHO CAN I ASK?** Ask your manager, or call Barbara at 767-3809.

APPENDIX C

Main study consent letter

Main study survey

January 27, 1999

Dear Lockworks Customer,

SPECIAL FAVOR: This research is for my dissertation. In order to complete the LSU requirements to graduate in May I need you to place the survey in the mail before February 14, 1999. Thank you for your invaluable help—I can not complete my degree without your assistance. As a thank you for participating in the survey Lockworks has provided 7 wonderful prizes for a raffle to be held for all those who complete the survey.

Lockworks in conjunction with Louisiana State University is studying how consumers evaluate the quality of the service they receive. This study will assist Lockworks in improving its customer service. In order to be able to determine how consumers evaluate their stylist we need your assistance. Attached is a survey that explores how you evaluate the service you receive when using a stylist.

Your answers to this survey will be kept anonymous. To participate, all you need to do is carefully consider and answer each question as accurately as possible. There are no right or wrong answers, only your honest opinions

When you have completed the survey, remove the cover letter, and simply place the completed survey in the attached envelope. *If you wish to enter the raffle just place your name and phone number on the raffle entry slip and place it in the envelope with your survey.* Then simply mail the envelope back to us. No one associated with Lockworks will see your responses. Your raffle entry and survey will be kept separate.

Thank you in advance for assisting in this research. Good luck in the raffle.

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Attachment

STYLIST EVALUATION LOCKWORKS

Thank you for participating in the survey; your answers will provide valuable information on how to improve stylist performance. When you have completed the survey, please place it in the self-addressed envelope. *Be sure to put your name and phone number on the entry form and include it in the envelope to be eligible for the prize raffle. Your survey must be received by the date indicated on the form for you to be entered in the raffle.* Once again be assured that your answers will remain strictly anonymous and thank you for your support.

GENERAL DEMOGRAPHIC AND BACKGROUND QUESTIONS

Gender: Male Female

Age: _____ years

Annual household income (before taxes): \$0-10,000 \$10,001-19,999 \$20,000-29,999
 \$30,000-39,999 \$40,000-49,999 \$50,000-59,999
 \$60,000-74,999 \$75,000 or more

Your Level of education:

Some High School

High School Diploma

Some College

Undergraduate College Degree

Masters Degree

Professional Degree (i.e. JD, MD, Ph.D., etc.)

Have any of the following occurred in the past twelve months

Death in your family

Yes No

Divorce

Yes No

Change in jobs

Yes No

Negative change in income

Yes No

Relocation

Yes No

Major medical event

Yes No

Have you used this salon before but with a different stylist? Yes No

Concerning your previous experiences with hair stylists did you receive high quality service? Yes No

How did you select to use this hair salon/stylist (select one):

Recommendation of friend

Saw an advertisement/promotion

Yellow pages

Other (list): _____

SERVICE EXPERIENCE

Below are questions concerning your overall evaluation of your experience with this stylist.

1. The overall quality of the service received from the stylist was:

Very Poor ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Excellent

2. My feelings towards the stylist can best be described as:

Very unsatisfied ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Very satisfied

3. How would you rate the service you received compared to the service you have received from other stylists?

Extremely low quality ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Extremely high quality
Average

4. The service quality provided by the stylist was much better than expected.

Strongly disagree ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Strongly agree

5. How do you feel about the quality of service received from your stylist

① Terrible ② Unhappy ③ Mostly dissatisfied ④ Mixed ⑤ Mostly satisfied ⑥ Pleased ⑦ Delighted

SERVICE EXPERIENCE CONTINUED

6. Did going to this stylist represent a valuable service to you considering the time, effort and money spent?
Strongly disagree ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Strongly agree
7. As a whole, I am satisfied with the performance of the stylist
Strongly disagree ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Strongly agree
8. How satisfied are you with the overall experience with your stylist?
Not at all satisfied ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Very satisfied

STYLIST

This section is designed to determine which aspects of the performance of the stylist have the greatest impact on your evaluation of the service provided.

Please answer the questions below using the following scale

1=Strongly disagree, 2=Disagree, 3=Feel Neutral, 4=Agree, 5=Strongly agree

Your stylist:

- | | | | | | |
|---|---|---|---|---|---|
| 1. was knowledgeable about the type of service you desired (i.e. hair cut, waxing, coloring, perms, relaxing, trimming of beards, etc). | ① | ② | ③ | ④ | ⑤ |
| 2. was knowledgeable about different types of hair and appropriate cuts. | ① | ② | ③ | ④ | ⑤ |
| 3. cut hair well/ turned out as expected (or permed, or colored, or waxed). | ① | ② | ③ | ④ | ⑤ |
| 4. appeared well trained and qualified. | ① | ② | ③ | ④ | ⑤ |
| 5. provided the service that was agreed upon. | ① | ② | ③ | ④ | ⑤ |
| 6. was dependable. | ① | ② | ③ | ④ | ⑤ |
| 7. did not make any mistakes (no nips with scissors, hairdryer was not too hot, no burns from curling iron etc). | ① | ② | ③ | ④ | ⑤ |
| 8. had a courteous and pleasant manner. | ① | ② | ③ | ④ | ⑤ |
| 9. listened and discussed what you wanted. | ① | ② | ③ | ④ | ⑤ |
| 10. was willing to respond to your requests. | ① | ② | ③ | ④ | ⑤ |
| 11. gave you his/her undivided attention. | ① | ② | ③ | ④ | ⑤ |
| 12. was friendly and pleasant. | ① | ② | ③ | ④ | ⑤ |
| 13. was prompt for the scheduled appointment or gave an explanation for the delay. | ① | ② | ③ | ④ | ⑤ |

In this section, the focus is to determine how often the stylist performed certain behaviors during your appointment.

Please answer the questions below using the following scale

1=Not at all, 2=Once, 3=Occasionally, 4=Often, 5=Numerous Times

How often did the stylist:

- | | | | | | |
|---|---|---|---|---|---|
| 14. tell you a personal story | ① | ② | ③ | ④ | ⑤ |
| 15. offer some non-salon information | ① | ② | ③ | ④ | ⑤ |
| 16. joke or kid with you | ① | ② | ③ | ④ | ⑤ |
| 17. tell you how he/she felt in a situation similar to yours | ① | ② | ③ | ④ | ⑤ |
| 18. listen to you talk about your personal feelings | ① | ② | ③ | ④ | ⑤ |
| 19. express interest and concern for your well being | ① | ② | ③ | ④ | ⑤ |
| 20. talk to you about some interest of yours | ① | ② | ③ | ④ | ⑤ |
| 21. tell you that she/he would keep what you talked about private-just between the two of you | ① | ② | ③ | ④ | ⑤ |
| 22. ask questions of a personal nature | ① | ② | ③ | ④ | ⑤ |

YOUR FEELINGS AND EMOTIONS ABOUT THE SERVICE ENCOUNTER

In this section, the survey is exploring how your experience with the stylist may cause YOU to experience certain feelings or emotions and how these could potentially impact your evaluation. Listed below are several feelings and emotions you might have felt during and after encounter with the stylist. Fill-in any number between 1 and 5 to describe how you felt.

Please use the following scale: 1=Not at all, 5=Very Strongly

Pleased	① ② ③ ④ ⑤	Caring	① ② ③ ④ ⑤
Warm-hearted	① ② ③ ④ ⑤	Affectionate	① ② ③ ④ ⑤
Happy	① ② ③ ④ ⑤	Elated	① ② ③ ④ ⑤
Sad	① ② ③ ④ ⑤	Sorry	① ② ③ ④ ⑤
Regretful	① ② ③ ④ ⑤	Angry	① ② ③ ④ ⑤
Worried	① ② ③ ④ ⑤	Confused	① ② ③ ④ ⑤

FUTURE ACTIONS

Given your experience with stylist please answer the following questions

How likely are you to:

- continue to use the stylist as your regular stylist.
Strongly disagree ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Strongly agree
- use the same stylist the next time you need a haircut (waxing, color, perm).
Strongly disagree ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Strongly agree
- patronize the same stylist the next time you need some special service
Strongly disagree ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Strongly agree
- tell others positive impressions about this stylist
Not at all likely ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Very likely
- recommend this stylist to your friends
Strongly disagree ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Strongly agree
- use this stylist the next time you are in need of a haircut (waxing, color, perm, etc)
Not at all likely ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Very likely
- recommend to your friend that they use this stylist
Strongly disagree ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Strongly agree
- recommend Lockworks to your friends
Strongly disagree ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Strongly agree

GENERAL ATTITUDES

These questions provide an idea on how certain general beliefs about life could help determine how one responds to business transactions. There is no "right" or "wrong" answer.

What is truly important is that your answers reflect what you honestly feel.

Please use the following scale: 1= never, 2=rarely, 3=sometimes, 4=often

How often do you feel:

- in tune with the people around you? ① ② ③ ④
- a lack companionship? ① ② ③ ④
- you have a lot in common with the people around you? ① ② ③ ④
- your interests and ideas are not shared by those around you? ① ② ③ ④
- that you are an outgoing person? ① ② ③ ④
- your social relationships are superficial? ① ② ③ ④
- no one really knows you well? ① ② ③ ④
- that you can find companionship when you want it? ① ② ③ ④
- there are people who really understand you? ① ② ③ ④
- people are around you but not with you? ① ② ③ ④

General Attitudes continued. Remember there are no "right" or "wrong" answers.
Please use the following scale: 1=Strongly disagree, 2=Disagree, 3=Slightly disagree, 4=Neutral, 5=Slightly agree, 6= Agree, 7=Strongly agree

- | | |
|---|---------------|
| 1. I like to be around and to involve myself with other people | ① ② ③ ④ ⑤ ⑥ ⑦ |
| 2. Taking part in social and community activities is very important to me | ① ② ③ ④ ⑤ ⑥ ⑦ |
| 3. I enjoy having people around me | ① ② ③ ④ ⑤ ⑥ ⑦ |
| 4. Having emotional ties with others is important | ① ② ③ ④ ⑤ ⑥ ⑦ |
| 5. Planning to get along with others is worthwhile | ① ② ③ ④ ⑤ ⑥ ⑦ |
| 6. Working with others is important to me | ① ② ③ ④ ⑤ ⑥ ⑦ |
| 7. I care what others think of me | ① ② ③ ④ ⑤ ⑥ ⑦ |

THIS SECTION IS TO DETERMINE THE IMPORTANCE OF YOUR VISIT

Going to a stylist to get a haircut (color, perm, wax, massage, facial, manicure, etc):

1. Is very important ① ② ③ ④ ⑤ ⑥ ⑦ Is very unimportant
2. Requires a lot of thought ① ② ③ ④ ⑤ ⑥ ⑦ Requires little thought
3. Is very risky ① ② ③ ④ ⑤ ⑥ ⑦ Is a sure bet
4. If something goes wrong during this visit, you have a
A lot to lose ① ② ③ ④ ⑤ ⑥ ⑦ A little to lose

THIS SECTION IS EXPLORING THE PERFORMANCE OF DIFFERENT AREAS IN THE SALON

1. Were you put on hold when you called to book your appointment? ○Yes ○No
2. Was your appointment accurately booked? ○Yes ○No
3. Please rate the following:

Receptionist	Poor ① ② ③ ④ ⑤ ⑥ ⑦ Excellent, Not applicable (NA) ○
Shampoo Technician	Poor ① ② ③ ④ ⑤ ⑥ ⑦ Excellent, NA ○
Stylist	Poor ① ② ③ ④ ⑤ ⑥ ⑦ Excellent, NA ○
Esthetician	Poor ① ② ③ ④ ⑤ ⑥ ⑦ Excellent, NA ○
Nail Technician	Poor ① ② ③ ④ ⑤ ⑥ ⑦ Excellent, NA ○
Massage Therapist	Poor ① ② ③ ④ ⑤ ⑥ ⑦ Excellent, NA ○
4. Rate the overall atmosphere of the salon (décor, music, image) Poor ① ② ③ ④ ⑤ ⑥ ⑦ Excellent
5. How important was the location of the salon in your choice of patronage? Not at all ① ② ③ ④ ⑤ ⑥ ⑦ Very
6. Did you purchase any Lockworks products? ○Yes ○No
7. Did your stylist recommend Lockworks product to you? ○Yes ○No
8. Would you use spa services if offered? ○Yes ○No
9. Would you like to see the salon hours extended? ○Yes ○No
10. Do you consider a visit to Lockworks a luxury ○ or a necessity ○?

OTHER COMMENTS

APPENDIX D

Measurement model construct loadings

MEASUREMENT MODEL LOADINGS FOR THE SIX CONSTRUCTS

AFFECT	LOADING	FUNCTIONAL LOADINGS	
affec01	0.84	f01	0.66
affec02	0.78	f02	0.89
affec03	0.87	f03	0.91
affec06	0.63	f04	0.78

QUALITY	LOADING	BEHAVIOR INTENTIONS	LOADINGS
oq01	0.77	pom02	0.92
oq02	0.69	rp01	0.94
oq03	0.62	rp02	0.93
or04	0.69		

COMMUNAL LOADINGS		TECHNICAL LOADINGS	
issb02	0.47	to02	0.75
issb04	0.52	to03	0.80
issb06	0.77	to04	0.82
issb07	0.84	to07	0.80

VITA

Barbara Ross Wooldridge graduated *magna cum laude* with a bachelor of arts degree in Communication Arts and minor in French from James Madison University in 1982. She worked in the hospitality industry until she enrolled in Cornell University. In 1990, she received her Master of Professional Studies degree with concentrations in Marketing and Human Resources from the School of Hotel Administration, Cornell University. From 1990 through 1995, she worked in Seychelles and Kenya as a director of sales and marketing. In 1995 she returned to the United States and enrolled in the doctoral program at Louisiana State University. In 1997 she was selected to attend the Southern Marketing Association's Doctoral Consortium. She received the degree of Doctor of Philosophy in Business Administration (Marketing) with a minor in psychology in 1999.

DOCTORAL EXAMINATION AND DISSERTATION REPORT

Candidate: Barbara Ross Wooldridge

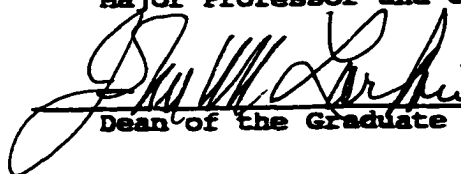
Major Field: Business Administration (Marketing)

Title of Dissertation: The Impact of Communal Behaviors on the
Judgement of Service Quality

Approved:



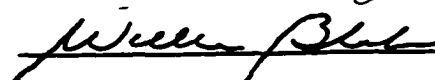
Major Professor and Chairman

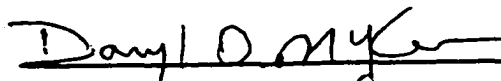


Dean of the Graduate School

EXAMINING COMMITTEE:







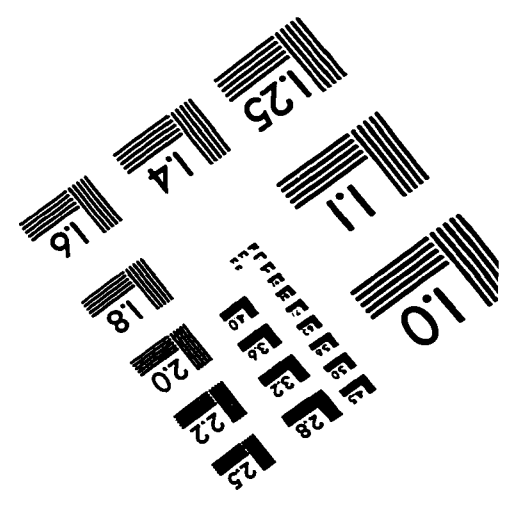
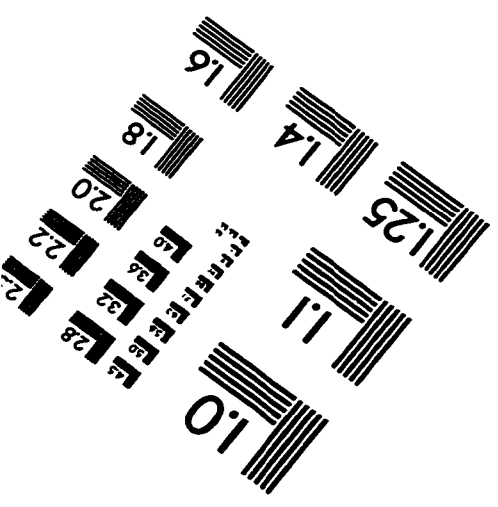
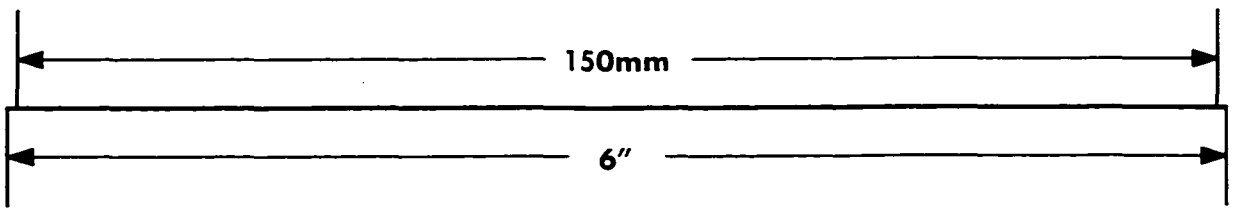
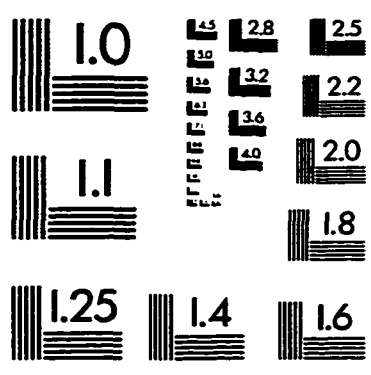
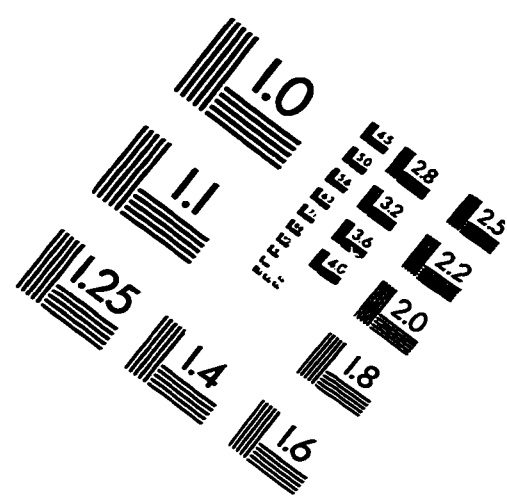
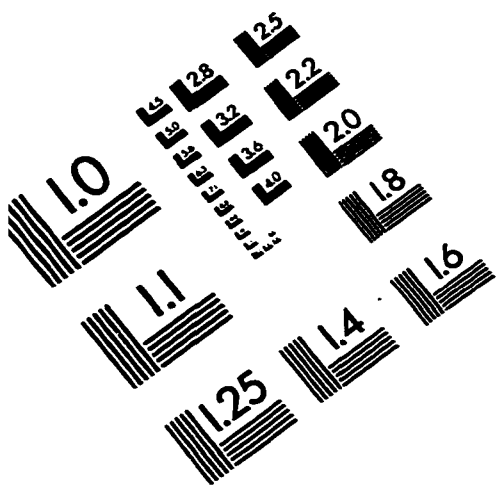




Date of Examination:

March 23, 1999

IMAGE EVALUATION TEST TARGET (QA-3)



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