Old Dominion University

ODU Digital Commons

Marketing Theses & Dissertations   Department of Marketing

Spring 2011

Judging Credence Service Based on Experience Service Evaluation: Moderating Effect of Ease of Assessing and Extrinsic Cues

Kungpo Tao
Old Dominion University

**JUDGING CREDENCE SERVICE BASED ON
EXPERIENCE SERVICE EVALUATION:
MODERATING EFFECT OF EASE OF ASSESSING AND EXTRINSIC CUES**

by

Kungpo Tao

M.S. May 2005, Texas A&M University at Commerce
M.B.A. June 1998, National Dong Hwa University
B.A. June 1994, National Pingtung University of Science and Technology

A Dissertation Submitted to the Faculty of
Old Dominion University in Partial Fulfillment of the
Requirement for the Degree of

DOCTOR OF PHILOSOPHY

MARKETING

OLD DOMINION UNIVERSITY

May, 2011

Approved by:

Kiran Karande (Chair)

Mahesh Gopinath (Member)

Steven Rhiel (Member)

ABSTRACT

JUDGING CREDENCE SERVICE BASED ON EXPERIENCE SERVICE EVALUATION: MODERATING EFFECT OF EASE OF ASSESSING AND EXTRINSIC CUES

Kungpo Tao
Old Dominion University, 2011
Chair: Dr. Kiran Karande

The impact of service failure on customers' perception of service quality is of vital importance to service providers. Prior research reveals little about how services that are purchased jointly by consumers are evaluated. My dissertation investigates the effect of failure of an experience service on the evaluation of a credence service that is purchased at the same time. In experimental study 1 carried out in the context of automobile services, it is found that the effect of service failure on trust is mediated by evaluation of service quality, and moderated by the ease of assessing service. In study 2 carried out in the same context, it is found that trust in the service provider mediates the effect of evaluation of experience service on evaluation of quality of credence service. The experience service evaluation to trust in service provider path and trust in service provider to evaluation of credence service path are moderated by service guarantee and type of relationship (pseudo- vs. true-). Together, study 1 and study 2 findings provide an explanation for how failure of an experience service impacts the evaluation of a credence service purchased simultaneously.

Committee members: Dr. Mahesh Gopinath

                       Dr. Steven Rhiel

Ask and it will be given to you; seek and you will find;

knock and the door will be opened to you.

MATTHEW 7-7.

ACKNOWLEDGMENTS

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

Introduction

Nowadays service industry is so competitive that service quality is critical to service businesses' survival. Service, unlike most tangible products, could be only evaluated during or after the service delivery in which customers' expectation and perceived performance should have different level of variance for service quality. When service failure occurs, it involves activities that occur as a result of customer perceptions of initial service delivery behaviors falling below the customer's expectations (Parasuraman, Berry, and Zeithaml, 1991b) and results in significant costs to the firm, such as lost customers (Keaveney, 1995). To deal with the dissatisfied customers from a service failure, understanding the customer's evaluation of service quality and managerial factors influencing relationship building is the key to a successful service recovery. Consumers are likely to use specific attributes or cues to infer service quality. Among many of the cues such as employee performance (Bitner, 1990; Hartline and Jones, 1996) and customer relationship (Gutek, 1995), associations with frontline employees could be the dominant quality cue. This paper provides an overview of the extant literature relating to service failure, service category, service quality, trust, and service cues including service relationship and service guarantee. Literature review is discussed in chapter 2. The research propositions and models are contained in Study 1 and Study 2 and they are outlined in chapter 3 and chapter 4, respectively.

This chapter consists of research background discussed from different perspectives including the service quality and relationship marketing which are presented in section

1.1.1 and section 1.1.2, respectively. Research gap and questions are discussed in section 1.2. Research objectives are informed in section 1.3. The organization of this study is described in section 1.4.

1.1 Research Background

Service has fundamentally different characteristics from goods which have tangible aspects. The perceived value of service is basically based on its intrinsic nature offered by the service provider. Within the service industry, service providers are under pressure to offer "value" to satisfy customers' expectations. According to U.S. Standard Industry Classification System, the service-producing sector consists of a number of divisions which are listed as Table 1. Service output accounts for 76.9% of gross domestic product (GDP) based on the report from National Economic Accounts (BEA) and it seems that service sector has already become a dominant driver of economic growth.

Table 1. Groups of Industries in Services Division

Service Categories
Utilities
Wholesale trade
Retail trade
Transportation and warehousing
Information
Financial activities
Professional and business services
Educational services
Health care and social assistance
Leisure and hospitality
Other services
Federal government
State and local government

Data from the U.S. Bureau of Labor Statistics (BLS) indicates that about 73 and 77 percent of the jobs added to U.S. payrolls from 1998 to 2008 were provided by the service-producing sector. It means that there are at least seven out of ten people employed within service industries. The top three industries with large numbers of jobs are the professional and business services, Retail trade, and Health care and social assistance. The service industry has more grown than other industries and the growth rate will be stably lasting in eight years (see Table 2).

Table 2. Employment by Major Industry Sector

Industry	Thousands of jobs			Percent distribution			Annual change	
	1998	2008	2018	1998	2008	2018	98-08	08-18
Goods-producing	24273	21363	21390	17.3	14.2	12.9	-1.3	0.0
Service-providing	102351	116451	131053	72.8	77.2	1.3	1.3	1.2
Agriculture	2528	2098	2020	1.8	1.4	1.2	-1.8	-0.4
Self-employed	9342	9312	9943	6.6	6.2	6.0	0.0	0.7
Secondary jobs	1896	1524	1607	1.3	1.0	1.0	-2.2	0.5

Consumers' expenditures for services have been increasing rapidly and represent approximately 33 percent of the total consumer expenditure (see Table 3).

Table 3. Percent Distribution of Total Annual Expenditures by Major Category

	2004	2005	2006	2007	2008
Average annual expenditures	100.0	100.0	100.0	100.0	100.0
Service	33.2	32.9	32.5	33.2	33.8
Housing	32.1	32.7	33.8	34.1	33.9
Food and beverages	8.8	8.0	8.1	7.9	8.3
Vehicles	7.8	7.6	7.1	6.5	5.5
Reading and Education	2.4	2.3	2.0	2.1	2.3
Cash contributions	3.2	3.6	3.9	3.7	3.4
Pensions and Social Security	10.2	10.4	10.2	10.1	10.5
Others	2.3	2.5	2.4	2.4	2.3

From the perspective of customers, the BLS annual report shows that the consumer's expenditure in average from 2004 to 2008 has almost the largest amount in service category. The proportion is even close to that of housing. The average expenditure of 44% during the past four years consists of restaurant service, apparel, auto service, flight, healthcare, entertainment, and insurance service. According to BLS, the major components of service spending—food service, apparel, transportation, healthcare, entertainment, and personal insurance plus housing and pension account for about 90 percent of total expenditures in 2008. Among the rapid growth items of service categories, healthcare is most significant one. Expenditures on healthcare increased 4.5 percent in 2008, 3.1 percent increase in 2007 and 3.8 percent increase in 2006. The information mentioned above all implies that service industry has not just dominated people's occupation and proportion of GDP but also provides an important transactional form for consumers in their daily lives.

Based on service classification, all services fall along a continuum from search based to credence based, the difficulty of obtaining pre-purchase information and knowledge increases as one moves from search-based to credence-based services. Search characteristics referred to the attributes that can be evaluated prior to purchase. Consumers are able to evaluate the product's search quality accurately based on their prior knowledge, direct inspection, and information reference such as consumer reports. Experience attributes were those that can be discerned only after purchase and consumption, and credence attributes cannot be judged confidently by the consumer even after purchase and consumption since consumers are lack of technical expertise or the

cost of acquiring accurate information about the service is higher than the service value expected. Therefore, consumers will be most skeptical of credence claims because these claims cannot be verified even after purchase and immediate consumption of services. The characteristics of service can be categorized in terms of risks perceived, price sensitive, expectation, and criticality (Ostrom and Iacobucci, 1995). The comparison of the three types of services is listed as Table 4.

Table 4. Characteristics of Search/Experience/Credence Service

Attributes	Search (goods)	Experience (service)	Credence (service)
Risks	Least risks and most confidence	Less and more confident to judge its quality	Riskier and no confidence to judge its quality
Price	Most sensitive	Consumers are more sensitive	Consumers are less sensitive and willing to pay more
Expectation	Low price and high quality	Low price is expected	Higher quality is expected
Criticality	Depends on the price of purchase	Less critical as less uncertainty	More critical as more uncertainty
Examples	Tangible goods	Hotels, fast-food outlets, hair salons, checking	Tax consultant, physicians, psychotherapy, financial investments

When purchasing or consuming a credence service, consumers are unlikely to judge the goodness of the service confidently (Murray and Schlacter, 1990) so that the perceived risk is higher than that of search or experience service. Consistent with the risk mentioned above, when customers are not certain about the outcomes of the service which is highly important to the customer (criticality), they would be quality sensitive rather than price sensitive (Ostrom and Iacobucci, 1995). In general, if customers are unable to judge quality of service, they might look to price, instead, since higher price

could be associated with higher quality. The main characteristics of service such as intangibility and perishability almost lead services totally separated from tangible goods and make it difficult to evaluate.

1.1.1 Service Quality

The importance of service quality has been emphasized in relationship marketing (Parasuraman, Zeithaml, and Berry, 1988; Zeithaml, Berry, and Parasuraman, 1996). Service quality is considered the property (Kelley, Donnelly, and Skinner, 1990) by which firms are able to differentiate themselves from competitors and then build up trustable relationships with customers. Basically service quality is conceptualized by its two sub-dimensions - technical and functional service quality (Grönroos, 1983). Unlike technical service quality which refers to the quality of the service output (Sharma and Patterson, 1999), functional service quality, on the other hand, addresses the nature of the customer-service provider interaction and the means by which the service is delivered. In experience and credence service, customers may have difficulty assessing technical outcomes due to the characteristics of intangibility of service (Crosby, Evans, and Cowles, 1990). The variability and the non-standardized nature of credence services lead to uncertainty about the actual cost and service performance (Murray and Schalater, 1990) and make it difficult for the consumer to evaluate alternatives before purchase (Guiltinan, 1987). For example, consumers in medical treatment find it difficult to evaluate the quality of the service after spending considerable time in Medicare. Hence, the amount of knowledge available to the consumer, prior to purchase, varies with the lowest for credence-based services and the highest for search-based services.

In the context of high credence service, instead of performance evaluation, relationship quality from the customer's perspective can be achieved through service providers' ability (Zeithaml, 1981) or physical surrounding (Bitner, 1995) to reduce perceived uncertainty about the service or the service provider itself. Such peripheral signal of service quality can be detected by customers when the service provider shows empathetic and responsive during service delivery. In the case, customers are likely to reduce uncertainty and enhance positive perceptions of the service outcomes. On the contrary, customers' uncertainty can imply the potential for service failure and negative outcomes, and it is why trust becomes vital to alleviating the negative impacts.

1.1.2 Customer Trust

The construct of trust has become an inevitable variable in service literature during past decades. In relationship marketing, trust is deemed an important instrument to build up relationships between both parties involved (Palmatier, Dant, Grewal, and Kenneth, 2006). In the literature of firm-consumer context, trust is widely confirmed as an essential element building the long-lasting relationships with customers (Morgan and Hunt, 1994; 1999), and it is believed to be an mediating variable related to positive outcomes such as customer retention. From previous definition, trust encompasses two requirements—the partner's belief about specific characteristics of the other relationship partner and the partner's intention to rely on the other partner.

In experience or credence service, because of uncertainty about the outcomes, customers will take into account of the relationship since the value of transaction depends largely on

how trustable the service provider could be. In e-commerce service, for example, trust is associated with high levels of security and privacy which are generally lack of. Similar to e-commerce, most services possess impersonal nature and inherent uncertainty of transactions or performance, and then not only decrease the customer's perception of control of service outcomes but also increase their demand of apprehensions about the service itself and the service provider. Thus, information clues such as service guarantee are considered as the firm's signal of trustworthiness (Martin and Camarero, 2005).

1.1.3 Service Cues

It is widely noted that consumers are able to differentiate services by using service cues (Zeithaml, 1988). Between the two categories of cues—intrinsic and extrinsic cues (Olson and Jacoby, 1972), consumers tend to rely more heavily on extrinsic cues than intrinsic cues when intrinsic cues are not available or when the quality is difficult to evaluate (Sawyer, Worthing, and Sendak, 1979). This is just case of service due to its intangible nature. Extrinsic cues are more important because intrinsic cues such as employee competence are extremely difficult to evaluate for consumers.

1.2 Research Gaps and Research Questions

An effective relationship is extremely important in service industry when customers are either relatively unsophisticated about the service (Crosby *et al.*, 1990) or uncertain technical outcomes (Zeithaml, 1981). In service context, due to intangibility and lack of technical knowledge and experience, service outcomes are difficult to evaluate. Consumer trust thus is critical to establishing the relationship with customers which in

turn, leads to the firm's positive outcomes. From previous studies, the assessment of service quality is still not clear especially when service providers deal with the problem of information asymmetry (Martin and Camarero, 2005).

Research gaps are found and listed as following:

- In consumer-relationships, the substantial and positive impact of trust has been confirmed (Sharma and Patterson, 1999). However, little is known about the relationships between two service quality evaluations.

- Trust has been widely adopted as outcome variable in service quality models (Boulding, Kalra, Staelin, and Zeithaml, 1993; Cronin and Taylor, 1992; Sirdeshmukh, Singh, and Sabol, 2002), but there are few studies examining the role of trust in mediating the relationships between two service quality evaluations.

- Based on the criteria of assessability of services, only few articles have tried to classify the type of service (Ostrom and Iacobucci, 1995) and investigate its effects on service quality, especially when customers are not certain service failure or future risks.

- Trust has been widely adopted as a mediator in relationship models (Palmatier et al., 2006), but there are no universal measures for it and little known about the interactions effects between managerial factors and service quality on trust.

- Previous research has indicated that extrinsic cues are more important than intrinsic cues to customer evaluation of service quality (Zeithaml, 1988). Certain extrinsic cues such service guarantee and service employee are fairly easy to

identify and could have significant influence on customers' service quality perceptions.

The research addresses the issue of service failure and service quality evaluation in the context of car repair service. It is to examine the effects of different services on the customer's quality perceptions. The research questions addressed in the current study are as following:

- What are the effects of the assess-ability of service quality on customers' trust, and how does its effect differ from a service success?

- To what extent are customers evaluating service quality after experiencing a service failure?

- Will customers infer high quality after experiencing a failure when service is guaranteed?

- How effectively are service providers using service guarantee to recover the customer's evaluation after experiencing a service failure?

- How should service guarantee be designed to minimize the effects of service failure?

- How can service providers use true-relationship alleviate the negative impact from experiencing service failure?

- How do customers evaluate a jointed credence service quality after experiencing a service failure?

1.3 Purpose of The Study

By offering empirical investigation of relationships between perceived service quality and trust, study 1 seeks to examine the direct and indirect effects of service failure, experience service quality on trust. The main purpose of study 1 is to understand the consumer's perception of service quality during a service failure in which an experience service and a credence service are jointed. It is intended to answer questions such as "How customers evaluate service quality differently when different services are jointed?" Given the causal relationship between service failure and service quality evaluation, the proposed model (see Figure 1) reveals that perceived service quality should act as a mediator between service failure or success and trust.

Figure 1. Conceptual Model of Experience Service Quality Evaluation and Trust
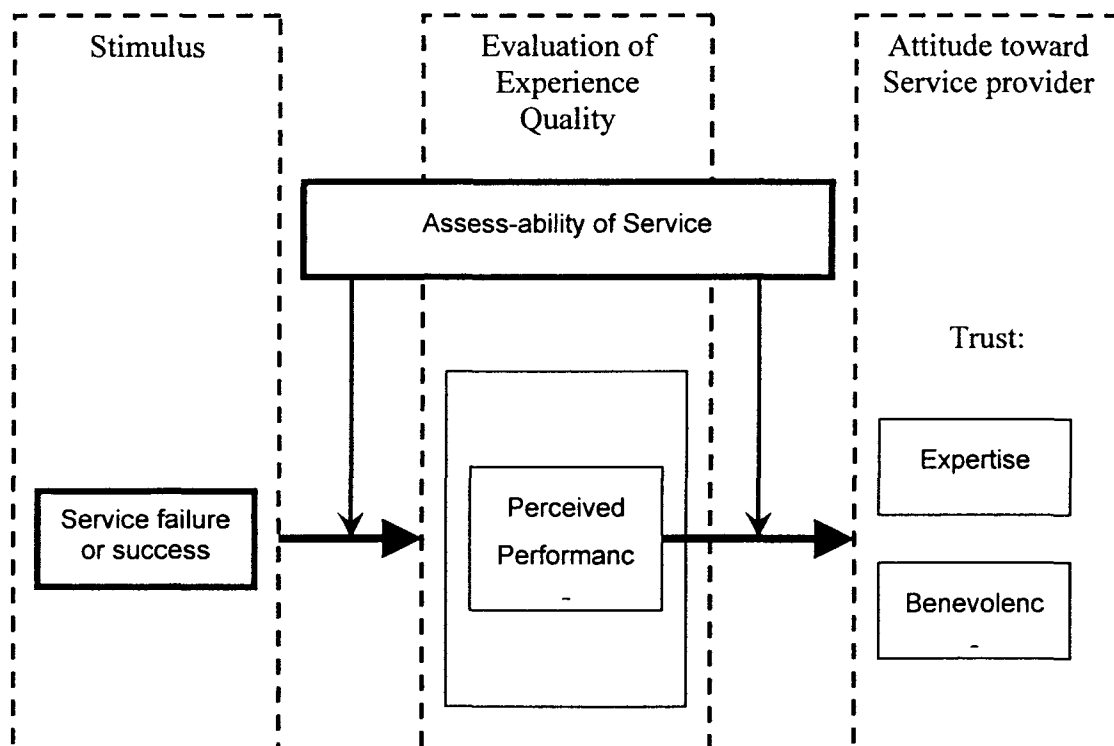
In study 2, two important managerial factors are added in the model—service guarantee and service relationship. Build on study 1, study 2 is designed to know how the managerial variables included in the model interact with service evaluation and customer trust. The proposed model reveals that trust should act as a mediator between jointed-service evaluations. Maintaining true relationship rather than pseudo-relationship with customers is hypothesized to have positively moderating effects on the relationship between trust in benevolence and credence service evaluation. This conceptual model builds upon previous research and intends to examine the impact of both service failures and managerial factors on credence service evaluation. Through a closed relationship with employee and service guarantee, dissatisfied customers may identify the specific service quality cues and should be able to transfer some negative feelings into positive affects (see Figure 2).

Figure 2. Conceptual Model of Experience and Credence Service Quality Evaluation
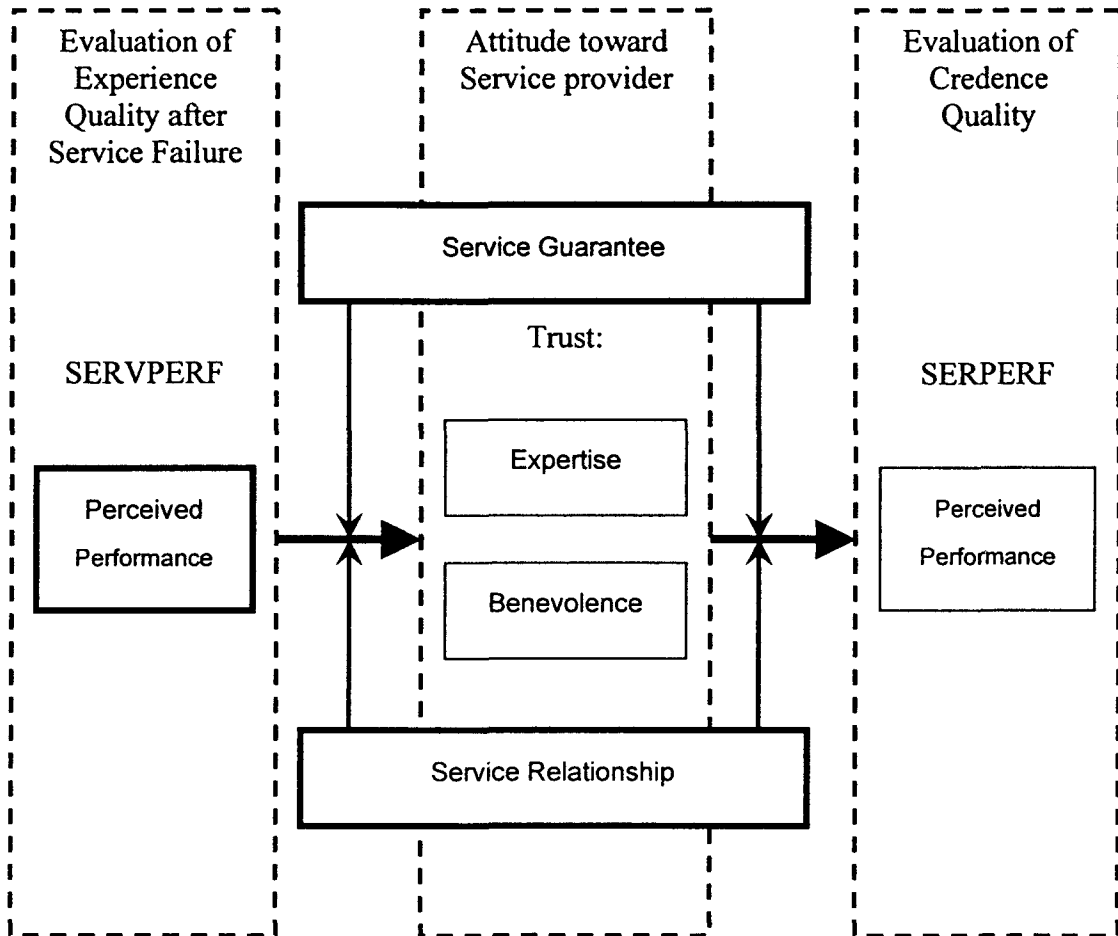
The objectives of this study are to:

- Understand the consumer's perception of service quality during a service failure in which an experience service and a credence service are jointed.

- Know how the managerial variables including service guarantee and pseudo-relationship interact with service failure and experience service evaluation and their effects on trust and credence service evaluation, respectively.

Contributions of this study to both academic and practitioners would be made since no research has yet investigated service quality within two different types of services and the model suggests an alternative way to evaluate credence service quality which is difficult to assess (Zeithaml, 1991).

1.4 Organization of The Study

This study is organized into five chapters. Chapter I entitled "introduction," provides the background for the essential concepts of service quality and imperatives to answer the research questions of this study. Chapter II entitled "Literature Review," summaries the relevant arguments from previous literature in detail. Chapter III entitled "Study 1," develops the proposed conceptual framework of service quality and trust and tests the hypotheses. Study 1 is conducted based on experimental designs, and the description of research subjects, instrument, and the statistical techniques applied in this study will be discussed. Chapter IV entitled "Study 2," further analyzes a similar model by adding two more moderating variables. In the chapter, data collected from the survey of consumers and result of analysis presents statistical findings. Analyses of reliability and validity of the both studies are discussed separately in each study. Discussion, conclusion, and implication are presented at the end of each study. Limitations and future research direction are suggested as well.

CHAPTER II

Literature Review

Most service studies have focused on how to improve the service quality of service providers in order to attract and maintain customers—factors that affect a customer's perception of service quality, and the effects of service recovery strategies on customer's justice perception and customer outcomes, but few studies have examined jointed services and measured how one service failure influences the other servcie's evaluation. How customers' evaluation beeing altered during service failure is, therefore interesting to marketing research.

2.1 Characteristics of Service

Intangibility, heterogeneity, inseparability, and perishability, and lack of owenership are usually craharcterised five dimensions of service (Zeithaml, Parasuraman, and Berry, 1985). Intangibility of services could cause marketing problem since it leads to difficulty in displaying or communicating services (Zeithaml *et al.*, 1985). Compared to goods, service is more difficult to evaluate (George and Berry, 1981). From the process of consumption, consumers might have difficulty in assessing service quality before the purchase because of the impossibility of display (Parsuraman, Zeithaml, and Berry, 1985). Heterogeneity is defined as the variable quality of service with even the same provider (Zeithaml *et al*, 1985). It means no exactly the same quality could be found in every time service delivery. Lack of standard and quality control (Clemes, Mollenkopf, Burn, 2000; Zeithaml *et al.*, 1985) are the major problem of heterogeneity of service. In inseparability,

since customers are acutally involved in production, it is difficult to mass produce services at a central location (Clemes *et al.*, 2000; Zeithaml *et al.*, 1985). A correct medicare diagnosis, for example, depends on an accurate description of symptoms from a patient to a doctor. Perishabilty refers to the characteristic of one-time consumption in which service can not be inventoried (Zeithaml *et al.*, 1985). Lack of ownership reflects that consumers can only have access to the service and no tangible ownership.

2.1.1 Intangibility

Compared to tangible goods, services can not be felt by individual's sensory perceptions. Customers are unable to see before purchase or predict the outcomes after the service delivery. Thus, to reduce the uncertainty, customers are likely to seek information about service quality, and the service providers will do their jobs to "tangiblize" the intangible (Levitt, 1981). Service providers can communicate their service quality by offering physical evidence and presentation (Booms and Bitner, 1981). According to Kotler and keller (2006), a service provider can make its service tangible through marketing tools:

- Place—the physical environment including exterior and interior should give customers some thoughts about the service.

- People—employees' behavior and attitude reflects how customer would be treated.

- Equipment—sophisticated facilities such as computers and machines should look "state of art."

- Communication material—printed materials look as efficiency and speed in works.

- Symbols—logos and symbols should signal the quality and speed of service.

- Price—monetary reward in case of poor service.

2.1.2 Inseparability

Since services are produced and consumed at the same time, it is difficult to separate the provider and the service from the service itself, and the customer involvement and customization cause difficulty mass producing services (Clemes *et al.*, 2000). Customer involvement can influence the service outcomes because services are usually highly customized to tailor the customer's needs (Hill and Nimish, 1992). On the other hand, service provider is also involved in the service production process. Unlike sellers of physical products, service provider is seen as the service itself (Bateson, 1995). Thus, service provider's representation is also crucial to the customer's perception of service quality. Due to high contact time and high level of customization, service providers should learn how to work faster and build up customers' confidence at the same time.

2.1.3 Heterogeneity

Due to highly customized service, service delivery depends on who provides, when and where to be provided. Customers are aware of the variability and may seek other's suggestions before purchasing the service. The lack of standard outputs leads to possible problems in quality control and promotion (Clemes *et al.*, 2000). Quality control is difficult because the main input of the service process is "people" (Bitner and Zeithaml, 1987). Similar to quality control, promotion of service quality seems problematic because of the high reliance on people and the emphasis on customization that lead to variability

in outputs. To increase quality control, recruiting and training may become an important means to select and provide employees required skills in service (Kotler and Keller, 2006).

2.1.4 Perishability

The biggest problem caused by the characteristic of perishability is unstable demand of customers. Service performance cannot be saved or stored in future. Such inability to store inventory and to synchronize demand and supply can endanger the survival for service providers (Parasuraman *et al.*, 1988). Sasser (1976) suggests marketing strategy of differential pricing to deal with the problem caused by perishability. The differential pricing seems useful to shift demand from peak to off-peak periods, thus, it should alleviate the difficulty in equalizing supply and demand in the service market. According to Table 5, service complexity is defined as the number and intricacy of steps required to perform a service and service divergence refers to degree of freedom allowed within a service process step (Shostack, 1987).

Table 5. Criteria to Differentiate Services

Criteria	Types of Service	Examples	Researchers
Standardization, customization, and degree of contact	high customized and high contact	legal, health care	Lovelock, 1983
	high standardized and high contact	public transportation	
	high customized and low contact	hotel, restaurant	
Complexity and Divergence	high complexity and low divergence	hotel, telephone	Shostack, 1987
	low complexity and high divergence	singing, teaching	
Degree of contact	high contact, customized, personal	legal, counseling	Bowen, 1990
	low contact, customized, personal	laundry	

Table 5 Continued

Nature of process and customer presence	people-processing service	airline, restaurant	Lovelock and Yip, 1996
	possession-processing service	car repair, laundry	
	information-based service	banking, legal	
Degree of contact and intangibility	frequent and intimate contact	project manager	La, Patterson, and Styles, 2005
	Intangibility and complexity	engineering	

Thus the service that is low in divergence could be easily standardized (e.g., telephone service). Tangibility/intangibility of actions and the extent to which customers need to be presented during service production (degree of contact) are the most widely accepted criteria to classify services. In tangibility, services could be classified as equipment based (information service) or people based (counseling), and from the perspective of functions, service could be any of the forms of performances (car repair), experiences (entertainment), or intellectual property (package software) (La et al., 2005).

2.2 Experience and Credence Service

The classification of services (Figure 3) has been first developed by Zeithaml (1981) and the criteria of ease/difficulty in evaluation has been used to classify service as high in search qualities, high in experience qualities, and high in credence qualities.

Figure 3. Continuum of Evaluation for Different Types of Products/Services

Easy to Evaluate — Most goods — Most services — Difficult to Evaluate

Clothing · Jewelry · Furniture · Houses · Automobiles · Restaurant meals · Vacation · Haircuts · Child care · Television repair · Legal services · Root canal · Auto repair · Medical diagnosis

High in Search Quality — High in Experience Quality — High in Credence Quality
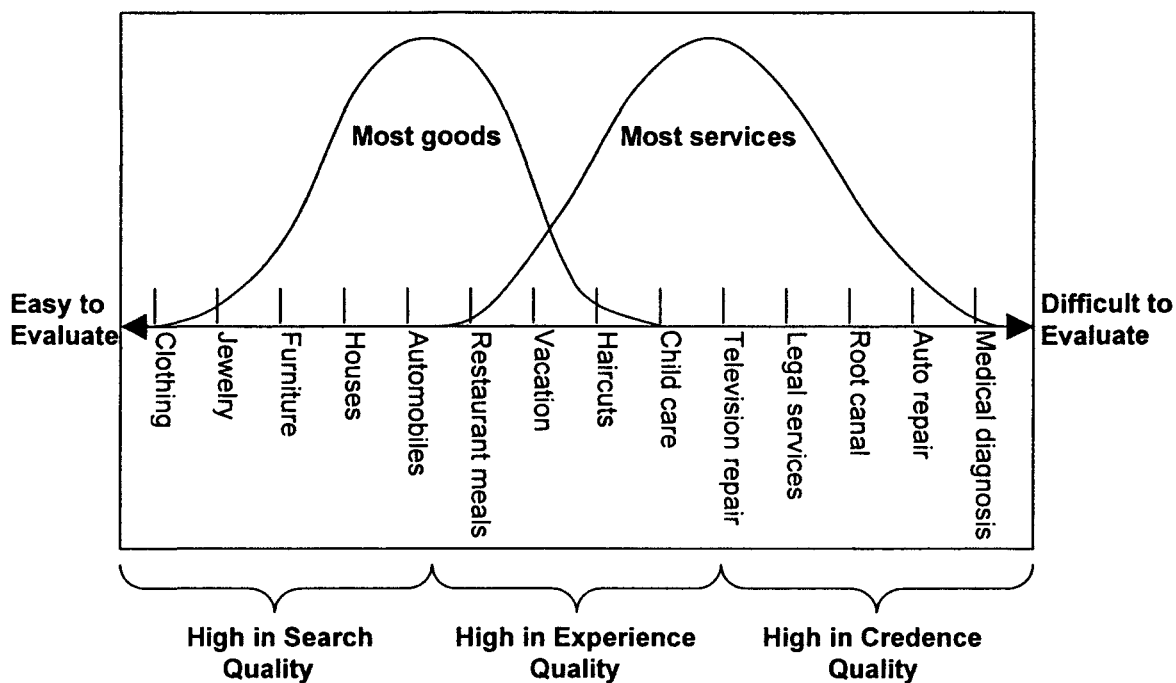
(Source: Zeithaml, 1981)

Search attributes are usually found in products in which consumers are able to verify those attributes prior to purchase by direct inspecting and obtaining information available from other sources. Experience attributes can be only evaluated only after purchase or consumption of the service. Credence attributes are difficult to verify even after the purchase or consumption. Unlike products with search attributes, experience and credence services are considered risky to consumers because of lack of quality inferences. To deal with the problem, consumers are likely to rely on other cues such as brand name to draw inferences about the service quality. According to Figure 3, service which is high in experience quality can be assessed only after it has been consumed, and service which is high in credence qualities can not be evaluated even after consumption.

Examples of experience and credence service are restaurant and medical service respectively. Because of difficulty in evaluating quality, credence services are riskier for consumers than experience services (Stafford 1996). To evaluate service, relevent factors associated with experience of consumption are necessary but not exist (Alford and Sherrell, 1996; Zeithaml and Bitner, 2000). In credence service, customers may have difficulty in developing their expectations even though they may have known about the servce since the factors for evaluation are missing. Examples of credence service are psychotherapy and physicians (Ostrom and Iacobucci, 1995). Patients in such service may have insufficient expertise to identify factors evaluating service quality.

2.3 Service Quality

Service quality is defined by Grönroos (1982) as "the outcome of an evaluation process where the consumer compares his expectations with the service he perceived he has received." Similar to Grönroos's definition, perceived service quality is defined as the difference between expected service and perceived service (Parasuraman *et al.*, 1985; 1988). Two constructs—service expectation and service perception are thus identified, and the "perceptions gap" has been consistent with the disconfirmation paradigm of Churchill and Surprenant (1982). According to Zeithaml (1988), service quality perception is the consumer's judgment about the overall excellence or superiority of a service. Due to the difficulty in defining and measuring it, service quality has raised considerable interests in marketing literature but the consensus on both issues is still missing (Asunbonteng, McCleary, and Swan, 1996; Lewis and Mitchell, 1990). It is widely acknowledged that the service quality is more difficult to model than the goods

quality because of the intangible nature of services. Also, the characteristic of intangibility makes service quality more difficult to evaluate than product quality (Hong and Goo, 2004). Zeithaml's (1988) definition of service quality perception indicates that the service quality is perceived by a customer when service is performed as superiority or excellence that satisfies the customer. Zeithamal and Bitner (1996) further define the construct as the delivery of excellent or superior service relative to customer expectations. Table 6 shows the main definitions and measures of service quality which have been widely accepted. In Grönroos's (1984) service dimensions, for example, the service quality perceived by customers includes two dimensions—technical quality and functional quality. The former could be measured more objectively by customers than the latter because the outcome of the service process is easier to evaluate than the process itself or function. Technical quality refers to what customers actually receive from a service, while functional quality concerns customers' perception of interaction during service delivery. Parasuraman *et al.*, (1985) created ten dimensions in an exploratory study and further reduced ten to five dimensions (Parasuraman *et al.*, 1988). The global measurement of service quality, SERVQUAL is developed based on the five dimensions and widely applied to service industries. Similar to Grönroos's (1984) dimension, two dimensions of Parasuraman *et al.*, (1988) include mechanistic quality and humanistic quality involve objective aspect or features of a service and subjective perceptions of people, respectively. Based on the scales developed by Parasuraman *et al.* (1988), tangibles include physical facilities, equipment, and staff appearance which are visible to customers. Reliability refers to the service provider's ability to perform service dependably and accurately. Responsiveness means the willingness to help and respond to

customers' needs. Assurance reflects the ability of service staff to inspire the customer's confidence and trust toward the service provider. Empathy shows how well the service provider cares about the individual customer when the service is delivered.

Table 6. Definitions and Measures of Service Quality

Definitions	Dimensions and industries			Researchers
Expectations against perceived performance	Technical		service business executives	Grönroos, 1982; 1984
	Functional			
Judgment by difference between expected service and perceived service (SERVQUAL)	Mecha-nistic	Relability	focus group interview	Parasuraman et al., 1985; 1988
		Tangibles		
	Human-istic	Empathy		
		Responsiveness		
		Assurance		
Discrepancy between customers' expectation and their perceptions	Customer kindness		car service	Bouman and van der Wiele, 1992
	Tangibles			
	Faith			
Service performance should be measured as an attitude	Attitude measure SERVPERF rather than SERVQUAL		fast food, banking, pest control, dry cleaning	Cronin and Taylor, 1992
Service quality measures should be modified as the industry varies	Modified SERVQUAL		financial institutions	Brown et al., 1993
Overall perception based on cutomers' evaluation of the three dimensions	Interaction		fast food, photograph, amusement, dry cleaning	Brady and Cronin, 2001
	Environment			
	Outcome			
Service quality measure should be tailored to demographic chacteristics	Interaction		railway travel service	Ganesan-Lim, Russell-Bennett, and Dagger, 2008
	Environment			
	Outcome			
	Systems			

2.3.1 Expectations

Customer expectations are viewed as pretrial belief about service (Olson and Dover, 1979), and they are basically consumer-defined probabilities of the occurrence of positive

and negative events (Oliver, 1981). The term expectation is described to predict the occurrence of the service or to believe the capability of the provider. In short, expectations are generally viewed as desires or wants of customers and refer to what service provider should offer rather than would offer (Parasuraman *et al.*, 1991b). Expectations may be active based on the beliefs on the basis of direct observation or experience with a situation (descriptive beliefs), information derived from others (informational beliefs), or through inference (inferential beliefs) (Fishbein and Ajzen, 1975). Descriptive beliefs hold as a result of direct personal experience unless the event occurred unexpectedly. The beliefs should correctly reflect the observed event. A customer traded in his old car in a car dealership, for example, the customer should hold a descriptive belief about the service/employee. Informational beliefs hold when the connection between an object and attribute is first made by another source. Individual can create an informational belief because of the credibility of source. In the case of auto repair service, a customer's expectation is as informational belief when he is told by a mechanical his car has engine problem and need to be taken care of immediately. Inferential beliefs are drawn from a prior belief since they are based on the perceived relations between beliefs. A customer will form an inferential belief when s/he has a reference to infer her/his further belief. Auto repair service is also a good example of inferential belief. The customer who has formed a belief that the service employee treats her/him nicely will believe the mechanical will do the same for her/his car.

To form expectations of service, customers may use any information associated with service. Sources of information could be prior exposure to the service, word of mouth,

expert opinion, publicity, and communications (e.g., advertsing, personal selling, and price) (Zeithaml, Berry, and Parasuraman, 1993). Two different approaches to customer expectation can be found in marketing literature and they are "will expectations" and "should expectations" (Boudling *et al.*, 1993; Tse and Wilton, 1988). Customers form expectations about what should happen in their future service encounter, and this normative expectation serves as a standard and differs from desired service quality. When service failure occurs, "will expectations" should be raised (Parasuraman *et al.*, 1991b). "Will expectations" associated with what customers believe will happen in subsequent service delivery. To further understand customer expectations, we are interested in how expectation changes as a result of others factors. In the relationship between belief and expectation, expectations act as pretrial beliefs, and pretrial commucation containing information about the service performance may be converted to cognitive associations such as product-specific beliefs. These beliefs will, in turn influence a pretrial attitude toward the product (Olson and Dover, 1979). Consist with Olson and Dover (1979), Oliver (1980) proposes that attitude is a function of expectations. If a customer is having a nice meal, for example, at one of the best restaurants, he/she probably expects good service and food, and then positive attitude toward the restaurant has increased. According to Fazio and his colleagues (1986), attitude/non-attitude continuum is thought as the strength of association in memory between service and the customer's attitude about the service. At the end point without attitude, customers do not have any expectation about the service. To evaluate service quality, one has to make judgment based on his/her perception of performance only. At the other end point with existing attitude, an evaluation (belief) is available in memory. Thus, evaluation is working

through activation of the memory triggered by contact with services (Fazio, Powell, and Herr, 1983).

2.3.2 SERVQUAL

As the most common measure of service quality, SERVQUAL has been developed by Parasuraman *et al.* (1985), and the instrument is designed to measure service quality. In their model, basic dimensions of service which are derived from explortary research reflect service attributes and have been identified. These well known five dimensions consist of tangibles--physical facilities and appearance of personnel that contain the outward physical trappings of the service provider, of the facilities and of the communication materials used by the firm; reliability-- ability to perform the service consistently and accurately, responsiveness—readiness and willingness of the service provider to help customers and provide prompt service, assurance-- employee expertise knowledge that leads customer to have trust and confidence toward the service provider, and empathy-- caring and attention provided to customers by the service provider (Parasuraman *et al.*, 1991a, b; Zeithaml *et al.*, 1988).

Other similar measurements of service quality such as service reliability and service validity (Van Raaij and Pruyn, 1998) have been interoduced to expain whether the service is specified and provided correctly, respectively. They argue that the customer's evaluation of service depends on whether service specification and realization are matched by his/her expectations. Service validity is questioned when a customer takes his/her car to an auto repair store, for example, no agreement being made on

specifications about when to deliver the car, what should be checked and repaired, and what is the maximum repair price, In this case, service validity is lacking in the input stage of the service process before actual service realization (Van Raaij and Pruyn, 1998). Service reliability refers to the service performance and realization of these service specifications during the succeeding consumption stage.

2.3.3 SERVPERF

Besides SERVQUAL, an alternative measurement model, SERVPERF (Cronin and Taylor, 1992) has been employed as it focuses only on performance. Justifcation for SERVPERF indicates that expecation of SERVQUAL has no direct impact on customer satisfaction (Vilares and Coelho, 2003). SERVQUAL measures service quality by comparing the perceptions of the service with expectations, while SERVPERF maintains only the perceptions of service quality. Such performance-based measure based on the investigation across four industries may explain more variance in an overall measure of service quality (Bolton and Drew, 1991a, b; Boulding *et al.*, 1993; Cronin and Taylor, 1992; Oliver, 1989), and thus confirming that SERVPERF would be more reliable and better than SERVQUAL (Cronin and Taylor, 1992; Parasuramanl, 1994).

2.4 Service Failure

Service failure seems inevitable since the unique nature of service is associated with coproduction and inseparability of production and consumption (Fisk, Brown, and Bitner, 1993). From the perspective of disconfirmation (Oliver, 1981), service failure occurs when the outcome or processes of service delivery does not meet the customer's

expectation (Holloway and Beatty, 2003; Parasuraman *et al*, 1991b; Zeithaml *et al.*, 1993). In fact, service failure is caused by a mistake or problem during the delivery of the service and categorized as service delivery failures—failure to respond to customer needs and requests (Bitner, Booms, and Tetreault, 1990), outcome failures, and process failures (Stauss, 2002). Among various service failures, a core service failure may have the significant impact on the customer's reactions (Chang, 2006). There are two kinds of core service failures—when service provider's capability or performance cannot meet the customer's needs, and when the service delivery is flowed (Smith, Bolton, and Wagner, 1999). According to Kelley and Davis (1993), service failures could be formed in terms of severity, recurrence which refers to numbers of failure experiences, and recentness as timing of the failures, and these characteristics should have impact on customers' reactions to service failure. Evaluating the cost, Smith *et al.* (1999) further defined service failure as the magnitude of loss experienced from a failure. The loss from a failure can be tangible or intangible in the form of monetary value or psychic energy, respectively (Hart, Heskett, and Sasser, 1990). Since service is impossible to be error-free, in most situations of service, customers may have failure expectations (McCollough, Berry, and Yadav, 2000). When a service failure occurs, customers should perceive the discrepancy between failure expectations and service performance, and then further expect appropriate recovery efforts. In car repair service, for example, customers may have expectation of possible problems during or after the service. In the case, customers are likely to seek information which signals the service provider's recovery efforts to redress the problem from the service failure. In conclusion, service quality can be generally decomposed as interaction, environment, outcome, and ability quality (shown

as Table 7). In the case of service failure, customers should be more sensitive to the service outcome which leads to service quality perception. In practice, customers are usually not able to evaluate the service except a failure occurs. Thus, outcome quality could be the most import part for customers to judge how well the service provider can offer for them.

Table 7. Dimensions and Forms of Service Quality

Dimensions						Sub dimensions of Service	
	Grönroos, 1982; 1984 (functional and technical)						
		Parasuraman et al., 1985; 1988 (SERVQUAL)					
			Bouman and van der Wiele, 1992				
				Cronin and Taylor, 1992 (SERVPERF)			
					Brady and Cronin, 2001, Ganesan-Lim et al., 2008		
Interaction	●	●	●		●	Empathy, Responsiveness	Leads to service quality expectation
Environment		●	●		●	Tangibles and Facilities	
Outcome	●	●		●	●	Perception of Service Outcomes	Leads to service quality perceptions
Ability		●				Reliability and Assurance/Expertise	

2.5 Trust

Trust has become a central role in the development of relationship marketing (Dwyer, Schurr, and Sejo, 1987; Morgan and Hunt, 1994). Different definitions of trust seem lack of consensus in different disciplines. Attempts to define trust have widely been found in marketing, management, and psychology literature (see Table 8).

Table 8. Definitions and Dimensions of Trust

	Dimensions	Definitions	Researchers
One dimension	Reliability	Expectations of the partner to the certainty to keep his promises	Schurr and Ozane, 1995; Dwyer and Oh, 1987
Two dimensions	Reliability & emotional	A belief in the other's dependability or reliability	Johnson-George and Swap, 1982
	Reliability & integrity	A party's confidence in the exchange partner's behavior	Morgan and Hunt, 1994
	Cognition-based and affect-based	The extent to which a person's confidence and willingness to act on the actions of another	Daniel, 1995; Johnson and Grayson, 2005
	Cognitive & behavioral	"Willingness to rely on an exchange partner in whom one has confidence."	Moorman, Zaltman, and Deshpande, 1992; Butler, 1991
Multiple dimensions	Predictability, dependability, and faith	Feeling of confidence and security in caring responses of the partner and strength of the relationship	Rempel, Holmes, and Zanna, 1985
	Ability, benevolence, and integrity as the antecedents of trust	Trust is as a behavioral intention. One trusts someone because he/she is trustworthy.	Mayer, Davis, and Schoorman, 1995
	Contractual	Expectations that an exchange partner keeps its promises	Miyamoto and Rexha, 2004
	Competence	Confidence in exchange partner's competence	
	Goodwill trust	Confidence in exchange partner's open commitment to supporting and continuing a focal exchange relationship	

2.5.1 From Managerial Perspective

Trust consists of several essential issues such as risk, uncertainty, and dependency, and by which Mayer *et al.* (1995) proposed an integrative definition of trust as "the willingness of a trust to be vulnerable to the actions of trustee based on the expectation that the trustee will perform a particular action important to the customers, irrespective

the ability to monitor or control that trustee." Trust is crucial in social environment because people are unable to completely understand the social complexity or others' behaviors and intentions. With these social uncertainties and the needs to comprehend the social environment, people are forced trust in others. Based on the rationale, trust is a context-dependent social concept containing both cognitive and behavioral components (Butler, 1991). To clarify trust, Mayer *et al.* (1995) separate trust from trustworthiness by adding three facets of trustworthiness into their integrative model—ability, benevolence, and integrity.

2.5.2 From Psychology Perspective

Trust is viewed as trustworthiness in the context of personal characteristics with positive expectations on others' character (Butler and Cantrell, 1984; Colquitt, Scott, and LePine, 2007). There are two primary components found in previous trust literature—intention to accept vulnerability and positive expectations (Mayer *et al.*, 1995; Colquitt *et al.*, 2007). The willingness to be vulnerable is assocaited with trustor's expectation. A customer is willing to be vulnerable to a service provider, for example, probably because the service provider is believed to want to do good for the trustor. In other words, the service provider is trustworthy. Trustworthiness is deemed a multifaceted construct that implies the trustee's competence and character (Butler, 1991; Butler and Cantrell, 1984). Ability captures the knowledge and skills required to complete a specific job (Butler and Cantrell, 1984). Benevolence is defined as the extent to which a trustee is believed to be willing to do good for the trustor, and integrity refers to the extent to which a trustee is believed to behave morally and ethically (Colquitt, Scott, and LePine, 2007). Since benevolence can

create emotional attachment to trustee (Colquitt *et al.*, 2007), the affective fundations for trust exist and delvelop an emotional bond between the trustor and the trustee (Johnson-George and Swap, 1982).

2.5.3 From Marketing Perspective

The very element of trust is "reliability" that reflects the expectation of counterparty's behavior and the certainty that the counterparty will keep his/her promise (Dwyer and Oh, 1987; Schurr and Ozane, 1995). Anderson and Weitz (1989) define trust as one party's belief that the other party will take actions to fullfill its needs. Similar definitions can be found in literature such as a willingness of one with confidence to rely on an exchange partner (Moorman *et al.*, 1992) and one's "confidence in an exchange partner's reliability and integrity" (Morgan and Hunt, 1994). The belief in the partner's reliability is within the cognitive dimension, or refers to trustworthiness. Behavioral dimension as the other component of trust concerns the behavioral intention that implies the trustor's vulnerability and uncertainty (Moorman *et al.*, 1992). Customers' trust in salesperson has been widely investigated and shown that trust is positively related to the customer's experience with salesperson (Crosby *et al.*, 1990; Downey and Cannon, 1997). The salsperson's characteristics such as expertise (Crosby et al., 1990; Donney and Cannon, 1997) and likeability (Downey and Cannon, 1997) are positively assocatied with customer's trust in the salesperson and, in turn, positively influence trust in the company (Downey and Cannon, 1997). In general, customers are unable to evaluate the quality of service during the service delivery or even after the delivery; thus, trust in service

emplyee or service provider becomes a short cut to reducing uncertainty and risks and ensuring service quality.

2.5.4 Process of Trust

Three processes of developing trust have been proposed in previous literature— prediction process, capability process, and transference process. Prediction process relies on one party's ability to predict the other party's behavior. In the process, assessment of the other party's credibility and benevolence is required to build up trust when both parties have shared experience that enatils prediciton of other's behavior. By repeated interaction such as making and delivering promise, a service provider is able to make customers develop his/her confidence (Doyle and Roth, 1992; Swan and Nolan, 1985). Capability process focuses on the other's party's ability to meet its promise such as prompt delivery for customers. If the ability is doubtful, customers should be reluctant to trust the service provider. In transference process suggests that trust can be transferred from one to the other party since a trustee with highly trusted source can strengthen confidence of the trustee with little or no direct experience (Milliman and Fugate, 1988; Strub and Priest, 1976). The service provider, therefore, would be trusted for she/he is representative of a trusted organizaiton. On the contrary, distrust can be also transferred when trustee with no trusted source.

In sum, trust seems to be fit into a two-dimensional construct when consumers consider a service provider either professional or beneficial. Similar dichotomization has been found in literature. Build on the knowledge from previous studies, the construct of trust has

been further defined as the perceived credibility and benevolence of a target of trust (Downey and Cannon, 1997; Kumar, Scheer, and Steenkamp, 1995). The perceived credibility of an exchanger partner relies on the other partner's statement (Lindskold, 1978). According to Lindskold (1978), a party's expertise could be oral or written statement that increase the other party's confidence and build up trust. In practice, service provider with higher level of expertise is more trustworthy (Busch and Wilson, 1976; Moorman, Deshpande, and Zaltman, 1993). On the other hand, benevolent behavior refers to exchange partner's behavior that reflects service provider's motivation to place customers' interest ahead of self-interest (Sirdeshmukh *et al.*, 2002). In most cases, the construct of trust has rather long-term character than short-term nature, and it is actually a long-term consequence of service quality (Sirdeshmukh *et al.*, 2002). Considering service setting, the two-dimensional (expertise and benevolence) trust should be the most common and the best fit to reflect the customer's confidence in the service provider's competence and willingness to perform the service (shown as Table 9).

Table 9. Two Dimensions of Trust

Dimensions					Schurr and Ozane, 1995; Dwyer and Oh, 1987
					Johnson-George and Swap, 1982
					Morgan and Hunt, 1994; Daniel, 1995; Johnson and Grayson, 2005
					Mayer et al., 1995; Miyamoto and Rexha, 2004
					Sub dimensions of Service
Expertise	●	●		●	A belief or confidence in the other's reliability, competence/ability
Benevolence			●	●	Confidence in partner's commitment/ willingness to act in favor of the partner's interests

2.6 Service Relationship

Service may be considered impersonal when service provider and customer are unacquainted and may interact for a single encounter only. The single interactions between a customer and a service provider are service encounters rather than relationships since neither the customer nor the employee expects to interact with each other in the future (Gutek, 1995). Gutek, Bhappu, and Liao-Troth, and Cherry (1999) refer to this situation as a service pseudo-relationship in which a customer interacts with different frontline employees across service encounters. Since a pseudo-relationship involves repeated contact between a customer and a service provider, the customer will anticipate future interaction with the company but not with a particular service employee. In fact, it does not matter if the customer gets a different service provider each time visit a store.

Opposite to pseudo-relationship, a true service relationship builds up when the customer repeatedly interacts with the same employee across time (Hess Jr., Ganesan, and Klein, 2007). In repeated service encounters, interaction with the same service provider is usually expected. If the customer can also identify the service provider, this relationship is called "true service relationship" (Gutek, 1995). Customers are likely to engage in this relationship since a long-term relationship is built up and relationship benefits can be expected and gained from the same service provider (Gwinner, Gremler, and Bitner, 1998). Liljander and Strandvik (1995) have tried to explain relationship benefits by categorizing them as psychological, social, economic, and knowledge bonds. Relationship benefits refer to perceived advantages customers receive over and above the

core servcie (Gwinner *et al*, 1998). It is conconsidered a relationship benefit only when the advantage is not offered to any customer regardless of relationship length (Liljander and Roos, 2002). In medicare service, for example, a customer who has a long-term relationship with a doctor may believe she/he can get a better service or extra help from the doctor.

2.7 Service Guarantee

Service guarantee has been intensively studied for last decade and its definition varies from "a statement explaining the service customers can expect and what the company will do if it fails to deliver" (Hart, Schlesinger, and Maher, 1992), "a policy, express or implied, advertised or unadvertised, that commits the operation to making its guests happy" (Evans, Clark, and Knutson, 1996), to "a promise to the customer and is often advertised as such" (Callan and Moore, 1998; Zeithaml and Bitner, 1996). Dealing with the inconsistency of definitions, Kashyap (2001) proposes two crucial elements of service guarantees—a service promise and a compensation offer. According to Kashyap (2001), a service promise refers to the expression of service provider's willingness to engage in the customer's desirable actions, and a compensation offer is the claim of customers in case of service failure. Compensation is usually separately specified from service promise and categorized as full refunds, partial refunds, and punitive damages (See Table 10).

Table 10. Elements of Service Guarantee and Examples

Elements	Categories and Definitions		Examples
Service promise	A pledge about all attributes of service		Unconditional
	A pledge about specific attributes of service		Specific
Compensation	Full refunds	Explicitly statement	Money back
	Partial refunds	Implicitly statement	Based on damage or use
	Punitive damages	Implicitly statement	Credits or payouts

Derived from Kashyap (2001)

2.7.1 Classification of Service Guarantee

According to previous research, service guarantee has been classified as either four types—specific, unconditional, implicit, and internal (Callan and Moore, 1998; Hart *et al.*, 1992; Hart, 1995), two main types—unconditional and conditional (McColl, Mattsson, and Morley, 2005), or specific guarantee preferred and unconditional guarantee preferred (McDougall, Levesque, and VanderPlaat, 1998). Among the four types of service guarantee, specific and internal service guarantee are subject to their narrow focus on specific attributes and thus might have limited use in practice (Hart, 1995; Kashyap, 2001). Unconditional guarantee promises customer's satisfaction, a full refund, or a complete resolution (Hart *et al*, 1992). Implementation of unconditional guarantee requires customer interactions rather than specific service attributes such as specifying delivery time or price. Specific guarantees promise performance on specific attributes. If service price is an important criterion, for example, customers may only perceive those guarantees that promise service delivery in terms of price rather than other attributes (Kashyap, 2001). An internal guarantee is "a promise or commitment by one part of an

organization to another to deliver its products or services in a specified way and to the complete satisfaction of the internal customer or incur a meaningful penalty" (Hart, 1995). Opposite to unconditional guarantee which is explicit, implicit guarantee is an unwritten and unspoken guarantee by which confidence and understanding between customer and service provider can be built up (Bateson, 1995). Kashyap (2001) suggests that service guarantee would consist of two typical elements—service promise and compensation offer. Service promise is an expression that reveals the service provider's willingness to engage in desirable behaviors of customers, and compensation offer would be done when service failure occurs. From the previous discussion, two opposite constructs are proposed in the model of current study and they are defined as strong service guarantee which is unconditional and explicit (Hart *et al*, 1992) and weak service guarantee which is conditional and implicit. The types and definitions of service guarantee are shown in Table 11.

Table 11. Types of Service Guarantees and Definitions

Types	Callan and Moore, 1998; Hart *et al.*, 1992; Hart, 1995	McDougall *et al.*, 1998	Kashyap, 2001	McColl *et al.*, 2005	Hart, 1995	Definitions
Specific	●	●	●			Promise based on specific attributes (price, delivery)
Unconditional	●	●	●	●		Promise performance on all aspects of service
Conditional				●		Promise based on certain conditions
Implicit	●					unwritten and unspoken guarantee
internal	●				●	Guarantees carry a penalty for noncompliance and monetary compensation for employees within a firm

2.7.2 Theories of Service Guarantee

Relevant literature has addressed the issue of customer's perceptions of service guarantees and its effects. In the impact of service guarantee on customer satisfaction, Hart (1988) argues that service guarantee will increase customer satisfaction and particularly effective in several occasions such as low customer expertise and high consequence of failure. Further research questions "How is service guarantee perceived by customers?" "When do customers believe the service guarantee to be credible?" have been investigated by Boulding and Kirmani (1993). They dealt with tangible products and found that high or better warranties are signals of high quality while low or poor warranties are signals of poor quality and that high credibility firms offering high warranties will benefit from such warranty. Actually, the findings of service guarantees are mixed from previous studies. Employing conjoint analysis, Tucci and Talaga (1997) have examined the customer's choice of restaurants based on the presence of service guarantee. However, they conclude that the offering of service guarantees will not necessarily benefit the service provider. Possible rationale for their finding is that customers are generally thinking of high rate of service failure that associated with poor service quality.

From the perspective of attribution, service guarantees associate with the service provider's controllability over service delivery and magnify the success or failure of service (Kashyap, 2001). Kashyap's attribution model shows that service providers could persuade customers that they have greater control over service delivery by offering explicit guarantees (unconditional) and in turn, influence the customer's positive affect.

Customers' perception of risk is common especially in services due to the nature of service. Since customers are not certain the consequences and the outcomes of service, service providers are able to reduce these risks by providing specific information or guarantees (Boshoff, 2002). Two purposes of these "risk reliever tactics" are categorized by Boshoff (2002) as minimizing the consequences of service failure and enhancing the certainty that service will perform adequately.

2.7.3 Service Guarantee as Signal of Service Quality

Derived from theories of information economics, consumers and service providers possess asymmetrical information. What consumers have is imperfect knowledge while service providers own the perfect information. Such asymmetrical information leads to the difficulty determining service quality in advance by consumers and the incentives to send a pre-purchase signal to consumers by service providers in order to gain a competitive advantage over other competitors. Due to the specific attributes including search, experience, and credence, customers have difficulty assessing service quality not only prior to but also during or after consumption (Zeithaml, 1981; 1991). Customers usually don't have access to full information about the service quality. Service guarantees, thus, serve as signals of service quality (Kashyap, 2001; Sweeney, Johnson, and Armstrong, 1992). Providing service guarantees leads to reduced customer costs of search and information and also lower risks perceived in the performance (Erevelles, 1993; Kashyap, 2001). Although previous studies provide informative findings about the signal effect of service guarantees, few studies have investigated how customers perceive service guarantees as credible signals. Kennett, Sneath, and Menon (1999) use the notion

"credibility" to measure the plausibility of service guarantees, and they have found that service guarantees enable customer to predict the outcomes if the failure of service is easily observable, if compensation is significant to customers, and if the guarantee is clearly stated and easy to implement.

Service guarantees have become an effective means to signal service quality, and service guarantees serve as external cues captured by customers to evaluate service quality and reduce risk (Ostrom and Iacobucci, 1998). However, their finding shows that service guarantee has positive effect only when the other quality information is not presented. Investigating the cues about service quality, Sweeney *et al.* (1992) list the criteria as restaurant related cues including price, past experience, reputation, location, advertising, appearance of other customers, employee appearance, employee manner, and premises. Since the purchase decision must be made before the service delivery, customers will seek signals to enable them to predict the outcomes of service and similar cues such as price, brand names, and country of origin serve as signals of service quality (Fabien, 2005). Confirming the positive signal effect, Kashyap (2001) argues that service guarantees indirectly signal better quality by lowering perceptions of performance and financial risk.

CHAPTER III

Study 1
The Effect of Service Failure and Ease of Assessing Service Quality
on Service Quality and Trust

3.1 Introduction

Service failure is seemed inevitable in service delivery due to the specific natures of services. One of the natures that can cause service failure is the inseparability of service production and consumption. The service performance thus is impossible to evaluate during or after the service delivery. Thus it is important to understand the consequences of service failure and how customers perceive service quality, so that service providers are able to minimize the negative impact of service failure and retain the customer's business. In this chapter we examine the relationships of service failure/success, service quality, and customer trust toward the service provider. Unlike search-characteristic service, services such as medical diagnosis and auto repair service require customers to take much more efforts to assess service quality. The importance of service quality has been widely recognized since the perceived service quality results in positive behavioral intentions (Boulding *et al.*, 1993; Brady and Cronin, 2001; Gotlieb *et al.*, 1994; Hartline and Jones, 1996; Jang and Namkung, 2009; Ruiz *et al.*, 2008; Tam, 2004). Understanding the nature of perceived service quality is important since high level of service quality will drive positive customer outcomes at different service consumptions. The relationship between service quality and constructs of behavioral intentions has been widely examined (Boulding *et al.*, 1993; Brady and Cronin, 2001; Gotlieb *et al*, 1994; Hartline and Jones, 1996; Jang and Namkung, 2009; Ruiz *et al.*, 2008; Tam, 2004), but empirical

research related to the emphasis placed on assessability of service quality and its effects on trust is limited, and the impact of assessability of service on quality perceptions has not been examined. The primary goal of study 1 is to examine the effect of service failure on service quality perceptions and how the assessability of service quality moderates customer trust.

3.2 Service Quality Perceptions

Previous empirical service quality studies that are often cited by other researches can be classified as the determinants of perceive service quality, the outcomes of service quality, and the measurement of service quality (see Table 12). Service quality is specified as a multidimensional construct (Brady and Cronin, 2001; Parasuraman *et al.*, 1988). To measure the construct, general questions are probably more suitable than specific attributes since attributes of service weight differently in different service industries (Dagger and Sweeney, 2007). The perception of service quality is associated with experiences with auto repair service, for example, and it is accepted in measuring overall service quality and the jointed service quality in the present research. The auto repair service relies on customers' confidence in reliability and performance toward the service provider. Given the customer's quality service expectation and likelihood that service quality perceptions are formed after the service encounters, understanding how customers perceive service quality and how the perceptions below the customer's expectation impact customer trust (Eisingerich and Bell, 2008) should make contributions to both marketing theory and marketers.

Table 12. Summary of Empirical Service Quality Studies

Sources	Topics	antecedents	mediators	outcomes	Samples & industries
Boulding *et al.*, 1993	Dynamic process model of service quality	Expectation: -will -should	P-SQ	BI: -WOM -repurchase	107 managers & staff experiment
Anderson & Sullivan, 1993	Antecedents and Consequences of CS	Expectation	P-SQ	CS, BI-repurchase	22300 telephone-CAD survey in Sweden
Bolton & Drew, 1991	Multistage model of SQ	-reliability -responsive -assurance -empathy	--	P-SQ	1408 residents survey in telephone service
Taylor &Baker, 1994	Assessment of relationship between SQ & CS	CS, P-SQ	--	Purchase Intention	426 survey, mall-intercepts across four industries
Ostrom & Iacobucci, 1995	Consumer Trade-off & evaluation of service	Criticality S-properties -experience -credence	--	Performance of service	92 MBA students, experiment across four service industries
Hartline & Jones, 1996	Employee Performance cues	Performance of service employees	P-SQ	BI -WOM	1386 survey, hotel managers
Zeithaml *et al.*, 1996	Behavioral consequence of SQ	P-SQ	BI	Financial consequence	3069 survey in four service industries both from B-B/-C
Parasuraman *et al.*, 1988	SERVQUAL measuring SQ	Expectation Perceptions	--	SQ	200 service users, customers in four service industries
Gotlieb *et al.*, 1994	CS & P-SQ	Dis-Confirmation	CS, P-SQ	BI	232 mail survey, patients discharged from hospitals
Ennew & Binks, 1990	Impact of participation on service relationship	Participation -customers -suppliers	SQ	CS to BI -customer retention	3483 FPB members survey data related to Bank
Lee *et al.*, 2000	Determinants of P-SQ & its relationship with CS	P-SQ	--	CS	196 entertainment park 197 aerobic school 128 investment ' consult
Brady & Cronin, 2001	Customer Orientation on service perception & behavioral outcome	-Customer orientation - Performance - Scape	SQ	CS, SV to BI	649 customers -auto service -amusement park -video rental
Brady & Cronin, 2001	Conceptualizing P-SQ	Interaction SQ , Physical environment SQ, and Outcome SQ	--	SQ	1149 customers -fast food -photography -amusement park -dry cleaning

Table 12 Continued

Sureshchandar, Rajendran, and Anantharaman, 2002	Determinants of P-SQ	-core service -human -system -tangible -social	--	SQ	20 experts 41 items -academicians -researchers -practitioners
Tam, 2004	CS, SQ, & P-SV	P-SQ P-time cost P-money cost	CS P-SV	BI -post purchase	209 customers in restaurants
Bell et al., 2005	Customer relationship dynamics	SQ -technical -functional	--	Customer loyalty	514 financial service
Dean & Lang, 2008	Comparing three signals of SQ	SQ signals	--	CS	275 and 191 students experiments
Eisingerich & Bell, 2008	P-SQ & customer Trust	SQ -technical -functional	--	Customer trust	1268 customers, financial planning service
Ruiz et al., 2008	SV revised	SQ	SV	CS BI-repurchase	494 distributors and customers in US, 254 students in Span
Jang & Namkung, 2009	P-SQ, Emotion, and BI	P-SQ	Emotion	BI	290 customers in restaurant service
Lai et al., 2009	SQ, SV, image, CS create loyalty	SQ	CS	Loyalty	118 customer in tele-communication in China
Wang, 2010	SQ, P-SV, corporate image and customer loyalty	SQ, PV, Image	--	Customer loyalty	260 barber survey in Taiwan

SQ: Service Quality, P-SQ: Perceived Service Quality, SV: Service Value, P-SV: Perceived Service Value, CS: Customer Satisfaction, BI: Behavioral Intention, WOM: Word of Mouth

3.2.1 Perception based on Service Type

Service quality perceptions can vary based on service type (Ganesan-Lim *et al.*, 2008) and the characteristics of service (Cronin and Taylor, 1992). Service characteristics have been classified and differ in terms of criticality (Ostrom and Iacobucci, 1995) and involvement (Mittal, Katrichis, and Kumar, 2001; Prenshaw, Kovar, and Burke, 2006).

On the basics of characteristics, researchers have investigated the determinants of service quality through comprising a set of attributes or dimensions (Brady and Cronin, 2001; Dean and Lang, 2008; Parasuraman *et al.*, 1988; Sureshchandar *et al.*, 2002). To form the perception of service quality, customers are likely to rely more on serch qualities than on experience quality (Murray and Schlachter, 1990). However, the impact of search attributes on perceived quality is expected to weaken when customers are able to assess experience or credence service attributes such as service outcome and expertise (Dagger and Sweeney, 2007). From the perspective of service type, the service types can be roughly categorized as high and low contact service. According to Mersha (1990), high contact service refers to a service involving direct contact between the customer and the service provider. Customization of the service is emphasized due to the intensive interaction between them. On the contrary, low contact service does not require the customer-employee interaction and leads to less customization of service. Therefore, compared to high contact service, low contact service may rely more on outcome quality than on interaction quality. Since most services are highly credence-based and impossible to be evaluated even after service consumption, customers in low-contact service tend to rely on the outcome perceptions or past experience.

3.2.2 Perception based on Service Outcome

In general, service quality is widely considered in terms of process and outcomes (Gronroos, 1982; 1983; Kelly, Donnelly, and Skinner, 1990; Parasuraman *et al.*, 1988; Richard and Allaway, 1993). Based on Szmigin's (1993) definitions, the process quality can be described as hard and soft quality (Gronroos, 1982) which associates with what is

going to be performed and how the service is performed. Outcome quality, of the most of all, should have the most significant impacts on the customer's evaluation since it is the end-result of the hard and soft quality and it can also be assessed in terms of time period. Customers may perceive the outcome quality immediately due to the success of service provider dealing with problem; on the other hand, the final outcome quality may be perceived after the service has been implemented (Halinen, 1994). The outcome quality therefore seems to be a significant determinant of the overall service quality assessed by the customer in some service industries. In auto repair industry, for example, a customer does care about what s/he actually receives from the repair service delivery. The customer may be or not able to evaluate the technical quality of the outcome immediately and it all depends on the ease of assessing the outcome quality. Compared to final outcome quality, the immediate outcome quality seems more practical to evaluate for customers and indicates that the service quality perception can vary in terms of the service's ease of assessing.

3.3 Ease of Assessing Service Quality

Service encounters may differ in terms of duration and complexity (Bolton, 1998; Singh, 1991), and customers will update their perceptions of service quality when their experience has been accumulated through repeat consumptions. Due to the lack of experience and knowledge (Dagger and Sweeney, 2007), experience and credence services may reflect the different level of ease of evaluation. The assessability of service quality is expected to be changed when customers gain more experience and knowledge about the experience. In the case of easy-to-evaluate service, the service quality attributes

tend to be more relevant to search-based classification, while in the cases of hard-to-evaluate service, the attributes are more relevant to credence-based classification (Dagger and Sweeney, 2007). According to Dagger and Sweeney (2007), whether service attributes are either difficult or easy to evaluate depends on whether customers have sufficient experience or information about a particular attribute. Attributes considered difficult to evaluate are characterized by the lack of reference for comparison. On the other hand, attributes that are easy to evaluate are considered high assessability because of prior experience and information is sufficient (see Figure 4). According to Hess (1996), when a customer's experience increases, his/her knowledge or information which is evaluable is also increases. The customer is therefore able to evaluate attributes that could be considered difficult to evaluate before. Auto repair service, for example, contains both low and high assessability situations. Compared outcome attribute, technical expertise is not easily judged when a customer is going to evaluate the repair service. However, outcome seems easier to evaluate since the customer may be able to use similar situations and experience with other service provider as the references when he/she wants to evaluate the service quality of scratch removal. As consequence, service with low level of ease of assessing service quality such as car engine repair is more difficult to evaluate than service with high ease of assessing service quality such as car scratch fix.

Figure 4. The Ease of Assessing Service Quality
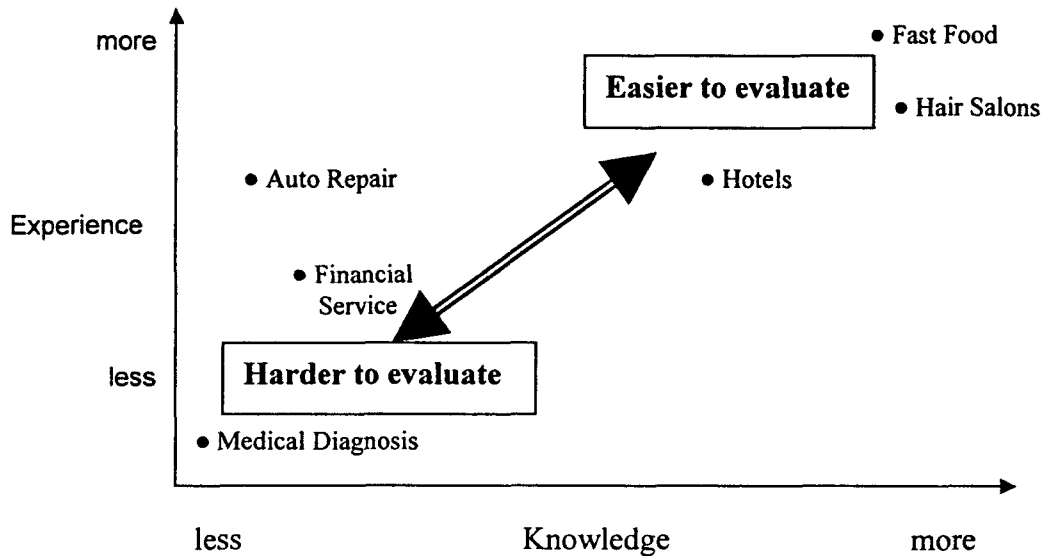
(Derived from Dagger and Sweeney, 2007)

3.4 Conceptual Framework

Figure 5 presents the conceptual model and provides the relationships hypothesized in study 1. As the model shown, the customer's evaluation of experience service quality follows a service failure encounter in which an experience service and a credence service are jointed together. Besides search attributes, the most services comprising experience attributes that can be evaluated only after consumption and credence attributes that can not even be evaluated after consumption (Zeithaml, 1991).

Figure 5. Hypothetical Model of Experience Service Quality Evaluation and Trust
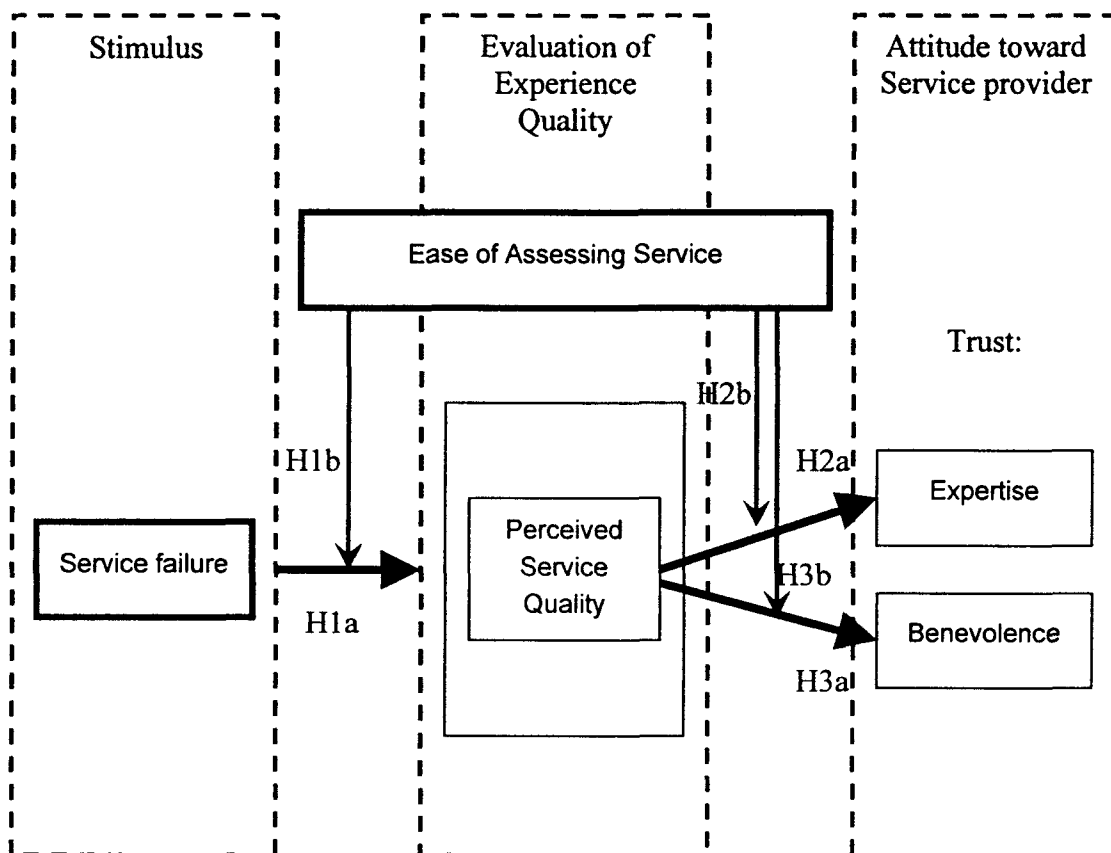
The study focuses on the customer's perceptions of experience service provider's ability to perform and satisfy the customer's needs and expectations. To form service quality perception, the customer's perception of the service provider's overall performance could have both cognitive and affective characteristics. In particular, the study examines the difference in service quality evaluation between low and high level of assessability of service and whether its effects on customer trust change. When experience service failure

occurs, the perceived performance will influence the customer's trust toward the service provider and then influence the customer's expectation of the credence service quality.

By reviewing the conceptualizations of trust from the literature, the two-dimensional conceptualization of trust is presented in this study and measured differently. Based on the definitions of trust, customers could develop belief or expectancy about the service providers. The belief may rely on the service provider's ability or competence to perform the right service at the right time. It can be labeled as the service provider's expertise perceived by the customers. On the other hand, customers may also believe the service provider can be motivated to act in the interests of the customer. It can be labeled as the service provider's benevolence which refers to the intentions to act beneficially toward the customer. Based on the two dimensions, expertise is conceptualized as the perceived credibility of the service provider (Doney and Cannon, 1997). Benevolence reflects the integrity and honesty of the service provider. The service provider can be perceived benevolent but does not necessarily have capacities to deliver service. On the contrary, a service provider may be able to perform the service well but may lack motivation to optimize the actions in favor of the customer's interests.

3.5 Hypotheses Development

In the relationship of perceived service quality and trust, customers are to evaluate either explicit or implicit cues of the service provider and then build up trust. Explicit cues including the service quality delivered by service provider from which customers' evaluation is formed through having direct experiences of the service (Smith 1997).

During the process of evaluation, trust will be gradually built up when customers perceive favoralble service quality. However, customers could evaluate service quality on the basis of incidents they have experienced with the service provider.

From theoretic perspective, information about service delivery is bundled as knowledge structures. As a result, positive serivce should give rise to optimistic scripts for service quality evaluation; whereas negative experiences of service failure should produce pessimistic scripts when service failure activates the knowledge structure. The perceived service quality has consistently been conceptualized as being cumulative in nature (Cronin and Tailor, 1992; Parasuraman et al., 1988).

The customer's judgment of service success or failure is based on how service provider delivers the right service at the right time. From the customer's perspective, service quality perception relies heavily on the performance of service probably because customers are more conscious of the service performance when the consequence of the service is critical. When service failure occurs, for example, the poor service performance could adversely impact the service provider's ability to service customers and then lead to the decreased perception of service quality. Since the critical incident customers are to evaluate could be extremely negative, the customer's perception of service quality would be negatively influenced.

Given that customers change their attitude in reaction to service success or failure, it is expected that the negative relationship exists between service quality and service failure. The impact of service failure on both service quality perceptions may differ between low and high assessability of service quality. Thus, the two hypotheses are presented as:

H1a: The perceived service quality will lower when there is service failure than when there is non-failure.

H1b: The negative impact of service failure on perceived service quality is stronger when the ease of assessing service quality is high than when it is low.

Previous studies of buyer-supplier relationship indicate that trust between customers and serivce provider seems not to be affected by critical incidents but perceived overall service quality is assocaited with customers' trust in service provider. The construct of trust is shown a multidimensional construct and conceptualized and measured differently in terms of various dimensions such as credibility, reliability, and benevolence (Ganesan, 1994; Moorman et al., 1993; Sirdeshmukh *et al.*, 2002). From the customer perspective, since trust can reduce the perceived risk of the service outcome (Berry, 2000; Laroche, Bergeron, and Yang, 2004), customers are likely to develop trust in expertise of service provider to reduce the risk of facing negative consequences.

From the service provider's point of view, trust is deemed an effective means to reduce transaction costs in terms of searching or information costs during the service delivery. The first hypothesis concerns the predictor of service quality, and the service quality is cognitive evaluation of the service provider by customers. The second hypothesis posits that service quality in turn predicts two forms of trust—expertise and benevolence. Expertise is generally defined as the service employee's knowledge or technical competence to meet the customer's needs. In other word, the customer's perception of expertise reflects the service provider's competence required in the service transaction

(Crosby et al., 1990). The specific trust is built on the customer's confidence or willingness to rely on the service provider's competence and reliability (Moorman et al., 1992). From previous research the perceived expertise is a predictor of customer trust in the service employees (Crosby et al., 1990). Consistent with the finding, the agency's task-related abilities have been found to have positive impacts on the client trusts toward the agency (Moorman et al., 1993). The construct of expertise is the main component of the service provider's credibility by which customers believe that the service provider has the required expertise to perform the job effectively (Ganesan, 1994). Similar to but conceptually different with expertise, benevolence refers to the motives and intentions of the service provider (Ganesan, 1994), and it associates with the service provider's qualities, intentions, and characteristics rather than the behavioral outcomes (Rempel et al., 1985). Both dimensions of trust are considered the consequence of service quality. In the interactions, and the service assessability is also hypothesized to moderate both the effect of service failure and the effect of service quality. Since customers are often lack of experience and knowledge about the service or the service provider (Dagger and Sweeney, 2007), they should have less confidence to evaluate the service performed by the service provider. The impact of service quality perception on both expertise and benevolence may differ between low and high assessability of service quality. Thus, the four hypotheses are presented as:

H2a: Perceived service quality has a positive impact on expertise of service provider.

H2b: The relationship between perceived service quality and expertise is weaker when the ease of assessing service quality is low than when it is high.

H3a: Perceived service quality has a positive impact on benevolence of service provider.

H3b: The relationship between perceived service quality and benevolence is weaker when the ease of assessing service quality is low than when it is high.

3.6 Methodology

Study 1 is an experiment design based on a 2x2 between-subjects completely randomized factorial design with two levels of service encounter (failure/success) and two levels of assessability of service (low and high). Each respondent was randomly allocated to one of the four groups. Participants were presented with a role-playing scenario describing an auto repair situation. In the scenarios, a customer went to a dealership to fix his/her car problem. The output of the car repair service is manipulated. In the evaluation of service performance, the customer found that her/his car problem was either existing or fixed. In the other condition, ease of assessing service was also manipulated by varying the extent to which the customer was going to evaluate (easy or difficult to evaluate). In all conditions, the service performance acted as a major attribute by which customers are able to judge service failure/success and the ease of assessing service quality.

3.6.1 Sample

Sampling from two sources has been conducted in the study. Student sample was employed in this study and participants came from a public university located in a city of an east coast state. The other source of sample was also used through online survey. Participants are mainly senior students and encouraged to take part of the study by awarding extra credits. A sample of 169 senior undergraduate business students

completed both in-class pencil-and-pencil questionnaire and online survey. In all four scenarios, respondents were randomly assigned to 4 experimental conditions in 2x2 between-subjects factorial design. Online survey is assisted by showing the subjects a video clip about the scenario rather than reading the statement of it. The pretest results demonstrate the efficacy of video clip as one of the direct and effective means of communicating messages to the respondents. The scenario stated that the service context was a car repair service offered by a car dealership where customers are familiar with. In the scenario, the service performance is varied by service failure and non-failure (success), and the assessability of service is also manipulated as low and high level. Each participant is exposed to and randomly assigned to one of the four scenarios. Questions measured the participants' reactions to the service failure/success and their perceptions of service quality with two different service types (scratch removal vs. battery recharge). No significant differences exist among the cells in terms of gender and age so the randomization is effective ($F > .05$).

3.6.2 Measures

Each of the constructs included in the study was measured by employing and adapting existing scales. All items have been revised to fit the real situation based on the scenario setting. Subjects' attitude toward the service provider is measured by using the opposite words at either end of the scale. The semantic differential (SD) has been common used in literature to describe the connotative meaning of abstract concepts (Cozens and Jacobs, 1961). The SD is applied in this study not only because it has been frequently adopted by researchers but also because its usefulness to stimulate subjects' responses to attitude

scales. Besides the semantic scales, the other items were measured by using seven-point

Likert scales (see Table 13). Age is measured as a covariate to service quality in this

study since age is considered a determinant of perceptions of service quality (Javalgi,

Belonax, and Robinson, 1990; Mattila, Karjaluoto, and Pento, 2003).

Table 13. Constructs, Scale Items and Sources in Study 1

Constructs	Scale items	Sources of Scale
Trust - Benevolence	The car dealer favors the customer's best interest.	Sirdeshmukh et al., 2002
	The car dealer is genuinely concerned that my car problem will be fixed.	Doney and Cannon, 1997
	I trust in the car dealer's good intentions.	San Martin and Camarero, 2005
	The car dealer makes an effort to give personal attention.	San Martin and Camarero, 2005
	The car dealer can be trusted; it really looks out for the customer.	San Martin and Camarero, 2005
	The car dealer is reliable because it is mainly concerned with the customer's interests.	San Martin and Camarero, 2005
Trust - Expertise	The car dealer is very knowledgeable.	Doney and Cannon, 1997
	The car dealer knew his/her service very well.	Doney and Cannon, 1997
	The car dealer is not an expert.	Doney and Cannon, 1997
	I trust in the car dealer's professional competence.	San Martin and Camarero, 2005
	I believe that the car dealer has excellent technical resources.	San Martin and Camarero, 2005
	I believe that the car dealer has high-qualified personnel.	San Martin and Camarero, 2005
Service Quality	The overall quality of the service provided by the dealer was excellent.	Dagger and Sweeney, 2007
	The quality of the service provided by the dealer was impressive.	Dagger and Sweeney, 2007
	The service provided by the dealer was of a high standard.	Dagger and Sweeney, 2007
	I believe the dealer offers service that was superior in every way.	Dagger and Sweeney, 2007

3.6.3 Pretest

A pretest involving a total of 66 students was conducted and shows that the manipulation is effective. For the failure manipulation, the object was to vary the service performance by failure and success after the service delivery. To create strong manipulations of service failure which is deemed realistic, car scratch and car battery recharging are employed. Results of the pretest have shown that service failures are realistic and perceived differently in the service performance. As expected, the customer's perception of service evaluation was rated as higher score in seven-point scale with service failure group than in non-failure group ($M_{failure\_}=5.55$, $M_{non-failure}=2.75$, $F(1, 65) = 44.29$, $p < .01$). In the other control variable of assessability, participants felt not sure about the service quality evaluation when the situation is difficult to evaluate. ($M_{difficult}=3.67$, $M_{easy}= 3.67$, $F(1, 55) = 13.10$, $p < .01$). The sampling frame contains total of 169 respondents who were willing to participate the survey under the promise of confidentiality and anonymity. The majority of respondents were directed using a web-based survey (64%) and were contacted by the referral to ask to participate. The web-survey has identified respondents who have actually watched the video clips as the scenarios before answering the questions.

3.6.4 Manipulation Checks

As expected, the customer's perception of service evaluation was rated as higher score in seven-point scale with service failure group than in non-failure group ($M_{failure\_}=4.97$, $M_{non-failure}=3.20$, $F(1, 165) = 45.24$, $p < .01$). In the other control variable of assessability,

participants felt not sure about the service quality evaluation when the situation is difficult to evaluate. ($M_{difficult}$ = 3.67, M_{easy} = 5.20, $F(1, 165)$ = 30.02, $p < .01$).

3.7 Analysis and Results

3.7.1 Correlation Analysis

The correlations between all variables are provided and descriptive statistics are shown in Table 14. The Pearson correlation was conducted to test the existence of relationships between the all independent variables and the two forms of trust—expertise and benevolence.

Table 14. Correlation Matrix of Variables in Study 1

	Mean	Std. D.	1	2	3	4	5
1. Service Failure	.461	.500					
2. Ease of Assessing	.443	.498	-.039				
3. Service Quality	3.62	1.88	-.573**	-.002			
4. Expertise	4.42	1.40	-.455**	-.075	.675**		
5. Benevolence	4.11	1.64	-.503**	-.087	.795**	.745**	
Minimum			0.00	0.00	1.00	1.00	1.00
Maximum			1.00	1.00	7.00	7.00	7.00

*$p < .05$; **$p < .01$

The correlation shows that service failure negatively associated with all dependent variables. As expected, the relationship between expertise and benevolence is highly correlated, but the ease of assessing service quality does not directly associate with the other three variables.

3.7.2 Hypothesis Tests

General linear models were employed to examine the proposed hypotheses. The main effects and two-way interaction between factors were included in the model of the study. Since two-way interactions have been found, the main effect was estimated for the group formed based on the two-levels of the other variable. Results of the between-subjects factorial model are showed in Table 15.

Table 15. Results of General Liner Model in Study 1

Independent Variables	Covariate	Dependent Variables		
	Age	Service Quality	Expertise	Benevolence
Service Failure	.57	73.01**	n/a	n/a
Ease of Assessing Service (moderator)	3.70*	.16	1.88	1.74
Service Quality	n/a	n/a	88.65**	214.43**
Service Failure—Ease of Assessing Service	1.78	31.51**	n/a	n/a
Service Quality—Ease of Assessing Service	n/a	n/a	6.79*	21.76**

F-value with *$p < .05$; **$p < .01$

Controlling of age as a covariate, the results show a significant two-way interaction between failure and the ease of assessing service ($F = 31.51, p < .01$) on service quality. The negative relationship indicates that customers who have experienced service failure are likely to decrease the perception of service quality when the service is easy to evaluate, compared to the service which is difficult to evaluate. Therefore, H1b is supported. The interaction indicates that a "buffer" effect exists when service is not easy to evaluate. When service is easy to evaluate, customers seem to be more sensitive to the

service performance. The score of service quality falls into two extremes. The plot of the interaction is shown as Figure 6.

Another two interactions—the effects of service quality and the ease of assessing service on both expertise and benevolence are also significant ($F(1, 163) = 21.76$ and 6.792, $p < .01$ and $p < .05$). As shown in Table 15, the ANOVA results reveal that the "buffer" effect when the ease of assessing service is low. Thus, Hypothesis 2b and 3b are supported. Figure 7 plots the interactions, indicating the effect of service quality on both expertise and benevolence at high and low level of ease of assessing service. In both interactions, the relationship between the perceived quality and trust—benevolence and expertise is weaker when the ease of assessing service is low than when it is high. The plots of the two interactions are shown as Figure 7.

Figure 6. Interaction Effect of Failure and Ease Assessing Service Quality
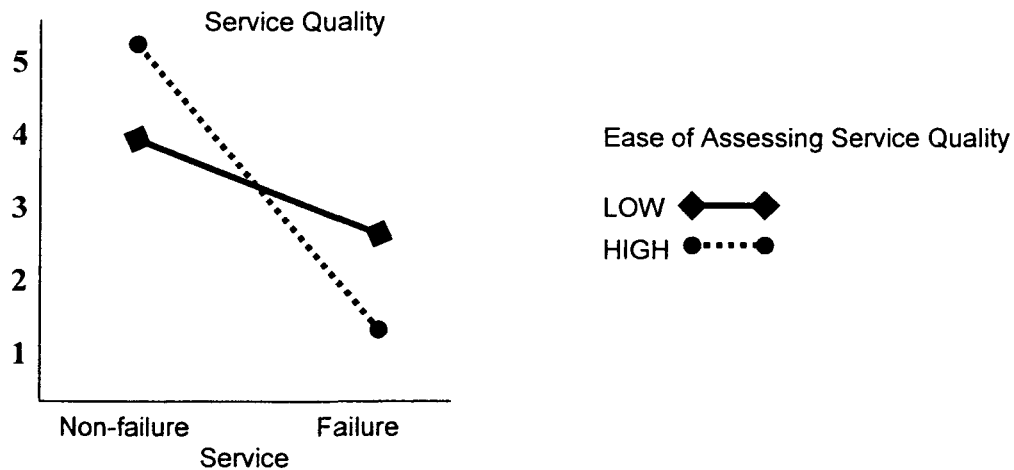
Figure 7. Interaction Effects of Service Quality and Ease of Assessing Service Quality
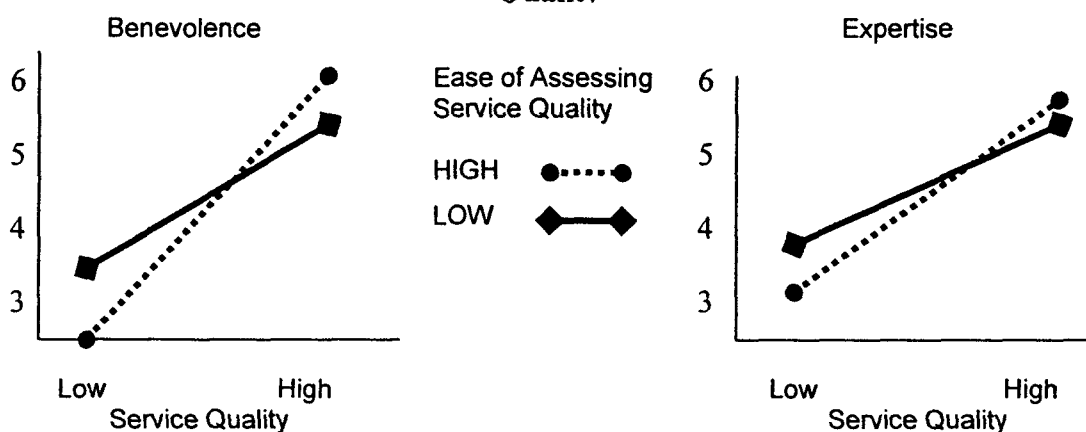
To test the main effect, the result of ANCOVA shows that the main effect of service failure is significant both for which the ease of assessing service is low ($F = 8.68, p < .05$) and for which the ease of assessing service is high ($F = 137.25, p < .01$). Therefore, H1a is supported. H2a and H3a state the relationships between perceived service quality and trust under the effect of ease of assessing service. ANOVA results indicates that the main effect of service quality is significant both when the ease of assessing service is low ($F = 20.60, p < .01$) and for which the ease of assessing service is high ($F = 52.00, p < .01$). Similar to the effect on expertise, ANOVA of service quality on benevolence shows that the main is also significant both for the ease of assessing service is low and high ($F = 47.77, p < .01$; $F = 154.66, p < .01$). Thus, both H2a and H3a are supported.

The moderating effects have been found on the both expertise and benevolence. The interaction effects of service quality and the ease of assessing service on the perceived expertise of the service provider and the benevolence perceptions indicate a positive impact of the ease of assessing service on the relationship between perceived service

quality and the two constructs of trust. Compared to the high level of ease of assessing service, low level of ease of assessing service negatively affects the perception of expertise and benevolence after a service failure taken place. Service performance and service quality are actually the antecedents of the service provider's expertise and benevolence. If customers perceive service as success, they are likely to believe the service provider to be trustworthy. It suggests that the service performance can provide a signal of service quality that positively impacts customer trust. The finding suggests that perceived quality is determined by the perceived service outcomes. The result of hypotheses testing is summarized and shown as Table 16.

Table 16. Summary of Hypotheses of Study 1

	Hypotheses	Results
H1a	The perceived service quality will lower when there is service failure than when there is non-failure.	Supported
H1b	The negative impact of service failure on perceived service quality is stronger when the ease of assessing service quality is high than when it is low.	Supported
H2a	Perceived service quality has a positive impact on expertise of service provider.	Supported
H2b	The relationship between perceived service quality and expertise is weaker when the ease of assessing service quality is high than when it is low.	Supported
H3a	Perceived service quality has a positive impact on benevolence of service provider.	Supported
H3b	The relationship between perceived service quality and benevolence is weaker when the ease of assessing service quality is high than when it is low.	Supported

3.7.3 Mediating Test

Hypotheses 1a, 2a, and 3a indicate that the effect of service failure on customer trust toward the service provider would be mediated by the perceived service quality. To test the hypothesis, Baron and Kenny's (1986) procedure is adopted and employed by the following steps: First of all, the independent variable should significantly affect the mediator. Second, the independent variable should significantly affect the dependent variable. Third, the mediator variable should affect the dependent variable when both the independent and the mediator variable are served as independent variables in the model. According to Baron and Kenny (1986), perfect mediation can hold as long as the independent variable has no effect on the dependent variable when the mediator is controlled (as in the third regression). The results of the mediating tests show that perceived service quality is a perfect mediator between service failure and the customer's trust toward the service provider. The results and procedures are shown in Table 17.

Table 17. Mediating Tests of Service Quality

Independent variables	Dependent variables				
	Service Quality	Trust			
		Expertise		Benevolence	
	1	2	3	4	5
Service Failure	-9.03**	-6.59**	-1.45	-7.52**	-.23
Service Quality			8.89**		13.21**
R^2	.328	..455	.463	.503**	.636
F(1, 167)	81.62**	43.53**		56.63**	
F(2, 166)			71.49**		145.11**

Standardized coefficients (two-tailed t-values)
$^*p<.05$; $^{**}p<.01$; $^{***}p<.001$

Regression model 1 indicates that the effect of service failure/non-failure on perceived service quality is significant (t = -9.03, p < .001). The same effect is found from the regression model 2 and 4. Service failure significantly affected both expertise and benevolence (t = -6.59, -7.52, p < .001). The regression model 3 and 5 show that service failure has no effect on both expertise and benevolence when service quality is presented in both models (t = -1.45, -.23. p > .05). Therefore, the perfect effect of service quality as mediator between service failure and trust is confirmed.

3.7.4 Validity Tests

To test the validity by establishing a construct's scale, researchers have defined it and identified several methods to measure it. Sheperd (1993), for example, argues that there is only one type of validity including criterion and content validity. Later, Cronbach's (1971) proposes that validity can only be established for interpretations but for test or scale, and his argument has been widely accepted now. Cronbach's alpha is commonly used to establish convergent validity. Cronbach's alpha reliability coefficient normally ranges between 0 and 1. It is believed that the closer Cronbach's alpha coefficient is to 1.0 the greater the internal consistency of the items is in the scale. It is widely accepted that the value .60 is considered acceptable for exploratory purpose, .70 and above is adequate and good for confirmatory purposes. The result shows that there is a good reliability for each construct measured in the study (α = .969, four items for perceived service quality; α = .862, 4 items for expertise after two item are removed; α = .933, six items for benevolence).

Opposed to testing convergent validity, Discriminant validity is refers to the principle that indicators for different constructs should not be highly correlated since they measure different constructs. In factor analysis, researchers have accepted that constructs are deemed different if indicators load most heavily on different factors (Straub, 1989). In order to confirm the validity of trust construct, a confirmatory factor analysis (CFA) was conducted to assess its discriminant validity. The AMOS (version 18) was used as the analytical tool for the estimation of the measurement model. The discriminant validity was tested by constraining the correlation to unity (as 1 in restricted model) and then to see whether the model is significantly worse fitting than the one where the correlation is freely estimated (unrestricted model). The chi-square difference test between the two models would affirm the discriminant validity of the constructs (Anderson and Gerbing, 1988; Bagozzi, Yi, and Phillips, 1991). A significant chi-square difference indicates substantial improvement in model fit. The result of CFA shows that a significant lower chi-square value ($\chi^2_{(26)}$ = 79.65 compared to $\chi^2_{(27)}$ = 93.53) for the model in which the correlation is not constrained to unity indicates that the two constructs of trust are not perfectly correlated and that discriminant validity is achieved. Thus, Benevolence and Expertise should be considered two different constructs in this study.

3.8 Conclusion and Suggestion

Due to the growing competitive intensity, research has focused on the customer-service relationship in order to attract new customers and secure existing relationships with customers. However, relatively fewer studies have targeted the service evaluation and its

relationship with service quality. The present study is to address the gap by focusing on service assessability and service quality. After experienced a service delivery or consumption, customers would be able to assess the service quality; however, when customers are unable to evaluate service quality due to intangibility or lack of knowledge about the service, they are likely to adopt an indirect approach to completing the evaluation. In other words, it is common for customers to judge service quality by evaluating another service that is considered a counterpart. In most services, customers may act as the service quality co-producer since customers are also required to perform the service delivery. Such participation can provide service providers with a potential source of competitive advantage in service market. Due to the potential competitive advantage, service providers have to prioritize the customer's perceived service quality by effectively managing both the service delivery process and the service itself. To achieve the goal, service employee recruiting and training are critical tools to improve their expertise and benevolent intentions. Service failure has implications for service provider. Service failure impacts the customer's perception of the service provider's ability to perform the service, and it can further impact post-purchase behaviors. The customer could be lost forever as a result of negative impact of customer loyalty. On the other hand, customers could take risks finding other service providers they are unfamiliar. Thus service failure can cause significant negative effects for both service provider and customers. The results show that service failure impacts service quality and that service failure in turn impacts both expertise and benevolence. The results are consistent with the findings of McCollough et al. (2000) and Eisingerich and Bell (2008) which suggest that customer satisfaction was found to be lower after service failure than in the case of error-

free service and that technical and functional service quality is key to building customer trust in a firm. In addition to the direct effects of service failure and service quality, results also show that the service assessability has a moderating impact on trust. The results of this study suggest that service provider should pay more attention to expertise. Perception of benevolence of service provider is often the result of experience with the service provider. In order to assure the effectiveness of communication, advertising should thus focus on both expertise and benevolence.

3.8 Limitation

Apparently some limitations could be found in the study. The use of cross-sectional data instead of time series data can cause causality issues. In testing moderating effects, this study demonstrates the power of one of other possible service categorical factors that could also buffer the negative effects associated with service failures. Thus additional factors might need to be considered in the model to fully understand their influence on customers' perception of service quality and trust. Next, this study only focuses on a single service context. Industry specific sample from the car repair service may constrain the ability to generalize the findings in other service settings. Thus caution should be exerted when generalizing the finding to other industries or different type of customers. This study has tested the mediating effects of service quality but causality cannot be determined by using a cross-sectional data. A broader cross-section survey may be required to investigate more general perspectives of service quality issues.

CHAPTER IV

Study 2
The Effect of Experience Service Quality and Trust on Credence Service Quality

4.1 Introduction

Given the asymmetrical information between service provider and customers, the customer's knowledge of service is considered imperfect (Grewal and Marmorstein, 1994). As a result, the customer's perception of service quality should differ based on the uncertainty perceived by the customer, and the uncertainty perception is influenced by external cues such as price reference furnished by the service provider (Biswas and Blair, 1991). Responding to uncertainty, customers are likely to seek heuristic signals or quality cues to reduce uncertainty. The heuristic information or quality cues have been classified as intrinsic cues and extrinsic cues (Zeithaml, 1988). Intrinsic quality cues are associated with the essential nature of the product or service and they cannot be changed without changing their core function or performance while extrinsic quality cues are external to the core function/performance of the product or service. Due to the lack of confidence to evaluate service, customers may use both intrinsic cues and extrinsic cues to "tangible" the intangibles of service. In physical product environment, intrinsic information seems to be more informative and will dominate signaling effects (Miyazaki, Grewal, and Goodstein, 2005). However, in service environment service is intangible and has fewer intrinsic cues to evaluate so that higher risk perception is expected (Murray and Schlacter, 1990). With the attempt of risk reduction, customers usually look to salient cues in the service environment to form their expectations about the service (Bitner, 1992). Due to

the lack of intrinsic cues, extrinsic cues have been suggested to help judging the service when customers must rely on the cues other than brand name and price (Zeithaml, 1988). Based on the motives mentioned above, the purpose of the current study is to understand how customer will respond to experience and credence service when they are exposed to service guarantee signals. In the study, two moderators of service relationship and service guarantee are employed as extrinsic cues. The common extrinsic cues and related studies are listed in Table 18.

Table 18. Summary of Studies of Extrinsic Cues

Extrinsic Cues	Levels	Findings	Researchers
Service guarantees	Specific or unconditional	Customers prefer detailed regulations or specific to unconditional guarantee.	Liden and Edvardsson, 2003; McDougall et al., 1998
	Full & specific	A combined full SG with specific form outperforms all other designs of SG	Wirtz and Kum, 2001
	Compensation	Greater amount of refunds is positively associated with low price perception for non-price conscious customers, but price conscious customers may interpret the deep refunds as signals of high price service	Kukar-Kinney, Walters, and MacKenzie, 2007
	Waiting time	If customers perceive the waiting time to be more than expected, the positive effect of waiting time SG is weaken	Kumar, Kalwani, and Dada, 1997
	Low price	Low price SG leads to more favorable effects on customer outcomes, but may not influence customers' perceptions in markets with high price dispersion.	Biswas, Dutta, and Pullig, 2006
Brands or Reputation	National or excellent	Excellent reputation for service quality leads to repurchase intention and buffer the negative effects of service failure	Hess, 2008

Table 18 Continued

Price	High and low	Price is a good evaluative criterion in service selection when the competence of the service provider is very salient to customers (e.g., doctors, hairstylists). Price is the least important cues for highly intangible services when assess service quality.	Crane and Clarke, 1988; Brady, Bourdeau, and Heskel, 2005
Advertising	Objective and subjective	Objective claims are more effective than subjective claims on purchase intention	Darley and Smith, 1993
Service Relationship	True- and Pseudo- R	True relationship will mitigate the negative effects of service failure and reduce customers' resistance to premium prices.	Hess, Ganesan, and Klein, 2003; Mattila, 2001

4.2 Service Guarantee

In experience/credence service, uncertainty that usually involved in service delivery will lead to the efforts to search information about the service quality, and the information can reduce the uncertainty by communicating to customers that the service quality will satisfy the customer's needs and compensate his/her lost (Kashyap, 2001). According to the signaling theory, the information asymmetry exists between two parties involved in a transaction (Spence, 2002). In the low price service guarantee study, Biswas *et al.* (2006) have shown the positive effect of signals. They find that low-priced seller will benefit from signaling the low price guarantee than high-priced sellers since such signal will cost high-priced seller more the benefits gained from it. In most cases, customer's perception of service quality differs based on the external cues (Sweeney et al., 1992). These salient cues serves as "risk reliever" to reduce perceived purchase risk (Bitner, 1992) and customers are likely to judge service quality by using more extrinsic cues such as price

and service guarantees than intrinsic ones such as the core function/characteristic of service which cannot be changed without changing its basic nature (Zeithaml, 1988). The extrinsic cue, or usually referred as signal of service quality have been employed and found its relationship with service quality perceptions (Boulding and Kirmani, 1993; Erevelles, Roy, and Yip, 2001). The finding about which type of service guarantees has more positive effects on service quality perception is still not conclusive in previous studies. Customers' perceived credibility of service guarantee is derived from the nature of the guarantee's message which could "tangibilize" its benefits. In fact service providers may choose to offer compensation to consumers who just experienced a service failure since such promise of monetary recompense is designed to foster the service provider's credibility. In practice, service guarantee offers may vary from incompletely specified to full compensation without conditions.

4.2.1 Design of Service Guarantee

In the service guarantee design, researchers have suggested that well-designed service guarantees will lead to higher quality perception and lower risk perception (Hart et al., 1990; Ostrom and Iacobucci, 1998; Wirtz, 1998). An unconditional guarantee holds since it is the most powerful without conditions (Hart, 1988). Consumers should be satisfied with the statement "We guarantee high quality accommodations, friendly and efficient service, and clean, comfortable surroundings. If you are not completely satisfied, we don't expect you to pay." as stated by Hampton Inn. However, McDougall et al. (1998) suggest that the full satisfaction guarantee stating all aspects of service are covered by the guarantee is not always the best type. In fact, customers prefer specific guarantee to full

guarantee when they consider the full guarantee ambiguous and concern about the ease of claiming the guarantee. Wirtz and Kum (2001) further test the effects of the scope of service guarantee and their findings show that a combined guarantee which combines the full satisfaction guarantee with specific guarantee will outperform all other guarantee designs. Comparing customer expectation of service guarantees with Hart's (1988) guidelines, Liden and Edvardsson (2003) have found that customers prefer detailed regulations to unconditional guarantee since customers might consider the guarantee is unreasonable and deem it a sort of "cheating." On the basis of salience, service guarantee can be labeled either implicit or explicit. An implicit service guarantee is likely to lead to negative perceptions when it is formalized (Hart, 1988). In the case of full guarantee, for example, if a service provider does not explicitly specify the coverage, there should be inherent ambiguity which results in a higher uncertainty and makes customers unable to foresee the outcomes of the service (Wirtz and Kum, 2001).

4.3 Service Relationship

In service setting, the characteristics of individualization or customization leads service a unique experience to each customer, and relationship with customers has become the focus in relationship marketing which has been shifted from the traditional marketing with the transaction focus (Gundlach, Achrol, and Mentzer, 1995). For many service businesses, developing long-term customer relationships could be critical to the firm's competence to cultivate the base of loyal customers (Bove and Johnson, 2001; Verhoef, 2003). Therefore, understanding the meaning of relationship can be essential to the understanding how customers would engage in different types of relationships. From the

perspective of psychology, personal relationship is a connection involved in a goal-based personality framework (Mick and Buhl, 1992). The formation of relationship can resolve issues such as tensions and tasks addressed in daily life (Cantor, Niedenthal, and Langston, 1987). From the perspective of sociocultural, relationship can be explained in terms of gender, family, culture, or other social networks (Milardo, 1992). From marketing perspective, relationships exist not only between individuals but also between the customer's lived experience and brands (Fournier, 1998).

4.3.1 Service Employee

Service offering is well recognized by its intangible nature that leads to customers' less confidence to create quality expectations. One the most important cues to aid customers in purchasing decision is the first contact employee who is deemed a determinant of predicted service (Crane and Clarke, 1988). In other word, customers' evaluation of service is often influenced by the contact personnel who represent the service or the service provider. The appearance of service employee does matter to customers' service evaluation. According to Wakefield and Blodgett (1944), the employee appearance serves as a visible cue to customers by which they are able to form perceptions of store image when shopping in a retail specialty store. Among the tangible cues in the service surroundings, the contact employee could be prominently viewed as a significant part of service quality offered from a customer's point of view. The identification of service cues including employee appearance and relationship with customers is confirmed to have significant impact on the customer's service evaluations (Chong and Wong, 2005). Customers may then be inclined to use the employee cues to discern the service quality.

4.3.2 True and Pseudo Relationship

According to Gutek *et al.* (1999), there are three types of service encounters. True relationships occur when the customer contact with the same service provider. In other words, the customer expects to interact with the same service provider in future and is able to identify a particular person as his/her service provider (Gutek, 1995). Customers are likely to expect to gain benefits from the buildup relationships (Gwinner et al., 1998). The relationship benefits may contain social or emotional bonds that lead to the decrease of risk perception (Mattila, 2001) and explain why customers are likely to remain in the relationship with physicians and barbers (Shemwell, Cronin, and Bullard, 1994). Service encounters occur when every time the customer interacts with a different service provider (Gutek *et al.*, 1999). Thus, service encounter is actually considered single interaction between a customer and a service employee, and it is neither the customer nor the employee's expectation to interact with each in the future so that no relationship would be achieved and the service encounter is similar to traditional marketing with transaction focus (Mattila, 2001). The last type of service encounter, pseudorelationship, occurs when a customer interacts with a different provider but a single service provider (Gutek et al., 1999). Within this relationship, relationship is built up between a customer and a service provider/company since the customer's expectation of future interaction with the service provider still exists even though the customer will meet a stranger every time visit.

4.4 Conceptual Framework

In the study 2 we study the effect of service failure on service quality and trust under two different managerial situations—service guarantee and service relationship (see Figure 8). As model shown, the customer's trust toward the service provider depends on his/her perception of experience service performance. Since credence service is difficult for customers to evaluate even after consumption (Zeithaml, 1991), the assessment of credence service all relies on the customer's trust—expertise and benevolence. This study is intended to examine the relationships between experience and credence service under two service quality cues—service guarantee and service relationship.

Figure 8. Hypothetical Model of Experience and Credence Service Quality Evaluation
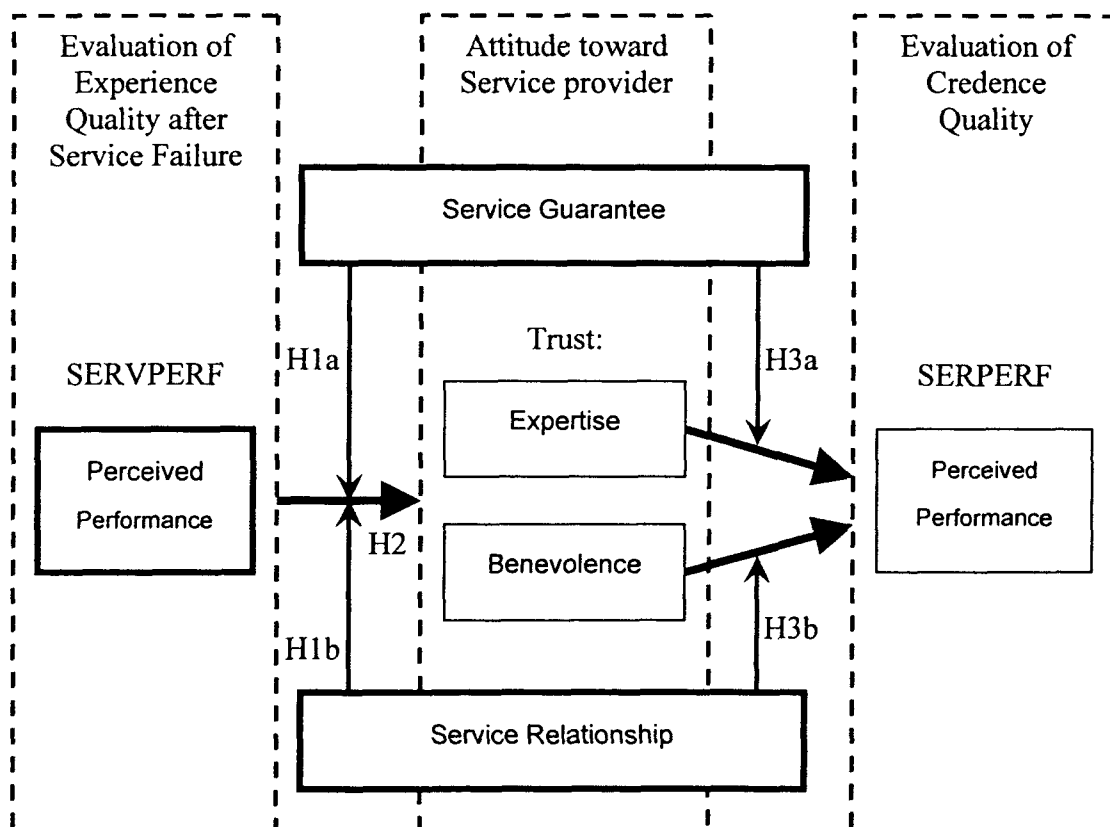
The relationship between service quality and trust has seldom been investigated in previous studies (Eisingerich & Bell, 2008). To deal with the information asymmetry between the service provider and customers, a service provider might provide a service guarantee associated with refund conditions. In the auto service setting, Andaleeb and Basu (1994) have examined the factors influencing the service quality and found that the customer's perceptions of service quality depends on the complexity and the customer's knowledge about the auto repair service. Their finding indicates that customers are usually not knowledgeable to respond to technical issues and they are forced to look to the other peripheral aspects of service. In the model of study 2, the prediction of the effects of service guarantee is based on the customer's perceptions of service performance risks. When service failure occurs, customers perceive a weak service guarantee (conditional and partial refund) and they might consider the service offer to be highly risky since they might anticipate potential loss in the future. As difficulty of evaluation of service quality increase from experience to credence service, customers might become more uncertain about the service quality, and thus they are likely to process the external quality signals such as service guarantee and service relationship.

4.5 Hypotheses Development

Expectations are a dynamic phenomenon as they are continuously updated based on new information, and empirical evidence has supported the effect of experience on expectations (Dorsch *et al.*, 2000; Johnson and Mathews, 1997; Tam, 2004). The customer's expectations update based on his/her service experience. In a service encounter, the customer's expectation of service should be influenced by his/her

knowdege about this service provider. In a long-term, consumer behavior such as trust shoud be stable and will influence the customer's expectation of service quality. Thus, the higher confidence in a service provider will lead to the higher expectation. On the other hand, in a short-term, to perceive the performance of credence service s eems impossible to achieve since the relevent factors to evaluate are missing (Zeithaml, 1991). In the fact of service purchase, whether to offer guarantee becomes the key deciding factor in evaluating service quality. When service failure occurs, customers may want to be compensated for their inconvenience or loss by seeking the service obligations. The consumer can expect that the way of recovery and compensation is ambiguous. Service guarantees can address this problem and makes it clear to the consumer what may cause a failure, how to redress, and what outcome will be (Halstead, Droge, and Cooper, 1993). The service will be trusted when they find there is specific and unconditonal guarantee that meets the service obligations. Through a well-supported service guarantee, consumers are encouraged to initiate a complaint for successful recovery. In the case, the strong service guarantee is expected in place during a service failure, and the positive effect of service guarantee should ehance the customer's trust and then increases the customer's expectation. Thus, it is hypothesized that:

H1a: When a failure of experience service occurs, its negative impact on expertise is weaker when a strong service guarantee is presented than when a weak service guarantee is presented.

In a service failure encounter, maintaining close relationships with customers is critical to protecting service provider from negative consequences (Mattila, 2001). Customers in a

true relationship condition are more willing to forgive the service provider for poor handling of the problem than customers in the pseudo-relationship since they expect social benefits such as personal recognition and friendship from the service provider (Gwinner et al, 1998). After experiencing service failure, customers in a pseudo-relationship interact with a previously unknown employee and may expect that they will not encounter again. As a result, customers may identify that the serving employee is less closely with the organization in a pseudo-relationship than they would in a true relationship (Hess et al, 2007). The hypothesis of an interaction can be, therefore, proposed as below:

H1b: When a failure of experience service occurs, its negative impact on benevolence is weaker when there is a true relationship between the customer and employee than when there is a pseudo-relationship.

Based on the theory of relationship marketing, customer trust toward service provider should act as a mediator between the joint services from both service relationship and expertise perspectives (Doyle and Roth, 1992; Swan and Nolan, 1985; Butler, 1991; Butler and Cantrell, 1984). The mediating effect is hypothesized as below:

H2: A failure of experience service will negatively affect perceived service quality of credence service through either expertise or benevolence.

A good service guarantee design that is proposed by Wirtz (1998) should be unconditional and clear meaning to customers. Consistent findings from McDougall *et al.*, (1998) indicate that a combined unconditional guarantee with specific payout clauses

would most appeal to customers. Previous research also indicates that customers prefer explicit service guarantee to implicit cues (Wirtz, Kum, and Lee, 2000). The specific and unconditional guarantee is considered a strong guarantee since it should have a positive effect on customer evaluation (Kasyap, 2001). Given the effects of service guarantee signals on the customer's uncertainty of service quality, it is expected that customers are likely to form favorable judgments about the service when service guarantee is presented as strong guarantee (unconditional and full refund). Thus, an interactional hypothesis is proposed below:

H3a: The positive relationship between expertise and perceived service quality is stronger when a strong service guarantee is presented than when a weak service guarantee is presented.

In fact, the lack of bonds with customers, impersonality, and the weaker connections between employees and the organization could make pseudo-relationships lacerate customer, bit by bit. In Mattila's (2001) relationship study, the influence of relaitonshiop with customers will reduce the customer's resistance to premium prices. Hess et al. (2007) also show that the negative effect of service will be mitigated by the customer's favorable service experience containing the past interactions with service employees. In fact, the negative effect of service may be worse when customers consider the service failure to be attributed to the service employee in a pseudo-relationship. When service failure occurs, a negative impact on service quality is more expected when the customer considers the service experience a pseudo-relationship rather than a true relationship. On the contrary, the personal recognition and relationship benefits expectation in a true relationship will

lead to a more positive impact on the customer's evaluation of service quality. Therefore it is hypothesized that:

H3b: The positive relationship between benevolence and perceived service quality is stronger when there is a true relationship between the customer and employee than when there is a pseudo-relationship.

4.6 Methodology

Study 2 is also an experiment design based on a 2x2x2 between-subjects completely randomized factorial design with two levels of service encounter (failure/success), two levels of service guarantees (strong and weak), and two levels of service relationships (true and pseudo). The nature of the interaction of service failure and service cues is varied to test the hypothesized relationships. Customers are expected to respond differently to qualitatively different interactional problems (e.g., service failure versus service guarantee). Extend the context of Study 1, Study 2 involves two signals of service quality (service guarantee and customer relationship). Each respondent was randomly allocated to one of the eight groups. Participants were presented with a role-playing scenario describing an ignition problem caused by the car battery. In the scenarios, a customer went to a dealership to check and fix the car problem. The outcome of the car repair service is manipulated. In the evaluation of service performance, the customer found that her/his car problem was either existing or fixed. In the presence of service guarantee, the types of service guarantee was manipulated by varying the extent to which the customers consider the service guarantee (strong guarantee with full refund and no

conditions or weak guarantee with partial refund and conditions). In service relationship, the manipulation effect is made between the customer and the service employee. Two situations are presented in the scenario. In true relationship, the service employee is able to identify the customer immediately when the customer enters the dealership, and the service employee is the same person the customer will interact every time visit. In pseudorelationship, the service employee and the customer don't know each other and they didn't meet before.

4.6.1 Sample

A convenient and random sampling has been conducted in the study. Both student and real consumer samples were employed in this study and student participants came from a public university located in a city of an east coast state. The student sample was chosen through online survey and the participants are mainly junior and senior students who were encouraged to take part of the study by awarding extra credits in marketing classes. The other sample consists of real consumer participants who came from a city of an eastern state in U.S. These consumers participated in the study by answering a paper-and-pencil survey and they were recruited individually during their visit to a restaurant located in a metropolitan shopping center. The total of both student and consumer samples is 411. The respondents' age ranged from 19 to 80, with the median age being 28.0 and 47.7 percent of the respondents were females.

4.6.2 Measures

The same measures as Study 1 are used in this study. Each of the constructs included in the study was measured by employing and adapting existing scales. All items have been revised to fit the real situation based on the scenario setting. The semantic differential (SD) is applied in this study since it has been common used in literature to describe the connotative meaning of abstract concepts (Cozens and Jacobs, 1961). The SD is applied in this study not only because it has been frequently adopted by researchers but also because its usefulness to stimulate subjects' responses to attitude scales. Besides the semantic scales, the other items were measured by using seven-point Likert-type scales with anchors of strongly disagree (1) and strongly agree (7). All the items of measurement are listed in Table 19.

Table 19. Constructs, Scale Items and Sources in Study 2

Constructs	Scale items	Sources of Scale
Trust - Benevolence	The car dealer favors the customer's best interest.	Sirdeshmukh et al., 2002
	The car dealer is genuinely concerned about fixing customers' problems.	Doney and Cannon, 1997
	I trust the car dealer's good intentions.	San Martin and Camarero, 2005
	The car dealer makes an effort to give personal attention.	San Martin and Camarero, 2005
	The car dealer can be trusted as he/she really looks out for the customer.	San Martin and Camarero, 2005
	The car dealer is reliable because he/she is mainly concerned with the customer's interests.	San Martin and Camarero, 2005
Trust - Expertise	The car dealer is very knowledgeable.	Doney and Cannon, 1997
	The car dealer knows his/her service very well.	Doney and Cannon, 1997
	The car dealer is not an expert.	Doney and Cannon, 1997
	I trust the car dealer's professional competence.	San Martin and Camarero, 2005

Table 19 Continued

	I believe that the car dealer has excellent technical resources.	San Martin and Camarero, 2005
	I believe that the car dealer has high-qualified personnel.	San Martin and Camarero, 2005
	The overall quality of the service provided by the dealer was excellent.	Dagger and Sweeney, 2007
Service Quality	The quality of the service provided by the dealer was impressive.	Dagger and Sweeney, 2007
	The service provided by the dealer was of a high standard.	Dagger and Sweeney, 2007
	I believe the dealer offered service that was superior in every way.	Dagger and Sweeney, 2007

4.6.3 Covariate

Age as a control variable is added to the analysis since age has been considered a determinant of perceptions of service quality (Javalgi *et al.*, 1990; Mattila *et al.*, 2003). According to their findings, older people are generally more discerning of service interactions and younger individuals are more demanding of tangible quality or outcomes. Thus, customers with different age are likely to perceive and evaluate service quality differently. With the age control, a more accurate assessment of the magnitude of dependent variables can be expected.

4.6.4 Design and Procedure

Again, an experimental approach is employed in this study. It is designed to allow orthogonal manipulations of the service performance along with the condition of the service guarantee and the relationship with customers. Although the approach seems impossible to replicate the richness of an actual perception of service quality, it allows

researchers to make stronger causal inferences about the hypothesized relationships. Participants in this study responded to a survey in which the scenario described one of eight randomly assigned experimental conditions from a 2 x 2 x 2 between-subjects factorial design. The three manipulated variables are: 1), service performance (service failure or service non-failure); 2), service guarantee (full refund with no condition or partial refund with condition); 3), customer relationship (true relationship or pseudo-relationship). Details of the manipulations are shown in Appendix A. Besides the manipulated variables, customer trust (expertise and benevolence) and credence service quality are measured. Data were collected via self-administered paper-and-pencil questionnaires and online survey. In self-administered format, the consumer was given a randomly selected booklet containing one of the eight scenarios. In the booklet, respondents first read a description page containing the corresponding experimental scenario. They were then asked to report the level of trust they would feel if they were in the given scenario, and the service quality perception they are likely to evaluate in response to the situation. These measures were followed by manipulation check questions and general demographic questions.

4.6.5 Pretest

A pretest was conducted to ensure that the manipulations could actually create the intended effect and the scenarios would be considered realistic. 110 undergraduate students from business majors participated in the pretest in exchange for extra course credit. The students were randomly presented with one of the eight scenarios and were asked to evaluate how serious the failure was in the scenario and how they felt about the

service guarantee and service relationship. Confirming the effect of manipulation, ANOVAs was used and the respondents presented with service failure reported significantly higher perception of failure (M = 4.92) than those presented with service non-failure (M = 3.0; $F(1, 109)$ = 33.4, $p < .001$). No other effects were significant in the analysis. Respondents were also asked how realistic they thought the scenario was. The average realism rating was high at 4.8 (on a seven-point scale) across all eight scenarios. There was no significant difference in realism ratings among the scenarios.

4.7 Analysis and Results

4.7.1 Manipulation check

To ensure the effect of experimental manipulations, respondents were asked to rate the extent to which the service failure they felt in the scenario and to what degrees they perceived the service guarantee and service relationship. An ANOVA was conducted on each of these three variables as independent variables. As expected, the respondents in the service failure group scored significantly higher level of failure (M = 5.41) than the non-failure group (M = 2.45, $F(1, 410)$ =529.5, $p < .001$). For evaluating service guarantee, the respondents were more likely to rate the service as strong when guarantee was cited as full refund with no condition (M = 5.74) than when guarantee was partial with conditions (M = 2.64, $F(1, 410)$ = 600.4, $p < .001$). For assessing service relationship, respondents scored the perception of relationship with the service employee significantly higher when the relationship was presented as pseudo-relationship (M = 5.50) than when the relationship was true relationship (M = 2.62, $F(1, 411)$ = 494.0, $p < .001$).

4.7.2 Hypotheses Testing

Table 20 presents the descriptive statistics for all variables and the correlation among the variables. Interaction effects were tested by using general liner model. Each two-way interaction is evaluated separately for the group formed based on the high and low levels of the other variable. To test hypothesis H1a that service guarantee moderates the effect of service failure on expertise, an ANOVA is conducted with expertise as dependent variables.

Table 20. Correlation Matrix of Variables in Study 2

Variables	Mean	Std. D.	1.	2.	3.	4.	5.	6.
1. Failure	.47	.50						
2. Service Guarantee	.50	.50	-.00					
3. Service Relationship	.49	.50	.02	-.02				
4. Expertise	4.44	1.50	-.36**	.43**	-.13**			
5. Benevolence	4.50	1.28	-.51**	.00	-.27**	.42**		
6. Perceived Service Quality	4.32	1.35	-.46**	.25**	-.12**	.40**	.59**	
Minimum			0	0	0	1	1	1
Maximum			1	1	1	7	7	7

*$p < .05$; **$p < .01$

As shown in Table 21, a significant interaction between service failure and service guarantee on expertise is found ($F(1, 410) = 4.90, p < .05$). The main effect of service failure on expertise holds both when service guarantee is strong and weak ($F = 26.02, p < .01; F = 52.29, p < .01$). Thus, H1a is supported as it states that when a failure of experience service occurs, its negative impact on benevolence is weaker when there is a

true relationship between the customer and employee than when there is a pseudo-relationship.

Table 21. Results of General Linear Model in Study 2

Independent Variables	Covariate	Dependent Variables		
	Age	Expertise	Benevolence	Service Quality
Service Failure	n/a	61.59**	n/a	n/a
Service Guarantee (moderator)	n/a	94.13**	.01	28.97**
Service Relationship (moderator)	n/a	8.00**	32.17**	6.41*
Expertise	27.31**	n/a	n/a	36.11**
Benevolence	23.89**	n/a	n/a	104.92**
Service Failure—Service Guarantee	n/a	4.90*	1.96	n/a
Service Failure—Service Relationship	n/a	4.71*	4.59*	n/a
Expertise—Service Guarantee	25.23**	n/a	n/a	3.10
Benevolence—Service Relationship	26.26**	n/a	n/a	4.08*

F-value with *$p < .05$; **$p < .01$

Figure 9 plots the interaction indicating that consumers will perceive higher level of expertise toward the service provider when service guarantee is presented as full refund without condition, no matter what the service is either a failure or non-failure. As expected, there was no significant difference of benevolence between strong and weak service guarantee when a consumer experienced a service failure ($M = 4.50$ and 4.51 for weak and strong service guarantee, respectively; $F(1, 410) = 1.96$, $p > .5$). Thus the moderating effect of service guarantee on perceived expertise is confirmed. In other words, offering strong service guarantee does matter when customers' perception of expertise is forming.

**Figure 9. Interaction Effect of Service Failure and Service Guarantee
on Expertise**
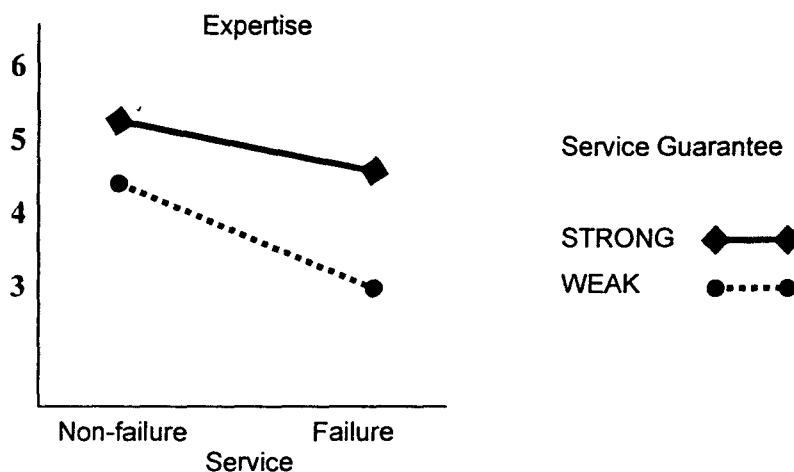
To test hypothesis H1b that service relationship moderates the relationship between service failure and benevolence, the result of ANOVA shows a significant interaction $(F(1, 410) = 4.59, p < .05)$. The main effect test is conducted to further examine the hypothesis. The result of ANOVA shows that service failure has significant impact on benevolence both when the service relationship is pseudo and true $(F(1, 202) = 114.27, p < .01; F(1, 207) = 53.62. p < .01)$. Therefore, H1b is supported.

Figure 10 plots the interaction that indicates the "buffering effect of true relationship." It means that consumers will perceive the average benevolence toward service provider when there is a true relationship, compared to pseudo relationship $(M = 4.26$ and 3.37, respectively), even though the service is a failure since service relationship has a significant main effect on benevolence.

Figure 10. Interaction Effect of Service Failure and Service Guarantee on Benevolence
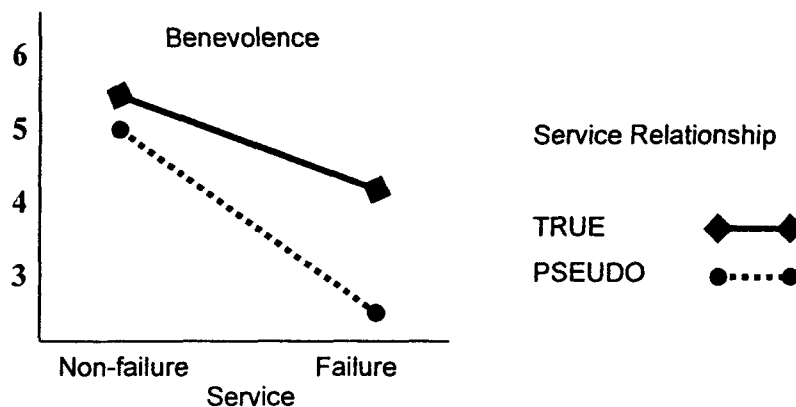
Based on the discussion in Chapter 2, perception of trust builds up mainly by two scales—expertise and benevolence. To understand their influences on perceived service quality, separate regressions are conducted with perceived service quality as the dependent variable and expertise, benevolence, service guarantee, and service relationship as the independent variables. Table 22 shows the results from all the regressions. Mediating test is conducted by following the process developed by Baron and Kenny (1986). Since the coefficient for each independent variable is significant and the coefficient for service failure is decreased when the mediator is added into the regression, H2 is partial supported as it hypothesize that a failure of experience service will negatively affect perceived service quality of credence service through either expertise or benevolence.

Table 22. Mediating Tests of Expertise and Benevolence

IV:	DV: Expertise			DV: PSQ			DV: PSQ		
	coefficient / t-value / p			coefficient / t-value / p			coefficient / t-value / p		
SF	-.36	-7.84	.000	-.47	-10.73	.000	-.37	-8.24	.000
Expertise							.27	6.06	.000
	DV: Benevolence			DV: PSQ			DV: PSQ		
	coefficient / t-value / p			coefficient / t-value / p			coefficient / t-value / p		
SF	-.52	-12.20	.000	-.47	-10.73	.000	-.22	-4.93	.000
Benevolence							.47	10.47	.000

Standardized coefficients (two-tailed *t*-values)
SF: Service Failure; PSQ: Perceived Service Quality

The last hypotheses are to test the moderating effect of service guarantee and service relationship on the relationship between trust and perceived service quality. A set of ANCOVA analyses are adopted with perceived service quality as the dependent variable and two constructs of trust—expertise and benevolence included as independent variables and age is controlled as the covariate variable. To run ANCOVA, the two continues variables were converted to dichotomous variables by splitting the sample at the median. In other words, the independent variables are split at the median to form high and low groups, which are then compared with respect to their means on the dependent variable. As shown in Table 21, the interaction between expertise and service guarantee was significant at the 10% level ($F(1, 392) = 3.10, p = .07$) when age is under control as covariate. Figure 11 plots the interaction and indicates that service guarantee does not matter when consumers perceived low expertise toward the service provider. However, when high expertise is perceived, strong service guarantee can effectively enhance

consumers' perception of service quality, compared to a weak service guarantee ($F(1$,

$199) = 17.99, p < .01$; $F(1, 191) = 3.46, p = .06$). Therefore, H3a is partially supported.

Figure 11. Interaction Effect of Expertise and Service Guarantee on Service Quality

Perceived Service Quality

An ANCOVA is run to test H3b that service relationship should moderate the relationship between benevolence and perceived service quality. As shown in Table 20, there is significant interaction between benevolence and service relationship ($F(1, 393) =$ $4.08, p < .05$). Considering the effect of covariate, the ANCOVA has added age into the model as the covariate. According to Miller and Chapman (2001), the covariate should not be different across the groups in the analysis and the regression slopes have to be homogeneous ($M_{true} = .31.92$, $M_{pseudo} = 31.90$, $F(1, 407) = .00$, p > .50). Table 20 shows that the covariate (age) significantly predicts the dependent variable ($F(1, 393) = 26.26, p$ $< .01$). In other words, perceived service quality is influenced by the consumer's age. When comparing the separate General Liner Model without the covariate, the amount of variation accounted for by the model has increased from 176.38 to 205.17 units

(corrected model), and the unexplained variance has been reduced from 568.37 to 524.81 units. Thus, it is concluded that there was a significant interaction effect of benevolence and service relationship on perceived service quality after controlling for the effect of consumers' age. Thus, H3b is supported. Figure 12 plots the interaction and indicates that consumers will perceive better service quality when they believe that the service provider is benevolent and when they have really good relationship with the service employee, compared to pseudo relationship ($F(1, 195) = 73.27, p < .01$; $F(1, 197) = 28.21, p < .01$).

Figure 12. Interaction Effects of Benevolence and Service Relationship on Service Quality

4.7.2 Validity Test

To test the onvergent validity, a Cronbach's alpha reliability test is conducted. The coefficients from the test are all greater than .80, indicating that there is a good reliability for each construct measured in the study ($\alpha = .953$, four items for Perceived Service Quality; $\alpha = .862$, four items for Expertise after two item are removed; $\alpha = .954$, six items for Benevolence).

4.8 Discussion and Implication

Consumers tend to find services more difficult to evaluate than physical products; therefore, they are likely to seek proxy or signals of quality to assess service quality. In general, consumers will try to "tangible" those intangibles. In other words, they are going to evaluate what they could not see by what they could see. The presence of other customers and appearance of sophisticated facilities, for example, are signals or cues of service quality. Results highlight the differential effect of service guarantee and service relationship between trust and service quality. Finding shows that the positive impact of service guarantee on expertise decreased as consumers perceived the service as a failure. Indeed, service guarantee had stronger positive effect on expertise as service is a failure than a non-failure. Consistent with the finding of Study 1, the negative effect of service failure can be "buffer" not only when the service is difficult to evaluate but also when service guarantee is presented as strong. The finding indicates that consumers expect the guarantee to be accessible and that the consumer's perception of expertise is influenced by the service provider's attitude about how service guarantee is carried out. Service relationship, on the other hand, is less important for building benevolence, compared to the importance of service guarantee to expertise. It might be due to the professional nature of auto-repair service which is more associated with technical context than with relationship building.

The results of this study indicate that customers may have quality perceptions as a result of anxiety-reducing cues in the service environment. Service providers should focus on control of cues that influence customers' expectations. Suggestions have been made from

the findings of the current study. First of all, tangible evidence, signals, or cues of service quality are necessary to project the credence service quality. When service failure is common in the service industry, both service guarantee and service relationship are good cues for marketers to use to alleviate the negative effects of service failure. Establishing a relationship with customers will not only enable positive perceptions of service evaluation but also further foster customer retention (Gwinner *et al.*, 1998; Palmatier *et al.*, 2006). Through the customer relationship building, service providers can exploit the unique relational resource to gain competitive advantage over competitors. From the customer's point of view, what a customer demands is a consistent service quality offered by service providers, and offering a service guarantee is an effective way to attract more customers. When service failure occurs, tangible compensation does provide a reassurance to customers. Service firms, therefore, are encouraged to use service guarantee to persuade customers that their service will have been eventually redressed. In auto repair industry, customers appear to be reassured by receiving full and explicit compensation for a service failure.

The results of this study suggest that in some situations, service guarantee should not be considered an essential component of marketing strategies. When expertise is perceived as low, there is no difference for perceived service quality no matter the service guarantee is weak or strong. Confirming Liden and Edvardsson's (2003) finding that negative industry reputation negatively associates with unconditional guarantee, the positive effect of service guarantee can be only found when expertise of service provider is perceived as high. It suggests that services such as medical care and financial service required high

level of expertise may benefit from the credibility with full guarantee without conditions. For setting the marketing policy, marketers should apply the service quality cues to fit their format and goals. If the goal of service providers is to increase their expertise, service guarantee should be considered; however, if the objective is to establish benevolence consumers will feel, a true relationship is more appropriate. In enhancing the perception of service quality, both extrinsic quality cues are effective since consumers were found to interpret pseudo-relationship and weak service guarantee as signals of low quality.

4.9 Limitations and Further Research

The present study is subject to limitations. In order to create a more realistic auto-repair experience through an imaginary scenario in the survey, the study has pretested for the effect of manipulation but it could still lack the realism and complexity of an actual visit. Customers were likely to skip their attention to the signals of service guarantee simply because they were not aware of until the service employee mentioned it. Furthermore, the finding could also be limited to some well-known stores since it is common for no-brand stores to offer other things than refund guarantee. The part of responses derived from student sample could also limit the generalization of finding. Even though students could be familiar with car-repair service, their homogeneous nature with respect to age and preference could lead to restricted variation on perceptions of price-sensitive attributes such as refund guarantee. Thus, future research should consider more variables to complete the hypothesized model. Intrinsic quality cues, for example, could be on the right track since they can better signal the service quality provided by the firm than

extrinsic quality cues with which consumers can barely infer quality since they are not difficult to imitate for the same service competitors.

BIBLIOGRAPHY

Alford, B. and D. Sherrell (1996), "The role of affect in consumer satisfaction judgments of credence-based services", *Journal of Business Research*, 37 (1), p.71-84

Andaleeb, S. S. and A. K. Basu (1994), "Technical Complexity and Consumer Knowledge as Moderators of Service Quality Evaluation in the Automobile Service Industry," *Journal of Retailing*, 70 (4), p.367-381

Anderson, J. C. and D. W. Gerbing (1988), "Structural Equation Modeling in practice: a Review and Recommended Two-Step Approach", *Psychological Bulletin*, 103 (3), p.411-423

Anderson, E. and M. W. Sullivan (1993), "The Antecedents and Consequences of Customer Satisfaction for Firms", *Marketing Science*, 12 (2), p.125-143

Anderson, E. and B. Weitz (1989), "Determinants of continuity in conventional industrial channel dyads", *Marketing Science*, 8 (4), p.310-323

Asubonteng, P., K. J. McCleary, and J. E. Swan (1996), "SERVQUAL revisited: A Critical Review of Service Quality", *Journal of Services Marketing*, 10 (6), p.62-81

Bagozzi, Richard P., Youjae Yi, and Lynn W. Phillips (1991), "Assessing Construct Validity in Organizational Research", *Administrative Science Quarterly*, 36 (3), p.421-458

Baron, Reuben M. and David A. Kenny (1986), "The Moderator- Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations", *Journal of Personality and Social Psychology*, 51 (6), p.1173-1182

Bateson, John E. G. (1995). *Managing Services Marketing*, Forth Worth, TX: The Dryden Press

Bell, Simon J., Seigyoung Auh, and Karen Smalley (2005), "Customer Relationship Dynamics: Service Quality and Customer Loyalty in the Context of Varying Levels of Customer Expertise and Switching Costs", *Journal of the Academy of Marketing Science*, 33 (2), p.169-183

Berry, Leonard L. (2000), "Cultivating Service Brand Equity", *Journal of the Academy of Marketing Science*, 28 (1), p.128-137

Biswas, Abhijit and Edward A. Blair (1991), "Contextual effects of reference prices in retail advertisements", *Journal of Marketing*, 55 (July), p.1-12

Biswas, Abhijit, Sujay Dutta, and Chris Pullig (2006), "Low price guarantees as signals of lowest price: The moderating role of perceived price dispersion", *Journal of Retailing*, 82 (3), p.245-257

Bitner, Mary. (1990), "Evaluating Service Encounters: The Effects of Physical Surroundings and Employee Responses", *Journal of Marketing*, 54 (April), p.69-82

Bitner, Mary, B. Booms, and M. Tetreault (1990), "The service encounter: diagnosing favorable and unfavorable incidents", *Journal of Marketing*, 54 (1), p.71-84

Bitner, Mary (1992), "Servicescapes: The Impact of Physical Surroundings on Customers and Employees", *Journal of Marketing*, 56 (April), p.57-71

Bitner, Mary (1995), "Evaluating Service Encounters: The Effects of Physical Surroundings and Employee Responses", *Journal of Marketing*, 54 (2), p.69-82

Bitner, M. and V. Zeithaml (1987), "Fundamentals in services marketing", Pre-conference paper form AMA workshop.

Bolton, Ruth N. and James H. Drew (1991a), "A longitudinal analysis of the impact of service changes on customer attitudes", *Journal of Marketing*, 55 (1), p.1-9

Bolton, Ruth N. and James H. Drew (1991b), "A multi-stage model of customer's assessments of service quality and value", *Journal of Consumer Research*, 17 (4), p.375-384

Bolton, Ruth N. (1998), "A Dynamic Model of the Duration of the Customer's Relationship with a Continuous Service Provider: The Role of Satisfaction", *Marketing Science*, 17 (Winter), p.45-65

Booms, B. H. and M. J. Bitner (1981), "Marketing Strategies and Organizational Structures for Service Firms", in Marketing of Services, edited by J. Donnelly and W. R. George (Chicago: American Marketing Association), p.47-51

Boshoff, C. (2002), "Service Advertising: An Exploratory Study of Risk Perceptions", *Journal of Service Research*, 4 (4), p.290-298

Boulding, W., A. Kalra, R. Staelin, and V. A. Zeithaml (1993), "A dynamic process model of service quality: from expectations to behavioral intentions", *Journal of Marketing Research*, 30 (February), p.7-27

Boulding, W. and A. Kirmani (1993), "A consumer-side experimental examination of signaling theory: do consumers perceive warranties as signals of quality?", *Journal of Consumer Research*, 20 (June), p.111-123

Bouman, M. and T. van der Wiele (1992), "Measuring service quality in the care service industry: building and testing an instrument", *International Journal of Service Industry Management*, 3 (4), p.4-16

Bove, L. L. and L. Johnson (2001), "Customer relationships with service personnel: do we measure closeness, quality or strength?", *Journal of Business Research*, 54 (3), p.189-197

Bowen, J. (1990), "Development of a taxonomy of services to gain strategic marketing insights", *Journal of the Academy of Marketing Science*, 18 (1), p.43-49

Brady, M. K. and J. Joseph Cronin Jr. (2001), "Some new thoughts on conceptualizing perceived service quality: a hierarchical approach", *Journal of Marketing*, 65 (3), p.34-49

Brady, M. K. and J. Joseph Cronin Jr. (2001), "Customer Orientation Effects on Customer Service Perceptions and Outcome Behaviors", *Journal of Service Research*, 3 (3), p.241-251

Brady, M. K., B. L. Bourdeau, and F. Heskel (2005), "The importance of brand cues in intangible service industries: an application to investment services," *Journal of Services Marketing*, 19 (6), p.401-410

Brown, T. J., G. A. Churchill, and J. P. Peter (1993), "Improving the measurement of service quality", *Journal of Retailing*, 69 (1), p.127-139

Busch, Paul and David T. Wilson (1976), "An Experimental Analysis of a Salesman's Expert and Referent Bases of Social Power in the Buyer-Seller Dyad", *Journal of Marketing Research*, 13 (February), p.3-11

Butler, J. K. Jr. (1991), "Toward Understanding and Measuring Conditions of Trust: Evolution of a Conditions of Trust Inventory", *Journal of Management*, 17 (3), p.643-663

Butler, J. K., Jr. and R. S. Cantrell (1984), "A behavioral decision theory approach to modeling dyadic trust in superiors and subordinates", *Psychological Reports*, 55, p.19-28.

Callan, Roger J. and Jacqueline Moore (1998), "Service Guarantee: A Strategy for Service Recovery", *Journal of Hospitality and Tourism Research*, 22 (1), p.56-71

Cantor, N., J. Norem, P. Niedenthal, and C. Langston (1987), "Life Tasks, Self Concept Ideals, and Cognitive Strategies in a Life Transition", *Journal of Personality and Social Psychology*, 53 (December), p.1178-1191

Chang, Chia-Chi (2006), "When Service Fails: The Role of the Salesperson and the Customer", *Psychology & Marketing*, 23(3), p.203-224

Chong, Bessie and Michael Wong (2005), "Crafting an Effective Customer Retention Strategy: A Review of Halo Effect on Customer Satisfaction in Online Auctions", *International Journal of Management and Enterprise Development*, 2 (1), p.12-26

Churchill, G.A. and C. Surprenant (1982), "An investigation into the determinants of customer satisfaction", *Journal of Marketing Research*, 19 (November), p.491-504

Clemes, M., D. Mollenkopf, and D. Burn (2000) "An investigation of marketing problems across service typologies", *Journal of Services Marketing*, 14 (7), p.573-594

Colquitt, J. A., B. A. Scott, and J. A. LePine (2007), "Trust, Trustworthiness, and Trust Propensity: A Meta-Analytic Test of Their Unique Relationships with Risk Taking and Job Performance", *Journal of Applied Psychology*, 92 (4), p.909-927

Cozens, W. R. and A. Jacobs (1961), "Empirically derived distributions similar to those used in computing the semantic differential", *Journal of Psychological Studies*, 12, p.143-149

Crane, F. G. and T. K. Clarke (1988), "The Identification of Evaluative Criteria and Cues Used in Selecting Services", *Journal of Services Marketing*, 2 (2), p.53-59

Cronbach, L. J. (1971). Test validation. in R. L.Thorndike (ed.). *Educational measurement. Second ed.*, Washington, D.C.: American Council on Education.

Cronin, J. J. Jr. and S. A. Taylor (1992), "Measuring service quality: a reexamination and extension", *Journal of Marketing*, 56 (July), p.55-68

Crosby, L. A., K. A. Evans, and D. Cowles (1990), "Relationship Quality in Services Selling: An Interpersonal Influence Perspective", *Journal of Marketing*, 54 (July), p.68-81.

Dagger, Tracey S. and Jillian C. Sweeney (2007), "Service Quality Attribute Weights: How Do Novice and Longer-Term Customers Construct Service Quality Perceptions?", *Journal of Service Research*, 10 (1), p.22-42

Daniel, J. M. (1995), "Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations," *Academy of Management Journal*, 38 (1), p.24-59

Darley, William K. and Robert E. Smith (1993), "Advertising Claim Objectivity: Antecedents and Effects", *Journal of Marketing*, 57 (4), p.100-113

Dean, Dwane H. and Jane M. Lang (2008), "Comparing three signals of Service quality", *Journal of Services Marketing*, 22 (1), p.48-58

Doney, Patricia M and Joseph P Cannon (1997), "An examination of the nature of trust in buyer-seller relationships", *Journal of Marketing*, 61 (2), p.35-51

Dorsch, Michael J., Stephen J. Grove, and William R. Darden (2000), "Consumer intentions to use a service category", *Journal of Services Marketing*, 14 (2), p.92-117

Doyle, Stephen X. and George Thomas Roth (1992), "Selling and Sales Management in Action: The Use of Insight Coaching to Improve Relationship Selling", *Journal of Personal Selling and Sales Management*, 12 (Winter), p.59-64

Dwyer, F. R., P. H. Schurr, and O. Sejo (1987), "Developing buyer-seller relationships", *Journal of Marketing*, 51 (April), p.11-27

Dwyer, F. R. and S. Oh (1987), "Output sector munificence effects on the internal political economy of marketing channels", *Journal of Marketing Research*, 24 (4), p.347-358

Eisingerich, Andreas B. and Simon J. Bell (2008), "Perceived Service Quality and Customer Trust: Does Enhancing Customers' Service Knowledge Matter?" *Journal of Service Research*, 10 (3), p.256-268

Ennew, C. T. and M. R. Binks (1999), "Impact of Participative Relationships on Quality, Satisfaction and Retention: An Exploratory Study", *Journal of Business Research*, 46 (October), p.121-132

Erevelles, S. (1993), "The Price-Warranty Contract and Product Attitudes," *Journal of Business Research*, 27 (2), p.171-181

Erevelles, S. A. Roy, and L. Yip (2001), "The universality of the signal theory for products and services," *Journal of Business Research*, 52 (01), p.175-187

Evans, Michael R., J. Dana Clark, and Bonnie Knutson (1996), "The 100-Percent Unconditional Money-Back Guarantee", *Cornell Hotel and Restaurant Administration Quarterly*, 37 (6), p.56-61

Fabien, L. (2005), "Design and Implementation of a service guarantee", *The Journal of Services Marketing*, 19 (1), p.33-38

Fazio, R. H., D. M. Sanbonmatsu, M. C. Powell, and F. R. Kardes (1986), "On the automatic activation of attitudes", *Journal of Personality and Social Psychology*, 50 (2), p.229-238

Fazio, R. H., M. C. Powell, and P. M. Herr (1983), "Toward a process model of the attitude behavior relation: Accessing one's attitude upon mere observation of the attitude object", *Journal of Personality and Social Psychology*, 44 (April), p.723-735

Fishbein, M. and I. Ajzen (1975), *Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research*, Addison-Wesley, Reading, MA.

Fisk, R. P., S. W. Brown, and M. J. Bitner (1993), "Tracking the Evolution of the Service Marketing Literature", *Journal of Retailing*, 69 (Spring), p.61-103

Fournier, Susan (1998), "Consumers and Their Brands: Developing Relationship Theory in Consumer Research", *Journal of Consumer Research*, 24 (4), p.343-373

Ganesan, Shankar (1994), "Determinants of Long-Term Orientation in Buyer-Seller Relationships", *Journal of Marketing*, 58 (2), p.1-19

Ganesan-Lim, C., R. Russell-Bennett, and T. Dagger (2008), "The Impact of Service Contact Type and Demographic Characteristics on Service Quality Perceptions", *The Journal of Services Marketing*, 22 (7), p.550-561

George, W. R. and Berry, L. (1981) "Guidelines for advertising of services", *Business Horizons*, 24 (4), p.52-56

Gotlieb, Jerry B., Dhruv Grewal, and Stephen W. Brown (1994), "Consumer Satisfaction and Perceived Quality: Complementary or Divergent Constructs?", *Journal of Applied Psychology*, 79 (6), p.875-885

Grewal, Dhruv and Howard Marmorstein (1994), "Market price variation, perveived price variation, and consumers' price search decisions for durable goods", *Journal of Consumer Research*, 21 (December), p.453-460

Grönroos, Christian (1982), Strategic Management and Marketing in the Service Sector, Marketing Science Institute, Cambridge, MA

Grönroos, Christian (1983), *Strategic Management and Marketing in the Service Sector*. London: Chartwell-Bratt

Grönroos, Christian (1984), "A service quality model and its marketing implications", *European Journal of Marketing*, 18 (4), p.36-44

Guiltinan, Joseph P. (1987), "The Price Bundling of Services: A Normative Framework", *Journal of Marketing*, 51 (April), p.74-85

Gundlach, G., R. Achrol, and J. Mentzer (1995), "The Structure of Commitment in Exchange", *Journal of Marketing*, 59 (1), p. 78-92

Gutek, Barbara, Anita D. Bhappu, Matthew A. Liao-Troth and Bennett Cherry (1999), "Distinguishing between Service Relationships and Encounters", *Journal of Applied Psychology*, 84 (2), p.218–233

Gutek, Barbara (1995), *The Dynamics of Service: Reflections in the Changing Nature of Customer/Provider Interactions*. San Francisco: Jossey-Bass

Gwinner, Kevin, Dwayne Gremler, and Mary Jo Bitner (1998), "Relational Benefits in Service Industries: The Customer's Perspective", *Journal of the Academy of Marketing Science*, 26 (2), p.101-114

Halinen, A. (1994), "Exchange relationship in professional services; a study of relationship development in the advertising sectior," Published Dissertation Project, sarja/Series A-6, Turku School of Economics and Business Administration, Turku.

Halstead, Diane, Corenlia Droge, and M. Bixby Cooper (1993), "Product Warranties and Post-purchase Service: A Model of Consumer Satisfaction with Complaint Resolution, *Journal of Services Marketing*, 7 (1), p.33-40

Hart, Christopher (1988), "The power of unconditional service guarantees", *Harvard Business Review*, 66 (July), p.54-62

Hart, Christopher, L. A. Schlesinger, and Dan Maher (1992), "Guarantees Come to Professional Service Firms", *Sloan Management Review*, 33 (3), p.19-29

Hart, Christopher (1995), "The Power of Internal Guarantees", *Harvard Business Review* (January-February), p.64-73

Hart, C., J. Heskett, and W. Sasser (1990), "The profitable art of service recovery", *Harvard Business Review*, 68 (4), p.148-156

Hartline, M. D. and K. C. Jones (1996), "Employee Performance Cues in a Hotel Service Environment: Influence on Perceived Service Quality, Value and Word-of-Mouth Intentions", *Journal of Business Research*, 35 (3), p.207-215

Heskett, J. L., T. O. Jones, G. W. Loveman, W. E. Sasser Jr., and L. A. Schlesinger (1994), "Putting the Service-Profit Chain to Work", *Harvard Business Review*, 72(March-April), p.164-174.

Hess, Christopher K. (1996), "The Evaluability Hypothesis: An Explanation for Preference Reversals between Joint and Separate Evaluations of Alternatives", *Organizational Behavior and Human Decision Processes*, 67 (3), p.247-257

Hess, Ronald. L. Jr., S. Ganesan, N. M. Klein (2007), "Interactioinal service failures in a pseudorelationship: The role of organizational attributions", *Journal of Retailing*, 83 (1), p.79-95

Hess, Ronald. L. Jr. (2008), "The impact of firm reputation and failure severity on customers' responses to service failures", *Journal of Services Marketing*, 22 (5), p.385-398

Hess, Ronald L. Jr., Shankar Ganesan and Noreen M. Klein (2003). "Service Failure and Recovery: The Impact of Relationship Factors on Customer Satisfaction", *Journal of the Academy of Marketing Science*, 31 (2), p.127-145

Hill, D. J. and G. Nimish (1992), "Service advertising: a framework to its effectiveness", *Journal of Services Marketing*, 6 (Fall), p.63-76

Holloway, B. B., & Beatty, S. E. (2003), "Service failure in online retailing: A recovery opportunity", *Journal of Service Research*, 6 (1), p.92-105

Hong, S-C. and Y. J. Goo (2004), "A causal model of customer loyalty in professional service firms: an empirical study", *International Journal of Management*, 21 (4), p.531-540

Jang, SooCheong and Young Namkung (2009), "Perceived quality, emotions, and behavioral intentions: Application of an extended Mehrabian-Russell model to restaurants", *Journal of Business Research*, 62 (4), p.451-460

Javalgi, R. G., J. J. Belonax, and A. M. Robinson (1990), "Mature consumers in the financial services marketplace-potential market segments", *Journal of Professional Services Marketing*, 6 (1), p.81-107

Johnson-George, C. E. and W. C. Swap (1982), "Measurement of specific interpersonal trust: construction and validation of a scale to assess trust in a specific other", *Journal of Personality and social Psychology*, 43 (6), p.1306-1317

Johnson, D. and K. Grayson (2005), "Cognitive and affective trust in service relationships", *Journal of Business Research*, 58 (4), p.500-507

Johnson, Cathy and Brian P. Mathews (1997), "The influence of experience on service expectations", *International Journal of Service Industry Management*, 8 (4), p.290-305

Kashyap, Rajiv (2001), "The Effects of Service Guarantees on External and Internal Markets", *Academy of Marketing Science Review*, 5 (8), p.1-19

Keaveney, S. (1995), "Customer switching behavior in service industries: an exploratory study", *Journal of Marketing*, 59 (2), p.71-82

Kelley, Scott W., James H. Donnelly Jr., and Steven J. Skinner (1990), "Customer Participation in Service Production and Delivery", *Journal of Retailing*, 66 (Fall), p.315-335

Kelley, S., K. D. Hoffman, and M. A. Davis (1993), "A typology of retail failures and recoveries", *Journal of Retailing*, 69 (4), p.429-452

Kennett, P. A. J. Z. Sneath, and M. K. Menon (1999), "Services guarantees as marketplace signals in the consumer choice process", *European Marketing Academy Conference Proceedings*, Berlin, p.235-252

Kotler, P. and K. L. Keller (2006), Marketing Management, Upper Saddle River, NJ: Prentice Hall

Kukar-Kinney, M., R. G. Walters, and S. B. MacKenzie (2007), "Consumer responses to characteristics of price-matching guarantees: The moderating role of price consciousness", *Journal of Retailing*, 83 (2), p.211-221

Kumar, Nirmalya, Lisa K. Scheer, and Jan-Benedict E. M. Steenkamp (1995), "The Effects of Perceived Interdependence on Dealer Attitudes", *Journal of Marketing Research*, 32 (August), p.348-356

Kumar, P, M. U. Kalwani, and M. Dada (1997), "The Impact of Waiting Time Guarantees on Customer's Waiting Experiences", *Marketing Science*, 16 (4), p.295-314

La, Vinh Q., Paul G. Patterson, and Chris W. Styles (2005), "Determinants of export performance across service types: a conceptual model", *The Journal of Services Marketing*, 19 (6), p.379-391

Lai, Fujun, Mitch Griffin, and Barry J. Babin (2009), "How quality, value, image, and satisfaction create loyalty at a Chinese telecom", *Journal of Business Research*, 62 (10), p.980-986

Laroche, M., G. McDougall, J. Bergeron, and Z. Yang (2004), "Exploring how intangibility affects perceived risk", *Journal of Service Research*, 6 (4), p.373-389

Lee, Haksik, Yongki Lee, and Dongkeun Yoo (2000), "The determinants of perceived service quality and its relationship with satisfaction", *Journal of Services Marketing*, 14 (3), p.217-231

Levitt, T. (1981), "Marketing Intangible Products and Pr4oduct Intangibles", *Harvard Busine3ss Review*, (May), p.94-102

Lewis, B. R. and V. W. Mitchell (1990), "Defining and measuring the quality of customer service", *Marketing Intelligence and Planning*, 8 (6), p.11-17

Liden, S. B. and B. Edvardsson (2003), "Customer expectations on service guarantees", *Managing Service Quality*, 13 (8), p.338-348

Liljander, V. and T. Strandvik (1995), "The nature of customer relationships in services", in Swartz, T. A., Bowen, D. E. and Brown, S. W. (Eds), Advances in Services Marketing and Management. Research and Practice, 4, p.141-167

Liljander, V. and I. Roos (2002), "Customer-relationship levels—from spurious to true relationships", *Journal of Service Marketing*, 16 (7), p.593-614

Lindskold, Svenn (1978), "Trust Development, the GRIT Proposal and the Effects of Conciliatory Acts on Conflict and Cooperation", *Psychological Bulletin*, 85 (4), p.772-793

Lovelock, C. H. (1983), "Classifying Services to Gain Strategic Marketing Insights", *Journal of Marketing*, 47 (3), p.11-19

Lovelock, C. H. and G. S. Yip (1996), "Developing Global Strategies for Service Business", *California Management Review*, 38 (2), p.64-86

Martin, S. S. and C. Camarero (2005), "Consumer Reactions to Firm Signals in Asymmetric Relationships", *Journal of Service Research*, 8 (1), p.79-97

Mattila, Anna S. (2001), "The Impact of Relationship type on Customer Loyalty in a context of Service Failure", *Journal of Service Research*, 4 (2), p.91-101

Mattila, M., H. Karjaluoto, and T. Pento (2003), "Internet banking adoption among mature customers: early majority or laggards?", *Journal of Services Marketing*, 17 (5), p.514-28

Mayer, R. C., J. H. Davis, and F. D. Schoorman (1995), "An Integrative Model of Organizational Trust", *Academy of Management Review*, 20 (3), p.709-734

McCollough, M. A., L. L. Berry, and M. S. Yadav (2000), "An Empirical Investigation of Customer Satisfaction after Service Failure and Recovery", *Journal of Service Research*, 3 (2), p.121-137

McColl, Rod, Jan Mattsson, and Clive Morley (2005), "The Effects of Service Guarantees on Service Evaluations during a Voiced Complaint and Service Recovery", *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 18, p.32-50

McDougall, Gordon H. G., Terrence Levesque, and Peter VanderPlaat (1998), "Designing the Service Quarantee: Unconditional or Specific?", *Journal of Service Marketing*, 12 (4), p.278-293

Mersha, T. (1990), "Enhancing the customer contact model," *Journal of Operations Management*, 9 (3), p.391-405

Mick, David and Claus Buhl (1992), "A Meaning-Based Model of Advertising Experiences", *Journal of Consumer Research*, 19 (December), p.317-338

Milardo, Robert M. (1992), "Comparative Methods for Delineating Social Networks", *Journal of Social and Personal Relationships*, 9, p.447-461

Milliman, Ronald E. and Douglas Fugate (1988), "Using Trust Transference as a Persuasion Technique: An Empirical Field Investigation", *Journal of Personal Selling and Sales Management*, 8 (August), p.1-7

Mittal, V. J. M. Katrichis, and P. Kumar (2001), "Attribute Performance and Customer Satisfaction over Time: Evidence from Two Field Studies", *Journal of Services Marketing*, 15 (5), p.343-356

Miyamoto, T. and N. Rexha (2004), "Determinants of three facets of customer trust: A marketing model of Japanese buyer-supplier relationship", *Journal of Business Research*, 57 (3), p.312-319

Miyazaki, A. D., D. Grewal, and R. C. Goodstein (2005), "The Effect of Multiple Extrinsic Cues on Quality Perceptions: A Matter of Consistency", *Journal of Consumer Research*, 32 (June), p.146-153.

Moorman, C., G. Zaltman, and R. Deshpande (1992), "Relationships between providers and users of market research: the dynamics of trust within and between organizations", *Journal of Marketing Research*, 29 (August), p.314-328

Moorman, Christine, Rohit Deshpande, and Gerald Zaltman (1993), "Factors Affecting Trust in Market Research Relationships", *Journal of Marketing*, 57 (January), p.81-101

Morgan, R. M. and S. D. Hunt (1994), "The commitment-trust theory of relationship marketing", *Journal of Marketing*, 58 (3), p.20-38

Morgan, R. M. and S. D. Hunt (1999), "Relationship-Based Competitive Advantage: The Role of Relationship Marketing in Marketing Strategy", *Journal of Business Research*, 46 (3), p.281-290

Murray, K. B. and J. L. Schlacter (1990), "The Impact of Services versus Goods on Consumers' Assessment of Perceived Risk and Variablity", *Journal of the Academy of Marketing Science*, 18 (Winter), p.51-65

Oliver, R. L. (1980), "A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions", *Journal of Marketing Research*, 17 (September), p.46-49

Oliver, R. L. (1981), "Measurement and Evaluation of Satisfaction Process in Retail Settings", *Journal of Retailing*, 57 (Fall), p.25-48

Oliver, R. L. (1989), "Processing of the satisfaction response in consumption: a suggested framework and research propositions", *Journal of Consumer Satisfaction, Dissatisfaction, and Complaining Behavior*, 2, p.1-16

Olson, J. C. and J. Jacoby (1972), "Cue Utilization in the Quality Perception Process", *Proceedings of the Third Annual Conference of the Association for Consumer Research*, p.167-179

Olson, J. C. and P. Dover (1979), "Disconfirmation of Consumer Expectations through Product Trial", *Journal of Applied Psychology*, 64 (April), p.179-189

Ostrom, Amy and Dawn Iacobucci (1995), "Consumer Trade-Offs and the Evaluation of Services", *Journal of Marketing*, 59 (1), p.17-28

Ostrom, Amy and Dawn Iacobucci (1998), "The Effect of Guarantees on Cionsumers' Evaluation of Services", *Journal of Services Marketing*, 12 (May), p.362-378

Palmatier, Robert W., Rajiv P. Dant, Dhruv Grewal, and Evans R. Kenneth (2006), "Factors Influencing the Effectiveness of Relationship Marketing: A Meta-Analysis", *Journal of Marketing*, 70 (October), p.136-153

Parasuraman, A. (1994), "Reassessment of expectations as a comparison standard in measuring service quality: implications for future research", *Journal of Marketing*, 58 (January), p.111-124

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

Parasuraman, A., V. A. Zeithaml, and L. L. Berry (1988), "SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perception of Service Quality", *Journal of Retailing*, 64 (Spring), p.12-40.

Parasuraman, A., L. L. Berry, and V. A. Zeithaml (1991a), "Refinement and reassessment of the SERVQUAL scale", *Journal of Retailing*, 67 (4), p.420-450

Parasuraman, A., L. L. Berry, and V. A. Zeithaml, (1991b), "Understanding customer expectations of service", *Sloan Management Review*, 32 (3), p.39-48

Prenshaw, P. F., S. E. Kovar, and K. G. Burke (2006), "The impact of involvement on satisfaction for new, nontraditional, credence-based service offerings", *Journal of Services Marketing*, 20 (7), p.439-452

Rempel, J. K., J. G. Holmes, and M. D. Zanna (1985), "Trust in close relationships", *Journal of Personality and Social Psychology*, 49, p.95-112

Ruiz, David Martin, Dwayne D. Gremier, and Judith H. Washburn (2008), "Service value revisited: Specifying a higher-order, formative measure", *Journal of Business Research*, 61 (12), p.1278-1291

San Martin, Sonia and Carmen Camarero (2005), "Consumer Reactions to Firm Signals in Asymmetric Relationships", *Journal of Service Research*, 8 (1), p.79-97

Sasser, W. E. (1976), "Match Supply and Demand in Service Industries", *Harvard Business Review*, (November-December), p.133-140

Sawyer, A. G., P. M. Worthing, and P. E. Sendak (1979), "The Role of Laboratory Experiments to Test Marketing Strategies", *Journal of Marketing*, 43 (Summer), p.60-67

Schurr, P. and J. Ozane (1995), "Influences on exchange processes: Buyer's perceptions of a seller's trustworthiness and bargaining toughness", *Journal of Consumer Research*, 11 (March), p.939-953

Shepard, L. A. (1993). "Evaluating test validity" in L. Darling-Hammond, ed., Review of research in education, 19, p.405-450

Sharma, Neeru and Paul G. Patterson (1999), "The Impact of Communication Effectiveness and Service Quality on Relationship Commitment in Consumer, Professional Services," *Journal of Services Marketing*, 13 (2/3), p.151-170

Shemwell, Donald, Joseph Cronin, and William Bullard (1994), "Relational Exchanges in Services: An Empirical Investigation of Ongoing Customer Service-Provider Relationships", *International Journal of Service Industry Management*, 5 (3), p.57-68

Shostack, G. L. (1987), "Service Positioning through Structural Change", *Journal of Marketing*, 51 (1), p.34-43

Singh, J. (1991), "Understanding the Structure of Consumers' Satisfaction Evaluations of Service Delivery", *Journal of Academy of Marketing Science*, 19 (3), p.223-244

Sirdeshmukh, Deepak, Jagdip Singh, and Barry Sabol (2002), "Consumer trust, value, and loyalty in relational exchanges", *Journal of Marketing*, 66 (1), p.15-37

Smith, J. Brock (1997), "Selling Alliances: Issues and Insights", *Industrial Marketing Management*, 26 (2), p.146-161

Smith, A., R. Bolton, and J. Wagner (1999), "A model of customer satisfaction with service encounters involving failure and recovery", *Journal of Marketing Research*, 33 (3), p.356-372

Spence, Michael (2002), "Signaling in retrospect and the informational structure of markets", *American Economic Review*, 92 (3), p.434-459

Stafford, M. R. (1996) "Tangibility in services advertising: an investigation of verbal versus visual cues", *Journal of Advertising*, 25 (3), p.13-28

Stauss, B. (2002), "The dimensions of complaint satisfaction: Process and outcome complaint satisfaction versus cold fact and warm act complaint satisfaction", *Managing Service Quality*, 12 (3), p.173-183

Straub, D. W. (1989). "Validating Instruments in MIS Research", *MIS Quarterly*, 13 (2), p.147-166

Strub, Peter J. and T. B. Priest (1976), "Two Patterns of Establishing Trust: The Marijuana User", *Sociological Focus*, 9 (4), p.399-411

Sureshchandar, G. S., Chandrasekharan Rajendran, and R. N. Anantharaman (2002), "Determinants of customer-perceived service quality: a confirmatory factor analysis approach", *Journal of Service Marketing*, 16 (1), p.9-34

Swan, John E. and Johannah Jones Nolan (1985), "Gaining Customer Trust: A Conceptual Guide for the Salesperson", *Journal of Personal Selling & Sales Management*, 5 (2), p.39-48

Sweeney, J. C., L. W. Johnson, and R. W. Armstrong (1992), "The effect of cues on service quality expectations and service selection in a restaurant setting", *Jouranl of Services Marketing*, 6 (Fall), p.15-21

Szmigin, I. (1993), "Managing quality in business-to-business services", *European Journal of Marketing*, 27 (1), p.5-21

Tam, Jackie L. M. (2004), "Customer Satisfaction, Service Quality and Perceived Value: An Integrative Model", *Journal of Marketing Management*, 20 (7), p.897-917

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), p.163-178

Tse, D. K. and P. C. Wilton (1988), "Models of Consumer Satisfaction Formaiton: An Extension", *Jounral of Marketing Research*, 25 (May), p.204-212

Tucci, L. A. and J. Talaga (1997), "Service Guarantees and Consumers' Evaluation of Services", *The Journal of Services Marketing*, 11 (1), p.1-10

Van Raaij, W. F. and A. Pruyn (1998), "Customer control and evaluation of service validity and reliability", *Psychology & Marketing*, 15 (8), p.811-832

Verhoef, P. (2003), "Understanding the effect of customer relationship management efforts on customer retention and customer share development", *Journal of Marketing*, 67 (October), p.30-45

Vilares, M. J. and P. S. Coelho (2003), "The employee-customer satisfaction chain in the ECSI model", *European Journal of Marketing*, 37 (11), p.1703-1722

Wakefield, Kirk and Jeffrey Blodgett (1994), "The Importance of Servicescapes in Leisure Service Settings", *Journal of Services Marketing*, 8 (3), p.66-76

Wang, Chung-Yu (2010), "Service Quality, Perceived Value, Corporate Image, and Customer Loyalty in the Context of Varying Levels of Switching Costs", *Psychology and Marketing*, 27 (3), p.252-262

Wirtz, Jochen (1998), "Development of a Service Guarantee Model", *Asia Pacific Journal of Management*, 15, p.15-75

Wirtz, Jochen, Doreen Kum, and Khai Sheang Lee (2000), "Should a firm with a reputation for outstanding service quality offer a service guarantee?", *Journal of Services Marketing*, 14 (6), p.502-512

Wirtz, Jochen and Doreen Kum (2001), "Designing service guarantees—is full satisfaction the best you can guarantee?", *Journal of Services Marketing*, 15 (4), p.282-299

Zeithaml V. A. (1981), "*How consumer evaluation processes differ between goods and services', in Marketing of Services*", J. Donnelly and W. George (eds.), Chicago, American Marketing Association, p.186-190

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

Zeithaml, V. A .(1991), "*How Consumer Evaluation Processes Differ Between Goods and Services*", in Marketing of Services, James H. Donnelly and William R. George, eds. Chicago: American Marketing Association

Zeithaml, V. A., L. L. Berry, and A. Parasuraman (1988), "Communication and control processes in the delivery of services", *Journal of Marketing*, 52 (2), p.35-48

Zeithaml, V. A., L. L. Berry, and A. Parasuraman (1993), "The Nature and Determinants of Customer Expectations of Service", *Journal of the Academy of Marketing Science*, 21 (1), p.1-12

Zeithaml, V. A., L. L. Berry, and A. Parasuraman (1996), "The Behavioral Consequences of Service Quality", *Journal of Marketing*, 60 (April), p.31-46

Zeithaml, V. A., A. Parasuraman, and L. A. Berry (1985), "Problems and strategies in services marketing", *Journal of Marketing*, 49 (2), p.33-46

Zeithaml, V. A. and M. J. Bitner (1996), *Services Marketing*, McGraw-Hill, New York, NY

Zeithaml, V. A. and M. J. Bitner, (2000), *Service Marketing*, McGraw-Hill, New York, NY

APPENDICES

A. Scenarios

Study 1

Scenario 1 (failure vs. experience service)
*Imagine you just bought a car from a dealer nine months ago. You found that **there was a key scratch on the body panel of the car.** So you went to the dealer and they said that it would cost you $70 to get it fixed. Looking the problem, you felt the service charge was fair. After inspection, they took your car to fix the scratch. When the car was returned, **you found that the scratch was still noticeable.***

Scenario 2 (failure vs. credence service)
*Imagine you just bought a car from a dealer nine months ago. **It was very difficult to start the car sometimes in cold weather.** You found that you had to start the car by one...two...three attempts. You knew the battery was not dead so you went to the dealer to check it out and they said that it would cost you $70 to get it fixed. Looking the problem, you felt the service charge was fair. After inspection, they took the battery from your car to recharge it. After the dealer fixed the battery, **you found that you could start the car successfully almost every attempt. Although you could start the car sometimes with couple attempts, you wondered whether it would start in cold weather.***

Scenario 3 (success vs. experience service)
*Imagine you just bought a car from a dealer nine months ago. You found that **there was a key scratch on the body panel of the car.** So you went to the dealer and they said that it would cost you $70 to get it fixed. Looking the problem, you felt the service charge was fair. After inspection, they took your car to fix the scratch. When the car was returned, **you found that the scratch was completely removed.***

Scenario 4 (success vs. credence service)
*Imagine you just bought a car from a dealer nine months ago. **It was very difficult to start the car sometimes in cold weather.** You found that you had to start the car by one...two...three attempts. You knew the battery was not dead so you went to the dealer to check it out and they said that it would cost you $70 to get it fixed. Looking the problem, you felt the service charge was fair. After inspection, they took the battery from your car to recharge it. After the dealer fixed the battery, **you found that you could start the car without difficulty and it worked every attempt. Although the problem seemed to be solved, you wondered whether it would start in cold weather.***

Study 2

Scenario 1 (failure vs. weak service guarantee vs. pseudo-relationship):
You have been having problem starting your car in cold weather. You need multiple attempts to start the car. You also want to do a wheel alignment on your car. You know

the battery is not dead so you take the car to the dealership to check the battery and the **wheel alignment. As you enter the dealer, you are greeted by a service representative Pat you have not met before.** *As you look around, you see a display stating that* **all services have a guarantee offering partial refund, subject to conditions on the contract.** *After the dealer fixes the battery,* **you find that you still need more than one attempt to start the car.** *The service representative tells you that the wheel alignment is taken care of.*

Scenario2 (failure vs. weak service guarantee vs. true-relationship):
You have been having problem starting your car in cold weather. You need multiple attempts to start the car. You also want to do a wheel alignment on your car. You know the battery is not dead so you take the car to the dealer to check the battery and the wheels alignment. As you enter the dealer, **you are greeted by a service representative Pat who always provides service to you.** *As you look around, you see a display stating* **that all services have a guarantee offering partial refund, subject to conditions on the contract. After the dealer fixes the battery, you find that you still need more than one attempt to start the car.** *The service representative tells you that the wheel alignment is taken care of.*

Scenario3 (failure vs. strong service guarantee vs. pseudo-relationship):
You have been having problem starting your car in cold weather. You need multiple attempts to start the car. You also want to do a wheel alignment on your car. You know the battery is not dead so you take the car to the dealer to check the battery and the wheels alignment. As you enter the dealer, **you are greeted by a service representative Pat you have not met before.** *As you look around, you see a display stating that* **all services have a guarantee offering full refund with no conditions attached.** *After the dealer fixes the battery,* **you find that you still need more than one attempt to start the car.** *The service representative tells you that the wheel alignment is taken care of.*

Scenario4 (failure vs. strong service guarantee vs. true-relationship):
You have been having problem starting your car in cold weather. You need multiple attempts to start the car. You also want to do a wheel alignment on your car. You know the battery is not dead so you take the car to the dealer to check the battery and the wheels alignment. As you enter the dealer, **you are greeted by a service representative Pat who always provides service to you.** *As you look around, you see a display stating* **that all services have a guarantee offering full refund with no conditions attached.** *After the dealer fixes the battery,* **you find that you still need more than one attempt to start the car.** *The service representative tells you that the wheel alignment is taken care of.*

Scenario5 (non-failure vs. weak service guarantee vs. pseudo-relationship):
You have been having problem starting your car in cold weather. You need multiple attempts to start the car. You also want to do a wheel alignment on your car. You know the battery is not dead so you take the car to the dealership to check the battery and the **wheel alignment. As you enter the dealer, you are greeted by a service representative Pat you have not met before.** *As you look around, you see a display stating that* **all services have a guarantee offering partial refund, subject to conditions on the contract.** *After*

the dealer fixes the battery, you find that you can start the car without difficulty. The service representative tells you that the wheel alignment is taken care of.

Scenario6 (non-failure vs. weak service guarantee vs. true-relationship):
*You have been having problem starting your car in cold weather. You need multiple attempts to start the car. You also want to do a wheel alignment on your car. You know the battery is not dead so you take the car to the dealer to check the battery and the wheels alignment. As you enter the dealer, **you are greeted by a service representative Pat who always provides service to you**. As you look around, you see a display stating that **all services have a guarantee offering partial refund, subject to conditions on the contract.** After the dealer fixes the battery, you find that you can start the car without difficulty. The service representative tells you that the wheel alignment is taken care of.*

Scenario7 (non-failure vs. strong service guarantee vs. pseudo-relationship):
*You have been having problem starting your car in cold weather. You need multiple attempts to start the car. You also want to do a wheel alignment on your car. You know the battery is not dead so you take the car to the dealer to check the battery and the wheels alignment. As you enter the dealer, **you are greeted by a service representative Pat you have not met before**. As you look around, you see a display stating that **all services have a guarantee offering full refund with no conditions attached.** After the dealer fixes the battery, you find that you can start the car without difficulty. The service representative tells you that the wheel alignment is taken care of.*

Scenario8 (non-failure vs. strong service guarantee vs. true-relationship):
*You have been having problem starting your car in cold weather. You need multiple attempts to start the car. You also want to do a wheel alignment on your car. You know the battery is not dead so you take the car to the dealer to check the battery and the wheels alignment. As you enter the dealer, **you were greeted by a service representative Pat who always provides service to you**. As you look around, you see a display stating that **all services have a guarantee offering full refund with no conditions attached.** After the dealer fixes the battery, you find that you can start the car without difficulty. The service representative tells you that the wheel alignment is taken care of.*

B. Questionnaire

A0: On a 100 point-scale, how would you rate your trust toward the service provider? ___ (0-100)

A1. Now please indicate the extent to which you agree or disagree with the
statements below:

Strongly Agree
Fairly Agree
Little Agree
Uncertain
Little Disagree
Fairly Disagree
Strongly Disagree

The car dealer favors the customer's best interest.	1	2	3	4	5	6	7
The car dealer is genuinely concerned about fixing customers' problems.	1	2	3	4	5	6	7

I trust the car dealer's good intentions.	1	2	3	4	5	6	7
The car dealer makes an effort to give personal attention.	1	2	3	4	5	6	7
The car dealer can be trusted as he/she really looks out for the customer.	1	2	3	4	5	6	7
The car dealer is reliable because he/she is mainly concerned with the customer's interests.	1	2	3	4	5	6	7
The car dealer is very knowledgeable.	1	2	3	4	5	6	7
The car dealer knows his/her service very well.	1	2	3	4	5	6	7
The car dealer is not an expert.	1	2	3	4	5	6	7
I trust the car dealer's professional competence.	1	2	3	4	5	6	7
I believe that the car dealer has excellent technical resources.	1	2	3	4	5	6	7
I believe that the car dealer has high-qualified personnel.	1	2	3	4	5	6	7

B0: On a 100 point-scale, how would you rate the quality of service? _____ (0-100)

B1. Please indicate the extent to which you agree
or disagree with the statements below:

Strongly Agree
Fairly Agree
Little Agree
Uncertain
Little Disagree
Fairly Disagree
Strongly Disagree

The overall quality of the service provided by the dealer was excellent.	1	2	3	4	5	6	7
The quality of the service provided by the dealer was impressive.	1	2	3	4	5	6	7
The service provided by the dealer was of a high standard.	1	2	3	4	5	6	7
I believe the dealer offered service that was superior in every way.	1	2	3	4	5	6	7
My feelings about the dealer were very positive.	1	2	3	4	5	6	7
I felt good about coming to the dealer for getting my car repaired.	1	2	3	4	5	6	7
I felt satisfied that the results of the service were the best achieved.	1	2	3	4	5	6	7
The extent to which the service provided to me has produced the best outcome was satisfying.	1	2	3	4	5	6	7

C. About the dealer:

Considering the possible problems with the service performance, how risky do you think it is to choose the dealer?

Not risky at all   1   2   3   4   5   6   7   Very risky

How sure are you about the dealer's ability to perform?

Not sure at all   1   2   3   4   5   6   7   Very sure

How confident are you of the dealer's ability to perform as expected?

Not confident at all   1   2   3   4   5   6   7   Very confident

How certain are you that this service provider would perform as well as similar dealers where you could go to?

Not certain at all   1   2   3   4   5   6   7   Very certain

D. The cause of the service failure/non-failure was likely to be:

Not at all controllable by the dealer   1   2   3   4   5   6   7   highly controllable by the dealer

Not at all preventable by the dealer **1   2   3   4   5   6   7** definitely preventable by the dealer

E. About this scenario:

In the scenario, how would you evaluate the service?
It's not a failure   **1   2   3   4   5   6   7** It's a failure

In the scenario, how sure are you that you think the problem was completely fixed or not fixed at all?
Not sure at all **1   2   3   4   5   6   7** Very sure

In the scenario, how difficult do you think it was to assess whether the dealer had fixed the problem in your car?
Not difficult at all **1   2   3   4   5   6   7** difficult

How realistic do you think is this scenario?
Very unrealistic   **1   2   3   4   5   6   7** Very realistic

F. Personal Information

Your gender

□   Male

□   Female

Year of birth 19 _____

The End of the Survey
Thank You

VITA

Kungpo Tao

College of Business and Public Administration, Constant Hall, Old Dominion University.

PhD	2011	Old Dominion University, Virginia, USA.
M.S.	2005	Taxes A&M University at Commerce, TX, USA.
M.B.A.	1998	National Dong Hwa University, Taiwan.
B.A.	1994	National Pingtung University of Science and Technology, Taiwan.