# *Staff perceptions of service quality in Egyptian commercial banks: an internal and external perspective*

# Staff Perceptions of Service Quality in Egyptian Commercial Banks: An Internal and External Perspective

By

Hossam Eldin Mahmoud Abou Elanain

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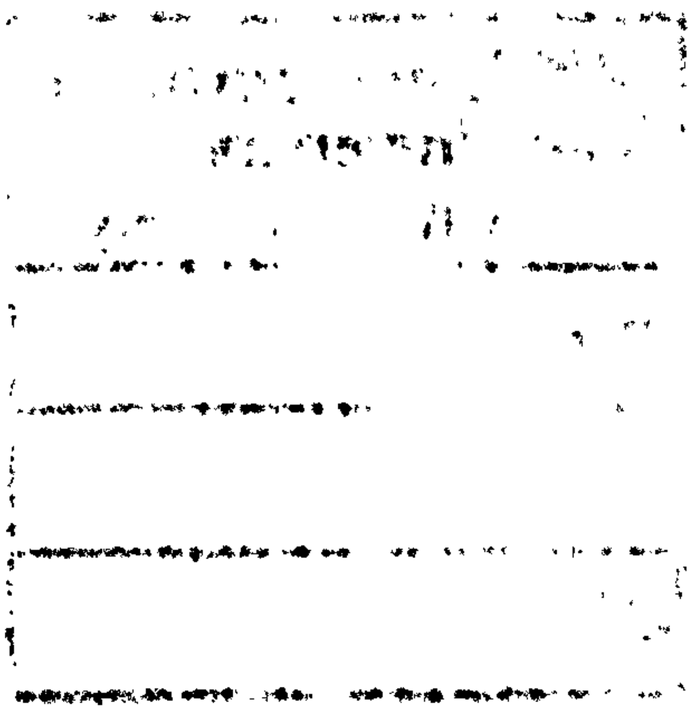

# DEDICATION

*To my mother*, for everything she has done for me.

*To the memory of my father*, in remembrance of his sacrifice so that, this is made possible.

*To my wife Shimaa*, for her love, patience and sharing me every moment during this work. Without her, it would have been impossible for me to finish this work.

*To my son Omar and my daughter Malak*, for being with us and making our life very joyful.

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## ABSTRACT

The main objective of this research is to examine the relationship between the internal and external service quality dimensions in Egyptian commercial banks. To achieve this objective, the thesis introduced the internal-external service quality model which proposes that the internal service quality has a positive impact on the external service quality. The research model was developed and tested empirically through three main stages.

The first stage was based on the extensive review of the literature in order to identity the concepts and measures of the internal and external service quality. In this stage, the research objectives were identified. The second stage was concerned with the building of the internal-external service quality model which proposed that the internal service quality dimensions have a significant positive impact on external service quality. To identify causal indicators for this relationship, some control variables were used and a set of empirically testable hypotheses were developed.

The third stage in this research was concerned with the empirical research design which was based on cross sectional data collected from the biggest four commercial banks in Egypt through a self-administered structured questionnaire using the drop-off method. The research questionnaire was completed by branch managers, supervisors and front line staff in forty-five branches located in Cairo, selected according to their size and their location. This resulted in 332 usable questionnaires with a satisfactory response rate of 75.4%. Additionally, some secondary data were collected about Egyptian commercial banks to obtain a profile and relevant information about them as they are the research population. The internal and external service quality measurement scales were developed by the adaptation of relevant established scales. The questionnaire was translated using back translation method and both English and Arabic versions of the questionnaire were pretested to determine their suitability. The measures used were generally found to be reliable and valid and multiple regression analysis was used as the major statistical technique to test the research hypotheses.

The internal service quality dimensions that were found to have the most significant impact on external service quality overall were management support, management effectiveness, job fit, working atmospherics, technology and employees service vision. With regard to the external service quality dimensions, it was found that the internal service quality dimensions that have the most significant impact on trust were

management support, job fit, job satisfaction, technology, employees service vision and working atmospherics. Regarding interface, the most significant internal service quality dimensions were: management effectiveness, job fit, management support and employees service vision. It was also found that management effectiveness, working atmospherics, management support and employees service vision were that most significant dimensions which affect the reliability of bank service. Regarding tangibles, it was revealed that management support, technology, management effectiveness and working atmospherics have the most significant impact on it. Finally, examining the relationship between the internal and external service quality on different levels of management (branch managers, supervisors and front line staff) revealed that the relative importance of the internal service quality dimensions in predicting external service quality differs according to the different levels of management.

The thesis concludes with some theoretical conclusions and policy implications to improve academicians and practitioners understating of the internal-external service quality relationship in Egyptian commercial banks.

**Key Words:** *Internal Marketing, Service Quality, Customer Service, Banking, Service Marketing, Employee Attitudes, Service Climate, Service Encounter, Customer-Contact Service Employees Management, Egypt.*

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# CHAPTER ONE
# INTRODUCTION TO THE RESEARCH

## 1.1 Introduction

The main purpose of this chapter is to present the general framework of the research. The research aims to examine the internal-external service quality model with a special reference to Egyptian commercial banks, therefore, the chapter will begin by presenting the Egyptian banking system in section 1.2. This is followed by a discussion of the importance of conducting this research and the research objectives in sections 1.3 and 1.4. The summary of the subsequent nine chapters which comprise the thesis will be presented in section 1.5.

## 1.2 The Egyptian Banking System

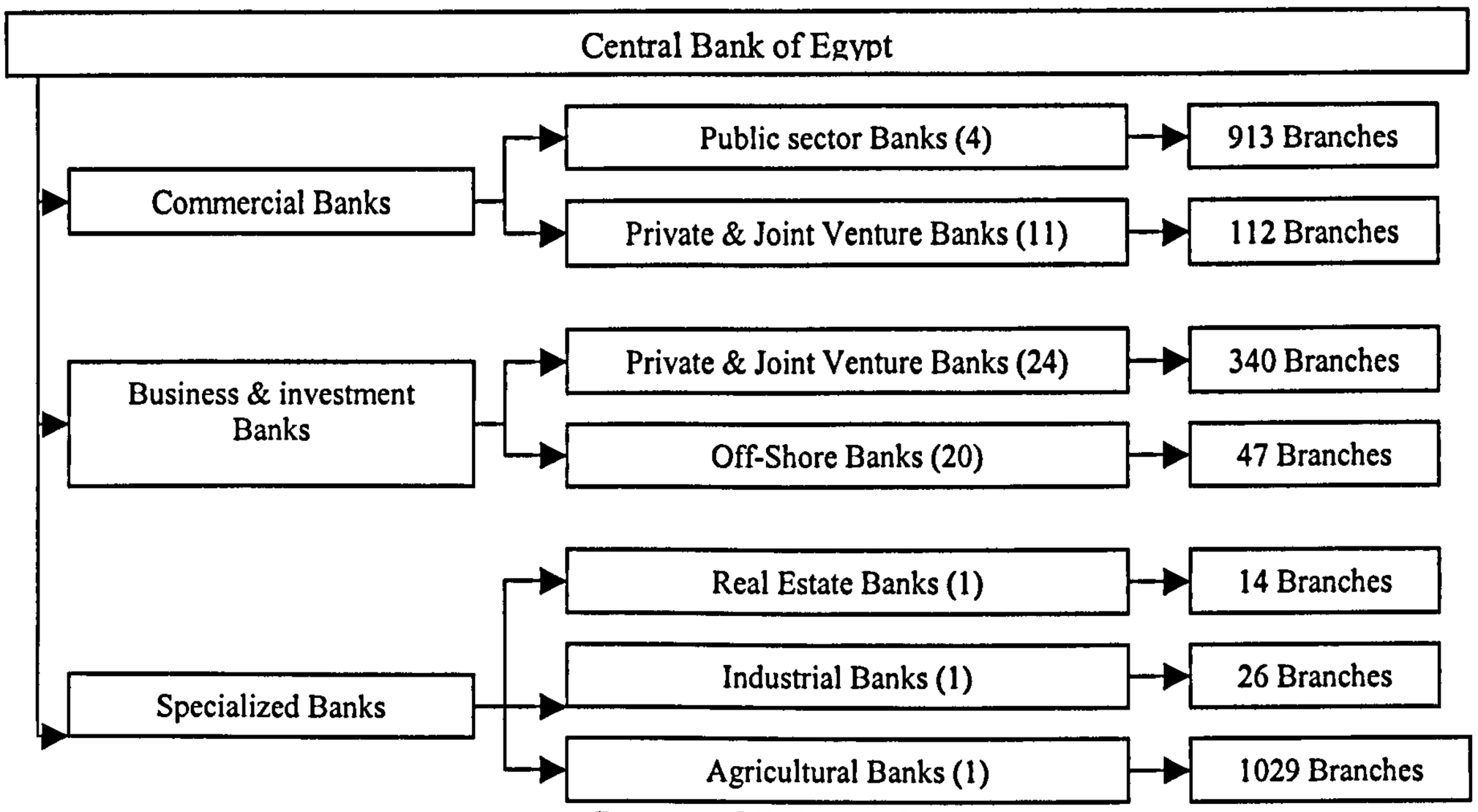
The banking industry in Egypt is amongst the oldest and largest in the region. Currently, there are 62 banks operating in Egypt, with 2481 branches in addition to 26 representative offices for foreign banks (see figure 1.1). As at end of April 1999, the total assets of the banking system excluding the Central Bank of Egypt (CBE) are LE (Egyptian Pound) 342 billion, while deposits are slightly above LE 195 billion. The Central Bank of Egypt is the regulatory body responsible for setting and coordinating the monetary and banking policies in Egypt. It is responsible for supervising, controlling and enhancing disclosure and stability of the banking sector. It is also entitled to establish the general framework of banking policies. CBE holds LE 145.6 billion in total assets and has a net position of US$ 18.7 billion of international reserves (CBE, 2000).

The Egyptian banking sector contains 28 commercial banks with 1253 branches. There are four public sector banks (the selected banks in the study) with 913 branches operating all over the country, and which count for nearly one half of the credit activities in the sector (see figure 1.1). Table 1.1 shows that Cairo has the largest number of the banking units and this is the reason for selecting bank branches located in Cairo to collect the research data from. This information justifies the reasons behind selecting the biggest four banks and their branches located in Cairo to conduct the research. Commercial banks total assets increased during the past five years by 66 percent to LE 266.6 billion, whereas total deposits at commercial banks increased by 64 percent to LE 197 billion (CBE, 2000).

## 1.3 The Importance of the Research

In most services, quality occurs during service delivery, usually in an interaction between the customer and contact personnel of the service firm. For this reason, service quality is

Figure 1.1: The Structure of the Egyptian Banking System as at 30/6/2000




Source: CBE (2000)

Table 1.1: Egyptian Banking Density

| Region Name | 1980 | | | 1990 | | | 2000 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Population | No. of Banking Units | Banking Density* | Population | No. of Banking Units | Banking Density | Population | No. of Banking Units | Banking Density |
| Cairo | 5.5 | 149 | 37 | 6.4 | 285 | 22 | 7.4 | 439 | 17 |
| Alexandria | 2.5 | 50 | 50 | 3.2 | 115 | 28 | 3.6 | 155 | 23 |
| Port Said | 0.3 | 14 | 21 | 0.5 | 26 | 19 | 0.5 | 35 | 14 |
| Suez | 0.2 | 12 | 17 | 0.4 | 17 | 24 | 0.4 | 20 | 20 |
| Ismailia | 0.4 | 18 | 22 | 0.6 | 29 | 21 | 0.8 | 46 | 17 |
| Behera | 2.8 | 103 | 27 | 3.6 | 124 | 29 | 4.4 | 126 | 35 |
| Domietta | 0.6 | 24 | 25 | 0.8 | 34 | 24 | 1.0 | 49 | 20 |
| Kafr-El-Shikh | 1.6 | 62 | 26 | 2.0 | 79 | 25 | 2.4 | 91 | 26 |
| Gharbia | 2.5 | 84 | 30 | 3.1 | 107 | 29 | 3.7 | 114 | 32 |
| Dakahlia | 3.0 | 101 | 30 | 3.8 | 123 | 31 | 4.6 | 141 | 33 |
| Sharkia | 2.9 | 97 | 30 | 3.8 | 139 | 27 | 4.7 | 165 | 28 |
| Menofia | 1.9 | 64 | 30 | 2.4 | 74 | 32 | 3.0 | 89 | 34 |
| Kaliubia | 1.8 | 63 | 29 | 2.9 | 76 | 38 | 3.6 | 85 | 42 |
| Giza | 2.7 | 65 | 42 | 4.3 | 115 | 37 | 5.2 | 203 | 26 |
| Fayium | 1.3 | 52 | 25 | 1.7 | 51 | 33 | 2.2 | 67 | 33 |
| Beni Suef | 1.2 | 52 | 23 | 1.6 | 53 | 30 | 2.1 | 62 | 33 |
| Minia | 2.3 | 97 | 24 | 2.9 | 109 | 27 | 3.6 | 119 | 30 |
| Assiut | 1.9 | 75 | 25 | 2.4 | 82 | 29 | 3.0 | 103 | 29 |
| Sohag | 2.1 | 82 | 26 | 2.7 | 96 | 28 | 3.4 | 105 | 32 |
| Kena | 1.9 | 77 | 25 | 2.5 | 88 | 28 | 2.7 | 109 | 25 |
| Asswan | 0.7 | 29 | 24 | 0.9 | 38 | 24 | 1.1 | 53 | 21 |
| Red Sea | 0.1 | 3 | 33 | 0.1 | 10 | 10 | 0.2 | 25 | 8 |
| New Valley | 0.1 | 9 | 11 | 0.1 | 14 | 7 | 0.2 | 8 | 25 |
| Marsa Matrouh | 0.2 | 3 | 67 | 0.2 | 7 | 29 | 0.2 | 7 | 30 |
| North & South Sinai | 0.2 | 3 | 67 | 0.2 | 35 | 6 | 0.3 | 48 | 7 |
| **Total** | **40.7** | **1388** | **29** | **53.1** | **1926** | **28** | **64.3** | **2464** | **26** |

* Population in Thousand for each unit

Source: CBE (2000)

highly dependent on the performance of employees, therefore, employees' attitudes and behaviour can positively and negatively affect customers' perceptions of the service encounter and their judgments of service quality (Bitner, 1990). In fact, providing high levels of external service quality is the key to the overall customer satisfaction in service organizations. Providing staff with what they need to serve their customers is also very important to organization's success because employees are expected to deliver good customer service when the organization expects and rewards such behaviour and establishes practices that facilitate service delivery (Schneider *et al.*, 1992).

There are many reasons for building a research model which examines the relationship between the internal and external service quality. For example, the special characteristics of services (i.e., intangibility, heterogeneity, perishability and inseparability of production and consumption) have an impact on the approach and substance of quality management and make it important to find different ways to improve the quality of service. Therefore, the model aims to identify and recommend guidelines for achieving high levels of customer service based on improving internal service quality. There is also a shortage of empirical evidence in the service marketing literature to link the different dimensions of internal service quality to the external service quality dimensions. The previous studies (Schneider *et al.*, 1992; Schneider *et al.*, 1998; and Hartline and Ferrell, 1996) have only focused on the overall perceptions of external service quality and neglect its various dimensions. Therefore, the importance of this research comes from trying to provide causal indicators for the relationship between the internal and external service quality dimensions to help service organizations' managers to know how internal service quality can improve customer service.

Another reason for building the internal-external service quality model is examining this relationship according to different levels of management, consequently, the study will provide useful insights to the managers into improving staff abilities and delivering higher levels of external customer service. The importance of this study also comes from that this is the first research of its nature to investigate the relationship between the internal and external service quality in the Egyptian banking. Therefore, this study will provide valuable advises for both academicians and practitioners in Egyptian banking industry.

## 1.4 The Research Objectives

The primary aim of this research is to examine the relationship between the internal and external quality of service in Egyptian commercial banks. The research also aims to investigate this relationship more deeply by identifying the most significant internal service quality dimensions in predicting each single external service quality dimension.

Another objective of this research is to provide policy recommendations for management of commercial banks in Egypt on how to improve customer service. To achieve these objectives, the study introduces the internal-external service quality model which proposes that the internal service quality dimensions have a positive impact on the external service quality and in order to identify some causal indicators for this relationship, control variables are used to determine the effect they might have on the relationship. Some testable hypotheses are also developed to examine this relationship and cross sectional data are collected from staff in Egyptian commercial banks.

## 1.5 Summary of the Research Chapters

The main objective of chapter two is to place internal marketing in a context. In doing so, the chapter starts with a discussion of the importance of internal marketing despite advances in electronic banking. This is followed by addressing the question of: what is internal marketing? which shows that with internal marketing the organization views its employees as internal customers, their jobs as internal products and trying to satisfy the wants and needs of its internal customers. The chapter also discusses the objectives of internal marketing and shows that internal marketing aims to manage the organization's human resources based on a marketing perspective. The concept of employees as internal customers is also presented in this chapter. Moreover, a service marketing management model developed by Tansuhaj *et al.* (1988) is presented in this chapter which emphasizes that internal marketing program influences employee attitudes and behaviour, which have a direct impact on the firm's external marketing activities. The chapter also presents the application of the traditional marketing mix to the internal market by using McCarthy's (1964) 4Ps framework: product; price; place; and promotion. In addition to the traditional marketing mix, applying marketing research and market segmentation in the internal market is also presented. Finally, the chapter discusses the relationship between the total quality management (TQM) and the internal marketing which emphasizes that both TQM and internal marketing are focused on the continuous performance improvement of individuals, groups and organizations.

Chapter three is devoted to explain and clarify what we mean by internal quality of service. This was achieved by discussing the extended model of service quality developed by Zeithaml *et al.* (1988) who identified several communication and control processes that managers could implement to manage service employees. These processes include managerial activities and employee responses that are hypothesized to affect service quality. This is followed by presenting the service employees management model developed by Hartline and Ferrell (1996) who identified three interfaces of the service

delivery process: manager-employee, employee-role, and employee customer. In order to describe the internal service quality, the service climate concept is discussed, followed by presenting the measure of organizational service-orientation (SERV*OR) developed by Lytle *et al.* (1998). Finally, the different dimensions of internal service quality are presented.

The main purpose of chapter four is to present the concept of "external service quality" and review the various "external service quality" models. In doing so, the chapter started with a discussion of service characteristics which have an impact on the approach and substance of external service quality management. The changing environment of service industries was also discussed in this chapter and is followed by presenting the different definitions and models of external service quality. The models typically emphasize different aspects of the problems and, therefore, reflect the different perspectives of the researchers they do, however, have a number of common features and one of the most important is the role of employees in providing a high level of customers service. Furthermore, the relationship between the moment of truth and external service quality is also discussed. Finally, the chapter presents the concept of relationship marketing which emphasizes the longer-term perspective and focuses on keeping rather than getting customers.

Chapter five presents the proposed research model and the research hypotheses. The chapter starts with reviewing the previous studies which examined the relationship between the internal components of service quality and external service quality and is followed by discussing the main objectives of the research. The proposed research model and its hypotheses which show that the internal service quality dimensions have a positive impact on the external service quality overall and on each single external quality dimension are also outlined in details.

The main objective of chapter six is to outline and explain the research methodology. The chapter begins with a discussion of the reasons behind building a model of the internal-external service quality. This is followed by presenting the different types of research methods and the nature of this particular study. The empirical data collection issues such as the different types of data and the different ways to collect it with a special reference to the approach used in this study are also discussed. This is followed by a discussion of the research sample in terms of the population, the sample frame, the sample unit and the sample size. This chapter also presents the measurement and scaling issues and is followed by a discussion of the questionnaire design. Questionnaire translation and the

pretesting process are also presented in this chapter. Furthermore, the discussion of variable operationalization, and validity and reliability analysis are presented in this chapter. Finally, the modified research model and the revised research hypotheses in the light of factor analysis results are discussed and is followed by presenting the method of analysis.

Chapter seven is devoted to present a general descriptive analysis of the internal service quality dimensions. In doing so, the chapter begins with discussing the response rate and branches profile in terms of their number, location and size. This is followed by a discussion of the main attributes of the respondents by age, experience and job position, etc. The descriptive analysis of staff perceptions of the nine internal service quality dimensions (management support, management effectiveness, working atmospherics, employees service vision, communication, technology, job fit, training and job satisfaction) is also discussed. This chapter also presents the analysis of variance (one-way ANOVA) as a statistical method to investigate and compare the difference between groups regarding the perceptions of the different dimensions of internal service quality.

The main task of chapter eight is to present a descriptive analysis of the external service quality dimensions. In doing so, the chapter begins with a descriptive analysis of staff perceptions of the four external service quality dimensions (trust, interface, reliability and tangibles). The chapter also discusses using one-way ANOVA in order to identify the significant differences between groups relating to their perceptions of external service quality dimensions.

The main objective of chapter nine is to test the research hypotheses empirically. The chapter begins with presenting the justifications of using the multiple regression analysis and its appropriateness as a statistical technique in achieving the research objectives. This is followed by a discussion of the basic assumptions in the multiple regression analysis and the issue of multicollinearity. The using of dummy variables as control variables and backward elimination as a method of selecting variables in the regression models are also presented in this chapter. This is followed by a discussion of the correlation analysis between the internal and external service quality dimensions and testing the research hypotheses by using multiple regression analysis. Finally, the regression models which examined the relationship between the internal and external service quality on different levels of management are discussed.

The purpose of the final chapter is to outline the major findings of this research and to discuss the research implications. The chapter begins with presenting the research main

findings and is followed by a discussion of the research implications. Finally, the research contributions, limitations and suggestions for future research are discussed.

## 1.6 Conclusion

The main purpose of this chapter was to provide a general picture of what has been done throughout this thesis. The reason behind presenting the Egyptian banking system in section 1.2 is to introduce to the reader a general idea about the banking sector in Egypt and why the biggest four commercial banks and Cairo were selected to conduct the research. The chapter also aimed to indicate the importance and the unique of this research and how the approach selected to conduct the empirical work is appropriate to achieve the research objectives.

# CHAPTER TWO

# INTERNAL MARKETING: CONCEPTS AND APPLICATIONS

## 2.1 Introduction

In services marketing, the employee plays a central role in attracting, building and maintaining relationships with customers. The recognition of the central role of employees in service marketing has given rise to "internal marketing" programs strongly oriented to employee development (Tansuhaj *et al.*, 1988). In service industries, employee-customer interaction determines a significant part of the market offering and the employee role in determining consumer satisfaction is much greater. The quality of service and the efficiency of the distribution of the service as well as the effectiveness of the communication effort depend more directly on the actions of employees of the firm. Greater attention to employee-customer interactions can result in an increase in perceived service quality, customer satisfaction, and repeat purchase behaviour of service customers (Gronroos, 1981; and Berry *et al.*, 1986). The recognition of the importance of the employee in service marketing, along with an effort to increase employee involvement in the marketing program is directly related to "internal Marketing" (Gronroos, 1981).

The chapter consists of section 2.2 which places internal marketing in a context and shows that it is still important despite advances in electronic banking. Section 2.3 addresses the question: what is internal marketing? and section 2.4 will discuss the objectives of internal marketing. This is followed in section 2.5 by a discussion of the internal customer concept. Section 2.6 then examines the role of internal marketing in a service marketing management model. Section 2.7 looks at the application of traditional marketing tools to the internal market. The marketing research and market segmentation in the internal market context will be presented in section 2.8. The chapter concludes by examining the relationship between internal marketing and total quality management in section 2.9.

## 2.2 The Importance of Internal Marketing in Electronic Banking

There is a tendency to assume that the quality of personnel performance in retail banking will become a less important issue as Electronic Fund Transfer (EFT) becomes more pervasive. Berry (1981) argued that in an EFT era there will be fewer opportunities to cross-sell, or build an image of personal service. Hence the "costs" of not capitalizing on the opportunities that do present themselves are greater. EFT also creates an homogenous environment, consequently one of the principal ways in which a bank can also distinguish itself, i.e. be

different and better than its competitors, lies in the quality of its people. The rise of EFT, therefore, emphasizes the need for a bank to position itself as one that has good people, not just good machines. Internal marketing can help a bank attract and retain the best possible employees and get the best possible work from them. By satisfying the needs and wants of its employees and regarding them as internal customers, a bank upgrades its capability for satisfying the needs and wants of its external customers. Internal marketing is especially important in labor-intensive service industries because in these industries employee performance is the "product" the external customer buys (Berry, 1981).

## 2.3 What Is Internal Marketing?

Initially the impetus behind the development of the internal marketing concept arose out of the recognition that because contact employees become involved in what is called interactive marketing, it is essential that they are responsive to customers' needs. This is reflected by Gronroos (1981) who claimed that the primary objective of internal marketing is to get motivated and customer-conscious personnel. There are several forms of internal marketing but what they all have in common is the notion that the "customer" is inside the organization (Berry, 1981). Berry defines internal marketing as

> *"Viewing employees as internal customers, viewing jobs as internal products, and then endeavoring to offer internal products that satisfy the needs and wants of these internal customers while addressing the objectives of the organization".*

Greene *et al.*, (1994) state that internal marketing is the promoting of the firm and its product lines to the firm's employees. Internal marketing involves the spreading of the responsibility for all marketing activity across all functions of the organization and the proactive application of marketing principles to "selling the staff" on their role in providing customer satisfaction within a supportive organizational environment (Gilmore and Carson, 1995). Kotler (1997) described internal marketing as the work done by the company to train and motivate its internal customers namely its customer contact employees and supporting service personnel to work as a team to provide customer satisfaction. Additionally, Rafiq and Ahmed (1993, P. 222) defined internal marketing as a planned effort to overcome resistance to change and to align, motivate and integrate employees towards the effective implementation of corporate and functional strategies. The literature, therefore, contains various definitions of internal marketing but according to Sargeant and Asif (1998) internal marketing has two common themes. First, internal marketing is seen as a mechanism for spreading the responsibility for marketing across the whole organization, and the second key idea is that to be effective, each

employee should be encouraged to regard their successor in the service chain as not merely a colleague but as an internal customer. Internal marketing activity can also take a variety of different forms. Helman and Payne (1992, P. 4) in particular propose three distinct categories:

(1) Marketing to employees, i.e. motivating employees to better performance and improved relationships with internal and external customers.

(2) Marketing as an internal function, i.e. marketing a particular department so that its role can be fully understood by others.

(3) Marketing the organization's products and services to employees, for example, where a bank encourages employees to use its own services.

Furthermore, MacStravic's (1985) study of internal marketing in hospitals identified the major determinants of long-term marketing success as being the personal interactions between staff and the public. Impressive facilities and equipment can serve as a significant advantage when competitors do not have them but, personal relationships determine how satisfied patients are and what they tell others. Another significant finding was that hospital staff were only optimally effective in their interactions with patients when they were satisfied with their own relationships with the hospital and fellow employees. In essence, internal marketing strives to create and maintain a "corporate culture" in which all employees are enthusiastic about their relations with the employer organization, with external customers and with other staff members.

## 2.4 Internal Marketing Objectives

MacStravic (1985) argued that internal marketing encompasses efforts to recruit, train, motivate and reward its employees. It has two primary focuses: first, it is aimed at complementing external marketing efforts by making interactions between the organization and the people it serves conducive to the objectives of customer attraction, retention and satisfaction. Second, it is aimed at producing and maintaining a motivated and satisfied work force that unreservedly contributes to the organizations external and strategic marketing objectives, as well as to the organizations commitment to quality, productivity and efficiency. Internal marketing can also be used in the following three ways: assistance in developing a service culture, once established maintaining a service culture, and introducing new products and new marketing activities (George and Gronroos, 1989). Indeed, there are two roles that internal marketing can perform in an organization (Gronroos, 1990). In the first instance it may be viewed as a tool to help individual employees to understand the significance of their position and to create an awareness of how it relates to others within the organization. The

aim of this approach is to improve cross-functional, co-ordination and co-operation (Christopher *et al.*, 1991). The second role identified by Gronroos is to promote, develop and sustain the ethos of customer service for internal as well as external customers. More importantly, Piercy and Morgan (1994, P. 5) determined the primary goals of internal marketing as:

(1) Gaining the support of key decision makers for organizational plans.

(2) Changing the attitudes and behaviour of employees and managers who interface with customers.

(3) Gaining staff commitment and making the marketing plan work.

(4) Managing incremental changes in the culture from "the way we always do things" to the "way we need to do things to be successful"

George and Gronroos (1989) claimed that internal marketing can be described as a philosophy of managing the organization's human resources based on a marketing perspective. It operates as an holistic management process which integrates the multiple functions of the organization in two ways: firstly, it ensures that employees, at all levels, understand and experience the business and its various activities and campaigns in the context of an environment that supports customer consciousness; and secondly, it ensures that all employees are prepared and motivated to act in a service-oriented manner. They emphasize that the premise of this philosophy is that if management want employees to do a good job with customers, then they must be prepared to do a good job with employees. In other words, internal exchanges between the organization and its employee groups must be operating effectively before the organization can be successful in achieving external goals.

Gronroos (1981) argued that internal marketing programs have two levels: a strategic internal marketing level and a tactical level.

(1) Strategic level. On the strategic level, the goal of the internal marketing program is to motivate employees and increase customer consciousness through: management methods (adopting a supportive leadership style), personnel policy (designing appropriate job description, recruitment procedures, and career planning), internal training (focusing on how customers should be treated), and planning procedures (helping employees understand, accept and support the systems, missions, goals, and strategies of the organization).

(2) Tactical level. Tansuhaj *et al.* (1991) state that tactical internal marketing activities include: internal training (conducting informal, periodic training sessions), internal interactive communication (establishing informal, spontaneous communication contacts),

internal mass communication (sending out periodic news letters or updates), market research (identify needs of employees), and market segmentation (offering programs or benefits that meet the unique needs of employees).

Tansuhaj *et al.* (1991) claimed that the success of internal marketing programs, on both strategic and tactical levels, hinges upon proper implementation. Ideally, an internal marketing program is pursued as an integrative activity throughout the entire organization. Empirical evidence suggests that the more successful service companies practice internal marketing as an integrated function throughout their organizations (Zeithaml *et al.*, 1985). Not only do contact personnel (who work face-to-face with the customers) need to practice internal marketing, but top management and support staff need to be integrated into the internal marketing program (Gronroos 1981; and Lovelock 1991). If the program is not accepted at top management levels or facilitated by support staff, implementation will be exceedingly difficult.

## 2.5 Internal Customers

For effective service delivery it is not sufficient simply to have customer conscious employees. It is also necessary to have effective co-ordination between contact staff and support staff. Hence, the internal marketing concept is perceived as a means of integrating the different functions, which are vital to customer relations (Gronroos, 1981). Sasser and Arbeit (1976) similarly showed that internal marketing regards personnel as the first market of a service company. The internal marketing concept is, therefore, based on the idea that "the employee is a customer". Berry (1981) states that viewing employees as internal customers, viewing jobs as internal products, and then endeavoring to offer internal products that satisfy the needs and wants of these internal customers while addressing the objectives of the organization is the essence of internal marketing. Both Bowen and Schneider (1988) and Gummesson (1987) have addressed the question, "Who is the customer?" The notion of external customers is well established, but Gummesson also suggests that:

> *"…. everybody should see himself as a customer of colleagues, receiving products, documents, messages, etc. from them, and he should see himself as a supplier to other internal customers. Only when the customers are satisfied-it is the satisfied customer that counts irrespective of whether he is external or internal-has a job been properly executed".*

Similarly, Rafiq and Ahmed (1993) state that in the total quality management (TQM) approach the focus is not upon the relationship between the organization and the employee

but the relationships between employees themselves. The idea of the internal customer means that everybody is both a supplier and a customer and the workings of an organization can be thought of as a series of transactions between customers and suppliers. This series of transactions is referred to in the TQM literature as "quality chains" (Oakland 1991, P. 4). Employees make demands upon each other rather than the organization. Furthermore, the types of demands they make on each other are limited to ensuring that they as suppliers deliver "products" that meet their "customers" requirements and vice versa. If these requirements are met along the entire length of the production chain then quality of the final product will be assured. To be successful, therefore, it is necessary to motivate employees to view each other as customers/suppliers and to get employees to perform to measurable standards, either set internally or externally.

Bowen and Greiner (1986) claimed that making everybody a customer in their relations with others inside the organization allows one to view what happens in a firm from a true process-management perspective. Bowen and Greiner (1986) also suggest that the human resources function in companies should be organized to provide quality service to internal clients. The contact employees' ability to function as "part-time marketers" depends to a large extent on the support they get from other employees and functions within the firm (George and Gronroos, 1989). Often, there are a large number of support persons who do not come into contact with customers themselves but who, nevertheless, indirectly influence the service ultimately provided to customers. These supporting personnel are, in fact, "part-time marketers" as well since they should recognize contact employees as their internal customers (George, 1990).

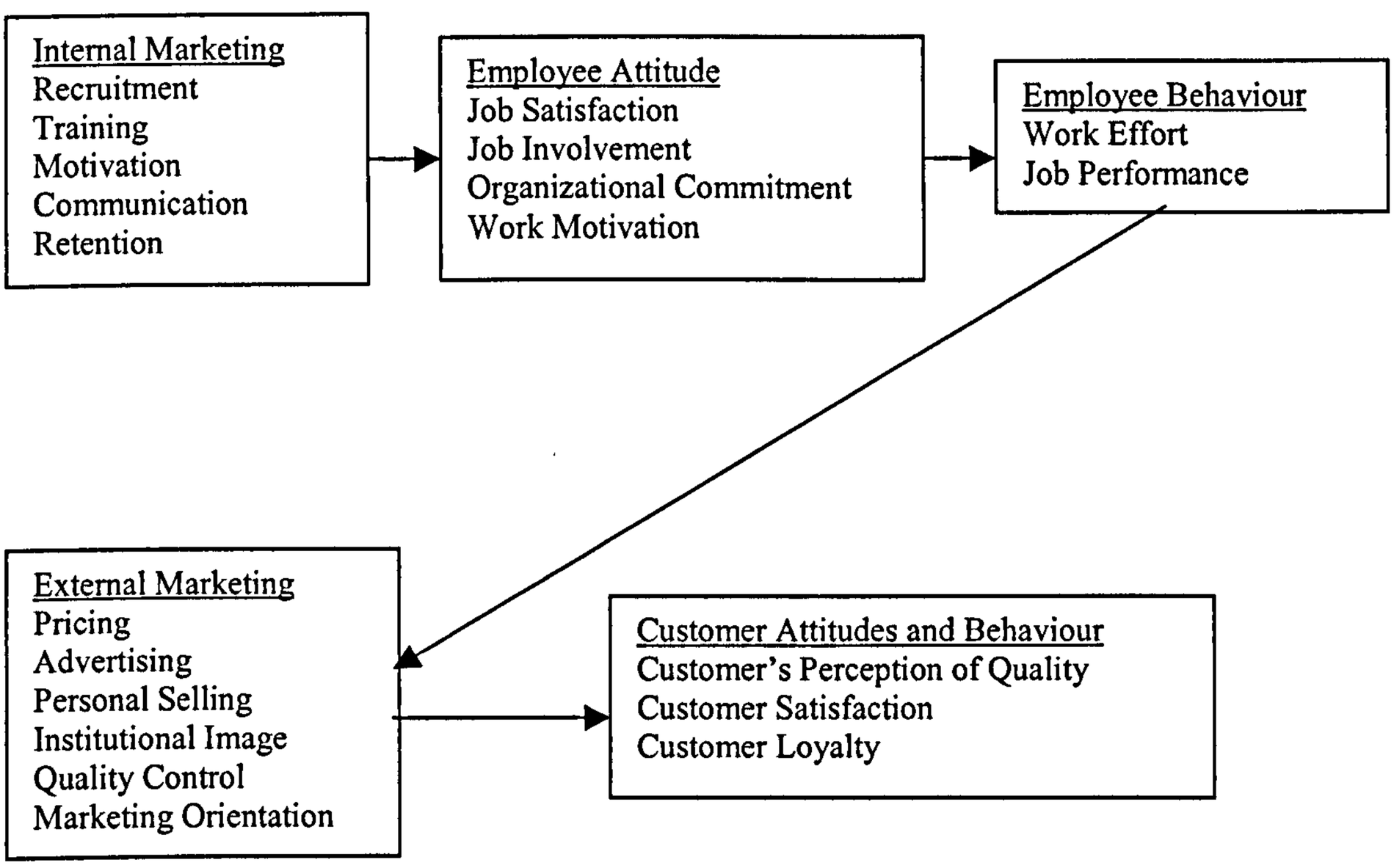
## 2.6 A Service Marketing Management Model

Figure 2.1 presents the service marketing management model proposed by Tansuhaj *et al.* (1988). This model consists of five major components: internal marketing, employee attitudes, employee behaviour, external marketing, and customer attitudes and behaviour. According to the model, internal programs influence employee attitude and behaviour, which have a direct impact on the firm's external marketing activities. The success of the external marketing program is reflected in enhanced customer attitudes and behaviour (Tansuhaj *et al.*, 1988). Tansuhaj *et al.* (1988) argued that internal marketing incorporates a multifaceted focus on employee development. A comprehensive internal marketing program is accordingly concerned with employee recruitment, training, motivation, communication and retention efforts. Taking each of these components in turn:

***Recruitment and training.*** Employees are regarded as a key organizational resource (Crane, 1982; and Peters and Waterman, 1982). Qualified applicants are attracted to the firm through

the use of job descriptions and effective recruitment procedures. Careful selection of contact personnel in service organizations is an essential accompaniment to the recruitment process (Davidson, 1978). Once hired, employees participate in a training program, which supplies them with a view of the total organization, so that they can locate themselves within it, and determine their importance to the organization. The training is professional and involves using as many senior line managers as possible (Tansuhaj *et al.*, 1988).

Figure 2.1: A Model of Service Marketing Management: Integrating Internal and External Marketing Functions




Source: Tansuhaj *et al.* (1988)

***Motivation***. Motivation strategies are important because they increase an employee's drive to perform at a higher level. Most employees in high-contact service job are self-motivated to provide what they believe is good customer service, but they feel that management often frustrates them (Schneider, 1980). Similarly, managers of service firms must believe in their organizations, be able to communicate their enthusiasm and conviction to their subordinates, and facilitate employee performance (Heskett, 1986). The motivation of employees and managers can be enhanced by appropriate incentive programs, team-building techniques, staff meetings, staff retreats, task forces, and seminars and workshops (Schneider, 1980).

***Communication***. Managers applying internal marketing concepts must seek to improve interpersonal and interactive communication channels by establishing an open information climate. In a service firm, internal communication with employees may be more important than any external communication with customers (Heskett, 1986). To identify employee

needs and desires, managers periodically conduct in-house surveys. Feedback to employees from such surveys is provided on a timely basis and appropriate modifications in organizational operations are made. Tansuhaj *et al.* (1988) emphasize that internal marketing also effectively uses mass communication techniques. Employees are provided with newsletters, and typically take-home information about the company's new products and marketing strategies.

***Retention.*** To retain employees, managers must ensure that salaries are competitive and bonus systems are attractive. Some of the most successful service firms have the most liberal and comprehensive fringe benefit programs in their sectors (Heskett, 1986). Such programs typically include flextime, cafeteria-style benefit programs, and career planning.

Internal marketing influences employee attitudes and this is the second main part of the model. Tansuhaj *et al.* (1988) claimed that it is not surprising that a strong internal marketing program can improve employee job-related attitudes. Specifically, management's internal marketing activities can increase job satisfaction, job involvement, organizational commitment and work motivation. Taking each of these components in turn:

***Job satisfaction.*** Smith *et al.* (1969) argued that job satisfaction, the feelings a worker has about their job, has five dimensions: satisfaction with the work itself, satisfaction with pay, satisfaction with promotion prospects, satisfaction with supervision, and satisfaction with co-workers. Through the administration of extrinsic rewards (such as salary, wages, fringe benefits and promotions), managers enhance employee satisfaction levels (Mitchell, 1982). By satisfying the needs of personnel, the firm upgrades its capabilities for satisfying the needs of its customers (Tansuhaj *et al.* 1988).

***Job involvement.*** Job involvement is concerned with the degree of absorption in the work activity. It is the degree to which a person identifies psychologically with their work and the degree to which work performance affects self-esteem (Tansuhaj *et al.* 1988). For employees who have strong job involvement, the total work situation becomes an important part of their life (Lodahl and Kejner, 1965). If an employee is not interested in a particular job, managers may need to change its characteristics to enhance job involvement or to place the employee in a position more suited to their desires and skills. Increased job involvement is highly conducive to lower absenteeism and lower turnover (Saal, 1978; and Siegal and Ruh, 1973).

***Organizational commitment.*** Organizational commitment refers to the extent to which a person has a strong desire to remain a member of the organization, is willing to exert high levels of effort for the organization, and believes and accepts the values and goals of the organization (Mowday *et al.*, 1979). At least five possible outcomes of organizational commitment have been identified, including improved job performance, increased tenure with the organization, lower absenteeism, and less turnover (Mowday *et al.*, 1982). Managers can increase organizational commitment by making employees feel that they are valuable members of the organization, by fulfilling promises, and by giving challenging, interesting and self-rewarding job assignments (Buchanan, 1975).

***Work motivation.*** Work motivation is what energizes, directs, channels, maintains and sustains an employee's actions and behaviour (Steers and Porter, 1983). An employee is motivated to perform well because of some subjective reward or feeling as a result of performing well (Lawler, 1969). Personal motivation to a large extent, determines work effort (Walker *et al.*, 1977) but managerial skill is still important in the application of motivation strategies (Griffin, 1987). Managers can influence and motivate employees by creating atmospheres that encourages, supports and sustains improvement (Gibson *et al.*, 1985).

The third part of the service marketing management model is employee behaviour. The employee epitomizes or defines service to the external customer (Booms *et al.*, 1981). The service encounter is a dyadic interaction between a customer and the employee of the service organization. It is, therefore, the nature of this interaction, and particularly the behaviour of the employee, which determines customer satisfaction (Czepiel *et al*, 1985). Employees with positive attitudes toward the organization normally reflect higher levels of work effort and job performance in the conduct of such external marketing activities as personal selling and quality control. Therefore, employee behaviour indirectly impacts on customer response to the service organization (Tansuhaj *et al.* 1988).

The fourth part of the model is external marketing. External marketing activities are generally categorized into pricing, advertising, personal selling, institutional image building, quality control, and marketing orientation. For manufactured goods, it is generally believed that a marketing plan composed of external marketing activities largely determines consumer satisfaction. However, in a service organization with intangible products the implementation of such a plan depends, to a great extent, on the activities of the employees (Tansuhaj *et al.* 1988). They determine the quality level of service, communicate personally with customers,

often influence the speed of service, may even negotiate prices and influence consumer prices by altering service charges, or adjusting interest rates on loans.

Tansuhaj *et al.* (1988) also argued that while many organizations may regard external marketing as basically a selling activity designed to move products from the producer to the consumer, current theory indicates a need for a more consumer-oriented approach which recognizes the role of employees in the provision of services. The banking industry for example, has historically taken a production or sales approach, primarily concerning itself with the provision of services on terms convenient to the producer rather than the consumer. Increased competition has forced banks to re-evaluate their external marketing strategy and to develop more consumer-oriented programs. Consumers of "marketing-oriented" banks were found be significantly more satisfied with their banks than customers of other banks. A number of objective characteristics of the marketing operations of banks affect customer satisfaction, including location convenience, range of services and innovativeness, hours, and prices. However, of all these characteristics, the most important "marketing" attributes were efficiency and courtesy of employees (McCullough *et al.*, 1986). Thus, the success of the external marketing effort appears to be greatly influenced by the work effort and job performance of employees.

The last part of the service marketing management model is customer attitudes and behaviour. Tansuhaj *et al.* (1988) claimed that an effective external marketing program results in enhanced customer perceptions of service quality, customer satisfaction, and customer loyalty. Tansuhaj *et al.* (1988) also found that the internal and external elements of the marketing program of service firms are closely interrelated. Service firms need to give greater recognition to the "employee-customer interaction" nature of services. It is clear that attitudes and behaviour of employees affect the marketing performance of the firm. Ultimately, positive customer attitudes and behaviour may be translated into improved firm performance as measured by the firm's market share, sales, profitability, and other financial ratios.

## 2.7 The Application of Traditional Marketing Tools to the Internal Market

Traditional marketing techniques and concepts can be applied to internal marketing. Great care, however, needs to be taken in applying the techniques in practice. Gronroos (1985) extended his original definition of internal marketing as a method of increasing employee

awareness of customer needs to include the use of "marketing-like" activities. He defines internal marketing as:

> *"... holding that an organization's internal market of employees can be influenced most effectively and hence motivated to customer-consciousness, market orientation and sales-mindedness by a marketing-like internal approach and by applying marketing-like activities internally"* (Gronroos, 1985)

Similarly, George (1990, P. 64) stated that with internal marketing employees are "best motivated for service-mindedness and customer oriented behaviour by an active marketing-like approach, where marketing-like activities are used internally". Piercy and Morgan (1991) are even more positive in their call for the use of marketing techniques in the internal marketplace. They view internal marketing as the "... development of a marketing program aimed at the internal marketplace in the company... by using the same basic structure used for external marketing" (P. 84).

Flipo (1986); Piercy and Morgan (1991); and Rafiq and Ahmed (1993) have used the McCarthy (1964) 4Ps framework: product; price; place (distribution); and promotion to apply the marketing mix concept to internal marketing as following:

### 2.7.1 Product in the Internal Marketing Context

At the strategic level the product can incorporate marketing strategies and as such it raises question relating to what values and attitudes are needed to make a plan work. At the tactical level the product could include new performance measures, and new ways of handling customers (Rafiq and Ahmed, 1993). Product can also be used to refer to services and training courses (Collins and Payne, 1991). At a more fundamental level the product is the job (Berry, 1981; Flipo, 1986; and Berry and Parasuraman, 1991). "Buying" a job consists of the employee assessing the value of the work offered by the employer. Therefore, the firm must "sell" a job by packaging it attractively in order to attract the best people (Sasser and Arbeit, 1976). Rafiq and Ahmed (1993) argued that in the services marketing approach to internal marketing, underlying the notion of the customer is the idea of exchange, i.e. that customers receive the products they want in exchange for payment. Products are bought in order to derive some form of utility but when it is applied to employees the concept of the customer runs into several problems. One of the main problems is that the "products" that employees are being sold may be unwanted or may in fact have negative utility (e.g. new methods of working). In normal marketing situations customers do not have to buy products that they do not want. However, this is not true for employees as they must either accept the

"product" otherwise they can be "forced" to do things under the threat of disciplinary action or dismissal. In normal marketing situations the consequences of non-purchase are clearly not so drastic. In normal marketing situations customers also have a range of (competing) products to choose from, this is unlikely to be the case in an internal marketing situation where one particular policy or job will be on offer.

### 2.7.2 Price in the Internal Marketing Context

Flipo (1986) argued that sometimes the employee is so enthusiastic about his or her job that he never considers it a duty. More commonly, however, some aspects of the job are unattractive, and even repulsive. In commercial work, for example, clerks would not normally like to deal with aggressive and unpleasant customers. This represents a psychological cost, which is assimilated, from the marketing point of view, to a price which has to be paid (Flipo, 1984). Rafiq and Ahmed (1993) claim that price can refer to the psychological cost of adopting to new methods of working, projects that have to be foregone in order to carry out new policies (i.e. the opportunity cost); or to transfer pricing and expense allocation between departments. As opportunity costs are difficult to measure precisely (unlike the monetary price of goods and services) employees may tend to over-estimate the costs of under-taking new practices and hence be inclined to resist changes.

### 2.7.3 Place in the Internal Marketing Context

Flipo (1986) stated that if the employees are geographically widely dispersed, this element of the marketing mix must be considered in the same way as that of the external market. This is the case for many service companies, which have an integrated network of branches. In order to offer jobs to the best people able to "buy" them, branches must be located close to their living places. Piercy and Morgan (1991) refer to place as distribution, they believe that the distribution channels element of the mix is concerned with the physical and socio-technical venues. In this sense, place incorporates: meetings, committees, training sessions for managers and staff, seminars, written reports, informal communications, etc. Ultimately, perhaps the real distribution channel lies in human resource management, and the lining-up of training, evaluation and reward systems, and recruitment, so that the culture of the company becomes the distribution channel for internal marketing strategies.

### 2.7.4 Promotion in the Internal Marketing Context

Rafiq and Ahmed (1993) argued that promotion in marketing refers to the use of advertising, publicity, personal selling (face-to-face presentation/communication) and promotions

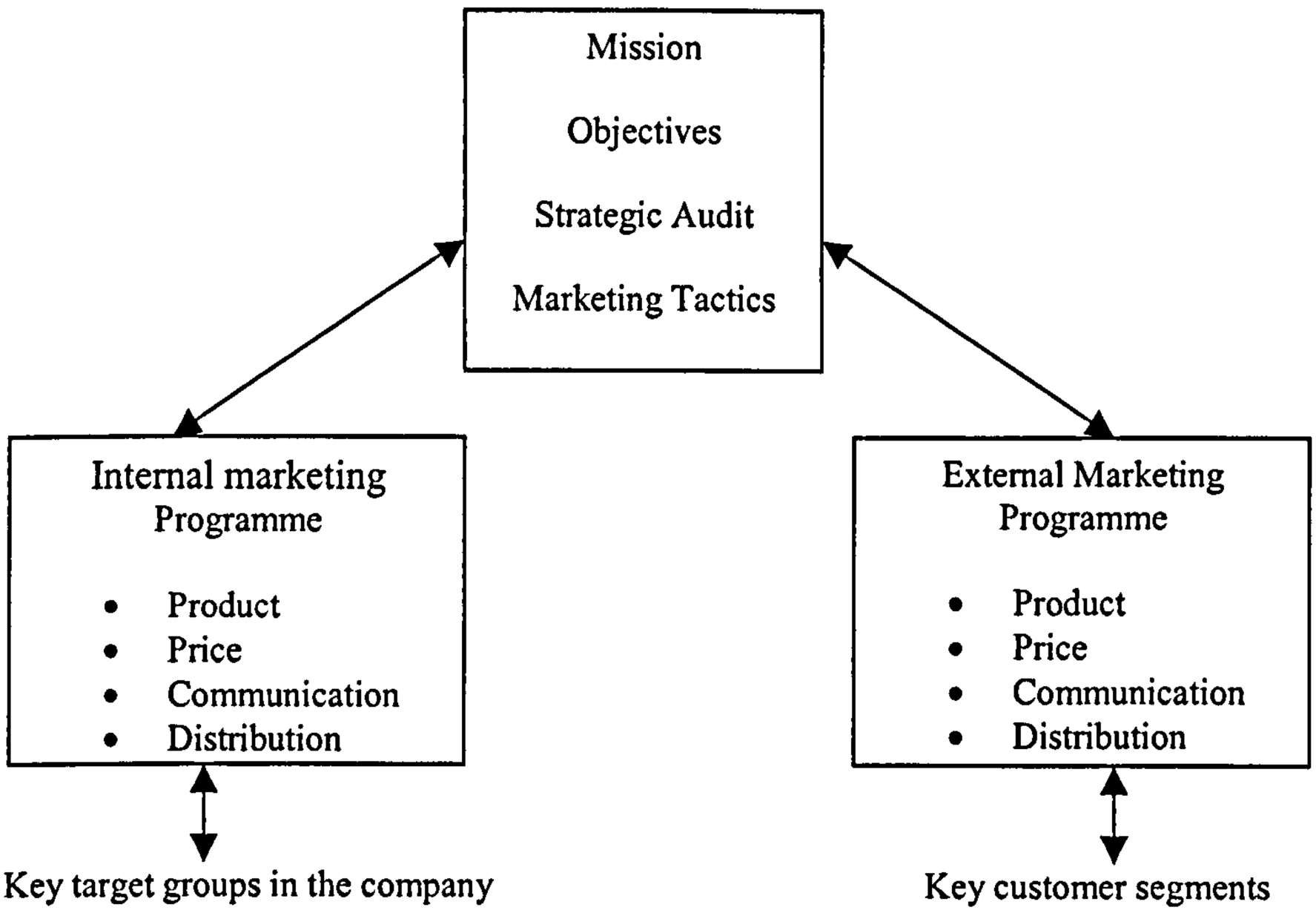
(incentives to purchase) in order to inform and to influence potential customers' attitudes to a firm's products. Motivating employees and influencing their attitudes is obviously an important aspect of internal marketing and hence there is a need to get communication strategies right. Personal selling (face-to-face presentations to individuals and groups) can be even more effective than in external marketing because the presenter (manager, supervisor) has implicit authority. Moreover, face-to-face communication is regarded as having a far greater impact than any other communication method (Townley, 1989). It is clear from the notion of employees as customers that they must be offered some benefits in order to change their behaviour. The use of incentives such as cash bonuses, recognition programs, prize draws and competitions directed at contact personnel in the services industry are very common. These can be used to overcome short-term resistance to change or to motivate employees towards consistent behaviour or to increase productivity.

Berry (1981) believes that advertising can also be used to influence employees to behave in desired ways. Many executives fail to realize that employees are "second audiences" for advertising. Consequently, they do not consider that advertising designed for external customers can also be designed for internal customers. Advertising can have very positive effects on employees. It can involve them, motivate them, educate them, and it can shape their perceptions about the company and about their jobs. Advertising can, therefore, be an important tool for "selling" jobs in service businesses like banks. In consumption services in which the performance of employees is what the customers buy, it follows that advertisers should be concerned not only with encouraging customers to buy but with encouraging employees to perform.

Rafiq and Ahmed (1993) state that despite the advantages of promoting internal marketing, the use of mass media advertising (i.e. newspapers and television) to communicate with employees (in order to motivate them) is rare. It is only used in special circumstance such as strikes where normal workplace methods of communication would be ineffective. However, because of the affect promotions have on both customers and employees, organizations need to take care of the image they are projecting of themselves and their workforce. Ideally, employees should be portrayed with positive customer oriented attributes, which employees can emulate. Furthermore, with the emergence of narrow-casting technology, organizations can now use television to communicate with large numbers of employees in diverse locations in a more targeted and cost-effective way.

Piercy and Morgan (1991) argued that the easiest way to make practical progress with internal marketing, and to establish clear objectives, is to use the same basic structures used for planning external marketing. They model this idea in the way suggested by figure 2.2, as a formal and legitimate part of the marketing planning process. It should be noted that Piercy and Morgan (1991) take the internal marketing program not only as an output of the marketing planning process, but also as an input, taking into account constrains and barriers. In other words, resistance to change by employees, for example, is part of the internal market plane, and as such it should be considered as a part of the marketing planning process.

Figure 2.2: Marketing Planning




Source: Piercy and Morgan (1991)

### 2.7.5 Extended Marketing Mix in the Internal Marketing Context

Because of the intangible nature of the product being "marketed" the Booms and Bitner's (1981) extended marketing mix for services should be used. In addition to the traditional 4Ps of the marketing mix physical evidence, process and participants need to be added. The 7Ps marketing mix (in particular the process and participants concepts) explicitly recognizes inter-functional interdependence and the need for an integrated effort for effective service (or product) delivery. An integrated effort is, after all, one of the major aims of an internal marketing program. The additions to the traditional marketing mix are as follows:

***Physical/Tangible evidence.*** Rafiq and Ahmed (1993) argue that the physical evidence (also referred to as tangible evidence by some authors) refers to the environment in which a product is delivered and where interaction takes place between contact staff and customers. It

also includes any tangible goods which facilitate delivery or communication of the product. Physical evidence can be categorized as either essential or peripheral. Peripheral evidence refers to tangible cues. For example, in this context it can include such things as memos, guide-lines, training manuals etc. Essential evidence, on the other hand refers to the environment in which the product is delivered. In internal marketing situations the environment in which the product is delivered is not usually as important for services because this will typically be the same as the normal work environment. However, the special significance of particular policies may be signaled by holding conferences or by sending employees for special training to external agencies. Tangible cues may be even more important in internal marketing than for external marketing. One of the most important tangible elements in internal marketing is documentation. Documentation of policies and changes in policies is important because if employees are required to perform to certain standards it is important that these standards are fully documented. Other tangible elements may include training sessions to achieve required standards for instance. The training sessions in themselves are also a tangible manifestation of commitment to standards or particular polices.

***Process***. Process refers to how a "customer" actually receives a product. In internal marketing, customer consciousness may be inculcated into the employees by training (or retraining). Process can also refer to whether new policies are introduced through negotiations with unions or imposed unilaterally. In the communications area process can also incorporate delivery methods, for instance whether circulars, videos or line managers are used to convey changes (Rafiq and Ahmed, 1993).

***Participants***. Participants refer both to employees involved in producing and delivering the product and those receiving the product who may ultimately influence the customer's perceptions. In an organizational context communications need to be delivered by someone of the right level of authority if they are to be effective. Hence, in internal marketing the source of the internal marketing programs plays a crucial role in their effectiveness. Employees in general tend to be influenced most by their immediate superiors (London, 1986). This suggests that inter-department or inter-functional communications are likely to be least effective. Direct communication between strategic management and contact staff, would, therefore, not by itself be sufficient for the implementation of internal marketing programs (Rafiq and Ahmed, 1993).

## 2.8 Marketing Research and Market Segmentation in the Internal Marketing Context

Berry (1981) claimed that marketing research can be applied to the internal marketing context. He argued that marketing research can be used to identify employee needs, wants and attitudes just as it can be used to identify consumer needs, wants and attitudes. Regularly surveying personnel concerning perception of supervision quality, working conditions, compensation and benefits, company policies, and other job-related maters provides several important benefits. First, management receive direct feedback concerning the degree of satisfaction internal customers have with the internal product, such feedback helps isolate components of different jobs that need to be improved. Second, it provides a means for identifying policy violations and other organizational breakdowns. Rafiq and Ahmed (1993) argued that employee surveys need to be handled with, even more, care than consumer surveys because of employee fear of repercussions. Hence, it may be necessary to guarantee absolute confidentiality in order to ensure a good response. Moreover, even if the response rates are high, they need to be interpreted carefully as respondents are more likely to reply in a way they think the organization would condone rather than express their true views. This is because of the aforementioned fear of repercussions. Another important difference between employee and customer surveys is that employee participation is not likely to be high if employees are not given feedback on the survey results. In addition to survey research, management may also find it helpful to use "deep sensing". Deep sensing relates to efforts by senior management to find out face-to-face what is on the minds of small groups of employees and to address concerns raised (Berry, 1981).

Berry (1981) also claimed that market segmentation can be applied to the internal marketing context. Markets are segmented because people are heterogeneous, and heterogeneity is just as real for internal markets. People are just as different when they are in the employee role as when they are in the consumer role. Segmentation in the internal marketing context is the process of grouping employees with similar characteristics, needs and wants, or tasks (Rafiq and Ahmed, 1993). In services, for instance, employees may be grouped on the basis of whether they are contact staff or not. Berry (1981) similarly stated that internal employees markets can and should be segmented. Indeed, it is the accommodation of individual differences that is behind such personnel concepts as "flexible work hours" and "cafeteria benefits". These concepts reflect internal market segmentation in action. Flexible working hours provide employees with greater freedom in selecting work hours than is customary in the eight to five type of workday. Flexitime benefits both employees and employers. Benefits

frequently reported for employers and employees include increased productivity and increased job satisfaction. Another segmentation-type response to the reality that people at work are heterogeneous is "cafeteria" fringe benefit programs. Under these programs, employers provide minimum coverage in life and health insurance, vacation days, and pensions. Employees then select additional benefits to suit their own circumstances and preferences, using credits based on salary, service, and age. The net effect is that within certain boundaries, employees put together their own package of benefits rather than employers doing it for them.

## 2.9 TQM (Total Quality Management) and Internal Marketing

TQM is closely related to internal marketing because it is concerned with continuous performance improvement of individuals, groups and organizations. What differentiates TQM from other management processes is the emphasis on continuous improvement. Total quality is not a "quick fix" but it is about personally changing the way things are done (Kanji, 1998). To improve performance, people need to know what to do and how to do it, have the right tools to do it, be able to measure performance and receive feedback on current levels of achievement. TQM provides this by adhering to a set of governing principles (Kanji and Asher, 1995; and1996). These principles can be categorized as follow: delight the customer; management by fact; people-based management; and continuous improvement. These principles can be used to drive the improvement process. Each principle is operationalized by using two of the following core concepts (see figure 2.3): customer satisfaction; internal customers are real; all work is process; measurement; teamwork; people make quality; continuous improvement cycle; and prevention (Kanji and Asher, 1995; and1996)

### 2.9.1 TQM Principles

Kanji and Asher (1995; and1996) argued that there are four principles and eight concepts associated with TQM. The four principles are:

***Delight the customer.*** The first principle focuses on the external customer and asks, "what would delight them?" Delight means being best at what matters most to customers, and this changes over time. Being in touch with these changes and delighting the customer now and in the future is an integral part of TQM.

***Management by fact.*** Knowing the current performance levels of the existing customers and employees products or services, is the first stage of being able to improve. If we know where we are starting from, we can measure our improvement. Having the facts necessary to

manage the business at all levels. Providing that information to people so that decisions are based upon fact rather than "gut feelings" is essential for continuous improvement.

***People-based management.*** Knowing what to do, how to do it and getting feedback on performance is one way of encouraging people to take responsibility for the quality of their own work. Involvement and commitment to customer satisfaction are ways to generate this. This principle of TQM recognizes that systems, standards and technology themselves will not guarantee quality. Therefore, the role of people is vital.

***Continuous improvement.*** Total quality cannot be a quick fix or a short-term goal that will finish when a target has been met. Total quality is a management process that recognizes that, however much we may improve, our competitors will continue to improve and our customers will expect more from us. Continuous improvement or incremental change, and not major breakthroughs, is an important principle which is the aim of all who wish to improve total quality.

### 2.9.2 TQM Concepts

The eight concepts associated with TQM are described by Kanji and Asher (1995; and1996) as follows:

***Customer satisfaction.*** Many companies, when they begin quality improvement processes, become very introspective and concentrate on their own internal problems almost at the expense of their external customers. In contrast, other companies, particularly in the service sectors, have gone out to their customers to survey what is important to them, and then to measure their own performance against customer targets (Kristensen *et al.*, 1993). The idea of asking customers to set customer satisfaction goals is a clear sign of an outward-looking company.

***Internal customers are real.*** The definition of quality (i.e. 'satisfying agreed customer requirements') relates equally to both internal and external customers. Many writers refer to the customer/supplier chain and the need to get the internal relationships working in order to satisfy the external customer. Whether you are supplying information, products or a service, the people you supply internally depend on their internal suppliers for quality work. In this respect their requirements are as real and important as those of external customers.

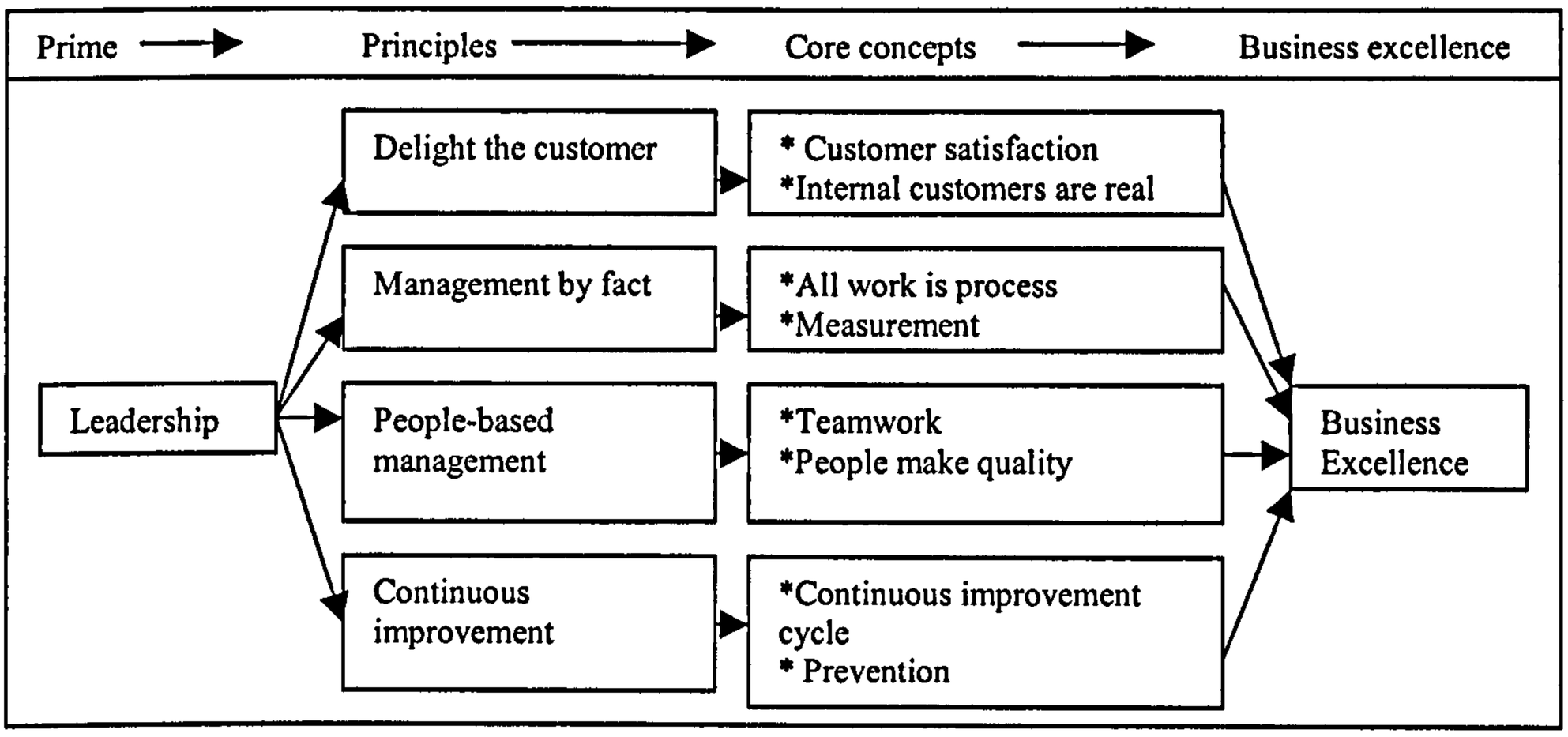
***All work is process.*** Process means any relationship, such as billing customers or issuing credit notes, that has an input, steps to follow and an output. A process is a combination of methods, materials, manpower, machinery, etc. which taken together produce a product or service. All processes contain inherent variability and one approach to quality improvement

is progressively to reduce variation, this can be done in stages: first, by removing variation due to special causes; second by reducing common cause variation, thus bringing the process under control; and then by improving its capability.

***Measurement.*** The fourth concept of TQM is measurement. Having a measure of how we are doing is the first stage of being able to improve. Measures can focus either internally, i.e. on internal customer satisfaction (Kristensen *et al.*, 1993), or externally, i.e. on meeting external customer requirements.

***Teamwork.*** Teamwork can provide an opportunity for people to work together in the pursuit of total quality in ways they have not worked together before. People who work on their own or in small, discrete, work groups often have a picture of their organization and the work that it does that is very myopic compartmentalized. They are often unaware of the work that is done even by people who work very close to them. Under these circumstances, they are usually unaware of the consequences of poor quality in the work they themselves do. If people are brought together in terms of a common goal, quality improvement becomes easier to communicate over departmental and functional walls.

Figure 2.3: Prime, Principles and Core Concepts of TQM




*Source: Kanji (1998)*

***People make quality.*** Many of the quality-related problems within an organization are not within the control of individual employees. These problems are caused by the way the company is organized and managed. We have all heard anecdotal stories of how computers or systems have got in the way of people trying to do a good job but simply telling employees to do better will not solve the problem. Exhorting employees to a higher level of performance (for example, by poster campaign) can have a counter-productive effect if they think that management has failed to tackle the real problem. In these circumstances, motivation alone

cannot work. People can only become committed to quality through the practical efforts of managers to remove the barriers to quality improvement. The role of managers within organizations is, therefore, to ensure that everything necessary has been done to allow people to make quality a realistic goal. This is turn creates an environment where people are willing to take the responsibility for the quality of their own work.

***Continuous improvement cycle.*** The continuous cycle of improving by establishing customer requirements, meeting those requirements and measuring success is an internal process which can be used to fuel the engine of continuous external improvement. By continually checking customers requirements, a company can find areas in which improvements can be made. This continual supply of information can be used to keep quality improvement plans up to date and reinforce the total quality journey.

***Prevention.*** The core concept of prevention is central to TQM and is one way of moving towards continuous improvements. Prevention means preventing problems from happening. The continual process of driving possible failure out of the system can breed a culture of continuous improvement over time. There are two distinct ways of achieving this, that are discernable in the literature. The first is to concentrate on the design of the product itself; the second is to work on the production process.

## 2.10 Conclusion

This chapter aimed to place internal marketing in a context. In doing so, the chapter started with a discussion of the importance of internal marketing despite advances in electronic banking as internal marketing can help a bank to attract and retain the best possible employees and improve their performance. This was followed by presenting the different definitions of internal marketing. It was clear that with internal marketing the organization views its employees as internal customers, their jobs as internal products and trying to satisfy the wants and needs of its internal customers. The chapter also discussed the objectives of internal marketing. The main objective of internal marketing is to manage the organization's human resources based on a marketing perspective. The concept of employees as internal customers was also discussed in this chapter. A service marketing management model developed by Tansuhaj *et al.* (1988) was also presented in this chapter. This model emphasizes that internal marketing programs influences employee attitudes and behaviour, which have a direct impact on the firm's external marketing activities. The chapter also presented the application of the traditional marketing mix to the internal market by using McCarthy's (1964) 4Ps framework: product; price; place; and promotion. This discussion

revealed that in addition to the traditional 4Ps of the marketing mix, physical evidence, process and participants need to be added. The process and participants concepts explicitly recognize inter-functional interdependence and the need for an integrated effort for effective service (or product) delivery. In addition to the traditional marketing mix, applying marketing research and market segmentation in the internal market was also presented in this chapter. Finally, the relationship between the total quality management (TQM) and the internal marketing was discussed. Both TQM and internal marketing focus on continuous performance improvement of individuals, groups and organizations.

Having examined the literature on the internal marketing with its emphasis on employees as customers and the beneficial effects this can have on a wide range of performance indicators, the next chapter will present the internal service quality construct. In doing so, the chapter will introduce the reader to the different dimensions of internal service quality and how these dimensions affect the performance of customer contact employees.

# CHAPTER THREE
# INTERNAL SERVICE QUALITY

## 3.1 Introduction

In most services, quality occurs during service delivery, usually in an interaction between the customer and contact personnel of the service firm. For this reason, external service quality is highly dependent on the performance of employees but as an organizational resource, employees cannot be controlled to the same degree as more tangible resources (Zeithaml *et al.*, 1988). Organizations can foster a service climate by establishing practices that facilitate service delivery and by expecting and rewarding service excellence (Bowen and Schneider, 1988; and Schneider, 1990). The basic idea is that employees will deliver excellent service to customers when the organization provides them with the resources (logistical, administrative, equipment, and managerial support) to deliver effective service and when the organization treats them as it would want them to treat customers (Schneider and Bowen, 1985). When these conditions hold, a positive climate for service is said to exist (Schneider *et al.*, 1992). The main purpose of this chapter is to explain and clarify the internal quality of service concept and it various dimensions. Specifically, section 3.2 will review the extended model of service quality developed by Zeithaml *et al.* (1988). This is followed in section 3.3 by a discussion of the service employee management model. Section 3.4 will present the service climate concept which describe the internal quality of service. The measure of organizational service-orientation (SERV*OR) developed by Lytle *et al.* (1998) will be discussed in section 3.5. Finally, the internal quality of service dimensions will be discussed in section 3.6.

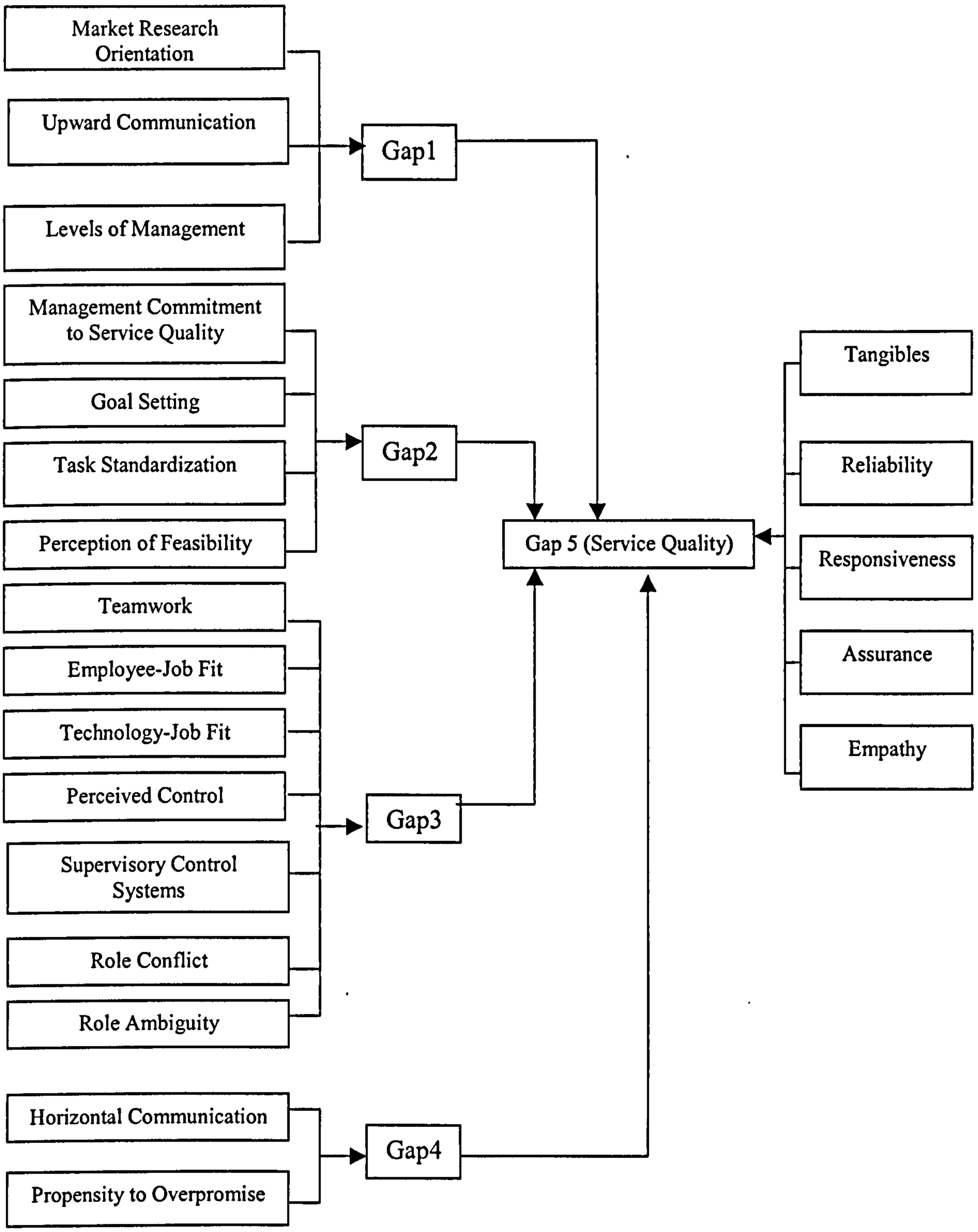
## 3.2 The Extended Model of Service Quality

Zeithaml *et al.* (1988) extended their original model of service quality by identifying a fairly exhaustive set of factors which affect the magnitude and direction of the four gaps on the marketer's side of their quality model (see figure 3.1). These factors or theoretical constructs represent the components of internal service quality. In discussing and explaining the four gaps, Zeithaml *et al.* (1988) used a minus sign (-) to indicate that placing emphasis on a particular construct would decrease the gap and a plus sign (+) to indicate the opposite, that placing emphasis on a construct would increase the gap.

### The Four Gaps in the Extended Model of Service Quality

***Gap 1: Difference between customer expectations and management perceptions of customer expectations.*** As shown in table 3.1, Zeithaml *et al.* (1988) proposed that the size

Figure 3.1: The Extended Model of Service Quality




Source: Zeithaml *et al.* (1988)

of gap 1 in any service firm is a function of three theoretical constructs: market research orientation, upward communication, and levels of management. They proposed that the gap between customer expectations and management perceptions of customer expectations depends on the extent to which a company recognizes the importance of the customer (market research orientation), receives accurate information about customers' needs (market research orientation and upward communication), and places barriers between contact personnel, i.e. service providers and top managers (level of management). Consequently, Zeithaml *et al.* proposed that the size of gap 1 is related to (1) the extent of market research orientation (-), were (–) signifies that increased market research orientation will decrease the gap between customer expectations and management perceptions of customer expectations, (2) the extent and quality of upward communication (-), and (3) the levels of management (+), were (+) signifies that the increase in the levels of management within an organization will increase the size of gap 1.

Table 3.1: Service Quality Management Gap 1

| Theoretical constructs | Specific variables |
|---|---|
| Market research orientation | • Amount of market research.<br>• Usage of marketing research.<br>• Degree to which marketing research focuses on service quality issues.<br>• Extent of direct interaction between managers and customers. |
| Upward communication | • Extent of employee-to-manager communication.<br>• Extent to which inputs from contact personnel are sought.<br>• Quality of contact between top managers and contact personnel. |
| Levels of management | Numbers of layers between customer contact personnel and top managers. |

Source: Zeithaml *et al.* (1988)

Table 3.2: Service Quality Management Gap 2

| Theoretical Constructs | Specific Variables |
|---|---|
| Management commitment to service quality | • Resource commitment to quality.<br>• Existence of internal quality programs.<br>• Management perceptions of recognition for quality commitment. |
| Goal setting | Existence of a formal process for setting quality for service goals. |
| Task standardization | • Use of hard technology to standardize operations.<br>• Use of soft technology to standardize operations. |
| Perceptions of feasibility | • Capabilities/systems for meeting specifications.<br>• Extent to which managers believe consumer expectations can be met. |

Source: Zeithaml *et al.* (1988)

***Gap 2: Management Perception-Service Quality Specification Gap.*** Table 3.2 reveals the four theoretical constructs and the specific variables relating to gap 2. Zeithaml *et al.* (1988)

proposed that the size of gap 2 between management perceptions of customer expectations and service quality specifications within the organization depends on management commitment to service quality, goal setting, task standardization, and perceptions of feasibility. Consequently, they proposed that the size of gap 2 is related to (1) management commitment to service quality (-), (2) setting of goals relating to service quality (-), (3) task standardization (-), and (4) perceptions of feasibility for meeting customer expectations (-).

Table 3.3: Service Quality Management Gap 3

| Theoretical Constructs | Specific Variables |
|---|---|
| Teamwork | • Extent to which employees view other employees as customers.<br>• Extent to which contact personnel feel upper level managers genuinely care for them.<br>• Extent to which contact personnel feel they are co-operating (rather than competing) with others in the organization.<br>• Extent to which employees feel personally involved and committed. |
| Employee-job fit | • Ability of employees to perform job.<br>• Importance and effectiveness of selection processes. |
| Technology-job fit | Appropriateness of tools and technology for performing job. |
| Perceived control | • Extent to which employees perceive they are in control of their job.<br>• Extent to which customer-contact personnel feel they have flexibility in dealing with customers<br>• Predictability of demand. |
| Supervisory control systems | Extent to which employees are evaluated on what they do (behaviour) rather than solely on output quantity. |
| Role conflict | Perceived conflict between expectations of customers and expectations of organization.<br>• Amount of paperwork needed to complete service transactions.<br>• Number of internal contacts that customer-contact people must make to complete a service transaction or answer customer queries.<br>Existence of management policy that conflicts with specifications. |
| Role ambiguity | Perceived clarity of goals and expectations<br>• Frequency and quality of downward communication.<br>• Extent of constructive feedback given to contact personnel.<br>Perceived level of competence and confidence<br>• Product knowledge of contact personnel.<br>• Product-specific training provided to contact personnel.<br>• Training in communication skills provided to contact personnel. |

Source: Zeithaml *et al.* (1988)

***Gap 3: Service Quality Specification-Service Delivery Gap.*** Gap 3 can be referred to as the "service performance gap" and is, the extent to which service providers do not perform at the level expected by management. The service performance gap occurs when employees are unable and/or unwilling to perform the service at the desired level. As shown in table 3.3 Zeithaml *et al.* identified seven theoretical constructs and no less than sixteen specific variables relating to gap 3. They proposed that the size of gap 3 is related to (1) the extent of

teamwork perceived by employees (-), (2) employee-job fit (-), (3) technology-job fit (-), (4) the extent of perceived control experienced by customer-contact personnel (-), (5) the extent to which behavioral control systems are used to supplement output control systems (-), (6) the extent of role conflict experienced by customer-contact personnel (+), and (7) the extent of role ambiguity experienced by customer-contact personnel (+).

***Gap 4: Difference between Service Delivery and External Communication.*** Table 3.4 shows that, Zeithaml *et al*'s gap 4 which is related to the difference between service delivery and external communication is a function of horizontal communication and propensity to overpromise. Consequently, Zeithaml *et al.* (1988) proposed that the size of gap 4 is related to (1) the extent of horizontal communication (-) which is determined by four specific variables and (2) propensity to overpromise (+) which is influenced by two primary variables.

Table 3.4: Service Quality Management Gap 4

| Theoretical Constructs | Specific Variables |
|---|---|
| Horizontal communication | • Extent of input by operations people in advertising planning and execution.<br>• Extent to which contact personnel are aware of external communication to customers before they occur.<br>• Communication between sales and operations people<br>• Similarity of procedures across departments and branches |
| Propensity to overpromise | • Extent to which firm feels pressure to generate new business.<br>• Extent to which firm perceives that competitors overpromise. |

Source: Zeithaml *et al.* (1988)

The extended model of service quality was derived from an exploratory study which needs to be tested further. A primary objective of this research, therefore, will be to empirically link the internal organizational aspects of service quality with the quality of service provided by the organization to its external customers.

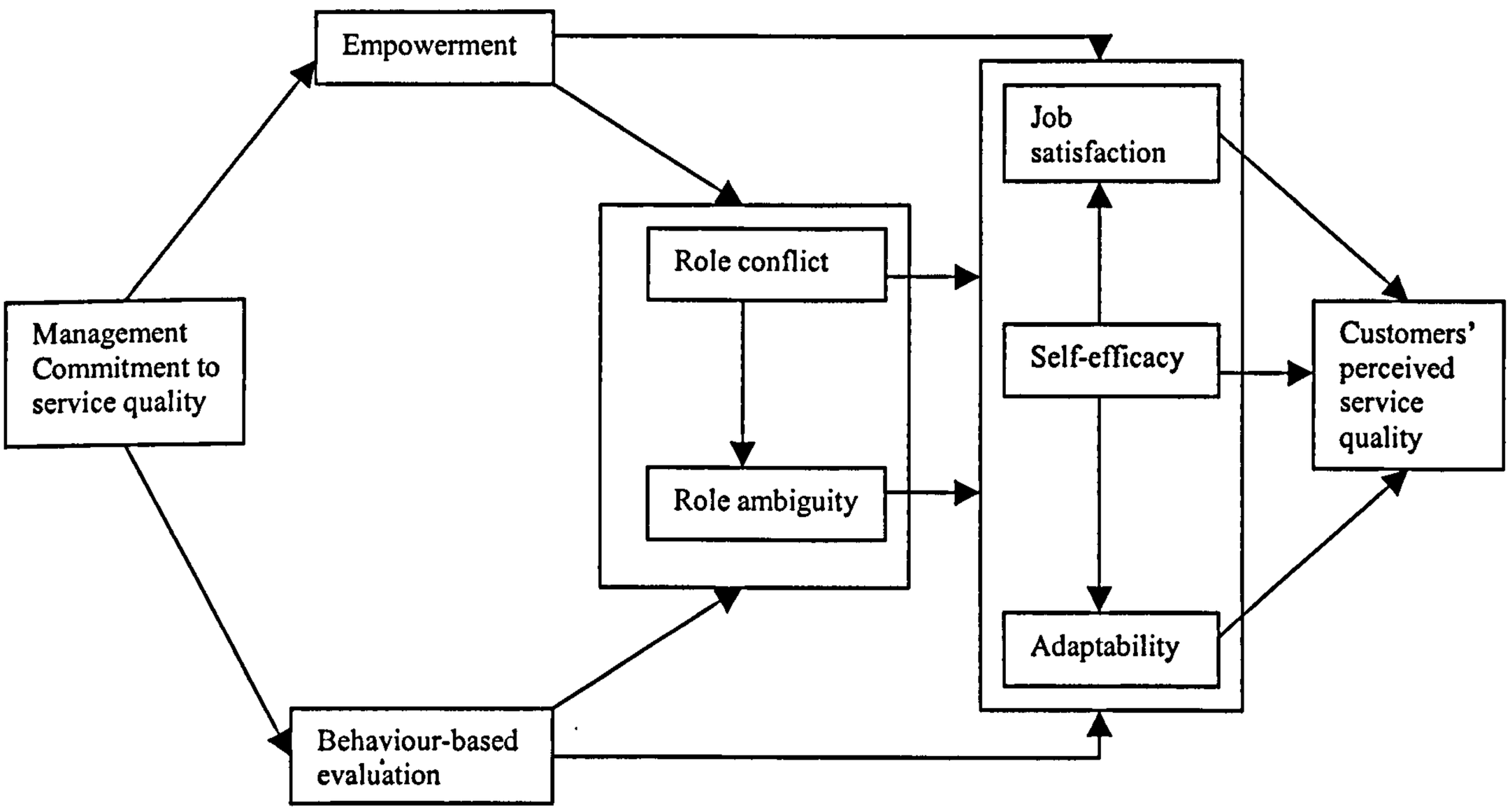
## 3.3 The Management of Customer-Contact Service Employees Model

Because of the importance of the service encounter, service firms must find ways to effectively manage their customer-contact employees to help ensure that their attitudes and behaviour are conducive to the delivery of quality service. Bowen and Schneider (1985) argued that traditional managerial functions should be altered because of the unique characteristics of services. Some of their recommendations include: (1) involving employees in the planning and organizing of service activities, (2) recognizing that the work environment of service employees has a strong influence on how customers experience the

service, and (3) understanding that the firm's human resources practices can ultimately influence customers' experiences. The underlying premise of these recommendations is that if managers treat their employees well, the employees will treat customers well (Bowen and Schneider, 1985; and Gronrroos, 1983).

Hartline and Ferrell (1996) developed and tested a model of service employees management that examines constructs simultaneously across three interfaces of the service delivery process: manager-employee, employee-role, and employee-customer (see figure 3.2). They examined the attitudinal and behavioral responses of customer-contact employees that can influence customers' perceptions of service quality, the relationships among these responses, and three formal managerial control mechanisms (empowerment, behaviour-based employee evaluation, and management commitment to service quality).

Figure 3.2: The Management of Customer-Contact Service Employees Model




Source: Hartline and Ferrell (1996)

### 3.3.1 The Employee-Customer Interface

The attitudinal and behavioral responses of customer-contact employees are important because of the interactive nature of service delivery (how the service is delivered) (Gronroos, 1983). Research has shown that employees' attitudinal and behavioral responses can positively and negatively affect customers' perceptions of the service encounter and their judgments of service quality (Bitner, 1990). On the negative side, early studies by Schneider (1980) and Shamir (1980) revealed that employees' role stress (conflict and ambiguity) and

dissatisfaction are major contributors to their inability to deliver good service. Singh (1993) provides empirical evidence that the role ambiguity experienced by boundary-spanning employees greatly reduces their job satisfaction and performance. Contact employees who experience ambiguous or conflicting role expectations are likely to exhibit decreased job satisfaction and performance, which leads to decrease in customers' perceived service quality (Schneider, 1980). Other attitudinal and behavioral responses have been shown to positively affect customer perceptions of quality. Bateson (1985) argued that contact employees are better able to satisfy customers when the employee has some control over the service encounter. Similarly, Bitner (1990) and Bitner *et al.* (1990) show through qualitative studies that customers are more satisfied with the service encounter when employees posses the ability, willingness, and competence to solve their problems. Bitner *et al.* (1990) also find that an employee's ability to adapt to special needs and requests enhances customers' perceptions of service encounter. Furthermore, several studies have shown that the friendliness, enthusiasm, and attentiveness of contact employees positively affect customers' perceptions of service quality (Bowen and Schneider, 1985; and Rafaeli, 1993).

Hartline and Ferrell (1996) identified three dimensions related to the employee-customer interface: employee-self efficacy, employee job satisfaction and employee adaptability.

***Employee self-efficacy***

Self-efficacy refers to an employee's belief in his or her ability to perform job-related tasks (Hartline and Ferrell, 1996). The importance of self-efficacy lies in its ability to increase employee performance. Self-efficacy grows stronger over time as the employee successfully performs tasks and build the confidence necessary to fulfill his or her role in the organization (Gist and Mitchell, 1992). As self-efficacy increases, employees exert more effort, become more persistent, and learn to cope with task-related obstacles (Bandura, 1977 and Gist, 1987). Empirical studies confirm that self-efficacy has a strong, positive relationship with employee performance (Earley, 1994). Employee performance during a service encounter typically involves responding to customer needs, handling special requests, and performing under adverse circumstances (Bitner *et al.*, 1990). Because of the increased effort that accompanies self-efficacy, highly self-efficacious contact employees should perform better in these service activities, thereby increasing customers' perceptions of service quality. Likewise, self-efficacious contact employees should be able to cope with demanding situations that arise during the service encounter. In summary, Hartline and Ferrell (1996) argue that the self-efficacy of contact employees should play an important role in shaping customers'

perceptions of the service encounter. When customers are served by employees who believe strongly in their own abilities, they are likely to receive higher-quality service.

***Employee job satisfaction***

Locke (1969, P. 316) defines job satisfaction as "the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job values". Churchill and colleagues (1985) argued that job satisfaction is closely related to employees' behavioral performance in a sales context. A similar relationship is likely to occur with respect to service employees (Hartline and Ferrell, 1996). During the service encounter, employee performance often is the service, as it is perceived by customers (Bitner, 1990). This relationship lies in the interaction between contact employees and customers, in which satisfied employees are more likely to engage in behaviour that assist customers (Locke and Latham, 1990; and weatherly and Tansik, 1993). Many researchers have argued that customers' perceptions of a service are influenced by employee job satisfaction (Schneider, 1980; Bowen and Schneider, 1985; and Gronroos, 1983).

***Employee adaptability***

Hartline and Ferrell (1996) define adaptability as the ability of contact employees to adjust their behaviour to the interpersonal demands of the service encounter. Solomon *et al.* (1985) argued that adaptability can be described as a continuum ranging from conformity to an established script, in which employees approach each customer the same way, to service personalization, in which employees must adapt to serve individual customers. Employees adaptability has been linked with customers' perceptions of the service encounter. Huphrey and Ashforth (1994) provide evidence that employees who "mindlessly" follow a service script are more likely to make mistakes and less likely to meet the individual needs of their customers. Bitner (1990) and Bitner *et al.* (1990) show that customers evaluate the service encounter more favorably when employees are able to adapt to meet their special needs and requests. This finding is further supported in a qualitative study by Bitner *et al.* (1994, P. 99), in which they report that "almost half of particularly satisfying customer encounters reported by employees resulted from their ability to adjust the system to accommodate customer needs and requests".

Within the employee-customer interface, Hartline and Ferrell, (1996) found that employee self-efficacy and job satisfaction have a positive effect on customers' perceived service quality. They argued that confident and satisfied employees are likely to perform better than

apprehensive and dissatisfied employees during the service encounter, which leads to an increase in customers' perceptions of service quality. They also reported that self-efficacy has a stronger effect on service quality than job satisfaction.

### 3.3.2 The Employee-Role Interface

Hartline and Ferrell (1996) identified role conflict and role ambiguity as dimensions related to the employee-role interface. Role conflict is defined as the incompatibility between one or more roles within an employee's role set, such that fulfilling one role would make fulfilling the others more difficult (Weatherly and Tansik, 1993). Role ambiguity occurs when an employee lacks salient information needed to effectively enact his or her role (Singh, 1993, P. 12). Role conflict or ambiguity have been shown to reduce employees' job satisfaction (Brown and Peterson, 1993), self-efficacy beliefs (Jex and Gudanowski, 1992) and adaptability (Scott and Bruce, 1994).

Within the employee-role interface, Hartline and Ferrell (1996) found that role ambiguity has a significant negative effect on employees self-efficacy, job satisfaction, and adaptability. As role ambiguity's negative effects extend into the employee-customer interface, it can diminish employees' ability to serve customers and indirectly decrease customers' perceptions of service quality.

### 3.3.3 The Manager-Employee Interface

Many managerial activities have the potential to effectively manage employee behaviour and responses in ways that improve service quality. The problem lies in identifying the most effective activities. Jaworski (1988, P. 26) calls these activities "formal controls" and define them as "management-initiated mechanisms that influence the probability that employees or groups will behave in ways that support the stated marketing activities." According to Jaworski, there are three types of formal controls: input controls (actions taken prior to the implementation of a marketing activity), process controls (attempts to influence behaviors and/or activities during implementation), and output controls (setting performance standards and monitoring or evaluating results). Examples of input controls include the recruitment, selection, and training of employees; strategic planning; and resource allocations. Process controls include any mechanism that attempts to influence employee behaviors and responses during implementation (e.g., organization structure, operating procedures, reward). Finally, output controls include both performance standards that are stated in terms of quality

outcomes (i.e., complaints, service quality, customer satisfaction) and evaluation of those outcomes.

Hartline and Ferrell (1996) argued that process control is very important in order to make employee behaviour and responses more conducive to the delivery of service quality. Previous research has addressed the importance of process controls. For example, researchers have argued that to effectively manage boundary-spanning service employees, managers should maintain flexible work climates (Schneider, 1980), places greater emphasis on the firm's human resource practices (Bowen and Schneider, 1985), reward employees for their contributions to customer satisfaction (Bowen and Schneider, 1985; and Reardon and Enis, 1990), increase their own commitment to service (George, 1990; Zeithma et al, 1988), and increase employees' discretion (empowerment) in serving customers (Bowen and Lawler, 1992; and Kelley, 1993). Hartline and Ferrell (1996) identified three service-related process control mechanisms that matched Jaworski's (1988) definition of formal process controls (i.e., mechanisms associated with the means to achieving desired employee responses): empowerment, behaviour-based evaluation and management commitment to service quality.

***Empowerment***

Empowerment refers to a situation in which the manager gives employees the discretion to make day-to-day decisions about job-related activities (Bowen and Lawler, 1992; and Conger and Kanungo, 1988). By allowing contact employees to make these decisions, the manager relinquishes control over many aspects of the service delivery process. Empowerment thought to be necessary because contact employees need the flexibility to make important decisions to completely satisfy customers. Allowing contact employees to use their discretion in serving customers has many positive influences on their responses and the service encounter (Hartline and Ferrell, 1996). Bowen and Lawler (1992) suggested that empowered employees feel better about their jobs and more enthusiastic about serving customers, with an end result of quicker response to customer needs and increased customer satisfaction. One of the primary outcomes of empowerment is increased employee self-efficacy (Conger and Kanungo, 1988). As employees gain more discretion over how there are performed, their levels of self-efficacy increase because they decide the best way to perform a given task (Gist and Mitchell, 1992). Empowered employees also are likely to be more adaptive because of the increased flexibility that accompanies empowerment (Scott and Bruce, 1994). Empowerment removes the constraints imposed on customer-contact employees, which gives them room to maneuver as they attempt to serve customers' needs (Reardon and Enis, 1990).

***Behaviour-based evaluation***

Behavior-based evaluation involves evaluating employees on the basis of how they behave or act rather than on the basis of the measurable outcomes they achieve (Anderson and Oliver, 1987). Under a behaviour-based system, contact employees are evaluated and compensated on the basis of criteria such as effort, commitment, teamwork, customer orientation, friendliness, the ability to solve customers problem, and other behaviour that are directed toward improved service quality (Bowen and schneider, 1985; and Readon and Enis, 1990). Linking evaluations to service-related behavioral criteria gives employees the incentive to engage in behaviour that are conducive to improved service quality (George, 1990; and Gronroos, 1983). It also gives employees more control over the conditions that affect their performance evaluations (Anderson and Oliver, 1987; and Cravens *et al.*, 1993).

Previous research supports the positive relationship between behaviour-based evaluation and employee responses. For examples, an emphasis on behavioral criteria has been shown to increase employees' competence (Cravens *et al.*, 1993), self-efficacy (Gist and Mitchell, 1992), and job satisfaction (Oliver and Anderson, 1994). Researchers have also found that employee adaptability increases when employees perceive that rewards are the result of their own behaviour or when rewards are tied to innovative behavioral performance (Scott and Bruce, 1994; and Spiro and Weitz, 1990). Behaviour-based evaluations also reduces employees' role conflict and ambiguity because it gives employees more control over the conditions that affect their evaluations (Basu *et al.*, 1985) and frees them from the pressures to produce measurable outcomes (Anderson and Oliver, 1987).

***Management commitment to service quality***

Ahmed and Parasuraman (1994, P. 85) defined management commitment to service quality as "encompassing the conscious choice of quality initiatives as operational and strategic options for the firm, and engaging in activities such as providing visible quality leadership and resources for the adoption and implementation of quality initiatives." Management commitment involves two components: (1) a strong, personal commitment to quality improvement and (2) a visible and active involvement in the quality-improvement process (Mohr-Jackson, 1993). Some researchers have argued that management commitment to service quality is the single most important determinant of whether good service is delivered to customers (George, 1990; and Gronroos, 1983). Previous studies suggest that managers must first possess a personal, affective commitment to improve firm's service quality (Mohr-Jackson, 1993, 1993). Managers who exhibit this commitment are more likely to take

initiatives that help the firm and its employees deliver superior quality (George, 1990). Examples of these initiatives include creating more flexible process, dedicating resources to the improvement effort, promulgating a quality-oriented vision throughout the firm, and rewarding employees for their efforts and commitment to the process (Ahmed and Parasuraman, 1994; and Wall and Zeynel, 1991).

Within the manager-employee interface, Hartline and Ferrell (1996) reported that the use of empowerment leads to both positive and negative employee outcomes. They argued that though empowered employees gain confidence in their abilities, they also experience increased frustration (conflict) in their attempt to fulfill multiple roles at the organization's boundary. In addition to fulfilling the demands of their managers and customers, empowered employees take on added job responsibilities (Conger and Kanungo, 1988). For some employees, this situation could prove to be frustrating. Although this conflict leads to an increase in self-efficacy as employees learn to cope with conflicting role demands, it also increases role ambiguity and indirectly reduces job satisfaction and adaptability (Hartline and Ferrell, 1996). Hartline and Ferrell (1996) argued that the use of behaviour-based evaluation complements the use of empowerment by mitigating some of its negative consequences. Because employees can control their own behaviour more easily than work-related outcomes, behaviour-based evaluation gives employees more control over their evaluations, thereby reducing conflict (Basu *et al.*, 1985). Emphasizing behavioral criteria also gives contact employees the incentive to adapt to changing customer needs. Furthermore, behaviour-based evaluation leads indirectly to reduce role ambiguity and increased job satisfaction. Finally, Hartline and Ferrell (1996) argued that managers must be committed to improving service quality before engaging in activities that have the potential to improve service quality (i.e., empowerment and behaviour-based evaluation). They also reported that management commitment to service quality has an indirect positive effect on service quality. Previous research also has argued that management commitment to service quality is the most important determinant of exceptional service quality (George, 1990; Gronroos, 1983; and Wall and Zeynel, 1991).

### 3.4 Internal Quality of Service and Service Climate

Internal service quality and organizational service climate are inextricably linked and therefore some researchers use the term "internal quality" to describe the service climate or the service orientation of the organization (Heskett *et al.*, 1994; and Hallowell *et al.*, 1996). Heskett *et al* (1994) accordingly define internal service quality as the attitudes that people

have toward one another and the way people serve each other inside the organisation. Similarly, Hallowel *et al* (1996) define internal service quality as employee satisfaction with the service received from internal service providers. In order to explain the internal service quality concept, the service climate concept will be discussed in the following section.

Climate has been defined as employees perceptions of the practices, procedures, and behaviour that get rewarded, supported, and expected with regard to customer service and customer service quality (Schneider *et al.*, 1998). The climate of an organization is dictated by the perceptions employees share about what is important in the organization. This is in turn is influenced by the employees experiences in the job and their perceptions of the kinds of behaviour management expect and support (Schneider and Bowen, 1995). A climate for service exists when employees' perceptions are integrated into a theme that indicates service is important to the organization. Schneider and Bowen (1995) offered examples of management practice that usually enhance a service orientated climate such as identifying what the market wants and needs for a high level of service quality. This involves measuring customer expectations and satisfaction, sharing the data with employees, and generating goals and plans to improve service delivery. Schneider and Bowen also suggested that the climate for service can be enhanced by hiring people who are willing and able to deliver excellent service, training them on aspects of service delivery, and rewarding them for excellent service. They also believed that procedures and technology should facilitate and support service delivery for both employees and customers. The operations management, marketing, and human resources functions should also work together to create a service orientated system.

Schneider *et al.* (1998) refer to contextual factors that sustain work behaviour as foundation issues. They proposed that a climate for service rests on a foundation of fundamental support in the way of resources, training, managerial practices, and the assistance required to perform effectively. They also proposed two categories of foundation issues: (1) the quality of internal service existing in an organization, and (2) general facilitative conditions. The first category reflects the quality of the service received internally from other departments within the organization and the second includes efforts toward removing obstacles to work (Burke *et al.*, 1996; and Schoorman and Schneider, 1988), supervisory behaviour (e.g., giving feedback and sharing information), and human resource policies (Schneider and Bowen, 1993). Albrecht and Zemke (1985) identified a similar set of practices and conditions that are condusive to an organization's ability to deliver a high level of quality service. These

practices included (1) focusing on the customer and understanding their wants, needs, and expectations, (2) developing and communicating a service strategy that defines excellent service and shows how it will be delivered, (3) designing customer-friendly service systems; and (4), having well trained, service-oriented people at all levels of the organization.

In this research, the definition of organizational service-orientation stated by Lytle *et al.* (1998, PP. 459) was used in order to describe internal service quality concept. Accordingly, internal service quality can be defined as:

*"An organizational-wide embracement of a basic set of relatively enduring organizational policies, practices and procedures intended to support and reward service-giving behaviors that create and deliver service excellence."*

### 3.5 SERV*OR: A Measure of Organizational Service-Orientation

Lytle *et al.* (1998) developed an organizational service orientation scale (SERV*OR) which measures and captures the extent to which an organization is perceived by its employees as having adopted and embraced specific policies, practices and procedures that help to create service orientation within an organization. The measure is made up of ten dimensions with 35 items. Each dimension is grounded in theory and practice and relates directly to enduring core service quality principles. These practices and procedures comprehensively represent the domain of service orientation. They include: (1) servant leadership, (2) service vision, (3) customer treatment, (4) employee empowerment, (5) service training, (6) service rewards, (7) service failure prevention, (8) service failure recovery, (9) service technology, and (10) service standards communication. The scale was constructed and validated using a rigorous methodological procedure including multiple informants, multiple samples, multiple organizations, multiple states, and multiple industries.

To describe organizational service orientation, Lytle *et al.* (1998) adopted two fundamental positions. First, they proposed that Organizational Service Orientation (OSO) is a dimension of an organization's overall climate (Schneider *et al.*, 1996; Schneider and Bowen, 1993; and Schneider and Bowen, 1995). Second, they claimed that OSO is best understood and measured by soliciting employee's perceptions and opinions about the organization (Schneider and Bowen, 1993; Schneider *et al.*, 1996; and Schneider *et al.*, 1992). Employees' perceptions of events, practices, and procedures as well as their perceptions of the behaviour that are rewarded, supported and expected constitute the climate of the work setting in an organization (Schneider *et al.*, 1992, P. 705). This suggests that climate is created by

thousands of everyday policies, practices and procedures that create the feel, predisposition or orientation of the organization (Deshpande and Webster, 19898; Hofstede *et al.*, 1990; Schein, 1985; Schneider and Bowen, 1993; Schneider and Bowen, 1995; Schneider *et al.*, 1996; and Schneider *et al.*, 1992).

Lytle *et al.* (1998) claimed that OSO is best measured and assessed by the perceptual inferences of employees. They suggested that employee inferences are typically centered around (1) how the organization goes about its daily business; and (2) what goals the organization pursues. Crucially, for this research, employee perceptions and inferences are becoming increasingly important to the study of service quality because they are being linked to service performance (Benoy, 1996; Hallowell *et al.*, 1996; Johnson, 1996; and Schneider and Bowen, 1995). Mounting evidence suggests that an organization service orientation is an important factor in the creation of superior customer value (Lytle *et al.*, 1998). Research indicates that important organizational outcomes such as increased profit, sales growth, customer satisfaction, and increased customer loyalty result directly from an organizational service orientation (Albrecht and Zemke, 1985; Heskett *et al.*, 1997; Henkoff, 1994; Johnson, 1996; O'Connor and Shewchuk, 1995; Rust *et al.*, 1996; Sasser and Jones, 1995; and Schneider and Bowen, 1995). Moreover, Empirical findings suggest that when employees perceive their organization as having a strong service orientation, customers report more positive service experiences (Heskett *et al.*, 1997; and Schneider and Bowen, 1993).

### 3.6 Internal Quality of Service Dimensions

In order to discuss the internal dimensions of service quality, it was very important to discuss the different dimensions of organizational service orientation presented by Lytle *et al.* (1998). They identified ten fundamental dimensions which effectively encompass the entire domain of organizational service orientation (see figure 3.3). Each of these dimensions is categorized within one of the four broad areas of service-related practices:

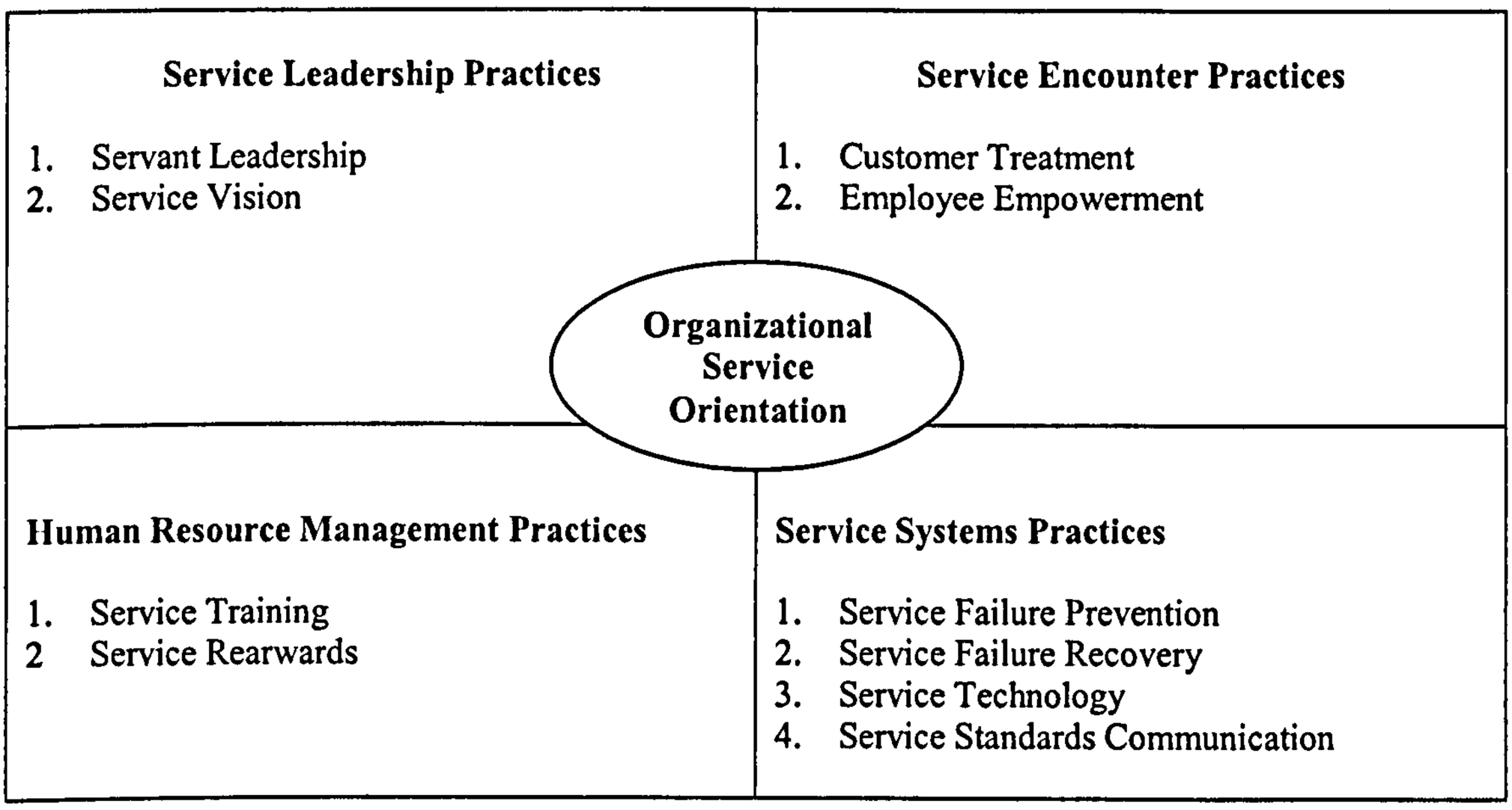
**Service Leadership**

Leadership is probably the most important factor in creating and maintaining an effective and positive service orientation (Heskett *et al.*, 1997; Kotter and Heskett, 1992; and Schneider, 1990). Lytle *et al.* (1998) suggest that servant-leadership and service vision are fundamental elements within the service orientation model.

***Servant Leadership.*** Servant-leaders set service standards by their own behaviour and management styles. They are actively engaged in helping, assisting, and meeting the needs of

employees within the work setting (Lytle *et al.*, 1998). They are a model of service to all employees by inspiring, motivating, and enabling them to achieve service excellence (Berry *et al.*, 1994; and Heskett *et al.*, 19976). Management service behaviour is, therefore, a conspicuous way of directing and shaping the service climate through example rather than by simply dictating service policy for the organization (Albrecht and Zemke, 1985; Heskett, 1986; and Schlesinger and Heskett, 1991). The logic of this derives from the proposition that if employees receive excellent service from their own managers, they are more likely to provide excellent service to customers (Heskett *et al.*, 1990; Hallowell *et al.*, 1996; and Church, 1995).

Figure 3.3: SERV*OR Dimensions




Source: Lytle *et al.* (1998)

***Service Vision.*** A "top-down" service vision is important and necessary if management is to instill widespread aspirations of providing quality service among staff (Albrecht and Zemke, 1985; Heskett, 1986; Heskett, 1987; and Heskett *et al.*, 1990). These aspirations subsequently become the driving force that enables the organization to deliver quality service in the marketplace. Lytle *et al.* (1998) claimed that service leaders who consistently communicate a service vision for the organization reinforce the importance of service quality and customer satisfaction in creating superior value for the organization.

**Service Encounter**

Service encounters are employee interactions with customers. Lytle *et al.* (1998) identified customer treatment and employee empowerment as important elements within the service encounter dimension.

***Customer Treatment.*** How customers are treated directly influences their perceptions of service performance and customer satisfaction (Berry *et al.*, 1994; Bitner, 1990, 1992; Bitner *et al.*, 1990; sasser and Jones, 1995; and Schneider *et al.*, 1992). Thus, organizations must consistently engage in practices which create positive customer perceptions of service performance in order to enhance customer satisfaction, loyalty and organizational profitability (Bitner *et al.*, 1990; Heskett *et al.*, 1990; and Parasuraman, 1988).

***Employee Empowerment.*** Empowerment refers to a situation in which the managers give employees the discretion to make day-to-day decisions about job-related activities (Bowen and Lawler, 1992; and Conger and Kanungo, 1988). By allowing contact employees to make these decisions, the managers relinquish control over many aspects of the service delivery process. Empowerment is thought to be necessary because "contact employees need the flexibility to make on the-spot decisions to completely satisfy customers" (Hartline and Ferrell, 1996, P. 56). The literature suggests that this responsiveness is significantly and positively correlated with customer perceptions of service quality and satisfaction (Albrecht and Zemke, 1985; Heskett *et al.*, 1990; Heskett *et al.*, 1997; and Sasser and Jones, 1995).

**Service Systems**

Reliability is at the core of quality service (Berry *et al.*, 1994; Chase and Stewart, 1994; Heskett *et al.*, 1997; Jacob, 1995; and Treacy and Wiersema, 1993). The delivery of a consistent level of service quality depends on how well the service creation and the delivery system is designed and how well it functions. An organizational service orientation, therefore, requires service systems that includes (1) service failure prevention and recovery practices, (2) high levels of service technology adaptation, and (3) service standards communication practices (Lytle *et al.*, 1998).

***Service Failure Prevention and Recovery.*** Lytle *et al.* (1998) claimed that the very essence of a service system are practices that (1) function to pro-actively prevent service failure and (2) function to respond effectively to customer complaints or service failures. Service failure prevention and recovery are, therefore, important determinants of service quality (Berry *et al.*, 1994). If an organization fails to prevent and/or resolve customer problems, they have in fact disappointed the customer twice: once for the initial failure and twice for failing to correct what had gone wrong in the first place. When immediate and planned responsiveness to service failure occurs, organizations are able to retain up to 95 percent of their dissatisfied customers (Albrecht and Zemke, 1985). Additionally, these system-driven processes and

procedures are closely related to customer perceptions of "organizational service passion" (Schneider *et al.*, 1992) which is posited to be related to service performance.

***Service Technology.*** Lytle *et al.* (1998) argued that an organizations use of technology and technology-based systems is arguably one of the most critical ingredients of success because it supports staff in delivering a superior customer service.

***Service Standards Communication.*** In order for the service system to work effectively, minimum service standards or benchmarks must be established and understood by all members of the organization (Benoy, 1996; Bowen *et al.*, 1989; Chase and Bowen, 1991; Hallowell *et al.*, 1996; Heskett, 1986; and Treacy and Wiersema, 1993). Standards of internal service quality are recognized in the literature as an important antecedent to customer satisfaction (Benoy, 1996; Berry *et al.*, 1991; and O'Connor and Shewchuck, 1995).

**Human Resource Management**

Many studies suggest that hiring, training, and rewarding service-oriented behaviour has a direct and positive influence on service quality and organizational performance. Therefore, organizational service orientation would involve a focus on service-oriented human resource management. Lytle *et al.*, (1998) identified service training and service rewards practices as important elements of human resource management.

***Service Training.*** Through quality-based team training, problem-solving training, inter-personal skills training, and other advanced training, employees should be trained and empowered to deliver excellent service to customers (Lytle *et al.*, 1998). Schlesinger and Heskett (1991) suggest that the main characteristics of leading service organizations are (1) value investment in people rather than exclusive investment in machines and (2) investment in service skills training so that the ability of employees to meet the complex service demands of customers are enhanced.

***Service Rewards.*** Johnson (1996) argued that employee reward and recognition are significantly and strongly related to levels of customer satisfaction. The work of Schneider and Bowen (1993) also underscores the importance of recognition and reward in promoting high levels of customer service quality.

In addition to Lytle *et al*'s (1998) model, the literature contains a variety of alternative models on the dimensions of internal quality. For example, Heskett *et al.* (1994) determined

five internal quality dimensions: (1) workplace design; (2) job design; (3) employee selection and development; (4) employee rewards and recognition; and (5) tools for serving customers. Hallowell *et al.* (1996) similarly identified eight components of internal service quality (see table. 3.5). In fact, internal quality programs include a wide range of initiatives. For example, developing effective internal communication systems, providing comprehensive training programs, requiring regular meetings across functional areas, implementing internal service quality-oriented performance measurement systems, surveying internal customers, and developing cross-functional teams (Azzolini and Shillaber, 1993; Handfield and Ghosh, 1994; and Tucker *et al.*, 1996).

Table 3.5: Components of Internal Service Quality

| Internal service quality component | Definition | Sources |
|---|---|---|
| Tools | Are the tools necessary to serve customers provided to the employee by the organization? (This includes information and information systems.) | Zeithaml *et al.*, 1990; Berry and Parasuraman, 1991; Heskett *et al.*, 1990; Hart and Bogan, 1992; and Garvin, 1988. |
| Polices and procedures | Do policies and procedures facilitate serving customers? | Zeithaml *et al.*, 1990; Berry and Parasuraman, 1991; Heskett *et al.*, 1990; and Hart and Bogan, 1992. |
| Teamwork | Does teamwork occur among individuals and between departments when necessary? | Zeithaml *et al.*, 1990; Berry and Parasuraman, 1991; Heskett *et al.*, 1990; Hart and Bogan, 1992; and Garvin, 1988. |
| Management support | Does management aid (vs. hinder) and employee's ability to serve? | Zeithaml *et al.*, 1990; Berry and Parasuraman, 1991; Heskett *et al.*, 1990; Hart and Bogan 1992; Garvin, 1988; and Zemke and Bell, 1989. |
| Goal alignment | Are the goals of the employees aligned with those of senior management? | Zeithaml *et al.*, 1990; Berry and Parasuraman 1991; Heskett *et al.*, 1990; Hart and Bogan 1992; and Garvin, 1988. |
| Effective training | Is effective, useful, job-specific training made available in a timely fashion? | Zeithaml *et al.*, 1990; Berry and Parasuraman 1991; Heskett *et al.*, 1990; Hart and Bogan 1992; Garvin, 1988; and Zemke and Bell, 1989. |
| Communication | Does necessary communication occur both vertically and horizontally throughout the organization? | Zeithaml *et al.*, 1990; Berry and Parasuraman, 1991; Heskett *et al.*, 1990; Hart and Bogan, 1992; and Garvin, 1988. |
| Rewards and recognition | Are individuals rewarded and/or recognized for good performance? | Zeithaml *et al.*, 1990; Berry and Parasuraman, 1991; Heskett *et al.*, 1990; Hart and Bogan 1992; and Zemke and Bell, 1989. |

Source: Hallowell *et al.* (1996)

## 3.7 Conclusion

The main objective of this chapter has been to present the internal service quality construct. In doing this, it was necessary to discuss the extended model of service quality developed by Zeithaml *et al.* (1988). They identified several communication and control processes that managers could implement to manage service employees. These processes include managerial activities and employee responses that are hypothesized to affect service quality. This is followed by presenting the service employee management model developed by Hartline and Ferrell (1996). They identified three interfaces of the service delivery process: manager-employee, employee-role, and employee-customer. In order to explain the internal service quality, the service climate concept was discussed, followed by presenting the measure of organizational service-orientation (SERV*OR) developed by Lytle *et al.* (1998). Finally, the different dimensions of internal service quality were discussed.

Having examined the literature on internal service quality with its emphasis on the importance of employee satisfaction with the service received from internal service providers and the beneficial effects this can have on staff ability to provide high levels of external service quality to the customers, the next chapter will present the external service quality concept. In doing so, the chapter will discuss the different definitions and models of external service quality.

# CHAPTER FOUR
# EXTERNAL SERVICE QUALITY: CONCEPTS AND MODELS

## 4.1 Introduction

As competition becomes more intense and environmental factors become more hostile, the concern for service quality grows. The main purpose of this chapter is to present the concept of "external service quality" and review the various "external service quality" models. Section 4.2 identifies and discusses characteristics of services and is followed by a discussion of the changing environment for services industries in section 4.3. The external service quality concept and the different external service quality models are subsequently examined in sections 4.4 and 4.5. Section 4.6 looks at the moments of truth concept. Finally, section 4.7 examinees the role of relationship marketing in providing a high level of customer service.

## 4.2 Characteristics of Services

Traditionally the marketing literature focused more on goods than services. A large body of literature now argues that services are essentially different from goods and thus require different marketing strategies (Berry, 1980; Besson, 1973; Gronroos, 1978; and Thomas, 1987). There are arguably major differences between service and manufactured goods. These differences have an impact on the approach and substance of quality management. The salient differences are as follows:

### 4.2.1 Intangibility of Services

Most services are intangible (Bateson, 1977; Berry, 1980; Lovelock, 1981; and Shostak, 1977). The lack of tangible attributes means that it is difficult for the producer to describe the service and for the consumer to ascertain its likely virtues. The consumer cannot see, feel, hear, smell, or touch the product before it is purchased (Ghobadian *et al.*, 1994). Parasuraman *et al.*, (1985) argued that because services are performances rather than objects, precise manufacturing specifications concerning uniform quality can rarely be set. Most services cannot be counted, measured, inventoried, tested, and verified in advance of sale to assure quality. Because of intangibility, firms may find it difficult to understand how consumers perceive service and evaluate service quality (Zeithaml, 1981).

### 4.2.2 Heterogeneity of Services

Services are heterogeneous because their performance often varies from producer to producer, from customer to customer, and from day to day (Parasuraman *et al.*, 1985). In

industries such as retail banking which are both labour intensive and have large product portfolios, the buyer cannot assume consistency of staff behaviour and, therefore, consistency of service performance and quality (Berry *et al.*, 1985; Booms and Bitner, 1981; Kinsely, 1979; Langeard *et al.*, 1981; and Howcroft, 1993). The buyer of services may consequently experience greater perceived risk than the buyer of goods, which can be more readily standardized (Eiglier and Langeard, 1977; Guseman, 1981; and Zeithaml, 1981).

### 4.2.3 Perishability of Services

Services are perishable (Ghobadian *et al.*, 1994) and cannot be stored in one time period for consumption at a later date. This means that, unlike manufactured goods, it is not possible to have a final quality check. The service provider needs to get the service right first time, every time.

### 4.2.4 Inseparability of Production and Consumption

Production and consumption of many services are inseparable (Carmen and Langeard, 1980; Gronroos, 1978; Regan, 1963 and Upah, 1980). In service industries, the provider usually creates or performs the service at the time of consumption. The high visibility of the conversion process means that it is not possible to hide mistakes or quality shortfalls. Moreover, the involvement of the customer in the process introduces an additional factor over which management has little or no control. However, the behaviour of one group of customers does influence other customer's perception of service quality.

## 4.3 The Changing Environment for Service Industries

The emphasis on the service encounter and in particular, the contribution of service providers in enhancing and maintaining service quality arises from a number of trends such as changing consumer awareness and expectations, technological developments, and increased competitive elements (Lewis, 1989).

### 4.3.1 Consumer Awareness and Expectations

It is generally accepted that customers' expectations of quality are increasing (Leonard and Sasser, 1982; Takeuchi and Quelch, 1983; Roderique, 1986 and Smith and Lewis, 1988). Albrecht and Zemke (1985) claim that people are getting increasingly critical of the quality of service they experience. Expectations relate to elements of the marketing mix, which may be extended in the services sector to include "physical evidence", "process" and "People" (Booms and Bitner, 1981).

### 4.3.2 Technology

Advances in technology can make a major contribution to the delivery of a quality service. For example, Kreitzman (1987) sees new technology as an opportunity to increase service; Caradonna (1987) argues in favour of technological advances (e.g. self service) and increasing levels of customer service through customer convenience, which will also lead to cost saving- "self-service now means better service for convenience-conscious bank customers"; and Mulconrey (1986), examining the insurance industry, argues in favour of client-oriented information systems. He also suggests that "high tech" can create "high touch" and that management information systems can ensure that clients' needs are identified and served.

However, it is also accepted that technological developments make banks more impersonal, and that less personal contact may well means less customer loyalty (Lewis, 1989). Marshall (1985) found that leadership in technology was not that important for customers in insurance/financial service companies. Czarnecki (1988) possibly placed technology into perspective when he suggested that "technology is frequently the primary vehicle for delivering a service-it is, however a means to an end, the end being a satisfied customer". Similarly, Roderique's (1986) empirical work suggests that bank customers were more concerned about convenience and the quality of service than technological innovation. Britton (1987), reporting on the standards of service in the UK, found that customers wanted better personal service as well as technological efficiency.

### 4.3.3 The Competitive Environment

Most service industries consider quality to be a critical factor in determining a competitive edge, and there is an empirical evidence to suggest that it does allow companies to achieve an advantage over their competitors (Lewis, 1989). Ross and Shetty (1982) discuss the managerial revolution in the USA and the strategic challenge of service quality: "everything we know about strategy and strategic planning argues for the adoption of quality as a major component of mission and competitive advantage". Leonard and Sassetr (1982) similarly claim that "quality has become a major strategic variable in the battle for market share". Further, Albrecht and Zemke (1985) discuss the extent to which leading companies are putting a greater emphasis on service: "many more organizations are getting serious about the quality of the customer's experience, and are finding ways to improve it". Berry *et al.* (1989) believe that service excellence is a key strategic weapon- highlighting service quality as a marketing management strategy for the financial services industry; Hutchins (1986) states

that "quality is the business of the whole organization" and Jafe (1988) claims that "excellence of services is the critical corporate priority".

## 4.4 The External Service Quality Concept

External service quality is an elusive and abstract construct that is difficult to define (Brown and Swartz, 1989; Carmen, 1990; Crosby, 1979; Garvin, 1983; Parasuraman *et al.*, 1985; and Rathmell, 1966). There are many definitions of "quality". However, it is possible to classify the definitions of "quality" into five broad categories and their relevance to service organizations (Ghobadian *et al.*, 1994). These five categories are:

**(1) Transcendent.** Within this category "quality" is defined as innate excellence. The product or service will have unequalled properties. Under this definition much of Plato's philosophical analysis of beauty is transferable to the subject of quality. However, this definition of quality has little practical application because prior identification of determinants of quality is not possible. Implicit in this definition of "quality" is the relationship between individual salience and the perceived quality. The presence of this relationship has important implications for "good" and "service" quality.

**(2)** ***Product led.*** Under this heading "quality" is defined as the units of goodness packed into a product or service. Thus, a "quality" service will contain more units of goodness than a lower "quality" service. This definition relies on the quantification of the service's units of goodness or tangible attributes. In practice, however, it is not easy to clearly identify services' attributes, let alone quantify them. In addition, "goodness" is not absolute but relative to a particular circumstance.

**(3)** ***Process or supply led.*** In this approach, "quality" is defined as "conformance to requirements". This definition concentrates on the importance of the management and the supply-side quality. The focus is internal rather than external. Such a definition is useful for organizations, which perceive their problems as lying within the transformation process.

**(4)** ***Customer led.*** The focus under this approach is external. "Quality" which is defined as "satisfying customer requirements" or "fitness for purpose". This approach relies on the ability of the organization to determine and satisfy customer requirements. A "customer-led" definition implicitly encompasses the "supply-led" approach. This is because customer requirements are built into the service at the design stage, but it is at the transformation stage that the degree of satisfaction is determined.

**(5)** ***Value led.*** "Quality" in this final category is defined either as the "cost to the producer and price to the customer" or as "meeting the customer's requirements in terms of quality, price, and availability". The focus once again is external. The approach implies that there is a trade-off between "quality", "price" and "availability". The purchaser evaluates "quality", "price" and "availability" within the same decision algorithm.

Gronroos (1984) claimed that the perceived quality of a given service will be the outcome of an evaluation process, where the consumer compares his expectations with his perceptions of the actual service received. Service quality, therefore, is a measure of how well the delivered service level matches customer expectations. Delivering quality service means conforming to customer expectations on a consistent basis (Lewis and Booms, 1983). Smith and Houston (1982) claimed that satisfaction with services is related to "confirmation or disconfirmation" of expectations. They based their research on the disconfirmation paradigm, which maintains that satisfaction is related to the size and direction of the disconfirmation experience where disconfirmation is related to the person's initial expectations (Churchill and Suprenaut, 1982). Further, Sasser *et al.* (1978) developed further our understanding of service quality by identifying three different dimensions of service performance: levels of material, facilities, and personnel. Implicit in this trichotomy is the notion that service quality involves more than outcome; it also includes the manner in which the service is delivered.

Lehtinen and Lehtinen's (1982) basic premise is that service quality is produced by the interaction between a customer and elements in the service organizations. They use three quality dimensions: physical quality, which includes the physical aspects of the service (e.g., equipment or building); corporate quality, which involves the company's image or profile; and interactive quality, which derives from the interaction between contact personnel and customers as well as between customers and themselves. They further differentiate between the quality associated with the process of service delivery and the quality associated with the outcome of the service.

## 4.5 External Service Quality Models

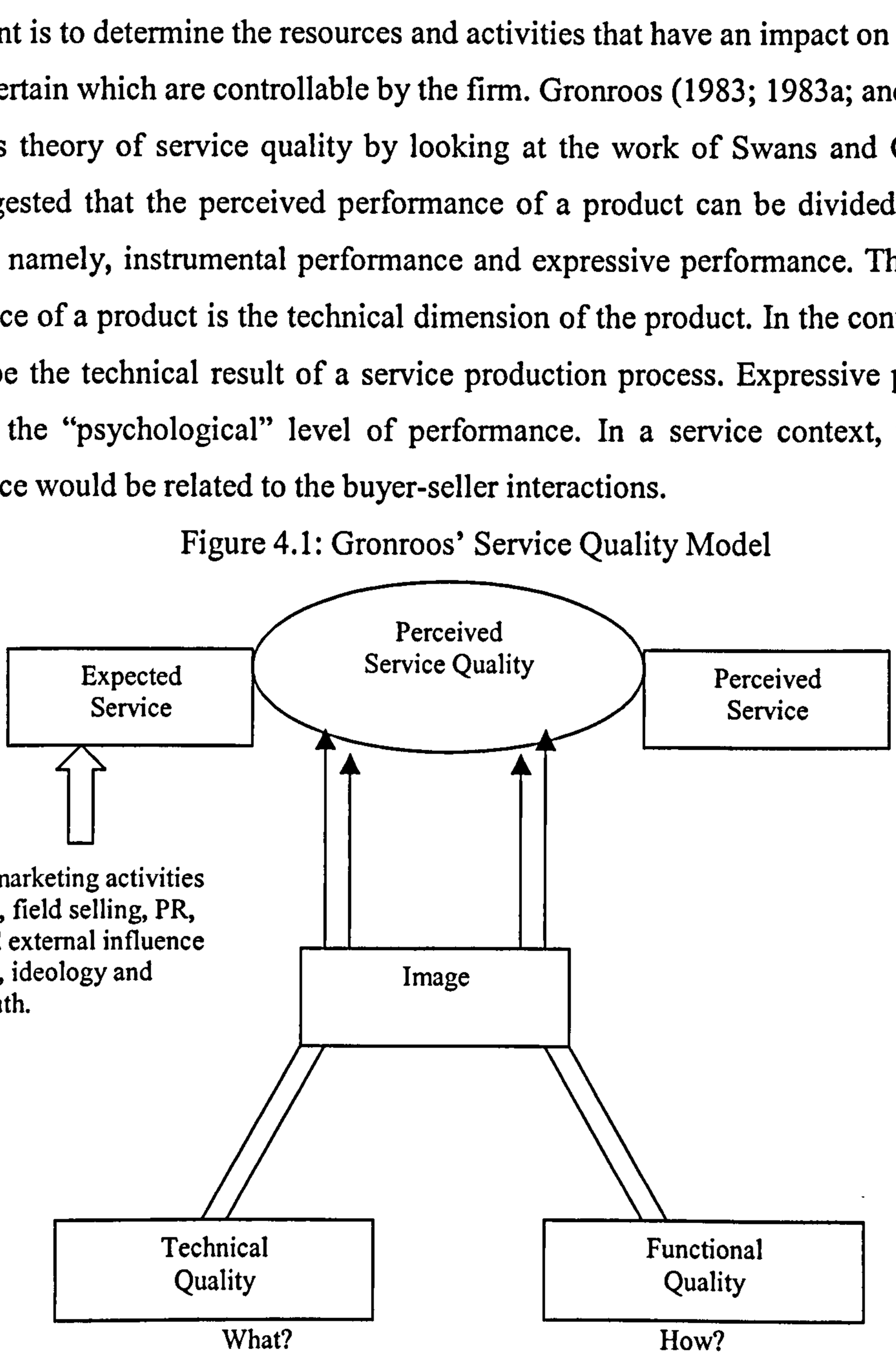
Although there are a considerable number of different approaches in the literature to modeling external service quality, three formal models can be clearly discerned: the Nordic school, the Gap school and the Holistic school.

### 4.5.1 Nordic School Model

The Nordic School is best represented by research conducted by Gronroos (1984). The primary aim of his research is to define how service quality is perceived by the consumer and determine in what way service quality is influenced. The model is shown in figure 4.1, and the rationale and theory underpinning it is discussed bellows.

Gronroos (1984) argued that the perceived quality of a given service will be the outcome of an evaluation process, in which the consumer compares his expectations with his perceptions of the actual service received. Hence, the quality of service is dependent on two variables: expected service and perceived service. In Gronroos' service quality model, a primary requirement is to determine the resources and activities that have an impact on these variables and to ascertain which are controllable by the firm. Gronroos (1983; 1983a; and 1984) further refined his theory of service quality by looking at the work of Swans and Combs (1976). They suggested that the perceived performance of a product can be divided into two sub-processes; namely, instrumental performance and expressive performance. The instrumental performance of a product is the technical dimension of the product. In the context of service, it would be the technical result of a service production process. Expressive performance is related to the "psychological" level of performance. In a service context, the expressive performance would be related to the buyer-seller interactions.

Figure 4.1: Gronroos' Service Quality Model




Source: Gronroos (1984)

Swans and Combs (1976) believed that satisfactory instrumental performance of the product is a prerequisite for consumer satisfaction, but that in itself this is not enough. If the expressive performance of a product is not considered satisfactory, the consumer will still feel unsatisfied, irrespective of the degree of satisfaction caused by the instrumental performance. For example, a bank may manage the affairs of a customer perfectly in a technical sense i.e. the instrumental performance is satisfactory, but if the customer is dissatisfied with the performance of the manager or the teller, he will probably feel unhappy with the service he gets from the bank.

**Technical Quality and Functional Quality**

Gronroos (1984) states that service is rendered to the consumer in the buyer-seller interactions. Clearly, what happens in these interactions will have an impact on perceived service because what the consumer receives is important to him and his evaluation of the quality of service. Gronroos (1984) claimed that there are two quality dimensions, which are quite different in nature: technical (instrumental) quality and functional (psychological) quality.

***Technical quality*** relates to the question of what the customer gets and is directly concerned with the material content of the buyer-seller interchange.

As such it is determined by the quality of the products and by the efficiency of business systems, etc.

***Functional quality*** relates to the question of how the customer receives the service. Specifically, this dimension of service quality divides into accessibility and appearance of staff, long term customer contacts, relationships within the firm, attitude, behaviour and service mindedness of service personnel, etc.

As service quality is produced in interactions with consumers, technical quality does not equate with total quality. Consumer will also be influenced by the way technical quality is transferred to him (Gronroos, 1984). The consumer is not only interested in "what" he receives as an outcome of the production process, but also in the actual process itself. The perceived service, therefore, is the result of a consumer's view of a bundle of service dimensions, some of which are technical and some of which are functional in nature. When perceived service is compared with expected service, we get the perceived service quality. The functional quality dimension cannot be evaluated as objectively as the technical dimension and can be very subjective. Gronroos (1984) believed that traditional marketing activities i.e. advertising, field selling, pricing, etc. can be used in order to give promises to

target customers. Such promises influence the expectations of the customers, and have an impact on the expected service. Moreover, word of mouth, traditions ("we have always done so") and ideology (religion, political involvement, etc.) may also have an effect on a customer's expectations. Furthermore, previous service experience also influence the expectations of customers. Perceived service, on the other hand, is the result of the consumer's perception of the service itself. Gronroos (1984) attempted to determine the relative importance of the technical and functional dimensions in the perception of service quality through an empirical study. This study indicated that functional quality is an important part of marketing. Moreover, it is more important to the perceived service level than technical quality. The results of Gronroos'study also indicated that a high level of functional quality may compensate for temporary problems with technical quality.

**Image as a Quality Dimension**

Corporate image is of the utmost importance to most service firms (Gronroos, 1984). The expectations of the consumers are influenced by their view of the company, i.e. by its the image. Gronroos (1984) argued that corporate image is the result of how customers perceive the firm and that the most important part of a firm, which its customers see and perceive, are its services. Therefore, corporate image can be expected to be influenced and based on technical and functional quality. There are other factors, which influence image, but Gronroos argued that these are less important than service. Traditional marketing activities such as advertising can be very effective in informing new target markets about image (Gronroos, 1984). However, advertising Campaigns, or other traditional marketing activities, should not be launched, if the picture of the firm that is presented to customers does not reflect existing technical and functional quality dimensions. All traditional marketing efforts have an impact on the expectations of the customer, and an advertising campaign which gives the impression that service is better than it really is, will increase customer expectations. If the perceived service remains the same, the gap between expected service and perceived service will grow, and lead to promises conflict.

### 4.5.2 Gap Analysis School Model

The Gap school is represented by research conducted by Parasuraman *et al.* (1985). They reviewed a small number of empirical studies on service quality and investigated four service industries. This helped them to develop a model of service quality, and offer propositions about future research and quality. After reviewing a small number of studies on service quality, Parasuraman, *et al.* (1985) claimed that:

(1) Service quality is more difficult for the consumer to evaluate than goods quality.
(2) Service quality perceptions result from a comparison of consumer expectations with actual service performance.
(3) Quality evaluations are not made solely on the outcome of a service; they also involve an evaluation of the process of service delivery.

**Parasuraman *et al.* Exploratory Investigation**

Parasuraman *et al.* (1985) stated that the literature on service quality was not rich enough to provide a sound conceptual foundation for investigating service quality. They, therefore, completed an exploratory qualitative study into the concept of service quality. This involved focus group interviews with consumers and in-depth interviews with executives. Four service categories were chosen for investigation: retail banking, credit card, securities brokerage, and product repair and maintenance.

The aim of this exploratory investigation was to gain insights about the following questions:

(1) What do managers of service firms perceive to be the key attributes of service quality?
(2) What problems and tasks are involved in providing high quality service?
(3) What do consumers perceive to be the key attributes of quality in services?
(4) Do discrepancies exist between the perceptions of consumers and service marketers?
(5) Can consumer and marketer perceptions be combined in a general model that explains service quality from the consumer's standpoint?

**Quality Gap Analysis Model**

Parasuraman *et al.* (1985) argued that the most important insight obtained from analyzing the executive responses was the following:

*A set of key discrepancies or gaps exists regarding executive perceptions of service quality and the tasks associated with service delivery to consumers. These gaps can be major hurdles in attempting to deliver a service which consumers would perceive as being of high quality.*

Parasuraman *et al* (1985) argued that there are four gaps revealed by executives and one gap revealed by customers (see figure 4.2). These gaps are:

***(Gap1) Consumer Expectation-Management Perception Gap (the difference between consumer expectations and management perceptions of customer expectations)***. In essence, service firms executives (marketers) may not always understand what features connote high quality to consumers, what features a service must have in order to meet consumer needs, and what levels of performance are needed to deliver high quality service. This is consistent with

previous research in services, which suggests that service marketers may not always understand what consumers expect in a service (Langeard *et al.* 1981; and Parasuraman and Zeithaml 1982). This lack of understanding may affect quality perceptions of consumers. Parasuraman *et al* (1985) proposed that the gap between consumer expectations and management perceptions of those expectations will have an impact on the consumer's evaluation of service quality.

***(Gap2) Management Perception-Service Quality Specification Gap (the difference between management perceptions of consumer expectations and service quality specifications).*** A variety of factors such as resource constraints, market conditions, and management indifference may result in a discrepancy between management perceptions of consumer expectations and the actual specifications established for a service. This discrepancy is predicted to affect quality perceptions of consumers. Parasuraman *et al.* (1985) proposed that the gap between management perceptions of consumer expectations and the firm's service quality specifications will affect service quality from the consumer's viewpoint.

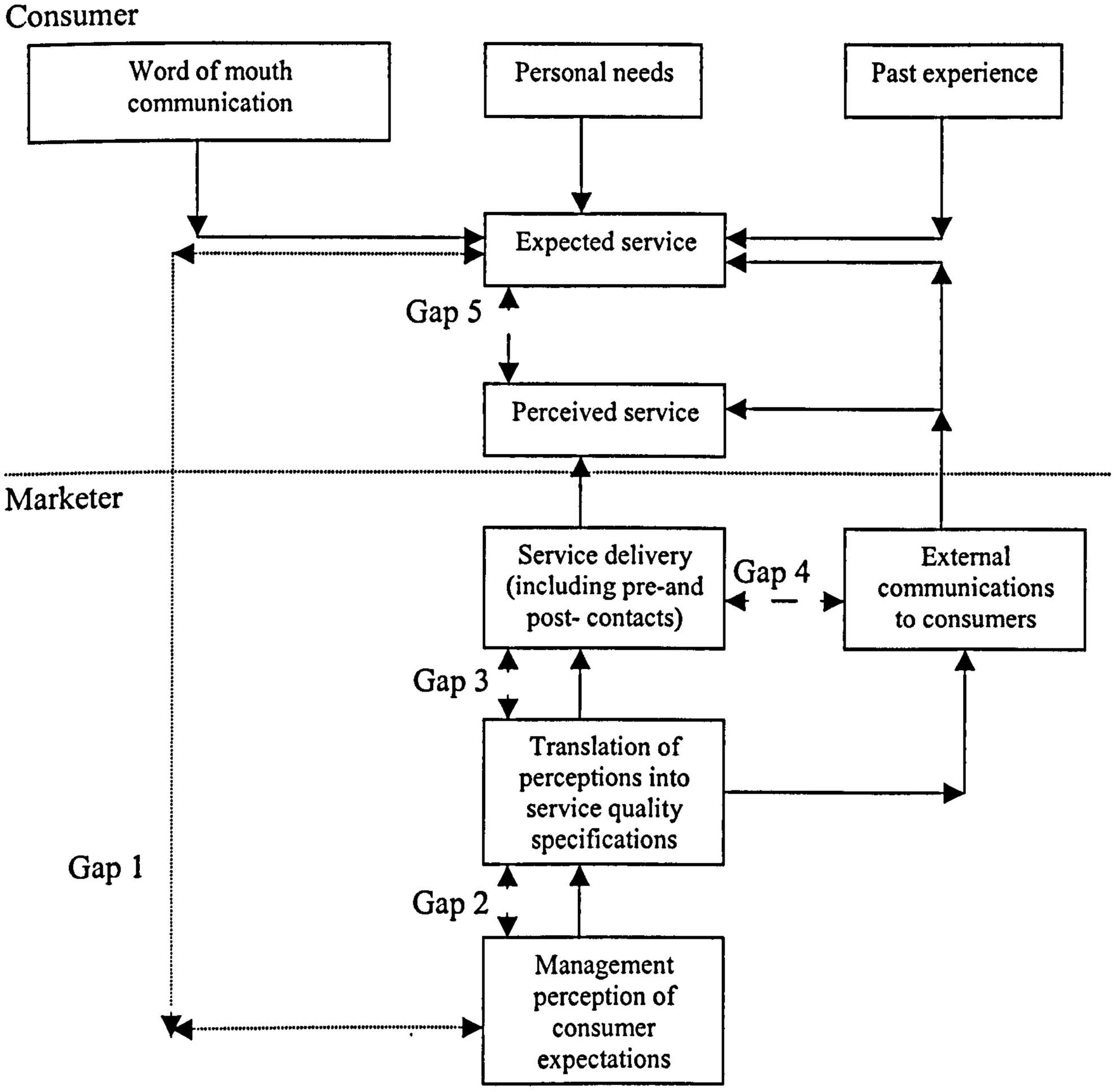
***(Gap3) Service Quality Specifications-Service delivery Gap (the difference between service quality specifications and the service actually delivered).*** Even when guidelines exist for service performance and treating consumers correctly, a high quality of service performance may not be a certainty. A service firm's employees exert a strong influence on the service quality perceived by consumers but employee performance cannot always be standardized. Parasuraman *et al* (1985) proposed that the gap between service quality specifications and actual service delivery will affect service quality from the consumer's standpoint.

***(Gap4) Delivery-External Communications Gap (the difference between service delivered and what is communicated about the service to consumers).*** Parasuraman *et al.* (1985) state that media advertising and other communications by a firm can affect consumer expectations. If expectations play a major role in consumer perceptions of service quality, the firm must be certain not to promise more in communications than it can realistically deliver. Promising more than can be delivered will raise expectations but lower perceptions of quality when the promises are not fulfilled. External communications can affect not only consumer expectations about a service but also consumer perceptions of the delivered service. Alternatively, discrepancies between service delivery and external communications-in the form of exaggerated promises or the absence of information about service delivery -can affect consumer perceptions of service quality. Parasuraman *et al.* (1985) proposed that the gap

between actual service delivery and external communications about the service will affect service quality from a consumer's standpoint.

**On the consumer side one gap was revealed, *(Gap5) Expected Service-Perceived Service Gap (the difference between the consumer's expected and perceived quality of a service).*** This gap represents the direction and the magnitude of the discrepancy between the consumer's perceptions of the actual service performance and his expectations for the service. Parasuraman *et al.* (1985) claimed that judgments of high and low service quality depend on how consumers perceive the actual service performance in the context of what they expected. They proposed that the quality that a consumer perceives in a service is a function of the magnitude and direction of the gap between expected service and perceived service.

Figure 4.2: Gap Analysis Model




Source: Parasuraman *et al.* (1985)

As figure 4.2 shows, service quality as perceived by a consumer depends on the size and direction of Gap5, which in turn, depends on the nature of the other four gaps associated with the design, marketing, and delivery of services.

**Determinant of Perceived Service Quality**

Parasuraman *et al.* (1985) state that consumers used basically similar criteria in evaluating service quality. These criteria fall into 10 key categories, which are labeled "service quality determinants" as shown in figure 4.3. These determinants are:

(1) ***Reliability*** involves consistency of performance and dependability.

(2) ***Responsiveness*** concerns the willingness or readiness of employees to provide a service and the ability to deal effectively with complaints.

(3) ***Competence*** means possession of the required skills and knowledge to perform the service.

(4) ***Access*** involves approachability and ease of contact.

(5) ***Courtesy*** involves politeness, respect, consideration, and the friendliness of contact personnel.

(6) ***Communication*** means keeping customers informed in a language they can understand but it also involves the company listening to its customers. It may mean that the company has to adjust its language for different consumers increasing the level of sophistication with a well-educated customer and speaking more simply and plainly with young or less educated customers.

(7) ***Credibility*** involves trustworthiness, believability, and honesty. The service provider's name and reputation, and the personal traits of front line staff all contribute to credibility. It typically involves having the customer's best interests at heart.

(8) ***Security*** is the freedom from danger, risk, or doubt. It involves physical safety, financial security and confidentiality.

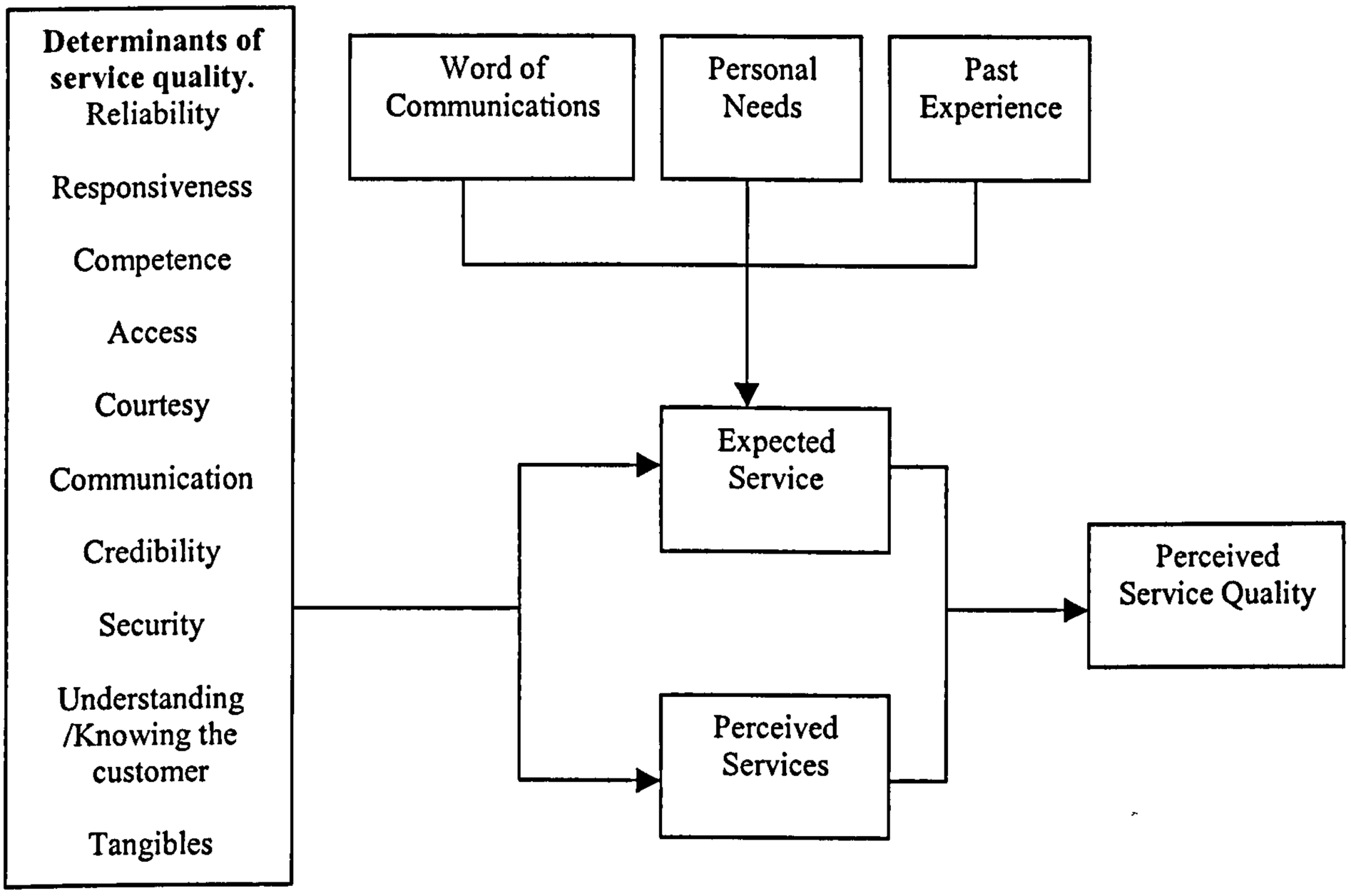
(9) ***Understanding/Knowing the customer*** involves making the effort to understand the customer's needs and specific requirements, providing individualized attention, and recognizing regular customers.

(10) ***Tangibles*** include the physical evidence of the service. They include the state of facilitating goods, physical condition of the buildings and the environment, appearance of personnel, and condition of equipment.

Figure 4.3 indicates that perceived service quality is the result of the consumer's comparison of expected service with perceived service. Parasuraman *et al.* (1985) claim that the

comparison of expected and perceived service is not unlike that performed by consumers when evaluating goods. What differs with services is the nature of the characteristics upon which they are evaluated. One framework for isolating differences in the evaluation of quality for goods and services is the classification of properties of goods proposed by Nelson (1974) and Darby and Karni (1973).

Figure 4.3: Determinants of Perceived Service Quality




Source: Parasuraman *et al.* (1985)

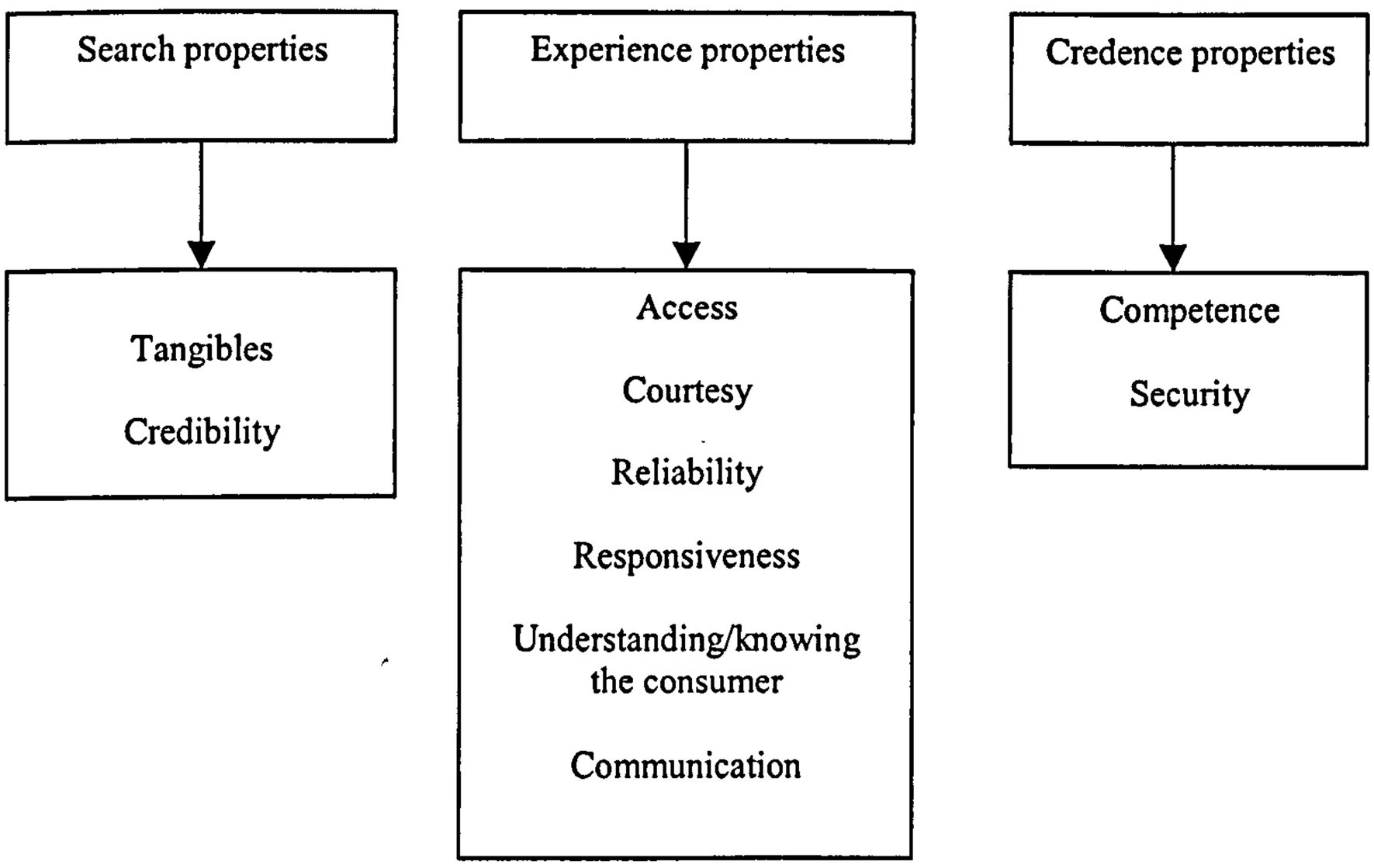
Nelson (1974) distinguished between two categories of properties of consumer goods: search properties, attributes which a consumer can determine prior to purchasing a product, and experience properties, attributes which can only be discerned after purchase or during consumption. Search properties include attributes such as color, style, price, fit, feel, hardness, and smell, while experience properties include characteristics such as taste, wearability, and dependability. Darby and Karni (1973) added to Nelson's two-way classification system a third category, credence properties, characteristics which the consumer may find impossible to evaluate even after purchase and consumption. Credence properties are fairly common in retail banking, especially, those which involve the purchase of complex long-term investments.

Parasuraman *et al.* (1985) argued that during the exploratory investigation, consumers in the focus groups mentioned search, experience, and credence properties when asked to describe and define service quality. These aspects of service quality can be categorized into the 10

service quality determinants and can be arrayed along a continuum ranging from easy to evaluate to difficult to evaluate. In general, services high in search properties are easiest to evaluate, followed by those high in experience properties, and those high in credence properties are the hardest to evaluate. Most services contain few search properties and are high in experience and credence properties, making their quality difficult to evaluate compared to goods (Zeithaml, 1981).

Parasuraman *et al.* (1985) stated that two of the ten determinants-tangibles and credibility-can be known in advance of purchase and this reduces the number of search properties. Other service quality dimensions such as, access, courtesy, reliability, responsiveness, understanding/knowing the consumer, and communication are experience properties, which can only be known as and when the consumer purchases or consumes the service. Two of the determinants probably fall into the category of credence properties, i.e. those which consumers cannot evaluate even after purchase and consumption, these include competence and security. Consumers are probably never certain of these attributes, even after consumption of the service. The classification of the determinants of service quality under search, experience and credence properties are shown in figure 4.4. As there are only a few research properties and because credence properties are too difficult to evaluate, Parasuraman *et al.* (1985) proposed that consumers typically rely on experience properties when evaluating service quality.

Figure 4.4: Classification of the Determinants of Service Quality




Source: Author

Parasuraman *et al* (1985) concluded that perceived service quality exists along a continuum ranging from ideal to totally unacceptable quality, with some point along the continuum representing satisfactory quality. The position of a consumer's perception of service quality on the continuum depends on the nature of the discrepancy between the expected service (ES) and perceived service (PS). They proposed that:

(1) When ES > PS, perceived quality is less than satisfactory and will tend toward totally unacceptable quality, with increased discrepancy between ES and PS;

(2) When ES = PS, perceived quality is satisfactory;

(3) When ES < PS, perceived quality is more than satisfactory and will tend toward ideal quality, with increased discrepancy between ES and PS.

**SERVQUAL Scale**

Parasuraman *et al.* (1988) developed a multiple item scale for measuring service quality called SERVQUAL. Both the exploratory research of Parasuraman *et al.* (1985) in which 10 dimensions of service quality were identified, and the works of other researchers examining service quality (Gronroos, 1983; Lehtinen and Lehtinen, 1982; and Sasser *et al.* 1978) served as the basis for the development of SERVQUAL, a 22 items instrument for assessing customer perceptions of service quality in service and retailing organizations. In SERVQUAL, the 97 items relating to the 10 dimensions of service quality (Parasuraman *et. al*, 1985) are reduced to 22 items which relate to 5 dimensions (three original and two combined). An examination of these five dimensions suggests the following definitions:

(1) ***Tangibles***: the appearance of physical facilities, equipment, personnel and communication materials.

(2) ***Reliability***: the ability to perform the promised service dependably and accurately.

(3) ***Responsiveness***: the willingness to help customers and provide prompt service.

(4) ***Assurance***: the knowledge and courtesy of employees and their ability to inspire trust and confidence.

(5) ***Empathy***: the provision of caring individualized attention to customers.

Of all these dimensions, reliability has emerged as the most important one from the customer's viewpoint regardless of the service being studied (Berry *et al.*, 1988).

SERVQUAL contains 22 pairs of items. Half of these are intended to measure the consumers' expected levels of service for a particular service (expectations). The other 22 items are intended to measure the consumers' perceived level of service (perceptions). The items are presented in a 7-point Likert response format and service quality is measured by

calculating the difference between scores for the corresponding items (i.e. perceptions minus expectations). Table 4.1 contains the five dimensions and the 22 items of the SERVQUAL measurement instrument. The SERVQUAL scale has been widely used by both academics and practicing managers to measure service quality.

Table 4.1: Items List of SERVQUAL Measurement Instrument

| | | |
|---|---|---|
| **Tangibles** | T1 | Has up-to-date equipment. |
| | T2 | Physical facilities are visually appealing. |
| | T3 | Employees are neat in appearance. |
| | T4 | Materials are visually appealing. |
| **Reliability** | Rel 1 | When promises to do something, it does so. |
| | Rel 2 | Shows sincere interest in solving problems. |
| | Rel 3 | Performs the service right the first time. |
| | Rel 4 | Provides services at the time it promises. |
| | Rel 5 | Keeps accurate records. |
| **Responsiveness** | Res 1 | Tells you when the service will be performed. |
| | Res 2 | Gives prompt service. |
| | Res 3 | Always willing to help. |
| | Res 4 | Never too busy to respond to your requests. |
| **Assurance** | A1 | Employees can be trusted. |
| | A2 | Feel safe in your transactions with employee. |
| | A3 | Consistently courteous. |
| | A4 | Has knowledge to answer your questions |
| **Empathy** | E1 | Gives individual attention. |
| | E2 | Has operating hours convenient to you |
| | E3 | Employees give personal attention |
| | E4 | Has your best interests at heart |
| | E5 | Employees understand your specific needs |

Source: Lam and Woo (1997)

**Critiques on SERVQUAL**

After SERVQUAL was proposed by Parasuraman *et al.* (1988), several critiques were levied against it. For instance, Carman (1990) argued that SERVQUAL could not be a generic measure that could be applied to any service. It needed to be customized to the specific service. Babakus and Boller (1992) also maintained that the dimensionality of service quality may depend on the type of services under study. In addition, in their empirical analysis, perceptions-only measures had higher correlations with an overall service quality measure and with complaint resolutions scores than did the SERVQUAL measures. This finding was also supported in studies by Cronin and Taylor (1992) and Boulding *et al.* (1993). Cornin and Taylor (1992) questioned the validity of SERVQUAL and proposed alternative models. Bowen *et al.* (1993) also challenged conceptualizing service quality as difference score measure. The critiques made by these two studies will now be reviewed in more detail.

***Cronin and Taylor's SERVPERF.*** Cronin and Taylor (1992) argued that SERVQUAL confounds satisfaction and attitude. They stated that service quality can be conceptualized as

"similar to attitude", and can be operationalized by the "adequacy-importance" model. In particular, they maintained that "performance" instead of "performance – expectation" determines service quality and that developed an alternative measurement tool, SERVPERF, which concerns only performance. In their empirical study, SERVQUAL appeared to have a good fit in only two of the four industries examined, whereas SERVPERF had an excellent fit in all four industries.

In response to the Cronin and Taylor's (1992) critique, Parasuraman *et al.* (1994) defended their position by insisting that past research provides strong support conceptually and empirically for service quality as the discrepancy between expectations and perceptions (e.g. Bolton and Drew, 1991a; 1991b; and Zeithaml *et al.*, 1991).

***Brown et al.'s Non-Difference Score Measure.*** Brown *et al.* (1993) argued that the calculation of a difference score in the SERVQUAL measure could lead to several psychometric problems, therefore, a non-difference score measure would be more desirable. In line with their arguments, their empirical investigation indicated that:

(1) The reliability of SERVQUAL was below that of non-difference score measure;

(2) SERVQUAL could not achieve discriminant validity but a non-difference score displayed better discriminant validity;

(3) Variance restriction effects were exhibited in using SERVQUAL; and

(4) A non-difference score measure outperformed SERVQUAL on other psychometric consideration while requiring subjects to respond to only half as many items.

Parasuraman *et al.* (1993) responded to Brown *et al.*'s (1993) critiques of SERVQUAL's difference score conceptualization. They argued that the superiority of the non-difference score conceptualization were debatable. Their arguments can be summarized as follows. First, regarding reliability, their own findings from multiple studies demonstrating high reliabilities of their SERVQUAL measures. Second, regarding discriminant validity, they argued that the difference score formulation displayed somewhat stronger discriminant validity than did the non-difference score formulation. Third, variance restriction problem may arise when difference score are used in multivariate analysis. However, it is not relevant when difference scores are used for diagnostic purposes. Finally, they argued that the SERVQUAL measure has more diagnostics, therefore, more practical implication than has the perceptions only measure.

### 4.5.3 Holistic School Model

The main proponents of this school are LeBlanc and Nguyen (1988). They note that the literature on service quality is mostly normative and descriptive in nature and that it reveals three principal schools of thought with regards to how customers evaluate quality:

(1) The first postulates that service quality resides in the physical environment associated with the service offering. These are the tangible elements of the service production system which act as indicators of perceived quality (Shostack, 1977; Berry, 1980; Levitt, 1981; Flipo, 1984; and Lehtinen and Laitamaki, 1984).

(2) The second proposes that service quality is achieved through the performance of contact personnel. Perceived quality thus lies in the staff's attitude and behaviour (Rathmell, 1974; Hostage, 1975; and Solomon *et al.*, 1985).

(3) The third seeks to describe perceived quality in terms of degree of customer satisfaction derived from the service encounter (Lewis and Booms, 1983; Nightingable, 1983; and Eiglier and Langeard, 1987).

LeBlanc and Nguyen (1988) argue that the models of service quality, proposed by Lehtinen and Laitamaki (1984); Gronroos (1984) and Parasuraman *et al.* (1984) based on the assertion that service quality are mostly derived from a comparison of customer expectations and service received. However, because of a lack of empirical testing, these models do not show how customers perceive quality, nor what determines their perception of quality.

**The Conceptual Holistic School Model**

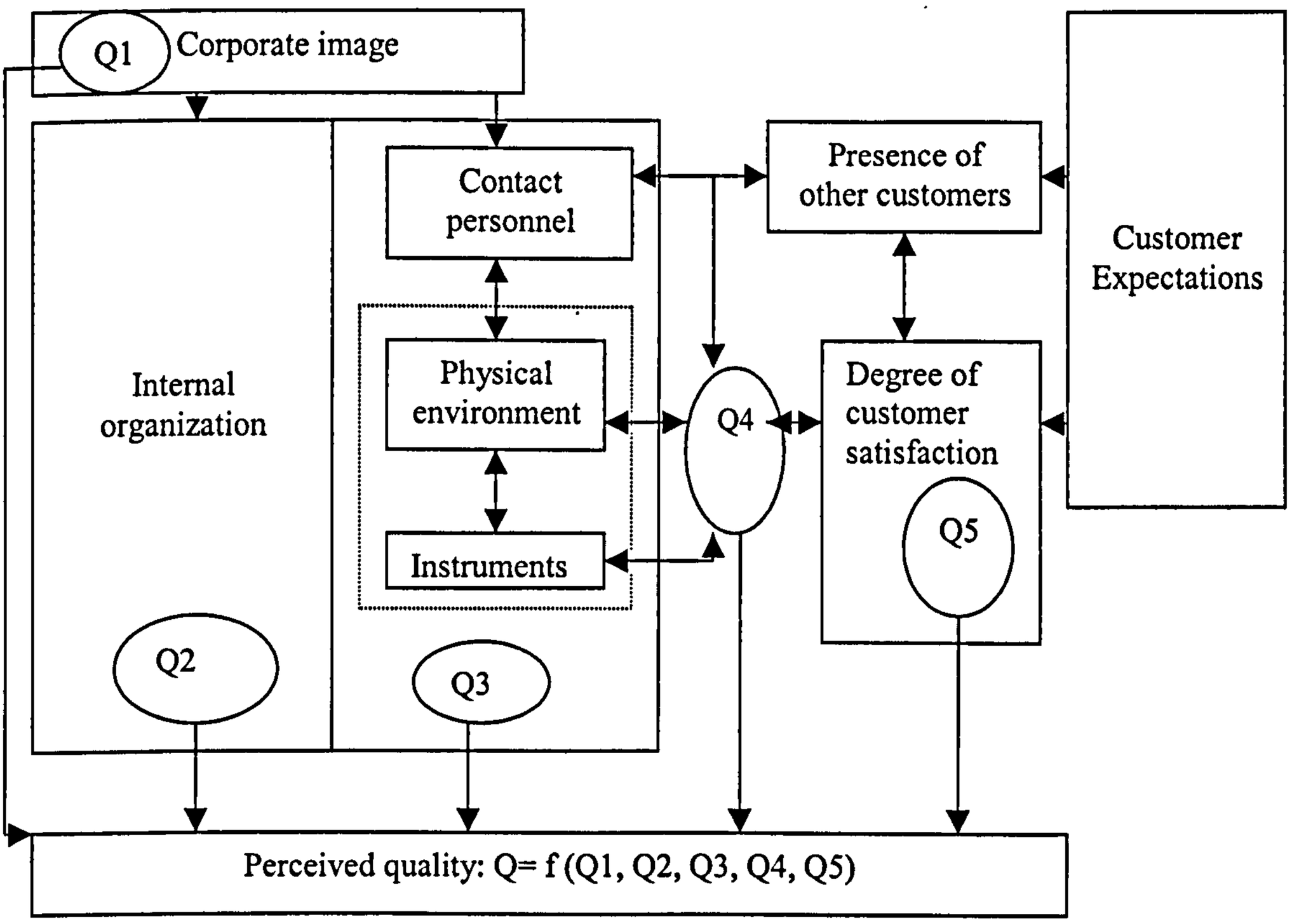
LeBlanc and Nguyen (1988) used insights obtained from the literature on service quality to develop an holistic model of service quality. This model proposes that when asked to evaluate a service offering, the consumer's judgment will be based on certain characteristics relating either to the service provider, or to other elements associated with the service offering such as the appearance, reliability, competence, punctuality and discretion of staff. In addition, other tangible clues like location, instruments used to provide service, size of institution, décor and atmosphere etc. are also important in determining the quality of the service.

LeBlanc and Nguyen (1988) identified five quality components on which the consumer's judgment of service quality is based. These are: corporate image, internal organization, physical support of the service producing system, customer/staff interaction and the degree of customer satisfaction (see figure 4.5).

(1) ***Corporate image*** is defined by various attributes, including the name of the business, its reputation, prices, access to service, the distinctive character of the business, variety of service offered, promises of expected benefits, competitiveness and concern for customers' well-being.

(2) ***Internal organization*** refers to the instruments and staff that are not visible to customers, but which are necessary for the operation to run smoothly. In general, the customer does not have any detailed or specific information on back office support systems, but still has the capacity to judge their effectiveness. Characteristics related to the internal organization would include the skills of the back office personnel and their ability to offer support services in a timely manner, technology used by the institution, and communication with customers through promotional activities.

Figure 4.5: The Conceptual Holistic Model of Service Quality




Source: LeBlanc and Nguyen (1988)

(3) ***Physical environment and instruments*** include such tangible elements as décor and ambience associated and created by the service provider. These physical properties include décor and atmosphere, appearance of buildings and grounds, layout and furniture arrangement, business hours, parking facilities, location, and other instruments used to provide service.

(4) ***The service encounter consists of customer/staff interactions***. Dimensions associated with this encounter would include appearance of staff, friendliness, competence, punctuality and reliability, timeliness and confidentiality, attentiveness, staff attitude, behaviour of other customers, and the procedures used in service delivery.

(5) ***Customer satisfaction*** is the outcome of the service encounter and reflects the comparison of customer expectations with the performance of the service provided.

**Holistic Exploratory Study**

LeBlanc and Nguyen (1988) used the conceptual framework as a basis for conducting an exploratory study into service quality determinants in financial institutions. A random sample of 2500 "user-members" of credit unions serving mainly the Francophone population of New Brunswick received mail questionnaires. They argued that the results supported the view that service quality is derived principally from customer satisfaction, i.e. the institution's capacity to meet customer expectations. Other factors that contributed to service quality were: the contact personnel, through their behavior; the internal organization, through its back office support system; the tangible evidence associated with the physical environment and instruments used to provide service; the image, reflected by the corporate entity and the interactions that take place between contact personnel and customers during the service delivery process. The results also indicated that the customer interaction factor was not significant. This suggests that the interactions between customers when, for example, they are waiting for service has no bearing on their assessment of service quality. Although this factor was not significant, management must nonetheless assure that service are provided in a timely manner.

**Holistic Model Managerial Implications**

LeBlanc and Nguyen (1988) emphasized some management implications which stem from their service quality model:

(1) Certain authors (Lewis and Booms, 1983; Nightingale, 1983; Parasuraman *et al.*, 1984; and Eiglier and langeard, 1987) have proposed that service quality is related to the degree of customer satisfaction derived from the service offering. LeBlanc and Nguyen (1988) state that customer satisfaction is the most important factor in explaining service quality in financial institutions. Management must therefore further investigate the process by which customer expectations are formed and compared to actual performances. Ensuring customer satisfaction along the service delivery process is thus a key element of service quality. Control can be exercised before and during the process, by accentuating and

controlling service delivery procedures (Shostack, 1977), or after the process, through advertising that reinforces the guarantee of satisfaction.

(2) LeBlanc and Nguyen (1988) claimed that services require a high degree of contact between personnel and customers, therefore, special attention must be paid to the staff's behaviour. Managerial actions should be guided by certain characteristics such as the attitude of staff, their competence, appearance, and sense of professionalism.

(3) The internal organization of the service firm must also be considered. Back office support staff must continuously provide pertinent information to customers on services offered, and operating procedures must run smoothly while guaranteeing the accuracy of transactions.

(4) The physical environment and instruments used while providing service quality is another point to consider. Management must manage the evidence in such a way that the service experience is pleasant and the tangible elements such as furniture arrangement, décor, and the overall "atmospherics" (Kotler, 1974) reinforce the institution's positioning statement.

(5) Corporate image is an important dimension to consider when establishing quality standards. Image can vary on a tangible/intangible continuum where control can be exercised on tangible dominant aspect such as guaranteed deposits and contribution to society by sponsoring charitable, cultural or sporting events, or on intangible dominant aspect such as reputation or prestige (LeBlanc and Nguyen, 1988).

### 4.5.4 Other Academic Models on External Service Quality

**Organizational Service Quality Improvement Model**

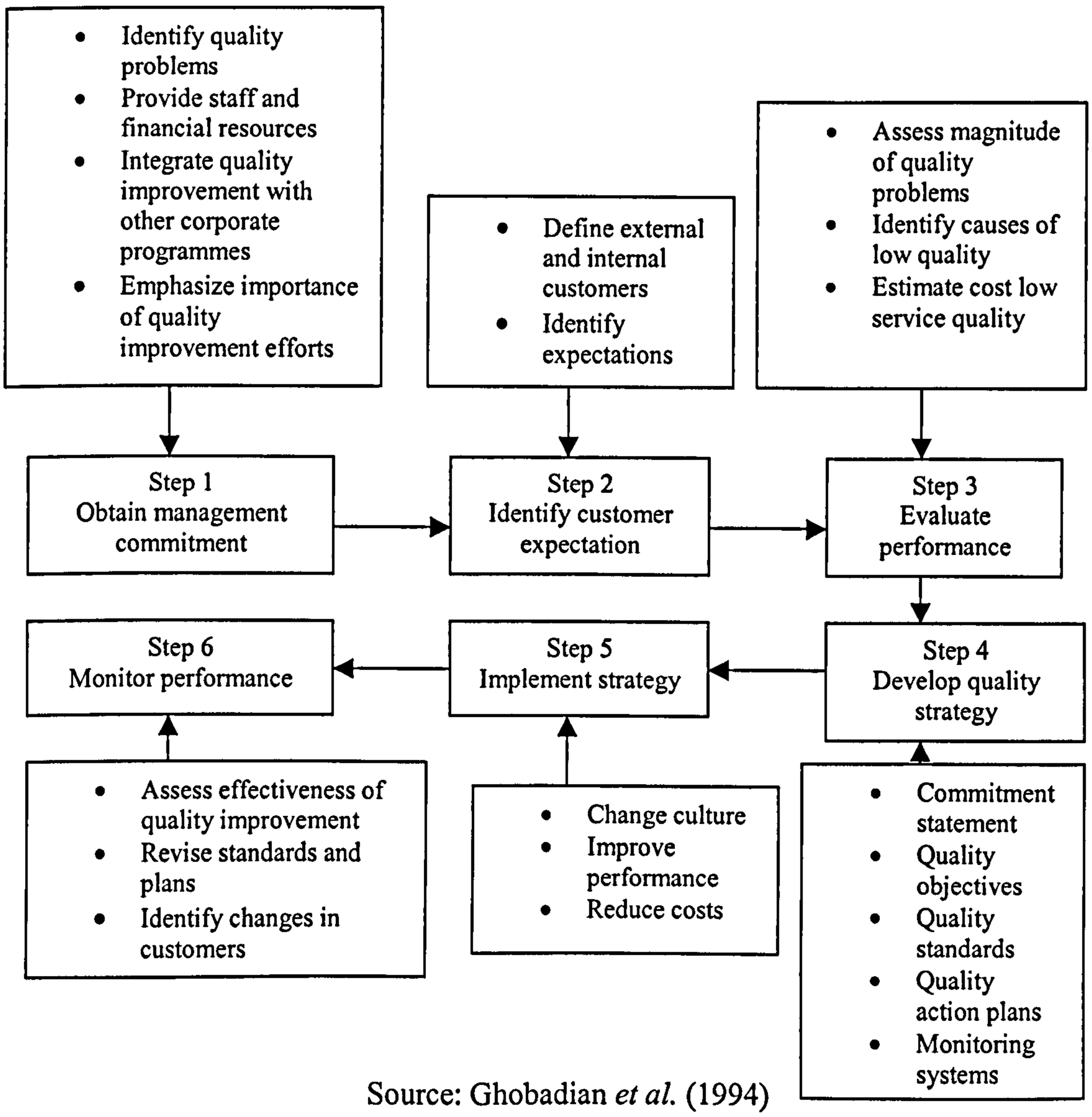
Moore (1987) proposed a model consisting of six steps. Figure 4.6 depicts this model and the pertinent factors at each step. It is evident from figure 4.6 that steps 2, 3,and 4 are the key components of the model. The key output of step 4 is the "quality action plan". The plan typically will include: an objectives statement, an order of priority, a description of the proposed improvement activities, an implementation schedule, and a list of required resources. The proposed monitoring system should attempt to measure both internal and external customer satisfaction. This model also provides a framework for addressing broad organizational quality issues.

**Service Quality Trade-Off Continuum and Suggested Positions Model**

The service quality trade-off continuum and suggested positions model was proposed by Haywood-Farmer (1988). He argued that a service organization has "high quality" if it meets customer preferences and expectations consistently. The key element in the attainment of

"high quality" is the identification of customers' service requirements and expectations. Haywood-Farmer (1988) suggested that the separation of attributes into groups is the first step towards the development of a service quality model. In general, services have three basic attributes: physical facilities, processes and procedures; people's behaviour and conviviality; and professional judgment. Each attribute consists of several factors. In this model, each set of attributes forms an apex of a triangle as shown in figure 4.7. The management's task is to identify where the organization is allocated in this nexus. This will enable them to provide a service whose elements are internally consistent and focused on meeting the needs of a specific segment of the target market. In deciding the appropriate position of the service, management needs to consider three "operational" factors. These factors are: the degree of service customization; the degree of labour intensity; and the degree of contact and interaction.

Figure 4.6: Organizational Service Quality Improvement Model

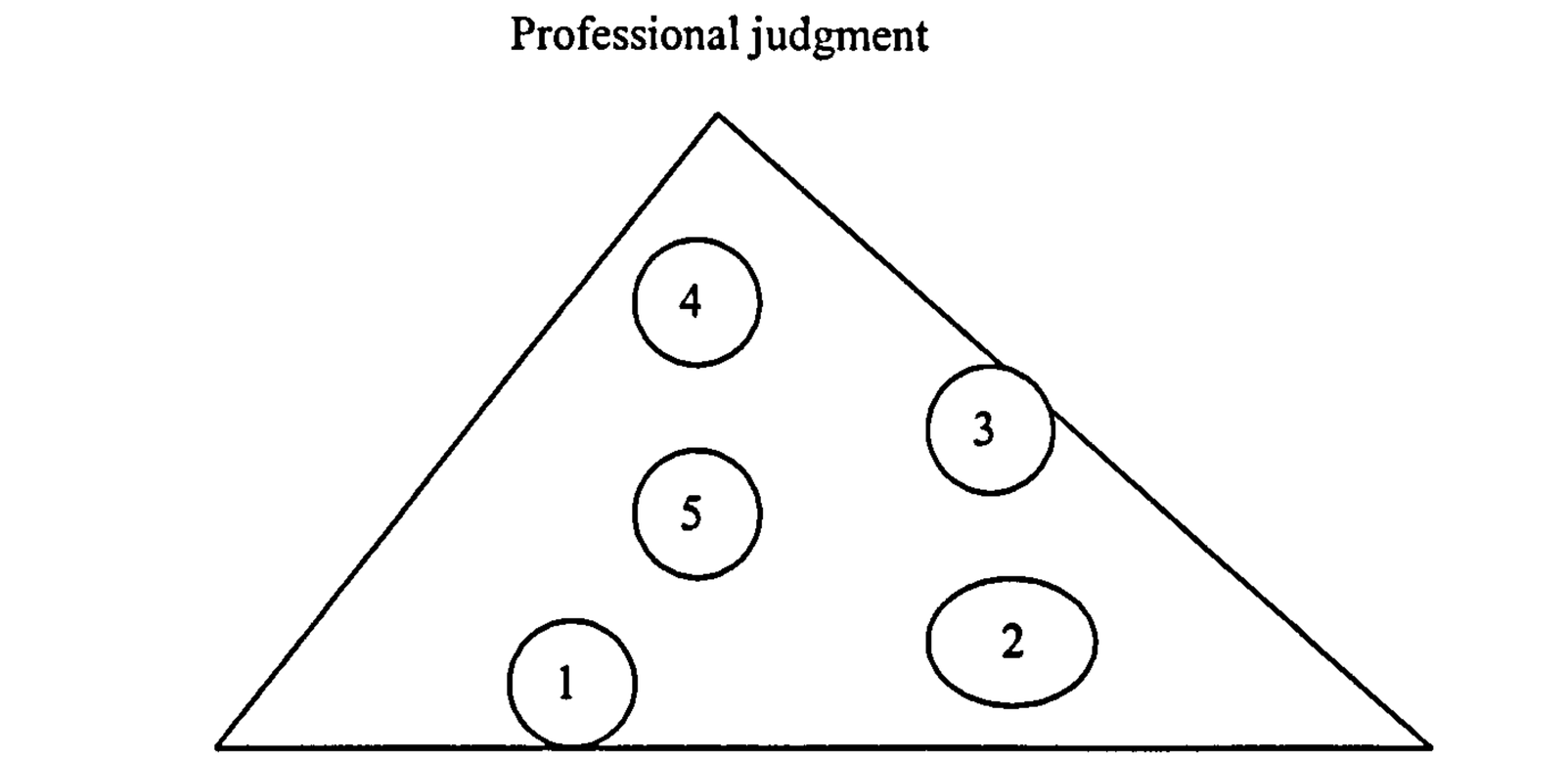



Source: Ghobadian *et al.* (1994)

**Modified Service Journey Model**

The modified service journey model was proposed by Nash (1988). It is generally recognized that consumers evaluate the service they receive, and their expectations are critically important in determining whether or not they are satisfied (Brown and Swartz, 1989). Nash (1988) suggested his model based on the "service journey" idea.

Figure 4.7: Service Quality Trade-Off Continuum and Suggested Positions Model




Physical facilities, process and procedures:
Location, layout
Size, décor
Facility reliability
Process flow, capacity balance, control of flow
Process flexibility
Timeliness, speed
Range of services offered
Communication

People's behaviour and conviviality:
Timeliness, speed
Communications (verbal, non-verbal)
Warmth, friendliness, tact, attitude, tone of voice
Dress, neatness, politeness
Attentiveness, anticipation
Handling companies, solving problems

Professional judgment:
Diagnosis
Advice, guidance, innovation
Honesty, confidentiality
Flexibility, discretion
Knowledge, skill

Key:
1.Short contact/interaction intensity – low customization, for example, utilities
2.Medium contact/interaction intensity – low customization, for example, theme parks
3.High contact/interaction intensity – low customization, for example, education
4.Low contact/interaction intensity – high customization, for example, stockbroking
5.High contact/interaction intensity – high customization, for example, medical or design.

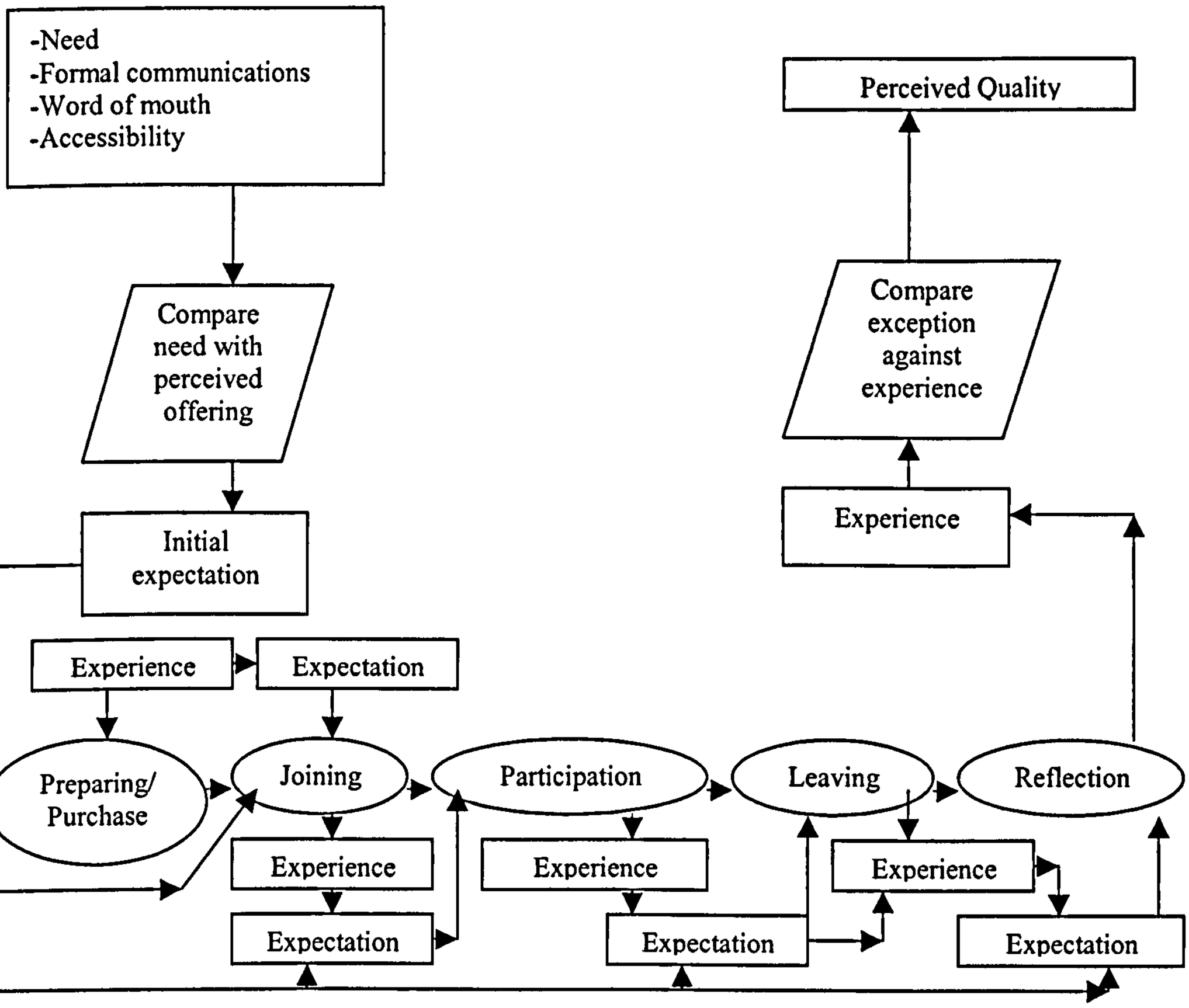
Source: Ghobadian *et al.* (1994)

Figure 4.8 depicts the typical stages of a "service journey". The experience at a given stage and the expectations formed prior to purchase help to shape the expectations for the next stage. "Service journey" is initiated by "need". Purchase will occur if there is match between consumers' "need" and the perceived service "offering". Accurate communications and reputation are the key determinants for the consumers' selection of the provider. Promotion

and prior communication also influences perceptions at the "participating", "leaving", and "reflecting" phases of the "service journey".

Another model proposed by Johnston (1988) is based on the same premise. This model is depicted in figure 4.9. The model identifies the important points prior to, during, and at the end of the service delivery where experiences at each point shape expectations for the next stage. Customers' expectations are dynamic and are influenced at each stage of delivery by different factors. These two models are useful because they help management to identify areas that influence customers' perceptions of "service quality" and where they need to concentrate their quality control and improvement efforts.

Figure 4.8: Modified Service Journey Model



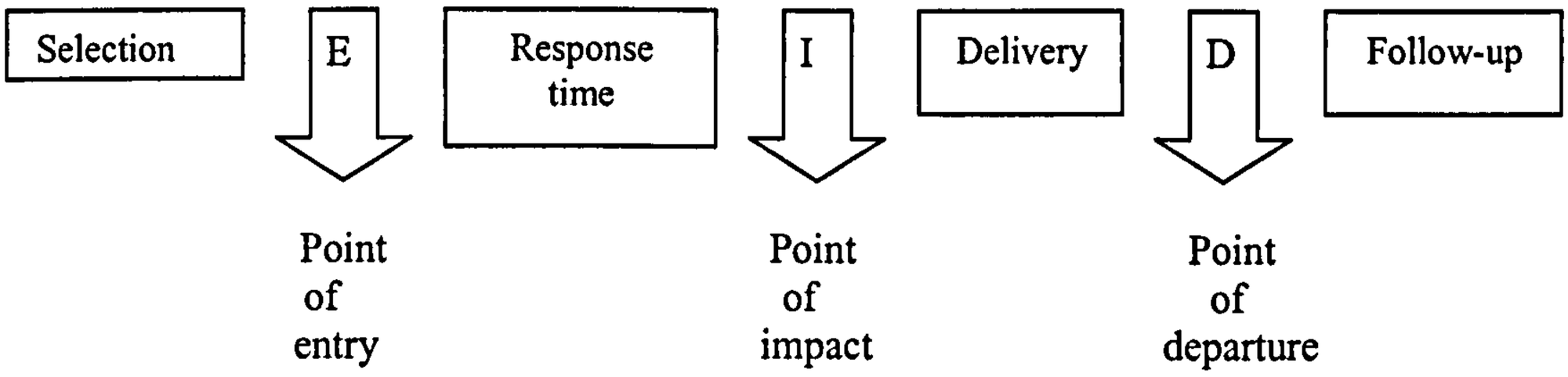

Source: Ghobadian *et al.* (1994)

**Behavioral Service Quality Model**

The interpersonal behaviour of the service provider is an important influence on customers' perceptions of the quality of both the "service process" and the "service outcome". The model of service success developed by Beddowes *et al.* (1987) stresses the importance of behavioral considerations. This model is depicted in figure 4.10. According to this model,

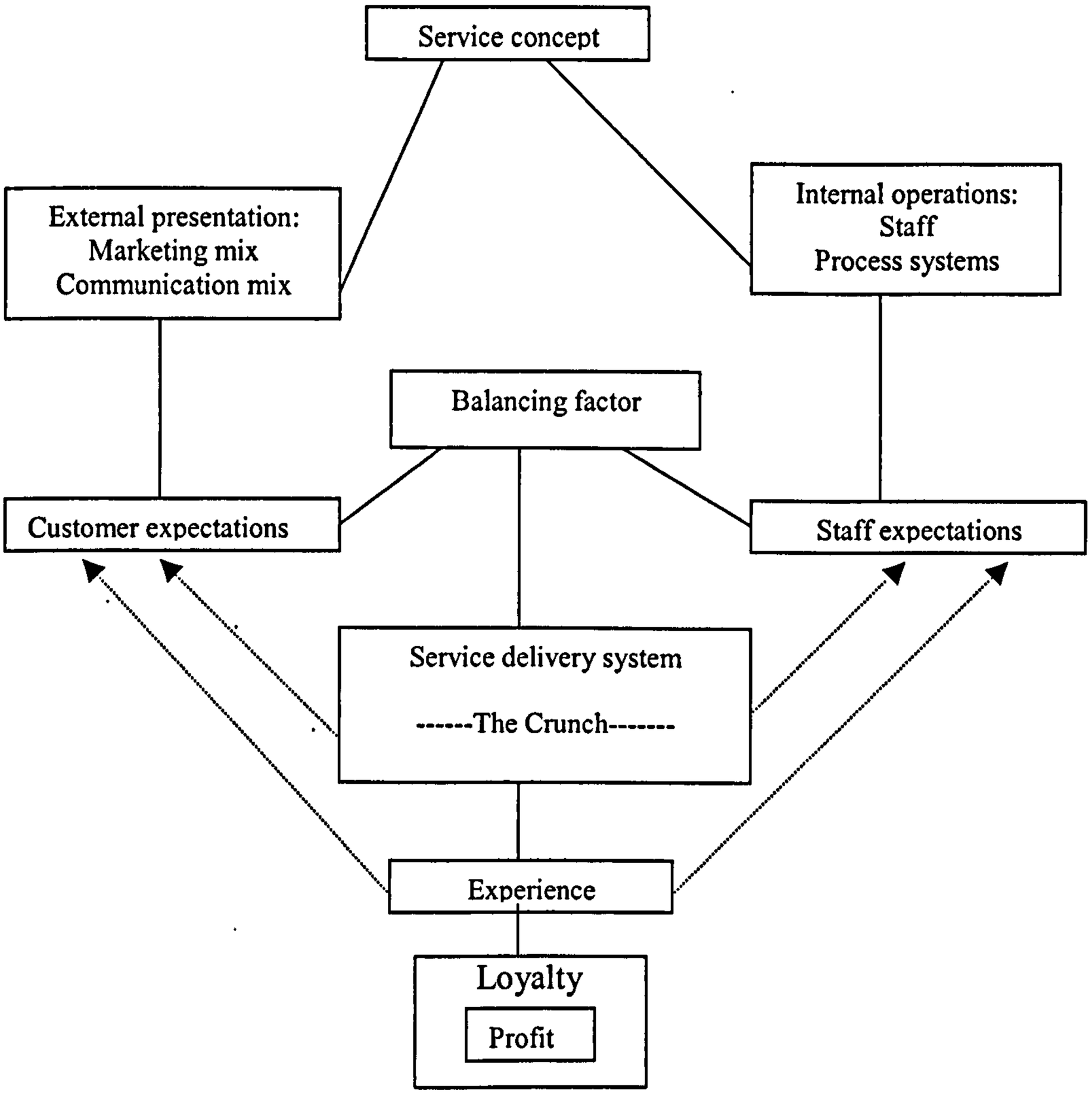
one of the most important quality success factors is the balance between customer and staff expectations. Beddowes *et al.* (1987) argue that a common danger faced by many service organizations is inflating customer expectations through marketing efforts without balancing this with what the organization can offer through appropriate development of staff and systems. According to this model, the other important contributor to service quality is the relevance and effectiveness of the service delivery system.

Figure 4.9: The Customer Processing Operations Framework




Source: Ghobadian *et al.* (1994)

Figure 4.10: Behavioral Service Quality Model




Source: Ghobadian *et al.* (1994)

### 4.6 Moments of Truth and External Service Quality

Moments of truth (or service encounters) are critical in the development and maintenance of relationships and, thus, service quality. Albrecht (1988, P. 26) defined a moment of truth to be "any episode in which a customer comes into contact with any aspect of the organization and gets an impression of the quality of its service", i.e. a customer's perceptions of service quality are determined during service encounters. Zeithaml (1991) highlights the significance of service encounters due to the experience aspects of services; and Lewis and Entwistle (1989); and Bitner (1990) discuss the need to manage encounters. In addition, Albrecht and Bradford (1990); and Heskett *et al.* (1990) refer to the value adding (to the core service) activity of service encounters which makes them central to the heart of any service strategy. Moreover, Albrecht (1988) proposes the "cycle of service", i.e. the chain of events a customer goes though as they experience the services, which identifies the key moments of truth. Integral to this is the role of employees in service encounters. The outcome of service encounters is determined by the interactions between service providers and customers. Interactions are influenced by a number of factors including: the personal, social and cultural characteristics of both customers and employees; systems and procedures, structure and technology; and organizational culture (Solomon *et al.*, 1985, Edvardsson *et al.*, 1989; Albrecht and Bradford, 1990; Grove and Fisk, 1991; and Morgan and Chadha, 1993). This relates to Lehtinen and Lehtinen's (1991) concept of interactive quality, i.e. that service delivery and, thus, perceived service quality is a function of interactive processes. In turn, this requires organizations to manage and control their service encounters via technical control systems and procedures, management of human aspects, and development of a service oriented culture.

### 4.7 Relationship Marketing and External Service Quality

Although relationship marketing originated in an industrial context, the service industry has increasingly become focused on maintaining and enhancing customer relationships as means of improving customers service (Clark *et al.*, 1995). Relationship marketing in the service context was first introduced by Berry (1983) to describe a longer-term approach to marketing. Definitions of relationship marketing emphasize a longer-term perspective and focus on keeping rather than getting customers (Abratt and Russell, 1999). According to Clark and Payne (1995, P.53) "relationship marketing is the business of attracting and enhancing long-term client relationships. Similarly Gronroos (1990, P.138) claims that the purpose of relationship marketing is "to establish, maintain and enhance relationships with customers

and other partners, at a profit, so that the objectives of the parties are met. This is achieved by a mutual exchange and fulfillment of promises". The need to develop competitive advantage in the services sector has provided the impetus for relationship marketing to become a topic of great interest to service organizations in general and banks in particular (Abratt and Russell, 1999). The macro-economic forces driving the interest in relationship marketing are succinctly cited by Berry (1995). These include the maturing of services marketing, the increased recognition of potential benefits for the firm, the increased recognition of the potential benefits for the customer and the technological advances. There are a number of different themes in the relationship marketing literature. These are discussed below.

(1) Emphasizing a relationship rather than a transaction (Clark *et al.*, 1995; Clark and Payne, 1995; Juttner and Wehrli, 1994; Keltner, 1995; and Morgan and Hunt, 1994). The move from transactional to relationship marketing emphasizes the notion that organizations such as banks need to know their clientele, what they want and effectively cross market throughout the banking group (Abratt and Russell, 1999).

(2) Understanding the economics of customer retention to ensure the appropriate allocation of resources. This involves targeting certain profitable customers/segments and maximizing their lifetime value (Berry, 1995; Clark *et al.*, 1995; Clark and Payne, 1995; Fornell and Wernerfelt, 1987; Fraering and Minor, 1994; Juttner and Wehrli, 1994; Reichheld and Sasser, 1990; and Storbacka, 1994). Customer knowledge will assist banks in retaining their existing profitable customers. This is generally regarded as more efficient attracting new customers.

(3) Recognizing that quality, customer service and marketing need to be integrated (Abratt and Russell, 1999). Trust between the customers and the organization cannot be in doubt, therefore, communications must be open, honest and frequent (Berry, 1995; Bitner, 1995; and Clark and Payne, 1995). The trust the client has in the bank's employees, and the extent to which the client perceives the banks employees to be acting ethically, will also influence relationship quality.

(4) Illustrating that the traditional marketing mix concept does not adequately capture all of the key elements which must be addressed in building and sustaining long-term relationships (Clark and Payne, 1995; Gronroos, 1989; Payne, 1995; and Webster, 1992). The formation of relationships is dependent on the appropriate facilitating conditions, for example, trust in the bank and its employees is extremely important.

(5) Ensuring that marketing is considered in a broad cross-functional context (Bejou *et al.*, 1996; Clark and Payne, 1995; Ganesan, 1994; Morgan and Hunt, 1994; and Payne,

1995). Service quality can provide the basis for enhanced loyalty, retention and improved business performance (Berry *et al.*, 1996; and Ennew and Binks, 1996). The inclusion of relationships in a banks marketing function may need to be added to make a cross-functional marketing approach more robust.

(6) The last theme is concerned with "internal marketing" incorporating a framework for internal staff relationships, external relationships with customers, suppliers, referral sources and recruitment markets (Bejou *et al.*, 1996; Berry, 1995; Clark *et al.*, 1995; Clark and Payne, 1995; Cram, 1994; Crosby *et al.*, 1990; Keltner and Finegold, 1996; and Payne, 1995). Implementation issues such as organizational structure and staff training may, therefore, be vital for a banks success (Abratt and Russell, 1999).

Attempts have been made to develop models of relationship marketing. Dwyer et al., (1994) for example, developed a five-phase model to explain how relationships are formed. Relationships formation or enhancement has been studied by Beaty *et al.* (1996). They developed a model which outlines the major steps in the relationship formation process. Ravald and Gronroos (1996) also developed a model that deals with relationship marketing and value. The concept of value in relationship marketing is now receiving a great deal of attention (Juttner and Wehrli, 1994; and Ravald and Gronroos, 1996). A model depicting the relationship chain was developed by Clark *et al.* (1995). It begins with the basic proposition that the purpose of all business processes is to create and sustain mutually advantageous relationships throughout the organization thereby enhancing customer value. Keltner and Finegold (1996) argued that banks are moving towards a relationship model of service delivery to gain a competitive advantage.

Relationship formation or enhancement has been studied by Beatty *et al.* (1996). They developed a model (see figure 4.11), which outlines the major steps in the relationship formation process. This model states that the relationship formation process goes through four stages, namely facilitating conditions, relationship formation, relationship enhancement and relationship outcomes.

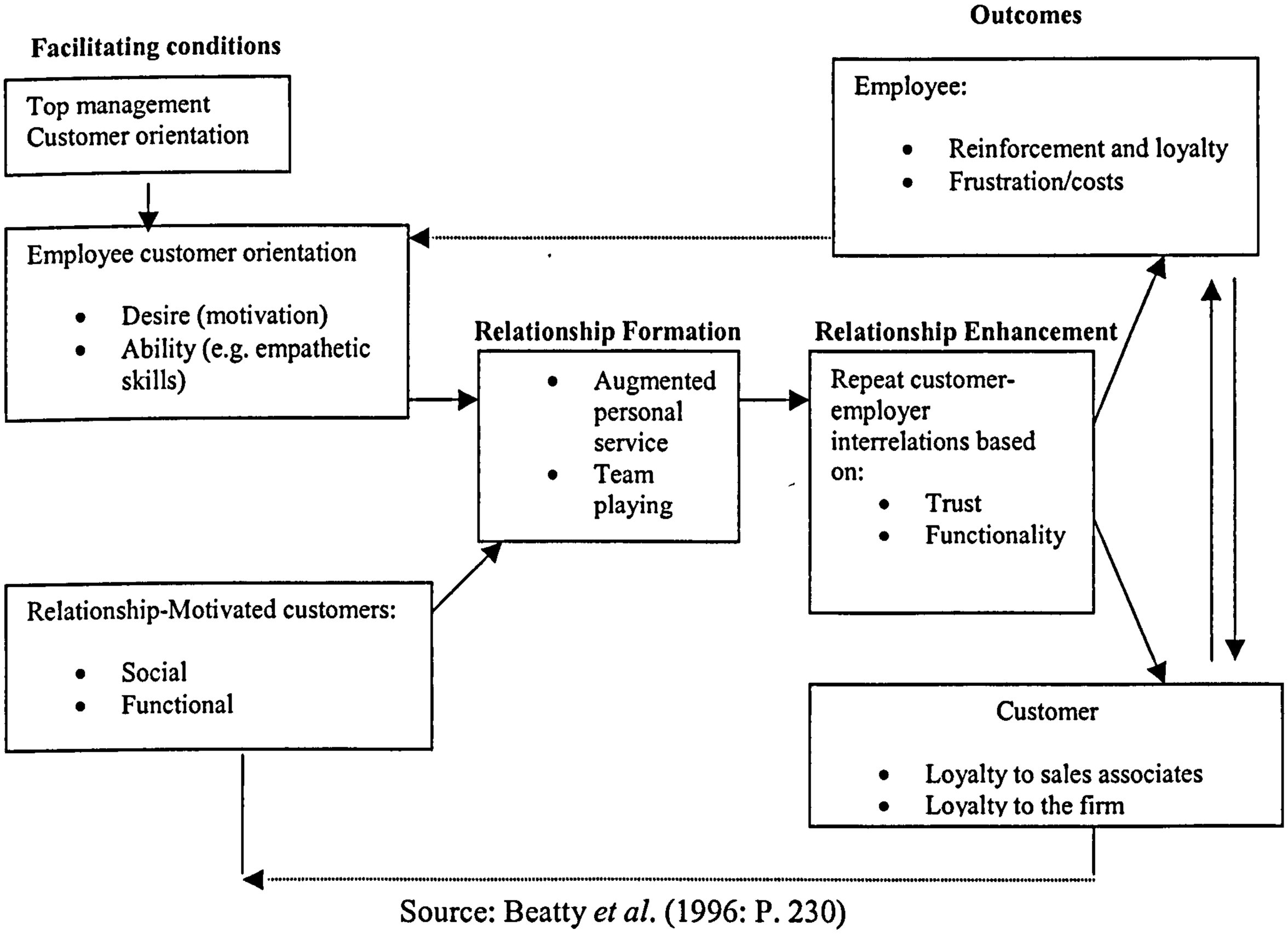
***Facilitating conditions***. Top management attitude, employee customer orientation and relationship-motivated customers were three factors identified by Beatty *et al.* (1996), which facilitate the development of long-term customer relationships. Beatty *et al.*'s (1996) research found that management who care deeply for their customers and encourage staff to satisfy customer needs were an essential element for relationship development. Their study also found that sales associates or staff most committed to customer services were the most

successful. Customers would, however, have to want to develop a relationship with the sales associate for the relationship to commence. The relationships in their study sometimes also developed from a functionality base towards a social relationship.

***Relationship formation***. In the early stages of the relationship, service which exceeded the customer's expectations affected the relationship development process positively. Teamwork between sales associates and between departments also enhanced the relationships with customers and clients.

***Relationship enhancement***. Relationship enhancement or repeat customer-employee interactions occur when customers perceive trust, friendship and functionality to be present in the relationship. As the relationship progresses, trust, friendship and functionality also determine the strength and likely continuation of the relationship.

Figure 4.11: Relationship-Formation/Enhancement Model in Retailing




Source: Beatty *et al.* (1996: P. 230)

***Relationship outcomes***. Outcomes of relationships can be viewed from both the customers' and employees' perspective. These two perspectives work to reinforce each other. The customer becomes committed and pleased with the relationship and this increases pressure on the employee to be even more committed (Abratt and Russell, 1999).

The relationship between the customer and the bank is influenced by the quality of the service the customers receive (Beatty *et al.*, 1996; and Crosby *et al.*, 1990). Another aspect influencing the service quality is the longevity of the staff (Keltner, 1995). Abratt and Russell (1999) claimed that bank staff do not stay in one position (or area for) very long. Management should, therefore, encourage employees to stay in positions for longer periods of time. Furthermore, Management should reward employee behaviour which develops and maintains clients relationships. This relationship marketing effort needs to be integrated throughout the entire organization. Systems should be developed to support the service quality requirement. Management need to show employees and customers that they care and want to build trust and confidence in the relationship with the bank (Abratt and Russell, 1999).

## 4.8 Conclusion

The main objective of this chapter has been to present the concept and the different models of external service quality. In doing so, the chapter started with a discussion of service characteristics which have an impact on the approach and substance of external service quality management. The changing environment of service industries which makes improving external service quality as competitive advantage for service organization was also discussed in this chapter. This was followed by presenting the different definitions and models of external service quality. The chapter has examined a fairly extensive range of service quality models. The models typically emphasize different aspects of the problems and, therefore, reflect the different perspectives of the researchers they do, however, have a number of common features and one of the most important is the role of employees in providing a high level of customer service. Furthermore, the relationship between the moment of truth and external service quality was also discussed. It was clear that moment of truth has an important role in satisfying external customers because the outcome of service encounters is determined by the interactions between service providers and customers. Finally, the chapter presented the concept of relationship marketing and argued that relationship marketing emphasizes the longer-term perspective and focuses on keeping rather than getting customers by providing external customers with high levels of service quality. Having examined the literature on external service quality, the next chapter will examine the relationship between the internal and external service quality. In doing this, the chapter will introduce the reader to the research objectives, the research model and the associated research hypotheses.

# CHAPTER FIVE

# THE PROPOSED RESEARCH MODEL AND RESEARCH HYPOTHESES

## 5.1 Introduction

The attitudinal and behavioral responses of customer-contact employees are important because of the interactive nature of service delivery (how the service is delivered) (Gronroos, 1983). Research has shown that employees' attitudinal and behavioural responses can positively and negatively affect customers' perceptions of the service encounter and their judgments of service quality (Bitner, 1990). This chapter aims to present the proposed research model and the research hypotheses. The proposed research model examines the relationship between the internal and external dimensions of service quality. The internal dimensions of service quality represent the independent variables in the proposed research model while the external service quality represents the dependent variable. The proposed research model hypothesizes that the internal service quality dimensions have a positive impact on the external service quality. This chapter contains three sections. Specifically, section 5.2 will present the previous studies which examined the relationship between the internal service quality and service performance. Section 5.3 will outline the different research objectives. This is followed by a discussion of the proposed research model, the research variables and hypotheses in section 5.4.

## 5.2 Internal Quality of Service and Service Performance

In this section, we will review some studies which make a link between the internal quality of service and organizational service performance. Schneider *et al.* (1980) were the first academics to link employee perceptions of service climate within an organization to ratings of customer satisfaction by collecting data from employees and customers in 23 branches of a large bank. They correlated mean responses to the survey dimensions across different branches, and found that several employee variables were significantly related to customer satisfaction. Some of these variables were significantly related to more specific facets of customer satisfaction, for instance, teller courtesy and competence. On the other hand there were other employee variables, such as job satisfaction, financial reward, and central processing support, which were not significantly related to the customer variables. Schneider and Brown (1985) replicated and extended this study using 28 branches from the same bank. Most of the same relationships were identified although the correlations tended to be weaker in the second study.

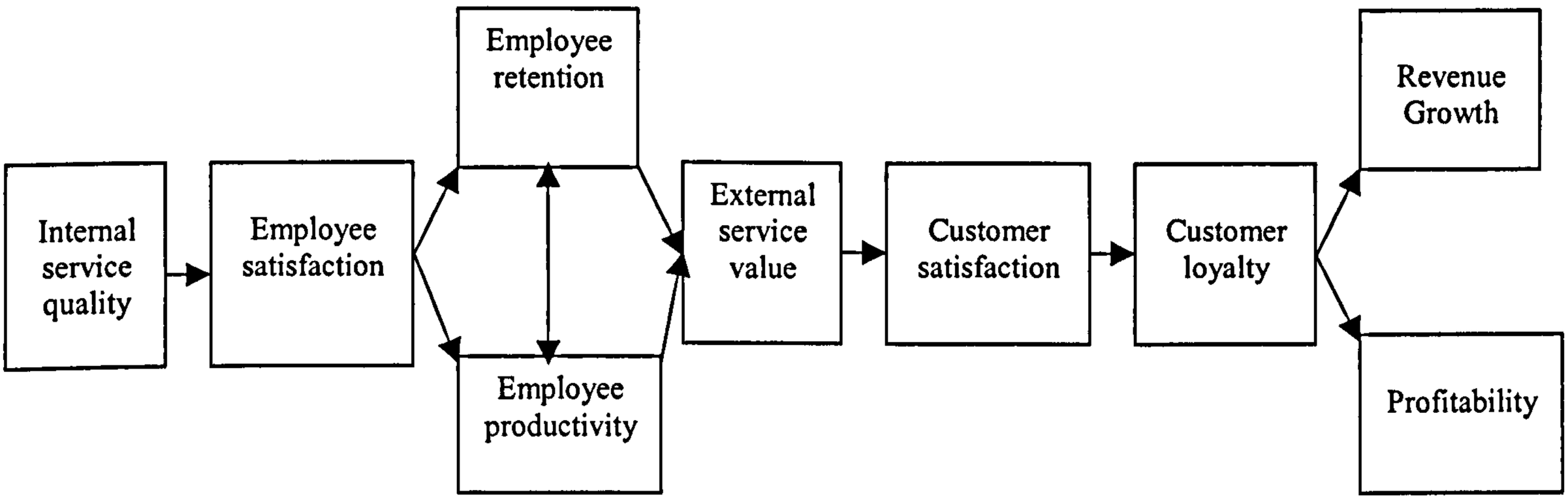
Johnson (1996) attempted to identify organizational practices that facilitate the delivery of a high level of customer service. The relationships between these organizational practices and the actual rating of customer satisfaction were ascertained by collecting data from employees and customers in 57 branches of a large bank. Johnson determined eight dimensions for measuring employees' perceptions about the performance of their organization in managing the delivery of quality service: (1) service strategy, (2) seeking information (from employees on customer expectations and needs), (3) evaluating service performance, (4) service training and support, (5) service rewards and recognition, (6) service orientation and commitment, (7) sales and service relationship (managing the transition between sales and delivery), and (8) service systems, polices, and procedures (systems designed to make it easy for customers to do business).

Two dimensions were used by Johnson (1996) to measure specific aspects of customer service and overall quality: (1) personal-contact dimension; and (2) nonpersonal-contact dimension. Personal–contact dimensions were defined as those in which customers rated their interactions with staff in the bank. These include the performance of tellers and other branch staff, phone representatives etc. and in particular, they focus on the level of service received when problems occurred. Nonpersonal-contact dimensions are those that do not involve direct contact with people. These include, for example, the quality of bank statements and the convenience of bank opening hours, branch locations, and the reliability of automatic teller machines etc. Johnson (1996) found that some service climate dimensions had significant correlations with overall customer satisfaction. The dimensions of information seeking, training, rewards and recognition, for example, had the strongest relationships. In contrast, service support, management service orientation, and employee service orientation had the weakest relationships. The overall service climate variable was, however, significantly related to all customer dimensions except bank statements.

Another study by Schneider *et al.* (1992) who obtained qualitative information from employees to identify the themes that constitute a "climate for service". Employee perceptions of the organization's emphasis on service were most highly related to being responsiveness to customer opinion, establishing procedures for delivering service, employment procedures, feedback on performance, and training. They also used content analysis to relate each of these themes to employee perceptions of service excellence and found that some themes were significantly related to employee perceptions of customer service.

Heskett's *et al* (1994) research is predicated on the service profit chain, a causal model based on the proposition that internal service quality drives employee satisfaction, which enables the delivery of a high value service, resulting in customer satisfaction, leading to customer loyalty, which in turn produces profit and growth (see figure 5.1).

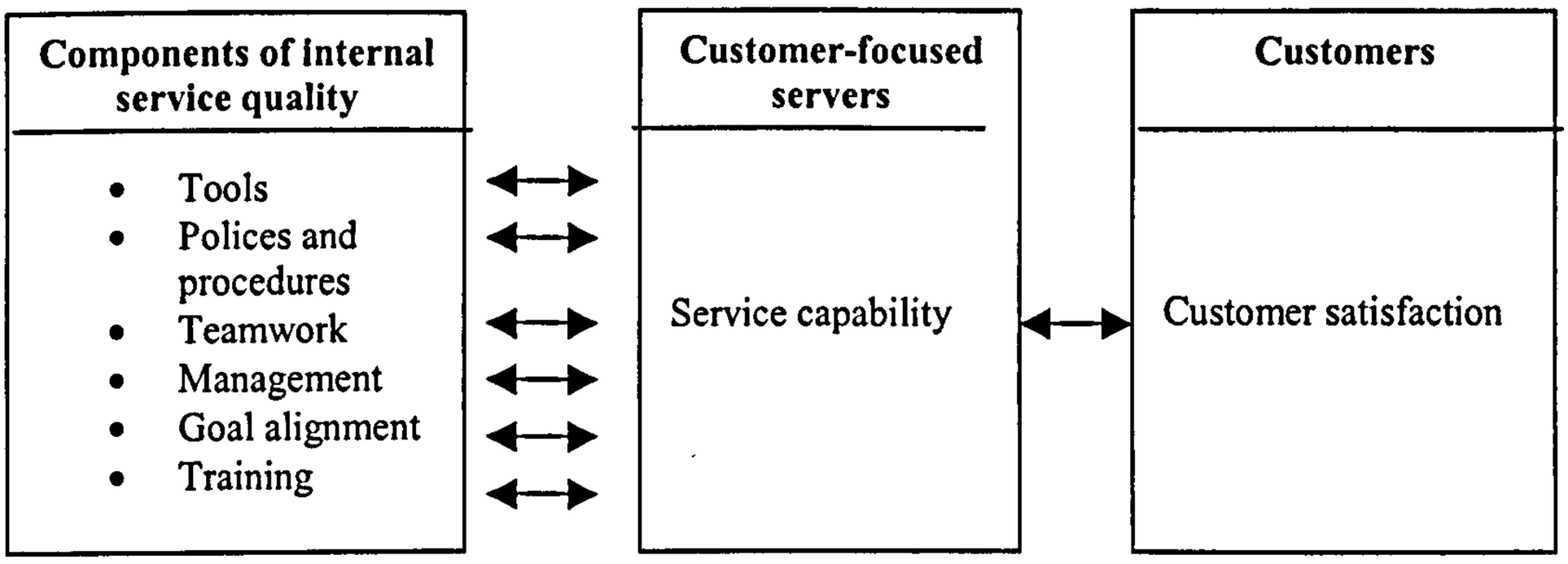
Figure 5.1: Service Profit Chain




Source: Heskett *et al.* (1994)

Furthermore, Hallowell *et al* (1996) developed a model linking measures of internal service quality to a relatively new measure of the work environment called "service capability". Service capability is defined as an employee's perception of his or her ability to serve the customer. Hallowell *et al.* (1996) claimed that service capability is a more direct antecedent of customer satisfaction than more traditional measures of the work environment such as employee morale, loyalty, and satisfaction. Hallowell *et al.* (1996) proposed that internal service quality is related to service capability, which is related to customer satisfaction. They also proposed that job satisfaction is more strongly linked to satisfaction with internal service quality than to satisfaction with wages and benefits (see figure 5.2).

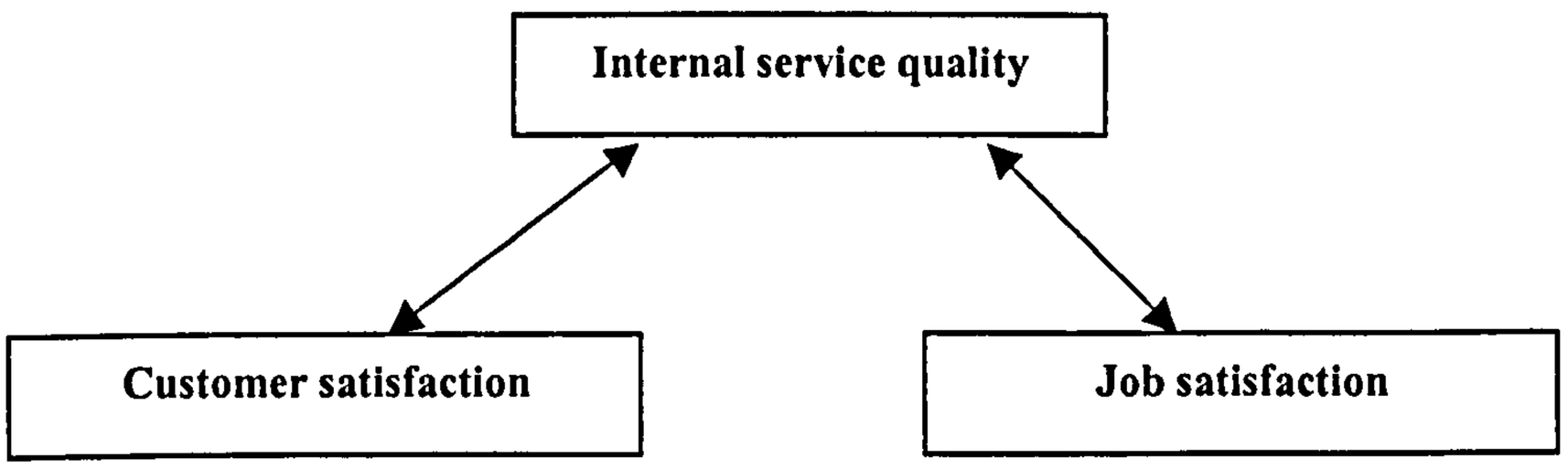
Figure 5.2: Internal Service Quality and Service Capability




Source: Hallowell *et al.* (1996)

Hallowell *et al.* argued that companies seeking to differentiate themselves on the basis of customer satisfaction may benefit by providing what front-line employees and managers need to serve their customers. They identified six components as being particularly important for internal service quality: tools (i.e. information and information delivery systems for employees), appropriate policies and procedures, teamwork, management support, goal alignment (i.e. realistic objectives), and training. By focusing on these components managers should be able to improve their employees' service capability, which in turn may result in increased customer satisfaction. They also suggested that job satisfaction is strongly related to internal service quality. Internal service quality, therefore, related to both job satisfaction and customer satisfaction, as illustrated by figure 5.3.

Figure 5.3: Internal Service Quality, Customer Satisfaction and Job Satisfaction relationships




Source: Hallowell *et al.* (1996)

The relationships in figure 5.3 suggest that managers seeking to deliver customer satisfaction by improving internal service quality should also increase job satisfaction. Higher job satisfaction can result in lower employee turnover, which has been hypothesized to improve internal and external service quality. The findings of Hallowell's *et al.* study suggested that managers concerned with employee job satisfaction would be advised to pay at least as much attention to the non economic components of internal service quality as to pay and benefits in kind.

## 5.3 The Research Objectives

Marketing academics have generally under-researched the nature of the relationship between the internal and external quality of service. The majority of research on the subject of service quality has tended to focus on the external customers' perspective while the internal dimensions of service delivery have been generally neglected. There is, therefore, a gap in the service quality research literature, which deals with staff perceptions of the internal quality of service and its relationship to the external quality of service. Consequently, the primary aim of this research is to examine the relationship between the internal and external quality of service. Data will be collected from employees within the Egyptian commercial banks about

their perceptions of the internal dimensions of service quality and the quality of service they provide to bank customers. The research has the following four objectives:

(1) To examine the nature of the internal quality of service in the Egyptian commercial banks.
(2) To identify the relationship between the internal and external quality of service.
(3) To identify some of the most significant internal quality of service dimensions affecting employees' perception of external quality of service.
(4) To examine the relationship between the internal and external service quality on different levels of management.

The research findings are expected to throw some light on these important considerations and provide policy recommendations for management of commercial banks in Egypt.

The relationship between the internal and external quality of service provide the basis for the proposed research model depicted in figure (4.5). This relationship is predicated on Lytle's *et al.* (1998, P.459) definition of organizational service orientation: that it is "*an organizational-wide embracement of a basic set of relatively enduring organizational policies, practices and procedures intended to support and reward service-giving behaviors that create and deliver service excellence.*" The basic assumption, therefore, is that there is a link between the internal and external quality of service.

## 5.4 The Proposed Research Variables and Hypotheses

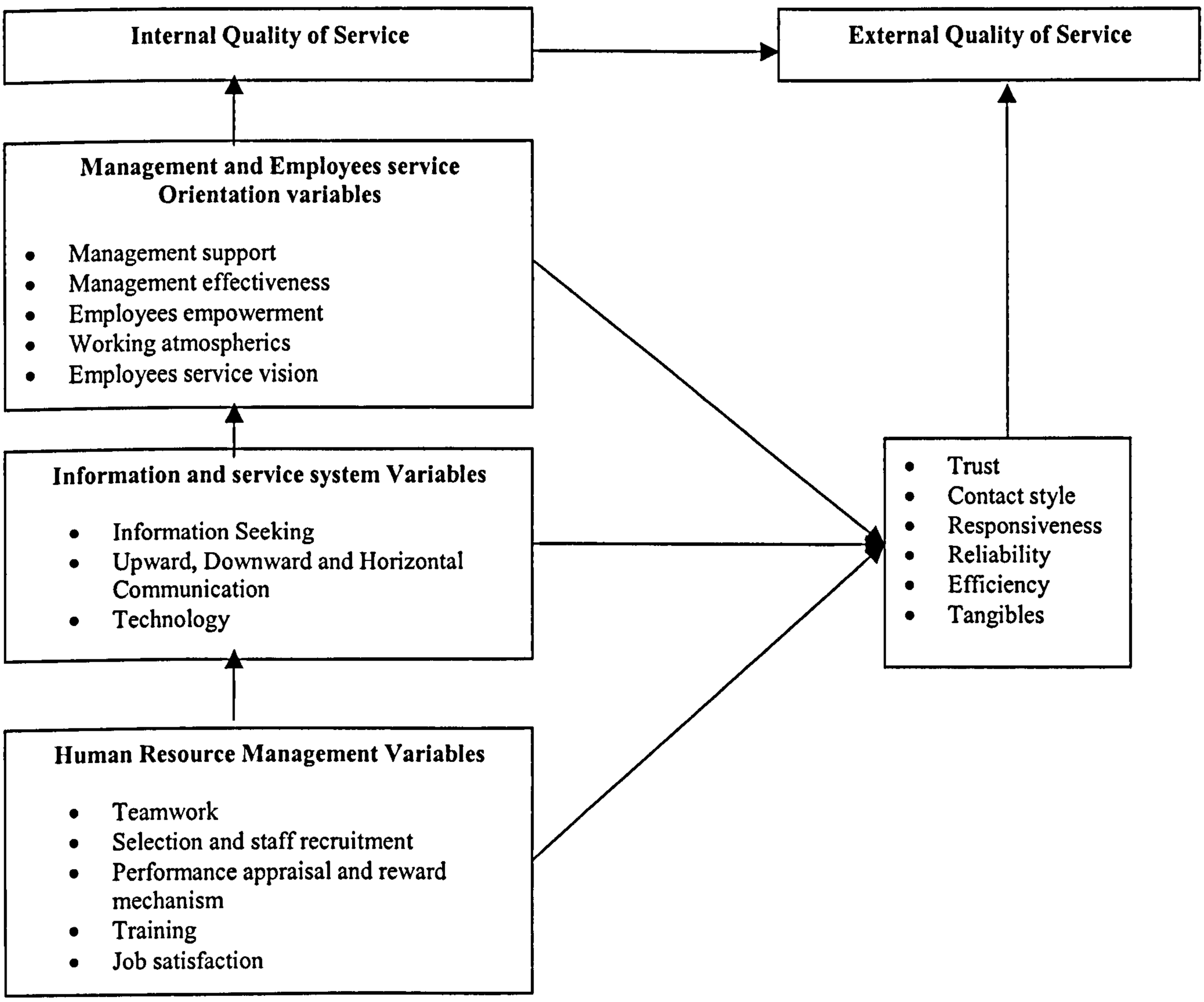
The proposed research model assumes that the internal quality of service construct consists of three sub-constructs, which influence the external quality of service. These sub-constructs which comprise the independent variables in the research model consist of management and employees service orientation variables, information and service system variables, and human resource management variables. The internal quality of service determines staff perceptions of the level of service they receive within the organization. In turn this influences and determines their propensity and willingness to provide a high level of service to external customers. In the proposed model in figure 5.4, the external quality of service is assumed to consist of six dimensions: trust, contact style, responsiveness, reliability, efficiency and tangibles.

### 5.4.1 External Quality of Service (The Dependent Variable)

The proposed research model shown in figure 5.4 assumes that external service quality is the dependent variable. The definitions and variables relating to the exposition of external service

quality have been derived from the literature survey contained in the previous chapter. The survey fully reflected the multidimensional nature of external service quality for both products and services (for example, see Garvin, 1984; and Parasuraman *et al.*, 1988). This multidimensional – multifaceted nature of external service quality was also reflected in the numerous models which were articulated in the chapter but, perhaps, no more so in the service industries, than by the SERVQUAL scale with its 22 items built on five dimensions. These dimensions have been modified in the light of the literature review as we will see later in the next chapter. As a consequence the research model contains six dimensions of external service quality: trust, contact style, responsiveness, reliability, efficiency and tangibles.

Figure 5.4: The Proposed Research Model



Trust is concerned with staff ability to generate a feeling of trust and confidence in customers. Contact style dimension is concerned with the quality of communication between bank staff and customers. Responsiveness refers to the willingness of staff to help customers and provide a prompt service. Reliability is concerned with the ability to perform the promised service dependably and accurately. Efficiency refers to the efficiency of bank service. The final dimension is tangibles and is concerned with the appearance of physical facilities, equipment and communication materials.

In order to examine the relationship between the internal and external service quality, the analysis of this model will try to address the impact of each independent variable on the overall perception of external service quality as well as on the individual dimensions of external service quality.

### 5.4.2 Management and Employees Service Orientation Variables

Service quality is subjective and is experienced and qualified by customers during service encounters. Thus, the need to create customer-oriented cultures where every employee feels a personal responsibility for delivering excellent service quality is essential (Lewis and Gabrielsen, 1998). Schein (1985) and Morgan (1986); and Kotter and Heskett (1992) distinguished between two levels of corporate culture: at a deeper level, basic assumptions and values which are difficult to change and, at a more superficial level, behaviour patterns which may be manipulated more easily. The challenge for any service quality initiative is, therefore, to implement a "high performance" culture whereby the service quality philosophy is institutionalized in a set of basic assumptions and beliefs (Long, 1988). Lewis and Gabrielsen (1998) similarly stated that culture management is important in a service quality strategy. It could be proposed that the ultimate goal of service quality is to create an organizational climate similar to Mintzberg's (1991, P.353) "missionary organization", where all parts of the organization strive towards a common goal, in this case a high level of service quality. Gummesson (1991) describes this as "the love factor", and he contends that service quality is often more dependent on the power of personal involvement and staff commitment than on systems, structure and standards. Various researchers have discussed how such a culture may be developed. A starting point, for example, may be an explicitly articulated mission statement (Albrecht, 1988; Payne, 1988; and Kotter and Heskett, 1992) focused on customer satisfaction and encouraging every employee to feel a personal responsibility for satisfying the customer in the best possible manner.

Leadership also has a vital impact on developing and sustaining an organization's service orientation. The leader's role has been the focus of research by Carlzon (1987, P. 426) who describes a leader as "a visionary, a strategic, an informer, a teacher and an inspirer". Howcroft (1991) similarly concentrates on the leader's role in developing and communicating a vision of the business. A crucial aspect of modern leadership is the leader's responsibility to motivate the organization and demonstrate through action what they consider to be important (Peters and Austin, 1985; Albrecht, 1988; and Bennett and Brown, 1992). An aspect clearly related to this is the executive's ability to communicate and create close relationships with subordinates (Coulson-Thomas, 1991) and employees must feel that the leader genuinely believes in the service quality concept. From the literature it is possible to identify the following management and employees service orientation variables:

***Management Support***

Hallowell *et al.* (1996) argued that management support is one of the internal service quality components. Similarly, Rapert and Wren (1998) identified management commitment to quality as one of the key variables in their study of the relationship between a quality-based strategy and organizational performance. Howcroft (1993) also claimed that management commitment is one of the key factors in explaining the difference in levels of internal quality between banks. Management support is concerned with management's effort to improve the employees' ability to serve customers (Zeithaml, 1990; Berry, 1991, Heskett, 1990; Hart, 1992; and Garvin, 1988). Managers' attitudes and behaviour continuously and directly shape an organization's service orientation (Albrecht and Zemke, 1985; Berry *et al.*, 1994; Bowen and Schneider, 1988; and Heskett *et al.*, 1990). Zeithaml *et al.* (1988) identified that the proportion of resources committed to service quality, the existence of an internal quality program, and the extent to which managers believe their attempts to improve service quality will be recognized and rewarded in the organization are variables which are related to management's commitment to service quality. Ahmed and Parasuraman (1994, P. 85) defined management commitment to service quality as "encompassing the conscious choice of quality initiatives as operational and strategic options for the firm, and engaging in activities such as providing visible quality leadership and resources for the adoption and implementation of quality initiatives". Mohr-Jackson (1993) also argued that management support to service quality involves two components: (1) a strong, personal commitment to quality improvement and (2) a visible and active involvement in the quality-improvement process.

Kanji and Asher (1995; and1996) claimed that many of the quality-related problems within an organization are not within the control of individual employees. This is because these problems are typically caused by the way the company is organized and managed. In fact exhorting employees to a higher level of performance (for example, by poster campaign) can have a counter-productive effect when they see that management fails to tackle the real problems. A critical role of managers within an organization, therefore, is to ensure that everything is in place to allow people to make quality their primary objective. This is turn can create an environment where people are willing to take responsibility for the quality of their own work. Church (1995) found that leadership behaviour of managers in the workplace directly affects service quality and organizational performance at the unit level. Furthermore, management support to external service quality in terms of setting service goals is very important in improving the firm's service quality. Research reveals that goal-setting not only improves both organizational performance and individual achievement, but also increases overall control of the organization (Ivancevich and McMahon, 1982; Latham and Locke, 1979; Locke *et al.*, 1981; and Sherwin, 1976). The development of service goals involves defining service quality in ways that enable providers to understand what management wants to deliver (Zeithaml *et al.*, 1988).

Setting high but realistic objectives is also an important consideration in improving the internal quality of service (Moore, 1987; and McAtarsney, 1999). Chaston (1994) argued that delivering the highest possible level of quality is only achieved in those organizations where all facets of organizational behaviour reinforce the importance which management assigns to meeting the needs of the external customer. The existence of performance goals and formal systems for setting those goals is, therefore, very important in improving the internal quality of service (Lewis and Gabrielsen, 1998). Zeithaml *et al.* (1988) claimed that companies that have been successful in delivering high service quality are noted for establishing formal goals relating to service quality.

Managers who exhibit their support to improve the firm's service quality are more likely to take initiatives that help the firm and its employees deliver superior quality (George, 1990). Examples of these initiatives include creating more flexible processes, dedicating resources to the improvement effort and promulgating a quality-oriented vision throughout the firm (Ahmed and Parasuraman, 1994; and Wall and Zeynel, 1991). Previous studies argued that management support to improve external service quality is the single most important determinant of whether good service is delivered to external customers (George, 1990;

Gronroos, 1993). Thus, we hypothesized that management support to service quality has a positive impact on staff ability to provide high levels of service quality to the external customers. We hypothesised also that management support to service quality has a positive influence on all of external service quality dimensions (trust, contact style, responsiveness, reliability, efficiency and tangibles). Hence, we propose the following hypotheses:

**H.1.** *Higher* m*anagement support to service quality leads to higher levels of external service quality as perceived by bank staff.*

**H.2.** *Management support to service quality is positively related to the following external service quality dimensions: (1) trust, (2) contact style, (3) responsiveness, (4) reliability, (5) efficiency and (6) tangibles.*

***Management Effectiveness***

Management effectiveness refers to the effectiveness of management in reducing staff role conflict and role ambiguity and emphasizing the objective of providing high levels of service quality. Role conflict is defined as the incompatibility between one or more roles within an employee's role set, such that fulfilling one role would make fulfilling the others more difficult (Weatherly and Tansik, 1993). Role ambiguity occurs when an employee lacks salient information needed to effectively enact his or her role (Singh, 1993, P. 12). Zeithaml *et al.*, (1988, P. 45) emphasized the significance of avoiding role ambiguity- "role ambiguity may occur because employees are uncertain about what managers or supervisors expect from them and how to satisfy those expectation". Thus, employees' understanding of their roles is a major determinant of their ability to serve the customers. Chaston (1994) stated that organizations sometimes establish service standards but then must ensure that employees are able and willing to carry out their assigned tasks. Early studies by Schneider (1980) and Shamir (1980) revealed that employees' role stress (conflict and ambiguity) is major contributors to their inability to deliver good service. Singh (1993) also provides empirical evidence that role ambiguity experienced by service contact staff greatly reduces their job performance. Contact employees who experience ambiguous or conflicting role expectations are likely to exhibit decreased job performance, which leads to a decrease in customers' perceived service quality (Schneider, 1980). Thus, we expect that management effectiveness in reducing employees' role conflict and ambiguity, and emphasizing the objective of high levels of service quality will positively affect employees' ability to deliver high level of service to external customers. Hence, we propose the following hypotheses:

**H3.** *Management effectiveness is positively related to external service quality as perceived by bank staff*

**H4.** *Management effectiveness is positively related to the following external service quality dimensions: (1) trust, (2) contact style, (3) responsiveness and (4) reliability.*

***Employees Empowerment***

Zeithaml *et al.* (1988) argued that the effective translation of managerial perceptions into specific service quality standards depends on the degree to which tasks can be standardized or routinised. According to Levitt (1976), standardization or (in his terms) industrialization of service can take three forms: (1) substitution of hard technology for personal contact and human effort; (2) improvement in work methods (soft technology); or (3) combinations of these two methods. Quality standards are, therefore, another important variable in developing a quality strategy (Moore, 1987). Lewis and Gabrielsen, (1998) stated that establishing and developing standards for service and getting them accepted throughout the organization is important in achieving a high level of service quality. Setting organizational standards, whether informal or formal has been similarly emphasized by McAtarsney (1999); Rapert and Wren (1998) and Chaston (1994). However, perceived control can be a function of the degree to which organizational rules, procedures, and culture limit contact employee flexibility in serving customers (Zeithaml *et al.*, 1988). The extent to which an employee's level of perceived control contributes to his or her ability to deliver service quality has been highlighted by Zeithaml *et al.* (1988) and Shreeve (1991). Organization rules, procedures and culture need to provide customer contact employees with flexibility and authority in serving customers. Organizations have to be careful to ensure that quality control programmes take into account the complexity of service encounters (Heskett, 1987), and do not reduce the service providers' full potential (Ballantyne, 1990).

Empowerment refers to a situation in which the manager gives employees the discretion to make day-to-day decisions about job-related activities (Bowen and Lawler, 1992; and Conger and Kanungo, 1988). In the literature, empowerment has two dimensions: the first is the technical dimension which emphasises the benefits of speed and organizational efficiency. Clutterbuck, (1989); and Firnstahl, (1989) for, example, emphasize that employees need responsibility and authority to act quickly, without a long chain command. The second dimension emphasizes the psychological aspects such as motivation and job satisfaction, and assumes that most people are willing to perform at their best if given the opportunity, usually by providing them with more autonomy (Peters and Waterman, 1982; and Bailyn, 1993). By

allowing contact employees to make these decisions, the manager relinquishes control over many aspects of the service delivery process. Empowerment removes the constraints imposed on customer-contact employees, which gives them room to maneuver as they attempt to serve customers' needs (Readon and Enis, 1990). Hartline and Ferrell (1996) argued that empowerment is thought to be necessary because customer contact employees need the flexibility to make important decisions to completely satisfy customers.

Allowing contact employees to use their discretion in serving customers has many positive influences on their responses and the external service quality. Bowen and Lawler (1992) suggested that empowered employees feel better about their jobs and more enthusiastic about serving customers, with an end result of quicker response to customer needs and increased customer satisfaction. Moreover, advocates of empowerment claim that employees will (1) be more responsive as service providers, (2) have higher levels of productivity, (3) deal with customer complaints more quickly, (4) be better motivated, and (5) provide higher levels of service quality (Lashley, 1995). Thus, we expected that employees empowerment will positively affect staff ability in serving external customers. Hence, we propose the following hypotheses:

**H5.** *An increase in the bank management's use of empowerment leads to higher levels of external service quality as perceived by bank staff*

**H6.** *An increase in the bank management's use of empowerment is positively related to the following external service quality dimensions: (1) trust, (2) contact style, (3) responsiveness and (4) reliability*

***Working Atmospherics***

For service quality initiatives to succeed, employees must have favourable perceptions about the working environment within the organization (Lewis and Gabrielsen, 1998). Seddon (1992, P. 81) writes "it is primarily attitude which determines success; people with the right attitude will make changes to any system, structure, or procedures as necessary". Staff attitudes towards the internal environment and the supervision within the organization are important in delivering high levels of service quality to external customers. Researchers have argued that to effectively manage customer contact employees, managers should maintain a flexible working environment (Schneider, 1980). Schneider and Bowen (1993) proposed that when employees' work is facilitated via supportive supervision, they can then devote themselves to meet the demands of external customers. Supportive supervision in terms of motivating staff and giving them regular feed back about their performance has a vital role in

improving customer service. Tansuhaj *et al.* (1988) believed that employees with positive attitudes toward the organization will have higher levels of work effort and job performance. Thus, we expect that good working atmospherics will positively affect staff ability to provide high levels of external service quality. Hence, we propose the following hypotheses:

**H7.** *Working atmospherics are positively related to external service quality as perceived by bank staff.*

**H8.** *Working atmospherics are positively related to the following external service quality dimensions: (1) trust, (2) contact style, (3) responsiveness and (4) reliability.*

***Employees Service Vision***

Lewis and Gabrielsen (1998) argued that consumer orientation may be viewed as a perquisite in the service quality process, but employees also need to feel responsible for meeting and exceeding customer expectations and creating lasting impressions of the bank. Employees service vision directly impacts customers' perceptions of service quality they received from the organizations (Berry *et al.*, 1994; Bitner, 1990, 1992; Bitner *et al.*, 1990; sasser and Jones, 1995; and Schneider *et al.*, 1992). A "top-down" service vision is important to instill customer service orientation among organizational members. Managers should reinforce the importance of service quality and customer satisfaction by consistently communicating a service vision for the organization. Albrecht and Zemke (1985) argued that having service-oriented people at all levels of the organization is related to an organization's ability to deliver high quality service. Thus, we hypothesized that employees who have positive service vision are more likely to be able to provide external customers with high levels of service quality. Hence, we propose the following hypotheses:

**H9.** *Employees service vision is positively related to external service quality as perceived by bank staff.*

**H10.** *Employees service vision is positively related to the following external service quality dimensions: (1) trust, (2) contact style, (3) responsiveness and (4) reliability.*

### 5.4.3 Information and Service System Variables

Effective communication is an essential facet of people management (Oakland and Oakland, 1998). Communication may improve the communication of the organization's goal, vision, strategy and business policy, or the communication of information and data (Colins and Porras, 1994; Purser and Cabana, 1997; and Yingling, 1997). Oakland and Oakland (1998) argued that in order to maximize effectiveness, communication should be two-way and regular. Wisner and Stanley (1999), and Hallowell *et al.* (1996) also claimed that the internal

communication process is an integral part of many firms' internal quality improvement initiatives. Moreover, organizations use of technology and technology-based systems is arguably one of the most critical ingredients of success because it supports staff in delivering a superior customer service (Lytle *et al.*, 1998). From the literature we can identify the following information and service system variables:

***Information Seeking***

Internal market research is one of the methods for achieving the objectives of internal marketing and improving the service orientation within the organization (Stauss and Schulze, 1990). Berry (1981) and Gronroos (1981) claimed that internal market research can be used to identify employees needs, wants and attitudes just as it can be used to identify consumer needs, etc. Consequently, Oakland and Oakland (1997) have shown that employee surveys increase the employees feelings of well being, and provide data for improvement. Information seeking involves asking employees how to improve service quality (Johnson, 1996). Previous studies argued that seeking information from staff about their opinions in improving external customer service has positive influence on external customer satisfaction with service (Johnson, 1996). As a result, we expect that seeking information from employees about how to improve customer service will positively affect external service quality. Hence, we propose the following hypotheses:

**H11.** *Information seeking is positively related to external service quality as perceived by bank staff.*

**H12.** *Information seeking is positively related to the following external service quality dimensions: (1) trust, (2) contact style, (3) responsiveness, and (4) reliability.*

***Upward, Downward and Horizontal Communication***

Researches suggest that customer-contact personnel can accurately predict consumer perceptions of the service (Schneider and Bowen, 1985). Therefore, top managers' understanding of the customer may depend largely on the extent and types of communications received from customer-contact personnel (Zeithaml *et al.*, 1988). Upward communication typically provides information to upper level managers about activities and performances throughout the organization (Read, 1962). Zeithaml *et al.* (1988) proposed that three specific variables influence the effectiveness of upward communication: extent of employees-to-managers communication, extent to which inputs from contact personnel are sought, and quality of contact between top managers and contact personnel.

Horizontal communications, i.e. the lateral information flows that occur both within and between departments of an organization (Daft and Steers, 1985) are also important. The basic purpose of horizontal communication is to co-ordinate people and departments so that the overall goals of the organization are achieved. If high service quality is to be perceived by the customer, horizontal communication among departments is necessary (Zeithaml *et al.*, 1988). Lewis and Gabrielsen (1998) argued that internal communication is important to enhance co-operation across functional lines and between front-line employees and improve the support they receive from internal back-up units. Internal communications ensure that back-room personnel are aware of the requirements of front-line personnel.

Moreover, conformance to a set of service standards is more likely to be met if those standards are understood by every employee in the organization (Berry *et al.*, 1994; Berry *et al.*, 1991; Kohli and Jaworski, 1990; and Sewell and Bowen, 1992). These standards, when communicated to all employees, maximize internal benchmark achievement and minimize service failures. They also strengthen the firm's ability to recover from such failures (Lytle *et al.*, 1998). Previous studies argued that the communication efficiency within the organization has an important role in improving external customer satisfaction with service (Hallowell *et al.*, 1996). Thus, we hypothesized that communication efficiency within the organization will positively affect staff ability to deliver high levels of external service quality. Hence, we propose the following hypotheses:

**H13.** *Upward, downward and horizontal communication efficiency leads to higher levels of external service quality as perceived by bank staff.*

**H.14** *Upward, downward and horizontal communication efficiency is positively related to the following external service quality dimensions: (1) trust, (2) contact style, (3) responsiveness and (4) reliability.*

***Technology***

The tools provided to the employees to serve customers is one of the main components of an internal quality of service program (Hallowell *et al.*, 1996; and McAtarsney, 1999).

Technology can be regarded as an aid to delivering quality service, e.g. with respect to information technology (Olaisen and Revang, 1991), to free staff from routine tasks thereby giving them more time to deal with customers (Pirrie, 1990), and to assist in production and delivery (Drucker, 1991). Rapert and Wren (1998) identified the investment in equipment as one of the key variables of a quality-based strategy. Similarly, Lewis and Gabrielsen (1998) claimed that technology should be designed to meet employees' requirements to enable them

to do their jobs well and deliver a high quality of service. Having update technology helps contact employees to provide an error-free and fast service to bank customers.

Zeithaml *et al.* (1988) claimed that provision of high service quality depends on the appropriateness of the tools or technology the employee uses to perform the job. Technology and equipment can enhance the service employee's performance. Equipment failures can interfere with adequate employee performance. Thus, we expect that technology support will positively affect employees' ability to provide high levels of external service quality. Hence, we propose the following hypotheses:

**H15.** *Technology is positively related to external service quality as perceived by bank staff.*

**H16.** *Technology is positively related to the following external service quality dimensions: (1) trust, (2) contact style, (3) responsiveness, (4) reliability, (5) efficiency and (6) tangibles.*

### 5.4.4 Human Resource Management Variables

The concept of market-focused human resource management (Bowen, 1996) clearly assumes a direct link between internal market outcomes (e.g. satisfied employees) and external market outcomes (e.g. customer's favorable perception of service quality or customer satisfaction). The logic for expecting positive significant relationship between human resource practices and customers perceptions of service quality is that service organizations in which employees have positive perceptions of human resource practices will be those in which employees can devote their energies and resources to serving customers. Redman and Mathews (1998) claimed that human resource management practices are central to building a commitment to service quality among managers, and staff alike. Human resource management is also important in providing a supportive environment in which continuous quality improvement can take place. From the literature it is possible to identify the following human resource management variables:

***Teamwork***

People who work on their own or in small, discrete, work groups often have a myopic picture of their organization and the work that it does. They are often unaware of the work that is done even by people who work very close to them. Under these circumstances, they are usually unaware of the consequences of poor quality work. Effective teamwork among service employees is one of Berry *et al.*'s (1994) "essential lessons" for improving service quality. Hallowell *et al.* (1996) also identified that teamwork is one of the internal quality components.

Effective teamwork has a number of benefits. First, co-worker plays a key role in supporting their colleagues when faced with difficult or unpleasant customers. Second, teamwork provides a valuable method of disseminating good practice, and supporting and inducting new employees (Redman and Mathews, 1998). Third, a major site of quality problems is the inter-section of departmental boundaries and the use of cross-functional teams in service delivery can help reduce causes of service failure (Schonberger, 1994). Zeithaml *et al.* (1988) proposed that the extent to which employees view other employees as customers, the extent to which employees feel management cares about them, the extent to which employees feel they are co-operating rather than competing with each other, and the extent to which employees feel personally involved and committed are critical aspects to teamwork. If people are brought together in terms of a common goal, quality improvement becomes easier to communicate within the organization. Gronroos (1990) claimed that the internal co-operation in the form of employees helping each other could ultimately lead to employees helping customers. Redman and Mathews (1998) also found that service-performance shortfalls are highly correlated with the absence of teamwork. Accordingly, we propose the following hypotheses:

**H17.** *Teamwork is positively related to external service quality as perceived by bank staff.*

**H18.** *Teamwork is positively related to the following external service quality dimensions: (1) trust, (2) contact style, (3) responsiveness and (4) reliability.*

***Selection and Staff Recruitment***

Service quality problems often occur because contact personnel are not well suited to their positions. Zeithaml *et al.* (1988) proposed that emphasis on matching the employee to the job through selection process and the consequent ability or skill of employees to perform the job well affect external service quality. Selection and recruitment includes the appropriate allocation of people to positions to ensure employee-job fit in both front-line and support personnel positions (Zeithaml *et al.*, 1988). Moreover, Chaston (1994) claimed that management must ensure that employees are capable of fulfilling their job role. Lewis and Gabrielsen (1998) also emphasize that customer contact-employees' key role in determining external customers' perceptions of an organization's service quality, depends on their knowledge, skills and behaviour. Indeed, selection procedures should take service quality related variables into account (Lewis and Entwistle, 1989; and Zeithaml *et al.*, 1988), and Schlesinger and Heskett (1991a; 1991b) refer to the need to look for "customer responsiveness and communication skills".

One outcome of good staff selection procedures is employees self-efficacy. Hartline and Ferrell (1996) argued that employee self-efficacy is an employee's belief in his or her ability to perform job-related tasks. Gris and Mitchell (1992) argued that self-efficacy grows stronger over time as the employee successfully performs tasks and builds the confidence necessary to fulfill his or her role in the organization. As self-efficacy increases, employees exert more effort, become more persistent, and learn to cope with task-related obstacles (Bandura, 1977; and Gist, 1987). Empirical studies confirm that self-efficacy has a strong, positive relationship with employee performance (Earley, 1994). The self-efficacy of contact employees plays an important role in shaping customers' perceptions of the service encounter because employee performance during a service encounter typically involves responding to customer needs, handling special requests, and performing under adverse circumstances (Bitner *et al.*, 1990). Because of the increased effort that accompanies self-efficacy, highly self-efficacious contact employees should perform better in these service activities, thereby increasing customers' perceptions of service quality. Likewise, self-efficacious contact employees should be able to cope with demanding situations that arise during the service encounter. Hartline and Ferrell (1996) argued that when customers are served by employees who believe strongly in their own abilities, they are likely to receive higher-quality service. They found that employee self-efficacy has a positive effect on customers' perceived of service quality.

Another outcome of good staff selection procedures is employee adaptability. Hartline and Ferrell (1996) claimed that employee adaptability is the ability of contact employee to adjust their behaviour to the interpersonal demands of the service encounter. Employee adaptability has been linked with customers' perceptions of the service encounter. Humphery and Ashforth (1994) provided evidence that employees who "mindlessly" follow a service script are more likely to make mistakes and less likely to meet the individual needs of their customers. Bitner (1990); and Bitner *et al.* (1990) showed that customers evaluate the service encounter more favorably when employees are able to adapt to meet their special needs and requests. Similarly, Hartline and Ferrell (1996) claimed that contact employees who adapt their behaviour during customer interactions are more likely to fulfill the needs and requests of their customers, thereby increasing customers' perceptions of service quality.

In fact, selection and staff recruitment procedures which take service quality related variables into account will have a positive influence on staff ability to provide high levels of external customer service. Hence, we propose the following hypotheses:

**H19.** *Selection and staff recruitment is positively related to external service quality as perceived by bank staff.*

**H20.** *Selection and staff recruitment is positively related to the following external service quality dimensions: (1) trust, (2) contact style, (3) responsiveness and (4) reliability.*

***Performance Appraisal and Reward Mechanism***

Lytle *et al.* (1998); Johnson (1996); and Hallowell *et al.* (1996) claimed that reward and recognition is one of the service climate dimensions. Organizational philosophies about rewards and recognition are essential to encourage employees to deliver service excellence (Beatty and Gup, 1989). Service-related employee behaviour is said to result from conspicuous and specific compensation reward practices and programs (Benoy, 1996; Hartline and Ferrell, 1996; and O'Connor and Shewchuck, 1995). An important element of service quality is the link between employee reward and service performance (Berry *et al.*, 1994; Heskett *et al.*, 1990; Roach, 1991; Schlesinger and Heskett, 1991b; and Schneider and Bowen, 1995). Evaluation criteria tend to be based on accounting data such as sales and profit figures, but they should also include an employee's ability to deliver quality service (Zeithaml *et al.*, 1988; and Cespedes, 1992). Deming (1986) suggests that incentive pay schemes that are linked to appraisal outcomes undermine the kind of co-operative, creative, and committed behaviour necessary for continuous service quality improvement. Linking evaluations to service-related behavioral criteria gives employees the incentive to engage in behaviour that are conducive to improved service quality (George, 1990; and Gronroos, 1983). It also gives employees more control over the conditions that affect their performance evaluations (Anderson and Oliver, 1987; and Cravens *et al.*, 1993).

Glover (1993) also claimed that it is important to shift away from the traditional focus on results and individual recognition, towards processes and group recognition in order to improve performance appraisal mechanism. It is also useful to the organizations to setting employee performance standards based on customer care indicators and appraising and rewarding staff against these standards (Wilkinson et al, 1993). Johnson (1996) found that employee rewards and recognition are significantly and strongly related to levels of customer satisfaction. Lewis and Gabrielsen, (1998) also argued that employee evaluation and rewards impact on levels of motivation and hence on the level of service quality delivered. Furthermore, the work of Schneider and Bowen (1993) underscores the importance or recognition, reward, and compensation to service quality, customer satisfaction, and a passion for service. Accordingly, we propose the following hypotheses:

**H21.** *Performance appraisal and reward mechanism is positively related to external service quality as perceived by bank staff.*

**H22.** *Performance appraisal and reward mechanism is positively related to the following external service quality dimensions: (1) trust, (2) contact style, (3) responsiveness and (4) reliability.*

***Training***

Training is one of the important components of an internal service quality program (Hallowell *et al.*, 1996; Lytle *et al.*, 1998 and Johnson, 1996). Training and education are critical success factors in delivering a quality service, because the training and education ethos determines what service is to be delivered and how will be delivered (McAtarsney, 1999). If no formal training and education development exists then the values adopted within the organization are left uncontrolled. With respect to training, employees need skills and product knowledge (i.e. technical qualifications) to provide technical quality (Gronroos, 1984), and also expertise which will allow them to perform reliably and consistently (Parasuraman *et al.*, 1991). Training programs need to minimize role ambiguity (Zeithaml *et al.*, 1988), recognize teamwork (Berry *et al.*, 1990), and teach group dynamics and communication skills (Ballantyne, 1990). Training in communication skills, especially in listening to customers and understanding what customers expect should give contact personnel greater role clarity (Zeithaml *et al.*, 1988). Furthermore, a number of researchers (Albrecht and Bradford, 1990; Edwards and Clutterbuck, 1991; and Coyne, 1993) stress the need for educating rather than training employees. Their suggestion is that education is more concerned with the total development of an employee- the objectives being to teach initiative, flexibility and motivation- to maximize service quality.

Organizations need, therefore, to invest time, money and effort in appropriate training activities (Albrecht and Bradford, 1990; Schlesinger and Heskett, 1991a; 1991b; and Berry and Parasuraman, 1991). In addition, Daniel (1992) and Sherden (1988) also emphasize that training is a continuous process of improvement, and as such is an investment in future competitive strength. Lewis and Gabrielsen (1998) suggested that the ability of employees to satisfy the external customer depends on the quantity and quality of training. Hallowell *et al.* (1996) also found that training has a positive impact on employees' ability to provide high levels of customer service. Similarly, previous study found positive relationship between quality training programs and customer satisfaction with service (Johnson, 1996). Accordingly, we propose the following hypotheses:

**H23.** *Quality training program is positively related to external service quality as perceived by bank staff.*

**H24.** *Quality training program is positively related to the following external service quality dimensions: (1) trust, (2) contact style, (3) responsiveness and (4) reliability.*

***Job Satisfaction***

Tansuhaj *et al.* (1988) claimed that employees job satisfaction has a direct impact on customers' perceptions of quality of service they receive. Locke (1969, P. 316) defines job satisfaction as "the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job values". Hartline and Ferrell (1996) argued that the conceptual domain of job satisfaction is broad, because it includes all characteristics of the job itself and the work environment. Job satisfaction, the feelings a worker has about their job, has five dimensions: satisfaction with the work itself, satisfaction with pay, satisfaction with promotion prospects, satisfaction with supervision, and satisfaction with co-workers (Smith, *et al.*, 1969; and Brown and Peterson, 1993). By satisfying the needs of personnel, the firm upgrades its capabilities for satisfying the needs of its customers.

Tansuhaj *et al.* (1988) argued that employees who enjoy job satisfaction will have higher levels of job involvement and organizational commitment. Job involvement is concerned with the degree of absorption in the work activity. It is the degree to which a person identifies psychologically with their work and the degree to which work performance affects self-esteem (Tansuhaj *et al.* 1988). For employees who have strong job involvement, the total work situation becomes an important part of their life (Lodahl and Kejner, 1965). Increased job involvement is highly conducive to lower absenteeism and lower turnover (Saal, 1978; and Siegal and Ruh, 1973). Organizational commitment refers to the extent to which a person has a strong desire to remain a member of the organization, is willing to exert high levels of effort for the organization, and believes and accepts the values and goals of the organization (Mowday, *et al.* 1979). At least five possible outcomes of organizational commitment have been identified, including improved job performance, increased tenure with the organization, lower absenteeism, and less turnover (Mowday *et al.*, 1982). Churchill and colleagues (1985) argued that job satisfaction is closely related to employees' behavioral performance. During the service encounter, employee behavioral performance often is the service, as it is perceived by customers (Bitner, 1990). This relationship lies in the interaction between contact employees and customers, in which satisfied employees are more likely to engage in

behaviour that assist customers (Locke and Latham, 1990; and weatherly and Tansik, 1993). Schneider (1980) found evidence that job satisfaction is a primary reason that employees deliver good service. Similarly, many other researchers have argued that customers' perceptions of a service are influenced by employee job satisfaction (Bowen and Schneider, 1985; and Gronroos, 1983). Hartline and Ferrell (1996) found that job satisfaction has a positive effect on customers' perceived of service quality. Accordingly, we propose the following hypotheses:

**H25.** *Higher levels of staff job satisfaction lead to higher levels of external service quality as perceived by bank staff.*

**H26.** *Higher levels of staff job satisfaction is positively related to the following external service quality dimensions: (1) trust, (2) contact style, (3) responsiveness and (4) reliability.*

## 5.5 Conclusion

The major task of this chapter was to present the proposed research model and the research hypotheses. In doing this, it was necessary to discuss the previous studies which examined the relationship between the internal and external service quality. It was concluded that this relationship need to be more investigated because the majority of previous studies examined the relationship between the internal dimensions of service quality and the overall perception of external service quality only and the external dimensions of service quality had been generally neglected. Therefore, one of the main objectives of this research is to investigate the relationship between the internal and external dimensions of service quality. The research model proposed that there are nine internal service quality dimensions which represent the independent variables. The model also proposed that the external service quality has six dimensions, each of them represents the dependent variable. The research model hypothesized that the internal dimensions of service quality have a positive influence on the external service quality.

Having presented the proposed research model and research hypotheses, the next chapter will discuss the research methodology and how the selected approach will hopefully lead to achieve the objectives of this research.

# CHAPTER SIX
# THE RESEARCH METHODOLOGY AND DESIGN

## 6.1 Introduction

The research methodology and design has a significant impact on the validity, reliability and generalizability of the empirical findings and, accordingly, the extent to which the research objectives have been accomplished. The main purpose of this chapter is, therefore, to present the research methodology and design. Section 6.2 identifies and discusses the reasons behind building a model of the relationship between the internal and external service quality. The different types of research methods and the nature of this particular study will be presented in section 6.3. Section 6.4 will deal with issues relating to empirical data collection. This is followed in section 6.5 by a discussion of the research sample in terms of the population, the sample frame, the sample unit and the sample size. Section 6.6 will discuss the measurement and scaling issues and is followed by a discussion of the questionnaire design in section 6.7. Section 6-8 will deal with questionnaire translation and the pretesting process. The discussion of variable operationalization, validity and reliability analysis will be presented in section 6.9. Section 6.10 will present the modified research model and the revised research hypotheses in the light of factor analysis results. Finally, the method of analysis will be presented in section 6.11.

## 6.2 Rational for Building a Model of the Relationship Between the Internal and External Quality of Service

Tull and Hawkins (1993) argued that model development is essentially concerned with a description of the outcomes that are desired, the relevant variables, and the relationships of these variables to the outcomes. The conceptual research model in this study is concerned with examining the relationship between the internal and external service quality. The model proposes that the internal service quality dimensions have a positive effect on the level of external service quality. This model was designed and based on the academic literature in the belief that it is appropriate for achieving both the academic and practical objectives of the research. Moreover, the model facilitates actionable recommendations that can lead to future research or improve service practices. There are many reasons for building a research model which examines the relationship between the internal and external service quality. For example, the special characteristics of services (i.e., intangibility, heterogeneity, perishability and inseparability of production and consumption) means that firms sometimes find it

difficult to understand how customers perceive and evaluate service quality. In addition, management cannot assume consistency of staff behaviour and, therefore, consistency of service performance and quality throughout the organizations. Moreover, the service provider usually creates or performs the service at the time of consumption and the high visibility of the conversion process means that it is not always possible to hide mistakes or quality shortfalls. The involvement of customer in the process also introduces an additional factor over which management has little or no control. These characteristics have an impact on the approach and substance of quality management and make it important to find different ways to improve the quality of service. Therefore, the model aims to identify and recommend guidelines for achieving high levels of customer service based on improving internal service quality.

There is an apparent gap in the service marketing literature and, therefore, a failure to link the different dimensions of internal service quality to the external service quality dimensions. Therefore, the research model aims to provide a causal indicator for the relationship between the internal and external service quality dimensions. By examining these relationships, the model attempts to identify and recommend specific suggestions to managers on how to improve the external service quality dimensions and consequently the overall external service quality. Another reason for building a research model stems from the fact that the relationship between internal and external service quality needs to be examined according to different levels of management. In this study this relationship will be examined on branch managers, supervisors and front line staff levels, consequently, the study will provide useful insights into improving staff abilities and delivering higher levels of external customer service. Another fundamental purposes of the internal-external service quality model is to explain and enhance the understanding of how the internal service quality dimensions affect the level of external service quality. By identifying the dimensions of internal service quality that have the most significant affect on external service quality, the study will enhance managers' ability to improve customer service.

### 6.3 The Research Design

Burns and Bush (2000, P.129) defined research design as: A set of advance decisions that make up the master plan specifying the methods and procedures for collecting and analysing the needed information. Churchill (1995) argued that research design is the framework or plan for a study, which is used as a guide in collecting and analysing data. A research design, therefore, ensures that the study is relevant to the research objectives. Tull and Hawkins

(1993, P. 50) also defined research design in marketing as: The specification of procedures for collecting and analysing data necessary to help identify or react to a problem or opportunity, such that the difference between the cost of obtaining various levels of accuracy and the expected value of the information associated with each level of accuracy is maximized. Several aspects of Tull and Hawkins's definition deserve further examination. First, research design requires the specification of procedures. These procedures involve decisions on what information to generate, method of collecting data, the method of measurement, the determination of what is to be measured, and the method of analysing the data. Second, it also entails the identification of appropriate data that is conducive to resolving the problems. Obviously, the efficient collection of relevant data requires a clear definition of the problem.

### 6.3.1 Exploratory Research *vs.* Conclusive Research

In order to make a decision about the research design, exploratory and conclusive research will be discussed below.

***Exploratory Research***

Exploratory research is concerned with discovering the general nature of a problem and the variables that related to it (Tull and Hawkins, 1993). In other words, the major emphasis in exploratory research is on the discovery of ideas and insights. Exploratory research is also usually unstructured and informal that is undertaken to gain background information about the general nature of the research problem. Unstructured means that exploratory research does not have a formalized set of objectives, a sample plan, or a questionnaire. It is usually conducted when little is known about the problem and there is a need for additional information or a desire for new or more recent information. Moreover, exploratory research is an important tool in generating hypotheses. Burns and Bush (2000) argued that exploratory research is systematic, but it is very flexible in that it allows the researcher to investigate whatever sources they desire. In general, Burns and Bush (2000) concluded that exploratory research is used in a number of situations:

- *Gain background information*. When very little is known about the problem or when the problem has not been clearly formulated, exploratory research may be used to gain much needed background information.
- *Define terms*. Exploratory research helps to define terms and concepts.
- *Clarify problems and hypotheses*. Exploratory research allows the researcher to define the problem more precisely and to generate hypotheses for the upcoming study.

Similarly, Churchill (1995) also stated that an exploratory study is used for any or all of the following purposes:

- Formulating a problem for more precise investigation or for developing hypotheses;
- Establishing priorities for further research;
- Gathering information about the practical problems of carrying out research on particular conjectural statements;
- Increasing the analyst's familiarity with the problem; and
- Clarifying concepts

Table 6.1: Differences Between Exploratory and Conclusive Research

| Research Project Components | Exploratory Research | Conclusive Research |
|---|---|---|
| **Research purpose** | General: to generate insights about a situation | Specific: to verify insights and aid in selecting a course of action |
| **Data needs** | Vague | Clear |
| **Data sources** | Ill-defined | Well-defined |
| **Data collection form** | Open-ended, rough | Usually structured |
| **Sample** | Relatively small; subjectively selected to maximise generation of useful insights | Relatively large; objectively selected to permit generalisation of findings |
| **Data collection** | Flexible; no set procedure | Rigid; well-laid-out procedures |
| **Data analysis** | Informal; typically non-quantitative | Formal; typically quantitative |
| **Inferences/recommendations** | More tentative than final | More final than tentative |

Source: Parasuraman (1991)

***Conclusive Research***

Parasuraman (1991) argued that conclusive research is intended to verify insights and to aid decision-makers in selecting a specific course of action. The primary purpose of conclusive research, also known as ***confirmatory research***, is to help decision makers choose the best course of action in a particular situation. It is, especially, useful when a decision maker has in mind one or more alternatives and is looking for information to evaluate them. Conclusive research is more formal and rigorous than exploratory research. In short, the purpose of a research project and the preciseness of its data requirements, determine whether the research is exploratory or conclusive. In general, conclusive or confirmatory research is conducted when a researcher has a clear idea about the types of information they want. Even though exploratory and conclusive research have distinct purposes, they both consist of the same research components. They differ only in terms of the degree of formalization and flexibility of the components (see table 6.1).

### 6.3.2 Descriptive Research *vs.* Causal Research

There are two basic forms of conclusive research: descriptive research and causal research. The distinction between the two is based on the primary purpose of the conclusive-research project and the nature of the inferences that can be drawn from it.

***Descriptive Research***

The descriptive research study is typically concerned with determining the frequency with which something occurs or the relationship between two variables. The descriptive study is typically guided by an initial hypothesis. The objective of descriptive research, as the name implies, is essentially to describe something. Specifically, it is intended to generate data describing the composition and characteristics of relevant groups, such as customers, organizations or market areas. Data collected through descriptive research can provide valuable information about the characteristics of the groups and also about the relationships between the characteristics. A great deal of marketing research can be considered descriptive research. Churchill (1995) argued that descriptive research is used when the purpose is as follows:

- To describe the characteristics of certain groups.
- To estimate the proportion of people in a specified population who behave in a certain way.
- To make specific predictions.

There are two basic descriptive research studies available to the marketing researcher: cross-sectional and longitudinal.

***Cross-sectional studies*** measure a population at only one point in time and, as such, they are often describe as "snapshots" of the population. Churchill (1995) argued that cross-sectional study has two distinguishing features. First, it provides a snapshot of the relevant variables at a single point in time. Second, the sample is typically selected to be representative of some known universe population. Therefore, a great deal of emphasis is placed on selecting the sample, usually with a probability sampling plan. The probability sampling plan allows the sampling error associated with the statistics generated from the sample to be determined. The "large" number of cases, typical of the sample survey approach, also allows for cross-classification of the variables. Cross-sectional studies are very prevalent in marketing research, outnumbering longitudinal studies and causal studies. Cross sectional studies are also the most popular method within the domain of descriptive research. Parasuraman (1991)

has also argued that cross-sectional studies account for the majority of formal research projects involving primary-data collection.

***Longitudinal studies*** are repeated-measurement studies involving data collected at several periods in time. While a cross-sectional study yields a "snapshot", a longitudinal study produces a "motion picture" (or a series of snapshots) of a situation over time (Parasuraman, 1991). In general, longitudinal studies are more informative than cross-sectional studies, just as motion pictures are more revealing than still pictures but longitudinal studies are also more expensive. Furthermore, the choice between the two depends on the objectives of the research. A cross-sectional study makes use of a cross-sectional sample or group of units or observation selected typically and solely for the onetime data collection. A longitudinal study typically employs a panel or a group of units or observation to provide measurements over a period of time.

Churchill (1995) argued that a good descriptive study presupposes a great deal of prior knowledge about the phenomenon being studied. It typically rests on one or more specific hypotheses. These conjectural statements guide the research in specific directions. A drawback of descriptive research, therefore, is that it generally cannot provide the type of evidence necessary to make causal inferences about relationships between variables.

### *Causal research*

Causal research is a form of conclusive research that is intended to generate the type of evidence necessary for confidently making causal inferences about relationships between variables (Parasuraman, 1991). Causal research design is concerned with determining cause-and-effect relationships. Churchill (1995) claimed that causal studies typically take the form of experiments, because experiments are best suited to determining cause and effect. An experiment is concerned with manipulating an independent variable to see how it affects a dependent variable, while also controlling the effects of additional extraneous variables. Independent variables are those variables over which the researcher has some control and can manipulate. On the other hand, the researcher has little or no direct control over dependent variables. Extraneous variables are those that could have some effect upon a dependent variable but are not independent. In attempting to examine causal relationships between an independent variable and a dependent variable, it is important to understand that extraneous variables may have caused changes in the dependent variable. Unfortunately, the desire to understand the world in terms of causal relationships is very difficult, if not impossible, and

there are formal conditions that must be in place before a researcher can attest causality. Table 6.2 describes the formal requirements for causality. Manipulation of the presumed causal variable and control of other relevant variables are distinct features of causal research. Data collected through causal research can therefore provide much stronger evidence of cause and effect than data collected through descriptive research. The preceding discussion does not necessarily mean that the analysis of descriptive research data cannot identify possible causal linkages between variables, especially when the effects of uncontrolled variables are filtered through certain analysis techniques designed for that purpose.

In fact, rather than view descriptive-versus-causal research as a clear-cut dichotomy, Parasuraman (1991) stated that we should think of conclusive projects as falling along a ***research continuum***, with "purely descriptive with no control" at one extreme and "purely experimental with strict control and manipulation" at the other. Virtually all conclusive projects fall somewhere along this continuum, although the point where "descriptive" ends and "causal" begins is subjective and somewhat arbitrary.

Table 6.2: Formal Conditions of Causality

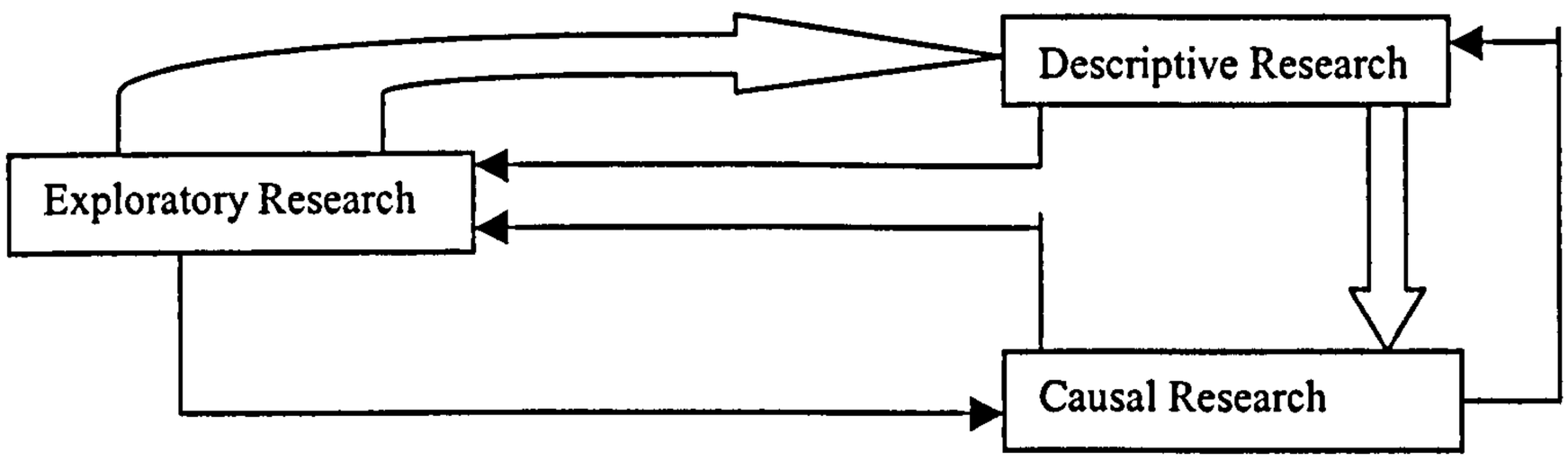
| Condition | Description |
|---|---|
| Covariation | It must be demonstrated that the causal variable occurs with the caused variable and that the two variables have an orderly relationship (for example, as price down, sales go up) |
| Time sequence | It must be demonstrated that the causal variable changed prior to or simultaneous with observed changes in the caused variable (for example, prices were lowered on Monday, and sales go up for Monday and all other days when prices were lower). |
| Systematic elimination | It must be demonstrated that all other possible causal variables are eliminated for candidacy (for example, if an advertising campaign began on the day we lowered prices, we could not eliminate the advertising campaign as a cause of sales going up). |
| Experimental design | It must be demonstrated that a valid experimental has been conducted in order to state that the variable is unequivocally causal (for example, a formal market test would be designed and conducted in order to determine the effect of a price reduction on sales). |

Source: Burns and Bush (2000)

Having stated the basic or general purpose of each major type of research design, three important caveats are in order. First, although the suggested classification of design types is useful for gaining insight into the research process, the distinctions are not absolute. Nevertheless, certain types of research designs are better suited to some purposes than others and the crucial tenet of research is that the design of the investigation should stem from the problem. Second, whether or not the designs are useful or appropriate in a given problem setting depends on how imaginatively and skilfully they are applied. There is no single best way to proceed as it all depends on the specific problem to be solved. A researcher, therefore, needs an understanding of the basic designs so that they can modify them to suit specific purposes. Third, Churchill (1995) argued that the three basic research designs can be looked

at as stages in a continuous process. Figure 6.1 shows the interrelations between the three types of research. Exploratory studies are often seen as the first or initial step in research. When researchers begin an investigation, it stands to reason that they lack a great deal of knowledge about the problem. Although Churchill (1995) suggested that the sequence would typically be from exploratory to descriptive to causal research, alternative sequences might be appropriate. The potential for conducting research in the reverse direction, for example also exists. If a hypothesis is disproved by causal research, the analyst may then decide that another descriptive study, or even another exploratory study, is needed. Likewise, not every research problem will begin with an exploratory study. It depends on how specific researchers can be in formulating the problem before them. A general, or vague statement leads naturally to exploratory work, whereas a specific cause-effect hypothesis lends itself to experimental work. (Churchill, 1995).

Figure 6.1: Relationships Among Research Designs




Source: Churchill (1995)

Furthermore, Burns and Bush (2000) argued that the choice of an appropriate research design depends largely upon the objectives of the research (see table 6.3).

Table 6.3: The Basic Research Objective and Research Design

| Research Objective | Appropriate Design |
|---|---|
| To gain background information, to define items, to clarify problems and hypotheses, to establish research priorities. | Exploratory |
| To describe and measure marketing phenomena at a point in time | Descriptive |
| To determine causality | Causal |

Source: Burns and Bush (2000)

The main research objective of this research is the examination of the relationship between the internal and external service quality dimensions, the research, therefore, is essentially conclusive. To be more specific, this research falls on the continuum suggested by Parasuraman (1991). By applying Hierarchical regression analysis and using dummy variables as control variables in order to make specific predictions, this research is descriptive research providing causal indicators for the relationship between the internal and external service quality. As an initial step, the exploratory research was conducted by reviewing the

literature on service marketing in order to define terms and concepts relating to internal and external service quality. Reviewing the service marketing literature also helped us to determine any gaps in the literature, further define the research problem, develop the conceptual framework and generate research hypotheses. A cross sectional study (sample survey) was used because it was considered the most suitable way to achieve the research objective. As mentioned earlier, cross-sectional studies are very prevalent in marketing research, outnumbering longitudinal studies and causal studies. Cross sectional studies are also the most popular method within the domain of descriptive research.

## 6.4 Empirical Data Collection Approach

The selection of the data-collection method(s) is one of the key aspects of research design (Tull and Hawkins, 1993). The decision to use a structured questionnaire as the primary method of data collection in this research was based on the nature of the data and the purpose for which it was to be used.

### 6.4.1 The Different Types of Data in Marketing Research

Generally, there are three types of data in marketing research: secondary data, survey data, and experimental data.

***Secondary Data***

Diamantopoulos and Schlegelmilch (1997) argued that secondary data can be obtained from published statistics (by government departments, trade association, chambers of commerce, and research foundations), annual report (published by business firms as well as non-profit organizations), abstracting & index services (covering thousands of periodicals, academic journals and newspapers), syndicated services (providing regular detailed information on a particular country/industry/product group) and database services (providing tailor-made mailing lists, allowing fast access to computerized information sources worldwide, or enabling electronic transfer of data sets from one location to another). Even though it is rare for secondary data to completely resolve a particular research problem, it will typically (1) help to clarify the problem under investigation, (2) suggest improved methods or alternative data for examining the problem, and (3) provide comparative data so that primary data can be more insightfully interpreted (Churchill, 1995). In this research, secondary data is used to obtain relevant information about the Egyptian banking industry and the selected four banks in this study. This data was obtained from two sources: the published reports from the central bank of Egypt and the annual reports of the four banks. As mentioned earlier, secondary data

from academic journals in the service marketing field was also used to define the service quality dimensions and to develop the research framework and hypotheses.

***Primary Data***

Primary data is collected to help solve a specific problem or facilitate decision making (Tull and Hawkins, 1993). Churchill (1995) argued that primary data is obtained in a number of different formats:

*Demographic/Socioeconomic Characteristics*. One type of primary data which is of great interest to researchers are the demographic and socioeconomic characteristics of a sample, such as age, education, occupation, marital status, sex, income, or social class. These variables are used to cross-classify the collected data and in some way make better sense of it. Demographic and socioeconomic characteristics are sometimes called "states of being", because they represent attributes of people. Some of these states of being, such as respondent's age, sex, and level of formal education, can be readily verified. However, others such as social class, can only be verified crudely, because they are relative rather than absolute measures of a person's standing in society.

*Psychological/Life-Style Characteristics*. Another format of primary data which is of interest to researchers is the subject's psychological and life-style characteristics such as, personality traits, social activities, interests, and values. Personality traits or mannerisms refer to the normal patterns of behaviour exhibited by an individual and are useful in distinguishing one individual from another.

*Attitudes/Opinions*. Attitudes and opinions indicate the views, preferences, inclination or feelings of people towards some object or phenomenon. As such it incorporates political beliefs and views on social issues etc. Attitudes are important in the marketing literature, because it is generally accepted that they are related to and influence behaviour (Churchill, 1995).

*Awareness*. In marketing research, awareness refers to respondents knowledge of some object or phenomenon. Typical examples are brand awareness, knowledge of important events or certain subjects or topics.

*Intentions*. Intentions refer to an individual's anticipated or planned future behaviour (Churchill, 1995). Such intentions can relate to future purchasing behaviour, social and personal behaviour (Diamantopoulos and Schlegelmilch, 1997).

*Motivation*. Motive can refer to a need, want, urge, etc., or any inner state that directs or channels behaviour towards specific goals. A researcher's interest in motives typically involves determining why people behave as they do. This is important for a number of reasons. For example, it is believed that a person's motives tend to be more stable than the individual behaviour, and, therefore, motives offer a better basis for predicting future behaviour than past behaviour. Similarly, understanding the motives behind a person's behaviour helps the researcher influence and anticipate future behaviour (Churchill, 1995).

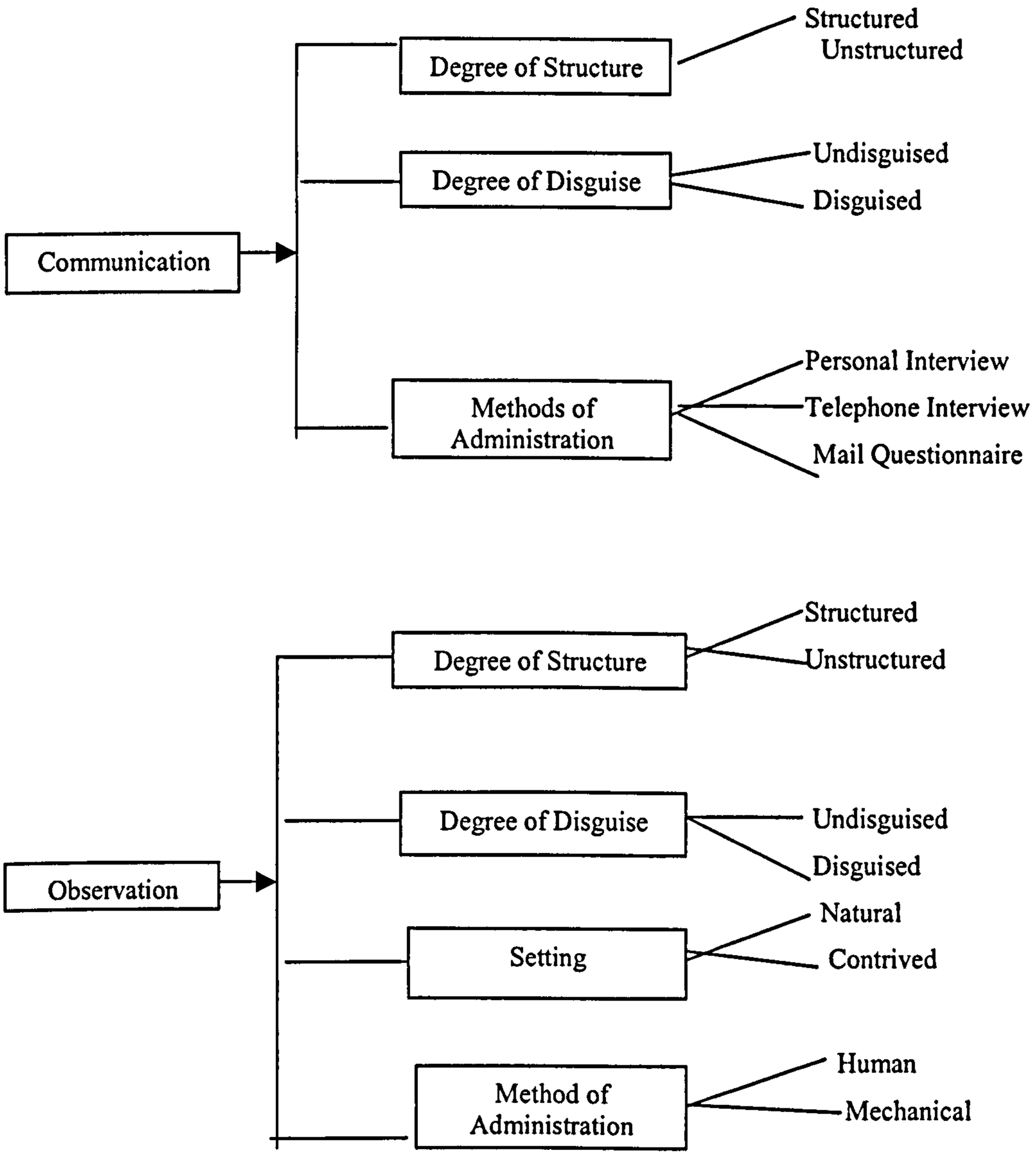
*Behaviour*. Behaviour is essentially concerned with what subjects have done or are doing. Current or actual behaviour is a physical activity which takes place under specific circumstances, at a particular time, and involves one or more actors or participants. The focus on behaviour involves a description of the activity and its various components (Churchill, 1995).

Most of the data needed for this research falls in the Attitudes/Opinions category because it is concerned with staff attitudes and opinions about internal and external service quality. Internal service quality is best understood and measured by soliciting employee's perceptions and opinions about the extent to which their organizations have embraced specific policies and good practices that are conducive to quality service. Schneider *et al.* (1992) argued that employees' attitudes and perceptions of events, practices, and procedures as well as their perceptions of the behaviour that are rewarded, supported and expected constitute the climate of the work setting in an organisation. Demographic/socioeconomic characteristics, such as respondents' sex, age, experience in the bank, experience in their current positions, annual income, education level and job position were used in order to better understand the respondents' profile.

### 6.4.2 The Basic Means of Collecting Primary Data

In collecting primary data, there are a number of choices which are shown in figure 6.2. The primary decision is whether to employ the communication or observation technique. Communication involves questioning respondents to secure the desired information using a questionnaire as a data collecting instrument (Churchill, 1995). Observation does not involve questioning but instead necessitates the checking and recording of relevant facts, actions, or behaviour. The "observer" may be a person or persons, or alternatively the data may be gathered using some mechanical device. Choosing a primary method of data collection implies several supplementary decisions.

Figure 6.2: Basic Choices Among Means for Collecting Primary Data




Source: Churchill (1995)

Table 6.4: Five Advantages of Survey Research

| Advantages | Descriptions |
|---|---|
| Standardisation | All respondents react to questions worded identically and presented in the same order. Response options (scales) are the same too. |
| Administration ease | Interviewers read questions to respondents and record their answers quickly and easily. In some cases, the respondents fill out the questionnaires themselves. |
| Tap the "unseen" | It is possible to ask questions about motives, circumstances, sequences, sequences of events, or mental deliberations. |
| Tabulation/analysis | Large sample sizes and computer processing allows quick tallies, cross-tabulations, and other statistical analyses. |
| Subgroup differences | Respondents can be divided into segments or subgroups for comparisons in the search for meaningful differences. |

Source: Burns and Bush (2000)

Communication and observation have their own advantages and disadvantages (Churchill, 1995). The communication method of data collection has the advantages of versatility, speed, and cost, whereas observation data is typically more objective and accurate. Burns and Bush (2000) argued that there are a number of advantages of using survey methods: standardization, ease of administration, ability to tape the "unseen," suitability to tabulation and statistical analysis, and sensitivity to subgroup differences (see table 6-4). Additionally, Burns and Bush (2000) argued that there are three major ways of collecting information from respondents: (1) have a person ask the questions (person-administered), (2) have a computer assist or direct the questioning (computer-administered), and (3) allow respondents to fill out the questionnaire themselves (self-administered).

### 6.4.3 Self-Administered Survey

With a self-administered survey (which is used in this research), the respondents complete the survey on their own. It is different from other survey methods in that there is no agent, human or computer administering the interview. The respondent reads the questions and responds directly on the questionnaire. Normally, the respondent goes at his or her own pace, and in most instances they select the place and time to complete the interview. They also decide when the questionnaire will be returned. Although commonly used in marketing research, self-administered surveys have both advantages and disadvantages.

***Advantages of self-administered surveys***

Burns and Bush (2000) argued that self-administered surveys have three important advantages: reduced cost, respondent control, and no interviewer-evaluation apprehension.

*Reduced cost*. By eliminating the need for an interviewer or an interviewing device such as a computer program, there can be significant savings in cost

*Respondent control*. Respondents can control the pace at which they respond, so they may not feel rushed. Ideally, a respondent should be relaxed while responding, and a self-administered survey may affect this state.

*No interviewer-evaluation apprehension*. Some respondents feel apprehensive when answering questions. The self-administered approach takes the administrator, whether human or computer, out of the picture, and respondents may feel more at ease.

***Disadvantages of Self-Administered Surveys***

Self-administration survey places control of the survey in the hands of the prospective respondent and, therefore, there is the possibility that respondents will not complete it or

answer the questions erroneously, or not respond in a timely manner, or refuse to return it (Burns and Bush, 2000). The major reason for these drawbacks is because no opportunity exists to monitor or interact with the respondent during the course of the interview. Due the absence of the interviewer, the burden of respondent understanding falls on the questionnaire design itself. It must therefore, have clear unambiguous instructions, examples, and reminders throughout.

### 6.4.4 Drop-Off Survey

One of the self-administered survey methods is the "drop-off survey" which is used in this research. With this method, the researcher approaches a prospective respondent, introduces the general purposes of the survey and leaves it with the respondent to complete. Essentially, the objective is to gain the prospective respondent's co-operation. Normally, the researcher will return on the same day or the next day to pick up the completed questionnaire. In this way, a researcher can cover a number of residential areas or business locations in a single day with an initial drop-off and a later pick up. It has been reported that drop-off survey are inexpensive, have a quick turnaround, high response rates, minimal interviewer influence, and good control over how respondents are selected (Burns and Bush, 2000).

In conclusion, this study uses the communication (questionnaire) approach to collect the empirical data. This approach is considered the most suitable for two reasons. First, it is suitable for collecting data about attitudes and opinions. The observation approach cannot be used to measure staff attitudes and opinions about the internal and external service quality dimensions. Second, the collection of cross sectional data necessitates that data should be collected from a wide, relatively large and well dispersed sample and this can best be done through reliance on a structured questionnaires. Moreover, the drop-off method was used as the most cost efficient approach to distributing and collecting the questionnaires.

## 6.5 Research Sample

A research sample is point of the universal population that represents the entire group (Burns and Bush, 2000). Given the importance of reaching generalizable conclusions from research work, the sampling issues become very important in determining the extent to which the research findings are generalizable. There are three vital decisions arising from sampling that should be considered, they are: the population and the sampling frame, the sample unit, and the sample size.

### 6.5.1 The Population and the Sampling Frame

A population is defined as the entire group under study as specified by the objectives of the research project (Burns and Bush, 2000). The population in this study is the Egyptian commercial banks. The sample frame is a master list of all the sample units in the population. Regarding the sample frame in this research, a list of the commercial banks registered with the central bank of Egypt was used and the biggest four commercial banks were selected. Forty five branches in Cairo were selected by the head offices of those four banks according to their size (small, medium and large branches) and location, in an endeavour to obtain a diverse sample.

With respect to branch location, four locations in Cairo were selected. Location one covers the centre of Cairo, a very busy area which involves a wide range of different branch activities. The people who live in this location are quite diverse in terms of their annual disposable income. This area also includes many commercial stores and governmental institutions. The second location is also very busy but annual disposable income is low and it is regarded as a poor area. The third location is a wealthy area with a high level of disposable income. This area also includes many commercial and governmental institutions. Finally, the fourth location has the highest level of disposable income and is regarded as the wealthiest of the four areas.

The selected branches were all located in Cairo the capital city of Egypt. Cairo was chosen for a number different reasons. Firstly, as the capital city it has the biggest and largest number of branches. Secondly, banks located in Cairo have taken steps to improve customer service. Thirdly, Cairo is the biggest city in Egypt accounting for 11.5% (7.4 Millions in 2000) of the Egyptian population (64.3 Millions in 2000) (Central Bank of Egypt, 2000). Fourthly, the biggest commercial stores and the main governmental institutions are located in Cairo. Furthermore, a huge number of diverse businesses are also located in Cairo. Finally, this profile of Cairo enabled the researcher to obtain a diverse sample in the most effective manners.

### 6.5.2 The Sample Unit

The sample unit is the basic level of investigation (Burns and Bush, 2000) and refers to the people from whom empirical data are collected and, accordingly, to whom the questionnaire should be directed. Determining the sample unit is very important because asking the right questions of the right people is critical to the success of the research. The sample unit in this

research includes branch managers, supervisors and front line staff in the branches of Egyptian commercial banks. As all of these respondents deal directly with external customers, they were considered appropriate in identifying key service delivery issues that are conducive to improving the levels of external customer service. This sis supported by the fact that the delivery of service occurs during the interaction between contact employees and customers, therefore, the attitudes and behaviour of contact employees can influence customers' perceptions of service (Bowen and Schneider, 1985). Previous Research has also shown that employees' attitudinal and behavioral responses can positively affect customers' perceptions of the service encounter and their judgements of service quality (Bitner, 1990).

### 6.5.3 Sample Size

Sample accuracy refers to how close the sample's statistics (for example, the mean and standard deviations of the responses to a particular question) are to the true population's value it represents. Sample size will have a direct bearing on how accurate the findings are relative to the universal population (Burns and Bush, 2000). The important points to bear in mind are that: (1) sample size is not related to representativeness, but (2) sample size is related to accuracy. Multiple regression is used as the main statistical technique to test the research hypotheses and Hair *et al.* (1995) argued that the size of the sample has a direct impact on the appropriateness and the power of multiple regression analysis. In addition to sample size in determining statistical power, size also affects the generalizability of the results by the ratio of observations to independent variables. Hair *et al.* (1995) suggested that the ratio should never fall below five, meaning that there should be at least five observations for each independent variable. While the minimum ratio is 5 to 1, Hair *et al.* (1995) argued that the desired level is between 15 to 20 observations for every independent variable. When this level is reached, the results should become generalizable. In this study, thirteen independent variables were identified plus fifteen dummy variables will be used as control variables in the regression models. On the assumption that 20 observations for each independent variable is the desired level, the sample size should be around 550. The ideal sample size can, however, be compromised by time and cost constraints and the response rate can also be difficult to assertain at the outset.

## 6.6 Measurement and Scaling

Measurement is defined as determining the amount or intensity of some of the characteristics which one of interest to the researcher (Burns and Bush, 2000). The objective is to measure the properties of objects. Properties are the specific features or characteristics of an object

that can be used to distinguish it from another object. Measurement is a simple process when the researcher is measuring objective properties, which are physically verifiable such as age and income. However, marketing researchers often desire to measure subjective properties, which cannot be directly observed because they are mental construct such as a person's attitude or intentions. In this case, the marketing researcher must ask a respondent to translate his or her mental constructs onto a continuum of intensity. To do this, the marketing researcher must develop question formats that are very clear and that are used identically by the respondents. This process is known as scale development (Burns and Bush, 2000).

### 6.6.1 Question-Response Formats

Burns and Bush (2000) argued that there are three basic question-response formats: open-ended, closed-ended, and scaled-response questions. An open-ended question presents no response options to the respondents. Rather, the respondent is instructed to respond in his or her own words. The closed-ended question provides response options on the questionnaire. There are two types of the closed-ended question: a dichotomous closed-ended question and a multiple category closed-ended question. A dichotomous closed-ended question has only two response options, such as "yes" or "no". If there are more than two options for the response, then the researcher is using a multiple category closed-ended question.

Finally, the scaled-response question utilises a scale developed by the researcher to measure the attributes of some construct under study. The response options are identified on the questionnaire. With an unlabeled scaled-response format, the scale may be purely numerical or only the endpoints of the scale are identified. The labelled scaled-response format uses a scale in which all of the scale positions are identified with some descriptor. Churchill (1995) argued that this type of fixed-alternative question is reliable for a number of reasons. First, the frame of reference is often obvious from the alternatives. Moreover, providing alternative responses also often helps to make the question clear. Similarly, providing the dimensions in which to frame the reply also helps to ensure the reliability of the question. Conversely, Churchill (1995) has stated that the reliability of fixed-alternative questions is sometimes associated with loss of validity because the answers may not accurately reflect the true state of affairs. Fixed alternatives may force a response to a question on which the respondent does not have an opinion. This is particularly true if a "no opinion" category is not provided as an alternative. Even when it is provided, there is often a tendency to keep the number of "no opinion" to a minimum. It may also be the case that the respondent has an opinion, but none of the response categories recognize it. Fixed alternative responses may also lower validity

when the response categories themselves introduce bias. In using a fixed-alternative question it is, therefore, very important that the alternatives adequately cover the range of probable replies.

In general, the fixed-alternative questions are best suited to situations when possible replies can be reasonably anticipated limited in number, and clear cut. Thus, they are appropriate for securing factual information (age, education, home ownership, etc.) and for eliciting expressions of opinion about issues on which people hold clear opinions. They are not as appropriate for securing primary data on motivations but could be used to collect data on attitudes, intentions, awareness, demographic/socioeconomic characteristics, and behaviour (Churchill, 1995).

### 6.6.2 Scales Characteristics

Scale development is concerned with designing questions to measure the subjective properties of an object. There are various types of scale, each of which possess different characteristics and these characteristics determine the scale's level of measurement. There are four recognized characteristics of scales: description, order, distance, and origin (Burns and Bush, 2000). Description refers to the use of a unique descriptor, or label, to represent each designation in the scale. For example, "yes" and "no", "agree" and "disagree". All scales include description in the form of characteristics labels that identify what is being measured. Order refers to the relative sizes of the descriptors. Here, the key word is "relative" as it typically includes such words as "greater than," "less than," and "equal to". Regarding distance, a scale has the characteristics of distance when absolute differences between the descriptors are known and may be expressed in units. When the characteristic of distance exists, the data can also be ranked in some sort of order. Finally, a scale is said to have origin if there is a unique beginning or true zero point in the scale. Not all scales have a true zero point, in fact, many scales used by marketing researchers have arbitrary neutral points, but they do not have origins. For example, when a respondent says, "No opinion" in response to a question, we cannot say that the person has a true zero level of agreement. Each of these scaling characteristics builds on the previous one in that description is the most basic and is present in every scale. If a scale has order, it must also possesses description. If a scale has distance, it must also possesses description. In other words, if a scale has a higher-level property, it also has all the lower-level property characteristics. However, the opposite is not true, lower prosperities scales do not necessary have higher property characteristics (Burns and Bush, 2000).

### 6.6.3 Measurement Levels of Scales

The characteristics of a scale determine its level of measurement. There are four levels of measurement: nominal, ordinal, interval, and ratio (Burns and Bush, 2000) and table 6.5 shows how each scale type differs according to the scaling characteristics. Table 6.5 shows that Interval scales are those in which the distance between each descriptor is known. The distance is normally defined as one scale unit. By wording or spacing the response options on a scale so they appear to have equal intervals between them, the researcher achieves a higher level of measurement than with ordinal or nominal scales. Moreover, with higher-order scales, the researcher is allowed to use more powerful statistical techniques (Burns and Bush, 2000).

Burns and Bush (2000) argued that the measurement level of a scale is very important for the following reasons. First, the level of measurement determines the level of information and, therefore, what you can and cannot say about the object of study. For example, nominal scales provide the lowest level of information, and therefore they are sometimes considered the crudest scales. Nominal scales allow us to do nothing more than identify the object of study in terms of some property it possesses. Ratio scales, however, contain the greatest amount of information and allow us to say many things. A second important reason for understanding scales is that the level of measurement dictates the type and level of statistical analysis. Low-level scales necessitate low-level analyses, whereas, high-level scales permit more sophisticated analyses. Parasuraman (1991) classified data with only nominal or ordinal properties as non-metric data, and data with interval or ratio properties as metric data. Metric data is conducive to using parametric statistics such as multiple regression analysis. Whereas, with non-metric data, only the less powerful non-parametric statistical techniques can be used. In other word, the amount of information contained in the scale dictates the limits or power of the statistical analysis. In the light of this, Burns and Bush (2000) argued that it is desirable to construct a scale at the highest appropriate level of measurement possible.

Table 6.5: Scales Characteristics According to the Level of Measurement

| **Level of Measurement** | **Scale Characteristics Possessed** | | | |
|---|---|---|---|---|
| | ***Description*** | ***Order*** | ***Distance*** | ***Origin*** |
| Nominal Scale | Yes | No | No | No |
| Ordinal Scale | Yes | Yes | No | No |
| Interval Scale | Yes | Yes | Yes | No |
| Ratio Scale | Yes | Yes | Yes | Yes |

Source: Burns and Bush (2000)

### 6.6.4 Considerations in Choosing the Question-Response Format

Burns and Bush (2000) stated that there are five considerations in choosing a question-response format: (1) the nature of the property being measured, (2) previous research studies, (3) the data collection mode, (4) the ability of the respondents, and (5) the desired scale level.

(1) *Nature of the property being measured.* The inherent nature of the property of a construct often determines the question-response format.

(2) *Previous research studies*. On some occasions, a survey follows an earlier one, and there my be a desire to explicitly compare the new findings with the previous survey. In this case, it is customary to simply adopt the question format used in the initial study. Burns and Bush (2000) argued that if a researcher believes a question format to be reliable and valid, and it suits the purpose of the study at hand, it is good practice to adopt or adapt it rather than inventing a new one.

(3) *Data collection mode*. Certain data collection modes are better suited for certain question formats. For instance, a mail or other self-administered questionnaire accommodates scaled-response questions because the respondent can see the response categories on the questionnaire itself.

(4) *Ability of the respondent*. It is advantageous to match the question format with the abilities of respondents. For example, if the respondent is unaccustomed to rating objects on numerical scales, it is appropriate to use a label format, or perhaps a dichotomous closed-ended question format in which the respondent simply indicates "agree" or "disagree".

(5) *Scale level desired*. Certain statistical analyses incorporate assumptions about the nature of the measures being analysed, so the researcher must bear these requirements in mind when selecting a question format. If a researcher desires to use higher-level statistical analyses, the question's response format must embody the correct scale assumptions.

In this research, the modified Likert scale is used to measure the internal and external service quality dimensions. The modified Likert scale is a scaled-response from commonly used by marketing researchers, in which respondents are asked to indicate their degree of agreement or disagreement on a symmetric agree-disagree scale for a series of statements (Burns and Bush, 2000). The value of the modified Likert scale should be apparent because respondents are simply asked how much they agree or disagree with the statement. In this sense, the scale captures the intensity of their feelings. The modified Likert scale is used in this research for four reasons. First, it is suitable for measuring staff attitudes and opinions about the levels of internal and external service quality. Second, by reviewing the relevant literature, it was

found that this scale is the most commonly used. Third, the data with Likert scale is metric and, therefore, facilitate the use of more powerful statistical techniques such as multiple regression analysis. Finally, the Likert scale is appropriate for the self administered survey because respondent can see the response categories on the questionnaire.

In order to reduce the response bias which may arise out of asking respondents whether their banks are good at delivering internal and external service, a 7-point scale is used (from 1= strongly disagree to 7= strongly agree). In addition to that, some of the statements are negatively worded and were, therefore, reversed when entering the data.

## 6.7 Questionnaire Design

In order to achieve a good response rate and minimize response bias, attention was also focused on the content and phrasing of the questions and the general appearance of the questionnaire. The guidelines for the construction of an effective questionnaire suggested by Tull and Hawkins (1997); Dillman (1978); Sekaran (1992); and Neuman (1994) have been followed.

### 6.7.1 Questions Content, Phrasing and Sequence

Tull and Hawkins (1997) identified five major considerations with question content. For each question, the researcher must ascertain (1) whether there is a need for the data, (2) whether of the question will produce the data, (3) the ability of the respondent to answer accurately, (4) the willingness of the respondent to answer accurately, and (5) the potential for external events to bias the answer. Regarding question phrasing, the primary concern is to ensure that the respondents and the researcher assign exactly the same meaning to each of the question. Tull and Hawkins (1997) identified the following issues in question phrasing: Are the words, singularly and in total, understandable to the respondents? Are the words biased in any respect? Are all the alternatives involved in the questions clearly stated? Are any assumptions implied by the question clearly stated? and what frame of reference is the respondent being asked to assume?

According to Sekaran (1992), not only is it important to address issues of wording and measurement when designing a questionnaire, it is also necessary to pay attention to what the questionnaire looks like in order to minimize biases and measurement errors. The appearance of the questionnaire may even affect the recipient's decision to respond (Dillman, 1978). Tull and Hawkins (1997) argued that the questionnaire must be designed so that the respondent

can easily move from one question to the next. In self-administered questionnaires, like the questionnaire in this research, appearance is an important variable in securing co-operation from respondents. In sequencing the order of the questions in the questionnaire, the study used the four ordering principles under the total design method (Dillman, 1978). The principles are derived on the basis of increasing respondents' motivation and building their confidence in completing the questionnaire. The four ordering principles are:

(1) Sequence the questions in descending order of usefulness and importance.
(2) Group the questions that are similar in content or question type together.
(3) Build a sense of flow and continuity throughout the questionnaire by taking advantage of the cognitive ties that respondents are likely to make among groups of questions.
(4) Position the questions that are most likely to be difficult to answer after those that are less likely to be difficult.

The questionnaire in this research is based on the guidelines suggested by Tull and Hawkins (1997); Dillman (1978); Sekaran (1992); and Neuman (1994). It consists of three sections: section 1 has of sixty items measuring the different dimensions of internal service quality (see table 6.6 and appendix A). Section 2 has of twenty-seven items measuring the external dimensions of service quality and section 3 addresses the personal background of respondents.

Table 6.6: Questionnaire Structure

| Questionnaire Sections | Items | No. of Items |
|---|---|---|
| **Section 1: Internal service quality items** | | |
| Management support | Items from 1 to 7 | 7 |
| Management effectiveness | Items from 8 to 11 | 4 |
| Employees empowerment | Items from 12 to 15 | 4 |
| Working atmospherics | Items from 16 to 19 | 4 |
| Employees service vision | Items from 20 to 23 | 4 |
| Information seeking | Items from 24 to 27 | 4 |
| Upward, downward and horizontal communication | Items from 28 to 33 | 6 |
| Technology | Items from 34 to 37 | 4 |
| Teamwork | Items form 38 to 40 | 3 |
| Selection and staff recruitment | Items from 41 to 42 | 2 |
| Performance appraisal and reward mechanism | Items from 43 to 48 | 6 |
| Training | Items from 49 to 54 | 6 |
| Job satisfaction | Items from 55 to 60 | 6 |
| **Section 2: External service quality items** | | |
| Trust | Items from 1 to 5 | 5 |
| Contact style | Items from 6 to 10 | 5 |
| Responsiveness | Items from 11 to 14 | 4 |
| Reliability | Items from 15 to 18 | 4 |
| Efficiency | Items from 19 to 23 | 5 |
| Tangibles | Items from 24 to 27 | 4 |

### 6.7.2 Structured-Undisguised Questionnaire

In designing the questionnaire, two important decisions relating to the "structure and disguise" of the questionnaire must be made (Churchill, 1995). Structure is the degree of standardization incorporated into the questionnaire. In a highly structured questionnaire, the questions and the responses are completely predetermined. In a highly unstructured questionnaire, the questions to be asked are only loosely predetermined, and the respondents are free to respond in their own words. A questionnaire in which the questions are fixed but the responses are open ended would represent an intermediate structuring. Disguise is the amount of knowledge concerning the purpose of a study that is communicated to a respondent. An undisguised questionnaire makes the purpose of the research obvious and explicit by the questions, whereas a disguised questionnaire attempts to hide the purpose of the study.

Structured-undisguised questionnaires are most commonly used in marketing research (Churchill, 1995). Questions are presented with exactly the same wording and in exactly the same order, to all respondents. The reason for standardizing them is to ensure that all respondents reply to the same questions. In the typical structured–undisguised questionnaire, the responses as well as the questions are standardized. Fixed-alternative questions in which the responses are limited to the stated alternatives are used. Probably the greatest advantages of the structured-undisguised questionnaire is that it is simple to administer and easy to tabulate and analyse. Responses should also be reliable in that if the respondents were asked the same questions again, they would respond in a similar fashion (assuming, of course, that their attitudes have not changed in the meantime) (Churchill, 1995).

The questionnaire design in this research is considered to be structured-undisguised because all of the questions are presented with exactly the same wording and in exactly the same order, to all the respondents. Moreover, the purpose of the research, was made very clear to all of the respondents by a covering letter which accompanied the questionnaire and the questionnaire instructions.

## 6.8 Translating and Pretesting the Questionnaire

After developing the initial version of the questionnaire and before translating it into Arabic, four academics at Loughborough University checked the English version in order to improve it in terms of content and construct validity. Table 6.7 summarizes the feedback received from the academics and the subsequent action taken.

Regarding the questionnaire translation, Berry (1980) suggested that the goal of translation is to obtain instruments that elicit responses that convey similar meanings to members of various groups (i.e. conceptual equivalence). This means that a literal translation of an instrument is not always sufficient for conveying the equivalent meaning of an instrument. Not only is linguistic translation of an instrument important, but also cultural translation is critical. Indeed, a central concern of every translation is to produce the cultural equivalent of an instrument (Werner and Campbell, 1970), or an instrument that has the same connotative meaning as the original instrument. It is very important, therefore, to consider the cultural applicability of the constructs being measured or purported to be measured. In other words, it is important to ensure that respondents are responding to a culturally compatible questionnaire.

Table 6.7: Feedback and Action Taken After Checking the English Version of the Questionnaire

| Feedback | Action Taken |
|---|---|
| Using seven-point Likert scale instead of five point-scale in order to reduce respondent bias. | The five point scale is changed to seven-point as following:<br>1= strongly disagree, 2= disagree, 3= slightly disagree, 4= neither agree no disagree, 5= slightly agree, 6= agree and 7= strongly agree. |
| Wording some statements negatively specially when using staff self-evaluation of external service quality in order to reduce respondent bias. | The wording of some items was changed from positive to negative. For example, in the internal service quality section some items were negatively reworded, for example:<br>• Item 38 (Staff within my department work as teams) is reworded to (Staff within my department work as individuals rather than in teams).<br>• Item 43 (The performance appraisal systems within the bank motivate me to deliver a high level of service quality to external customers) is reworded to (The performance appraisal systems within the bank do not motivate me to deliver a high level of service quality to external customers)<br>Regarding the external service quality section some items also were negatively reworded, for example:<br>• Item 3 (Bank brochures, leaflets and statements, etc, are visually appealing) was reworded to (Bank brochures, leaflets and statements, etc, are not visually appealing).<br>• Item 26 (Branch staff are able to provide customers with individual attention) was reworded to (Branch staff are not able to provide customers with individual attention). |
| Some terms should be explained to respondents, for example "work methods" in item 33 (Changes in work methods made to improve the quality of external customer service are clearly communicated to all employees and departments) should be clear to the respondent. | This item was reworded to "Changes in work methods (for example, the introduction of new technology to provide a speedier service) made to improve the quality of external customer service are clearly communicated to all employees and departments". |

### 6.8.1 Different Translation Methods

McGorry (2000) discusses a number of methods when translating the questionnaire or research instrument: one-way translation, double translation (back-translation), translation by committee, and decentering.

***One-way translation***

This is the simplest of translation methods and involves the translator reviewing the instrument in its original language and then translating it into the target language. No back translation is involved. Therefore, although this may be less expensive and less time consuming than other methods, there is no comparison of the final survey, and there may be some loss of information in the literal translation.

***Double translation***

In this form of translation, which is also referred as back-translation, there are at least two bilingual individuals who participate independently in the translation process. This process is effective because the instrument goes through a number of filters which are produced independently by researchers. The steps in this translation process are as follow:

(1) The questionnaire instrument is translated from the original language by a first translator into the target language.

(2) A second independent translator takes the results from the previous step and independently translates the instrument back into the original language. The researcher now has two versions of the instrument in the original language and can compare them for any inconsistencies, mistranslations, meaning, cultural gaps and/or lost words or phrases. If any differences are found the researcher can consult with the translators to find out why this has occurred and/or how the instrument can be revised.

This process has been described as one of the most adequate translation processes (Marin and Marin, 1991).

***Translation by committee***

This type of translation process is completed by asking two or more individuals who are familiar with both languages in the study to translate the text instrument from the original language to the target language (Marin and Marin, 1991). The researcher can then ask the two independent translators to arrive at consensus on a final format, or request that a third independent party choose a version that most closely captures the meaning of the original language. Although this translation method is more effective than one-way translation and may use less resources than other methods, translators may be reluctant to criticize one

another and/or may miss information relevant to the target group due to similar cultural backgrounds and education.

***Decentering***

Werner and Campbell (1970) proposed decentering as a way to develop instruments that would be culturally appropriate when cross-cultural research is conducted. In this process, the original language instrument is not considered finalized until the entire translation process is completed. Therefore, if a translator believes that a grammatical structure or that a word or tense must be changed to fit the cultural group under study, the original instrument should also be changed to reflect these linguistic and cultural characteristics. This involves constant comparison of the two instruments, and modifications are typically made to account for the limitations of the target language. Double translation only really considers the original language but decentering allows for a "culturally and linguistically equivalent" translation to evolve during the course of the interviewing/surveying period. In this sense this method involves revision of the original instrument to fit the new research situation. Although the questionnaire or research instrument may be more accurate culturally and linguistically, it may also be more costly in terms of time and resources. Moreover, the length of the instrument may be increased by this method of translating.

In this research, the research instrument was a questionnaire which was originally written in English. As Arabic language is the first language in Egypt, the questionnaire needed to be translated into Arabic. The back translation method was used to translate the questionnaire into Arabic. Back translation has been described and is recognized as one of the most adequate translation processes (Brislin, 1970; Marin and Marin, 1991; Sekaran, 1983; Hui and Triandis, 1985; Adler, 1983; and Malhotra *et al.*, 1996). A bilingual, who is aware of service marketing terminology, translated the English version into the Arabic language. A second independent bilingual, who also has a marketing management background, took the results from the previous step and independently translated the instrument back into English language. The two English versions of the questionnaire were then compared for any inconsistencies, mistranslations, meaning, cultural gaps and lost words or phrases. Some differences were found and revisions were made with the help of the two bilinguals.

### 6.8.2 Pretesting the Questionnaire

Before pretesting the questionnaire, five academics from Egyptian universities checked the Arabic version of the questionnaire to ensure that the items would be meaningful and capture

the issues that were to be measured. Table 6.8 summarizes the feedback received from the academics and the subsequent action taken. This was followed by the pretesting which was carried out to determine the acceptability of the questionnaire to the target respondents. It provided an opportunity to identify any errors and omissions and also determined the level of difficulty of each question. The Arabic version of the questionnaire was pretested by conducting nineteen personal interviews: four with senior managers of the selected four banks and fifteen with more junior staff. The respondents faced no apparent difficulty in understanding and answering the questionnaire. However, table 6.9 shows the pretest feedback and the subsequent action taken.

Table 6.8: Feedback and Action Taken After Checking the Arabic Version of the Questionnaire

| Feed back | Action Taken |
|---|---|
| Using staff annual income instead of their monthly one because staff in Egyptian banking get a lot of bonuses during the year, therefore, the basic monthly income will not represent the right income for staff. | Staff income question was reformatted from the monthly income basis to the annual income including bonuses as following:<br>• 7000 LE or less<br>• 7001-11000 LE<br>• More than 11000 LE |
| Reducing the response alternatives for education qualifications question in order to make the coding and entering the data for this question much easier. | The response alternatives for education qualifications question were reformatted from:<br>• Middle education<br>• Upper middle education<br>• Higher education<br>• Postgraduate diploma<br>• Master degree<br>• PhD degree<br>To:<br>• Less than university education<br>• University education<br>• Postgraduate education |

Table 6.9: Feedback and Action Taken After Pretesting the Arabic Version of the Questionnaire

| Feed back | Action Taken |
|---|---|
| Some respondents were unsure about the labels used on the numeric choices. | At the beginning the labels were used only on the first, middle and last choices. This was changed by putting labels on all of the numeric choices as following: 1= strongly disagree, 2= disagree, 3= slightly disagree, 4= neither agree no disagree, 5= slightly agree, 6= agree and 7= strongly agree. |
| Some respondents were unsure about the meaning of (the style of management) in item 18 "I think that the style of management within the bank could be improved". | To explain what management style mean, the item was reworded to "I think that the style of management within the bank (for example, the consultative style of management) could be improved". |

## 6.9 Variables Operationalization and Validity and Reliability Analysis

To facilitate comparison, the measures were adapted from previous studies in marketing management and psychology. A detailed explanation of how the research constructs were

measured will be presented in this section. This section will also examine constructs validity and scales reliability. Malhotra and Birks (1999, P.307) defined the validity of scale as: *"The extent to which differences in observed scale scores reflect true differences among objects on the characteristic being measured, rather than systematic or random error"*. Burns and Bush (2000) similarly argued that validity is the accuracy of responses to a measure. Therefore, validity is an assessment of the exactness of the measurement relative to what actually exists. In reality, there are a number of different ways of validating measurements. Content validity and construct validity are prominent two types of validity analysis and specifically discussed below.

### 6.9.1 Content Validity

Content validity, sometimes called face validity, is based on the extent to which the scale items represent a construct's measuring (Parasuraman *et al.*, 1988) and the rigour with which this measuring is specified by the generated items (Churchill, 1979). Malhotra and Birks (1999); and Nunnally (1979) argued that content validity cannot be determined numerically because it is subjective. It is, nevertheless, a systematic evaluation of how well the content of a scale represents the measurement task. In this research, content validity checks were performed on the internal and external service quality constructs to ensure that the items would be meaningful and capture the issues that were to be measured. These content validity checks were performed in the following ways: firstly, by an exhaustive review of the literature which identified the main issues. Secondly, by a detailed evaluation of these issues by academics interested in the subject. Thirdly, by conducting nineteen personal interviews as part of the pretesting process.

### 6.9.2 Variables Operationalization and Construct Validity

Construct validity refers to the degree a measure or scale adequately assesses a construct. Malhotra and Birks (1999) argued that construct validity addresses the question of what construct or characteristic is the scale measuring? Thus, construct validity requires a sound knowledge of the nature of the construct being measured and how it relates to other constructs. Factor analysis is used in this research to test the construct validity of the internal and external service quality scales. Hair *et al.* (1995) argued that the primary purpose of factor analysis is to define the underlying structure in a data matrix. As such it addresses the problem of analysing the structure of the interrelationships (correlations) between a large number of variables by defining a set of common underlying dimensions, known as factors. Therefore, factor analysis identifies the separate dimensions of a structure and then

determines the extent to which each variable is explained by each dimension. Malhotra and Birks (1999, P. 578) also identified the following three useful functions of factor analysis:

1. To identify underlying dimensions, or factors, that explain the correlations between a set of variables.
2. To identify a new and smaller set of uncorrelated variables to replace the original set of correlated variables for subsequent multivariate analysis (regression analysis).
3. To identify a smaller set of salient variables from a larger set for use in subsequent multivariate analysis.

Factor analysis was, therefore, an appropriate technique for this research to test construct validity and to identify a new set of uncorrelated factors for use in subsequent multivariate analysis (multiple regression analysis).

The principle components analysis approach is used in this research because its primary concern is to determine the minimum number of factors that will account for the maximum variance in the data for use in subsequent multivariate analysis. The Eigenvalues approach was used to determine the number of relevant factors to be extracted. Only factors with eigenvalues greater than 1.0 were retained and the other factors were excluded from the model. The Varimax method was also used as an orthogonal method of rotation that minimizes the number of variables with high loading on a factor, thereby enhancing the interpretative ability of the factors. Orthogonal rotation effectively identifies factors that are uncorrelated for use in regression analysis and, therefore, minimizes collinearity between the independent variables. The sample size in this study is 332 and Hair *et al.* (1995) suggest that the minimum acceptable variable loading for a sample of this size is 0.35.

**Variables Operationalization and Construct Validity for the Internal Service Quality Construct**

Sixty items were used to measure the internal service quality construct. Following to the literature, the sixty items were classified into three sub-constructs: i) management and employees service orientation (23 items); ii) information and service system (14 items) and iii) human resource management (23 items). The large number of internal service quality scale items necessitated that the researcher conduct three separate factor analyses on each of the sub-construct items. This methodology has been used by many academics (see for example, Sin and Tse, 2000).

*Management and Employees Service Orientation construct*

Table 6.10 shows the 23 items which were used to measure management and employees service orientation construct. The items were drawn from the literature (Rizzo *et al.*, 1970; Mowday *et al.*, 1979; Parasuraman *et al.*, 1990; Johnson, 1996; Hallowell *et al.*, 1996; Hartline and Ferrell, 1996; Johnson, 1996; Lytle *et al.*, 1998; Schneider *et al.*, 1998; and Lewis and Gabrielsen, 1998) and were designed to measure management and employees service orientation in five essential areas: management support (7 items), management effectiveness (4 items), employees empowerment (4 items), working atmospherics (4 items) and employees service vision (4 items). As mentioned earlier, respondents were asked to indicate on a seven-point scale ranging from "1= strongly disagree to 7= strongly agree" the extent to which they agreed or disagreed with each item. A seven-point scale was used (rather than the conventional five point scale) to take into account respondent bias.

Table 6.10: Management and Employees Service Orientation (MESO) Items

| | |
|---|---|
| **Management Support** | |
| MESO1 | The bank is committed to providing a high level of service quality to external customers. |
| MESO2 | My closest supervisor emphasises the importance of delivering a high level of service quality to external customers. |
| MESO3 | Management does not motivate me to provide a high level of service quality to external customers. |
| MESO4 | Improving the level of service quality to our external customers is one of the major goals of our bank. |
| MESO5 | Departments within the bank have formal systems for setting and monitoring performance against service quality goals. |
| MESO6 | My own performance within the bank is measured against specific service quality goals |
| MESO7 | The bank regards improving the levels of co-operation between different departments within the bank as an important goal. |
| **Management Effectiveness** | |
| MESO8 | Other considerations frequently take precedence over the goal of improving the quality of external customer service. |
| MESO9 | Management has far more important issues to address than helping me to provide a high level of service quality to external customers. |
| MESO10 | Time pressures usually prevent me from providing a high level of service quality to external customers. |
| MESO11 | I sometimes feel confused about what management expects from me when dealing with external customers. |
| **Employees Empowerment** | |
| MESO12 | When I am dealing with external customers, there are no controls imposed on me. |
| MESO13 | I often seek the approval of my manager/supervisor when making important customer decisions. |
| MESO14 | I personally have sufficient authority and discretion to provide a high level of service quality to external customers. |
| MESO15 | I would like to have more autonomy when dealing with external customers. |
| **Working Atmospherics** | |
| MESO16 | The internal working environment in the bank could be more supportive of staff. |
| MESO17 | The working environment within the bank is comfortable. |
| MESO18 | I think that the style of management within the bank (for example, the consultative style of management) could be improved. |
| MESO19 | I am satisfied with the supervision which I receive within the bank. |
| **Employees Service Vision** | |
| MESO20 | I do not consider that being responsive to the needs of external customers is an important part of my job. |
| MESO21 | My most important objective is to satisfy the needs of customers. |
| MESO22 | I feel personally responsible for creating a good impression of the bank to external customers |
| MESO23 | I feel that it is my responsibility to help colleagues within my department |

Prior to performing the factor analysis, the data matrix was examined to ensure that it had sufficient correlations to justify the application of factor analysis. The Kaiser-Meyer-Olkin

measure of sampling adequacy (MSA) which is a measure for calculating correlation within the entire data matrix was used to evaluate the appropriateness of applying factor analysis. Hair *et al.*, (1995) suggest that values above 0.50 indicate sufficient appropriateness. The Kaiser-Meyer-Olkin value for the management and employees service orientation construct was 0.838, a strong indication that factor analysis was, therefore, appropriate for analysing the data. The Bartlett test of sphericity (statistical test for the overall significance of all correlations within a correlation matrix) was also significant (0.000), indicating, once again, that factor analysis was appropriate.

Table 6.11: Factor Structure of Management and Employees Service Orientation (MESO) Items

| MESO Items | **Factor1: Management Support** | **Factor2: Management Effectiveness** | **Factor3: Working Atmospherics** | **Factor4: Employees Service Vision** |
|---|---|---|---|---|
| MESO1 | .654 | | | |
| MESO2 | .755 | | | |
| MESO3 | .493 | | | |
| MESO4 | .740 | | | |
| MESO5 | .622 | | | |
| MESO6 | .511 | | | |
| MESO7 | .538 | | | |
| MESO8 | | .594 | | |
| MESO9 | | .621 | | |
| MESO10 | | .722 | | |
| MESO11 | | .709 | | |
| MESO14 | | | .605 | |
| MESO17 | | | .794 | |
| MESO19 | | | .816 | |
| MESO21 | | | | .745 |
| MESO22 | | | | .869 |
| MESO23 | | | | .790 |
| **Eigenvalue** | 5.326 | 1.283 | 1.890 | 1.179 |
| **% variance** | 31.331 | 11.115 | 7.546 | 6.936 |
| **Cronbach** | .810 | .678 | .693 | .719 |

Factor analysis on the present scale of 23 items was carried out, utilising the principal components procedure, i.e. eigenvalues greater than 1.0, followed by a varimax rotation. This resulted in the extraction of four factors, which explained 56.9% of the variance. As shown in table 6.11, 17 items out of the 23 were retained and six were excluded. Items MESO12 and MESO13 were loaded in a separate factor and the Cronbach Alpha at 0.108 was very low indicating the poor reliability of these items. Similarly, Items MESO16, MESO18 and MESO20 were loaded in another separate factor with a very low Cronbach Alpha (0.268) and therefore, this factor was excluded from the analysis on the being of poor reliability. Item MESO15 was also excluded because of crossloading.

The factor structure for management and employees service orientation revealed that the four extracted factors matched the dimensions that were originally proposed in the research model. The employees empowerment dimension was the only dimension which disappeared because of the exclusion of items (MESO12, MESO13, MESO15) and the loading of item MESO14 under the working atmospherics factor as shown in table 6.11. Therefore, the four remaining factors can be labelled, as originally suggested: factor 1 as "*management support*"; factor 2 as "*management effectiveness*", factor 3 as "*working atmospherics*"; and factor 4 as "*employees service vision*".

***Information and Service System Construct***

As shown in table 6.12, 14 items were used to measure information and service systems. These items were adapted from the relevant academic literature (Johnson, 1996; Hallowell *et al.*, 1996; Hartline and Ferrell, 1996; Johnson, 1996; Lytle *et al.*, 1998; Schneider *et al.*, 1998 and; Lewis and Gabrielsen, 1998) and were designed to measure information and service system in three essential areas: i) information seeking (4 items), ii) upward, downward and horizontal communication (6 items) and iii) technology (4 items). Respondents were asked to indicate on a seven-point scale ranging from "1= strongly disagree to 7= strongly agree" the extent to which they agreed or disagreed with each item.

Table 6.12: Information and Service System (ISS) Items

| | |
|---|---|
| **Information Seeking** | |
| ISS1 | The bank regularly seeks information from staff about how to improve the quality of external customer service. |
| ISS2 | The bank encourages staff to make suggestions for improving the quality of external customer service. |
| ISS3 | The bank uses staff suggestions to improve the quality of external customer service. |
| ISS4 | The bank rewards staff who make good suggestions for improving the quality of external customer service. |
| **Upward, Downward and Horizontal Communication** | |
| ISS5 | Senior management within the bank regularly communicate to employees the importance of providing a high level of service quality to external customers. |
| ISS6 | Communication (for example, through the intranet, letters, memos and meetings) within my department could be much better. |
| ISS7 | Communication between my department and other departments within the bank could be much better. |
| ISS8 | Bank staff regularly make suggestions to managers/supervisors about how to improve the quality of external customer service. |
| ISS9 | The objective of delivering a high level of service quality to external customers is clearly communicated to all employees and departments. |
| ISS10 | Changes in work methods (for example, the introduction of new technology to provide a speedier service) made to improve the quality of external customer service are clearly communicated to all employees and departments. |
| **Technology** | |
| ISS11 | Bank technology helps me to provide an error free service to external customers. |
| ISS12 | Bank technology helps me to provide a fast service to external customers. |
| ISS13 | Bank technology provides me with easy-to-access information on extenral customers. |
| ISS14 | Bank technology has given me more time to talk to external customers and discuss their needs. |

The Kaiser-Meyer-Olkin value was 0.897 and the significant Bartlett test of Sphericity also suggested that factor analysis was an appropriate technique for analysing the data. The information and service system scale items were subjected to factor analysis utilising the

principal components (eigenvalues greater than 1.0) procedure, which was followed by a varimax rotation. This resulted in the extraction of two factors, which explained 66.4% of the total variance (see table 6.13). Table 6.13 also shows that 12 items were retained and that two items ISS6 and ISS7 were excluded from the information and service systems scale. Items ISS6 and ISS7 loaded in a separate factor with a low reliability Cronbach alpha (0.54), and the corrected item–total correlations for the information and service system scale items revealed that these two items had the lowest values (0.14 and 0.22), and they were below the cut-off point of 3.5 (Saxe and weitz, 1982), therefore, this factor was excluded from the analysis.

Table 6.13: Factor Structure of Information and Service System (ISS) Items

| **SSY Items** | **Factor1: Communication** | **Factor2: Technology** |
|---|---|---|
| ISS1 | .764 | |
| ISS2 | .830 | |
| ISS3 | .823 | |
| ISS4 | .793 | |
| ISS5 | .610 | |
| ISS8 | .757 | |
| ISS9 | .709 | |
| ISS10 | .631 | |
| ISS11 | | .855 |
| ISS112 | | .890 |
| ISS 13 | | .883 |
| ISS14 | | .798 |
| Eigenvalue | 6.089 | 1.884 |
| **% variance** | 50.738 | 15.702 |
| **Cronbach** | .902 | .908 |

Table 6.12 shows the three dimensions for information and service systems: information seeking; upward, downward and horizontal communication; and technology. However, the factor structure for the information and service system scale, shown in table (6.13), revealed that only two factors were extracted. Information seeking and the upward, downward and horizontal communication items were loaded together under one rather than two factors. This new more comprehensive factor includes 8 items (the four information seeking items and the four upward, downward and horizontal communication items) and was labelled "*communication*". As table 6.13 shows, the technology items were loaded under the one factor originally proposed and therefore, can be labelled as originally suggested "*technology*".

***Human Resource Management Construct***

As revealed by table 6.14, 23 items were used to measure human resource management. The items were identified from the academic literature (Smith, *et al.*1969; Brown and Peterson,

1993; Johnson, 1996; Hallowell *et al.*, 1996; Hartline and Ferrell, 1996; Johnson, 1996; Lytle *et al.*, 1998; Schneider *et al.*, 1998 and; Lewis and Gabrielsen, 1998) and were designed to measure the effectiveness of human resource management in five essential areas: teamwork (3 items), selection and recruitment staff (2 items), performance appraisal and reward mechanism (6 items), training (6 items) and job satisfaction (6 items). A seven-point Likert scale was used to measure responses to the construct items.

Table 6.14: Human Resource Management (HRM) Items

| | |
|---|---|
| **Team Work** | |
| HRM1 | Staff within my department work as individuals rather than in teams. |
| HRM2 | The teamwork between my department and other departments within the bank could be much better. |
| HRM3 | Colleagues within my department regularly help each other to provide a high level of service quality to external customers. |
| **Selection and Staff Recruitment** | |
| HRM4 | In recruiting employees, the bank attempts to ensure that staff have good communication skills. |
| HRM5 | When I was recruited by the bank, I was assessed in terms of my teamwork skills. |
| **Performance Appraisal and Reward Mechanism** | |
| HRM6 | The performance appraisal systems within the bank do not motivate me to deliver a high level of service quality to external customers. |
| HRM7 | I would like to receive more frequent feedback about my performance from my superiors. |
| HRM8 | The performance appraisal systems within the bank include co-operation and team-based performance indicators. |
| HRM9 | The bank rewards me when I provide a high level of service quality to external customers. |
| HRM10 | My supervisor usually praises my performance when I provide a high level of service quality to external customers. |
| HRM11 | The performance appraisal systems and reward mechanisms within the bank depend upon specific performance standards which include customer care indicators. |
| **Training** | |
| HRM12 | Training programmes within the bank should place more emphasis on the importance of providing a high level of service quality to external customers. |
| HRM13 | I would like to receive more bank training on how to provide a high level of service quality to external customers. |
| HRM14 | Management allows me sufficient time to attend training courses. |
| HRM15 | The bank should place more emphasis in bank training on how to improve my communication skills. |
| HRM16 | I would like to receive more bank training on how to improve my teamwork skills. |
| HRM17 | The bank should place more emphasis in bank training on how to improve my information technology skills. |
| **Job Satisfaction** | |
| HRM18 | I am satisfied with my job. |
| HRM19 | I am dissatisfied with my salary from the bank. |
| HEM20 | Overall the benefits I receive from the bank such as medical insurance, vacation, etc, are good. |
| HRM21 | I have a strong desire to remain in the bank. |
| HRM22 | I regard my work in the bank as an imoprtant of my life. |
| HRM23 | Management motivates me to do my best. |

The Kaiser-Meyer-Olkin (0.882) and the significant Bartlett test of Sphericity suggested that factor analysis was an appropriate technique for analysing the data. The human resource management scale items were subjected to factor analysis using the principal components (eigenvalues greater than 1.0) procedure, followed by a varimax rotation. This resulted in the extraction of three factors, which explained 55.5% of the variance (see table 6.15). Table 6.15 also shows that 18 items were retained and, therefore, five items (HRM2, HRM7, HRM13, HRM14 and HRM19) were excluded from the human resource management scale. Items HRM2, HRM7 and HRM19 were deleted because of crossloading. Items HRM13 and

HRM14 were loaded in a separate factor with a very low Cronbach Alpha (0.07) and therefore, this factor was excluded from the analysis.

As shown in table 6.14 the five proposed dimensions of human resource management were as follows: teamwork, selection and staff recruitment, performance appraisal and reward mechanism, training and job satisfaction. However, the factor structure for the human resource management scale, as shown in table 6.15, shows that only three factors were extracted. The teamwork, selection and staff recruitment and performance appraisal and reward mechanism items were loaded together under one factor. This new factor which was labelled "job fit" includes 10 items: two teamwork items, two selection and staff recruitment items, five performance appraisal and reward mechanism items, and one job satisfaction item. Table 6.15 also shows that the training items were loaded as originally proposed under one factor. The job satisfaction items were also loaded as originally proposed under one factor, except that item HRM23 was loaded under the job fit factor.

Table 6.15: Factor Structure of Human Resource Management (HRM) Items

| **HRM Items** | **Factor1: Job Fit** | **Factor2: Training** | **Factor3: Job Satisfaction** |
|---|---|---|---|
| HRM1 | .575 | | |
| HRM3 | .675 | | |
| HRM4 | .733 | | |
| HRM5 | .699 | | |
| HRM6 | .505 | | |
| HRM8 | .588 | | |
| HRM9 | .753 | | |
| HRM10 | .694 | | |
| HRM11 | .702 | | |
| HRM12 | | .769 | |
| HRM15 | | .849 | |
| HRM16 | | .778 | |
| HRM17 | | .795 | |
| HRM18 | | | .696 |
| HRM 20 | | | .741 |
| HRM21 | | | .650 |
| HRM22 | | | .572 |
| HRM23 | .559 | | |
| Eigenvalue | 5.738 | 3.024 | 1.226 |
| **% variance** | 31.875 | 16.799 | 6.810 |
| **Cronbach** | .874 | .834 | .712 |

**Variables Operationalization and Construct Validity for External Service Quality Construct**

The definitions and variables relating to the exposition of external service quality have been derived from the literature survey contained in chapter four. The survey fully reflected the multidimensional nature of external service quality for both products and services (for

example, see Garvin, 1984; Parasuraman *et al.*, 1988). The multidimensional–multifaceted nature of external service quality was also reflected in the numerous models which were articulated in the chapter. SERVQUAL has received particular attention in the service industry literature after it was proposed by Parasuraman *et al.* (1988). It attracted a number of criticisms. For instance, Carman (1990) argued that SERVQUAL could not be a generic measure that could be applied to any service and needed to be customized to specific services. Babakus and Boller (1992) also maintained that the dimensionality of service quality might depend on the type of services under study. In addition, their empirical analysis revealed that perceptions-only measures had higher correlations with an overall service quality measure than did the SERVQUAL measures. This finding was also supported in studies by Cronin and Taylor (1992); and Boulding *et al.* (1993). Cronin and Taylor (1992); and Teas (1993) questioned the validity and reliability of SERVQUAL and proposed alternative models. Brown *et al.* (1993) challenged the fundamentals of conceptualising service quality as a difference score measure. They argued that the calculation of a difference score in the SERVQUAL measure could lead to psychometric problems and concluded that a non-difference score measure was, therefore, more desirable.

In this research, the non-difference SERVQUAL score is used as suggested by Brown *et al.* (1993) to measure staff perceptions of the quality of service they provide to external customers. The SERVQUAL dimensions have been modified in the light of the literature review. The first modification was to use the five dimensions of external service quality itemized by the SERVQUAL scale but to develop these slightly to better reflect external service quality in a retail bank. As a consequence the research model contains six dimensions of external service quality: trust, contact style, responsiveness, reliability, efficiency and tangibles. Trust is not a recognised SERVQUAL dimension but it is related to the SERVQUAL dimension of "assurance". In order to focus overtly on the personal contact element in service provision, this dimension will include the following items: the ability of branch staff to give positive advice, appear knowledgeable, follow customers instructions and, in a general sense, generate a feeling of trust and confidence in customers.

The second dimension of external service quality is contact style and as such it drew upon all five of the SERVQUAL dimensions. However, in order to adapt it with the need of a retail bank, it consists of the following items: the appearance and manner of branch staff, their willingness to provide a high level of service, staff politeness when dealing with customers and the ability to provide customers with individual attention.

Responsiveness like reliability is one of the SERVQUAL dimensions and is concerned with the willingness of staff to help customers and provide a prompt service. The items are, therefore, concerned with the willingness of branch staff to help customers, provide a prompt service and keep customers informed. An additional item has, however, been introduced to better reflect the retail banking environment and this is concerned with teamwork in the branch.

Reliability is a recognized dimension of SERVQUAL and is concerned with the ability to perform the promised service dependably and accurately. As such the items focus on the reliability of branch staff promises, the ability of branch staff to resolve customers complaints, perform an error free service, and be sympathetic and reassuring to customers.

Efficiency is a dimension not readily associated with SERVQUAL but it is concerned with items such as how informative bank brochures are and ease of understanding of bank statement. This dimension also incorporates customer waiting time in branches, the convenience of branch opening times and whether branches keep the customer's financial affairs accurately. In this respect the dimension draws upon the external service quality literature but adapts it to the specific context of service in a retail bank.

The final dimension of external service quality is tangibles which follow the SERVQUAL approach and is concerned with the appearance of physical facilities, equipment and communication materials. The only notable difference compared to SERVQUAL is the exclusion of the staff appearance which is incorporated under the contact style dimension. The items incorporated under this dimension, therefore, include the technology in the branch, the physical appearance of the branch, the visual appeal of bank brochures, statements, etc. and the comfortable of customer waiting area.

The self-evaluation approach was used to measure external service quality. Staff were asked to indicate how they rated their performance on the various service related issues and how they perceived the level of service quality they delivered to customers. This approach has been used to measure external service quality in previous studies (Chang and Chen, 1998; and Schneider *et al.*, 1992). This approach was used in this study because it is very difficult, if not impossible, to obtain customer data about service quality in Egyptian commercial banks.

Table 6.16 encapsulates the above dimensions and shows that 27 items were used to measure external service quality in six essential areas: trust (5 items), contact style (5 items), responsiveness (4 items), reliability (4 items), efficiency (5 items), and tangibles (4 items). Staff were asked to indicate on a seven-point scale ranging from "1= strongly disagree to 7= strongly agree" the extent to which they agreed or disagreed with each scale item. The Kaiser-Meyer-Olkin (0.859) and the significant Bartlett test of Sphericity suggested that factor analysis was an appropriate method for analysing the data. The external service quality scale items were subjected to factor analysis using the principal components (eigenvalues greater than 1.0) procedure, which was followed by a varimax rotation, which explained 56.8% of the variance (see table 6.17). Table 6.17 also reveals that 22 items were retained and that five items (ESQ2, ESQ7, ESQ8, ESQ21 and ESQ25) were excluded from the analysis. Items ESQ2 and ESQ8 were loaded under factor 4 and by checking the corrected item-total correlations for this factor, it was found that they had the lowest values (.283 and .271). By excluding these two items the reliability for factor 4 increased from Cronbach alpha 0.571 to 0.665. Items ESQ7, ESQ25, and ESQ21 were deleted because of the crossloading.

Table 6.16: External Service Quality (ESQ) Items

| | |
|---|---|
| **Trust** | |
| ESQ1 | Branch staff instil trust and confidence in customers. |
| ESQ2 | Branch staff do not follow the instructions of customers. |
| ESQ3 | Branch staff are able to answer customer questions. |
| ESQ4 | Branch staff give positive advice to customers when they have a problem. |
| ESQ5 | Branch staff understand the needs of customers. |
| **Contact Style** | |
| ESQ6 | Branch staff are well dressed and appear neat and tidy. |
| ESQ7 | Branch staff are able to provide a high level of service quality to external customers. |
| ESQ8 | Branch staff could be more polite and courteous when dealing with customers. |
| ESQ9 | Branch staff are not able to provide customers with individual attention. |
| ESQ10 | Branch staff do not have the customers' best interests at heart. |
| **Responsiveness** | |
| ESQ11 | Branch staff keep external customers fully informed about new services. |
| ESQ12 | Branch staff find it difficult to give a prompt service to customers. |
| ESQ13 | Branch staff are willing to help customers. |
| ESQ14 | Branch staff work as individuals rather than as part of a team in providing a high level of service quality to customers. |
| **Reliability** | |
| ESQ15 | Branch staff find it difficult to keep promises made to customers because of other demands on their time. |
| ESQ16 | Branch staff are sympathetic and reassuring to customers. |
| ESQ17 | High workloads make it difficult for branch staff to perform an error-free service to customers. |
| ESQ18 | Branch staff resolve customers' complaints quickly. |
| **Efficiency** | |
| ESQ19 | Bank brochures and leaflets are not informative. |
| ESQ20 | Bank customers' statements are complicated and not easy to understand. |
| ESQ21 | Customer waiting times in the branch are reasonable. |
| ESQ22 | The branch handles and keeps the customers' financial affairs accurately. |
| ESQ23 | Branch opening hours are not convenient for customers. |
| **Tangibles** | |
| ESQ24 | The branch has up-to-date technology. |
| ESQ25 | The branch could be made more visually attractive. |
| ESQ26 | Bank brochures, leaflets and statements, etc, are not visually appealing. |
| ESQ27 | The customer waiting area in the branch is comfortable. |

Table 6.16 shows that six dimensions of external service quality were originally proposed: trust, contact style, responsiveness, reliability, efficiency, and tangibles. However, the factor structure of the external service quality scale as shown in table 6.17 reveals that only four factors were extracted. The tangibles items were loaded under one factor (factor 4) as originally proposed. The other external service quality scale items were loaded under three new factors as follows: factor 1 includes 10 items (four trust items, one contact style item, two responsiveness items, two reliability items, and one efficiency item); factor 2 consists of six items (two contact style items, two responsiveness items, and two efficiency items) and factor 3 includes three items (two reliability items and one efficiency item).

Table 6.17: Factor Structure of External Service Quality Items (ESQ)

| ESE Items | **Factor1: Trust** | **Factor2: Interface** | **Factor4: Reliability** | **Factor3: Tangibles** |
|---|---|---|---|---|
| ESQ4 | .780 | | | |
| ESQ5 | .768 | | | |
| ESQ3 | .741 | | | |
| ESQ11 | .720 | | | |
| ESQ1 | .682 | | | |
| ESQ18 | .659 | | | |
| ESQ13 | .629 | | | |
| ESQ22 | .541 | | | |
| ESQ6 | .579 | | | |
| ESQ16 | .470 | | | |
| ESQ10 | | .710 | | |
| ESQ9 | | .701 | | |
| ESQ19 | | .627 | | |
| ESQ12 | | .576 | | |
| ESQ14 | | .556 | | |
| ESQ20 | | .548 | | |
| ESQ15 | | | .750 | |
| ESQ17 | | | .718 | |
| ESQ23 | | | .670 | |
| ESQ24 | | | | .872 |
| ESQ27 | | | | .701 |
| ESQ26 | | | | .677 |
| Eigenvalue | 7.685 | 1.956 | 1.292 | 1.554 |
| **% variance** | 34.932 | 8.889 | 5.874 | 7.064 |
| **Cronbach** | .883 | .802 | .665 | .713 |

Hair *et al.* (1995) argued that the process of naming factors is not very scientific and is based on the subjective opinion of the analyst. They also argued that items with higher loadings on a particular factor are considered more important and have greater influence on the name or label selected to represent this factor. In order to label these three new variables, the researcher examined the items loadings on each factor and placed greater emphasis on those items with higher loadings. Accordingly, with the first factor, it was found that the various items had an underlying common, i.e. how to instil trust in customers. Moreover, the highest

loadings on this factor related to trust and confidence issues (ESQ4, ESQ5 and ESQ3). Therefore, factor 1 was labelled "*trust*". The items in second factor reflected the contact between branches, via staff and communication materials, and external customers. By examining the loadings on this factor, it was found that the highest values related to items ESQ10 and ESQ9 which deal with the care and attention that staff give to customers. Therefore, factor 2 was labelled "*interface*". Regarding factor 3, the highest loadings related to items ESQ15 and ESQ17 which essentially deal with error-free and timely service. Another important item in this factor was the convenience of branch opening hours, therefore, factor 3 was labelled "reliability".

From this analysis it is evident that the factor structure did not match the hypothesized dimensions of external service quality. This is not surprising because some of the external service quality scale items were taken without any modifications from SERVQUAL and the literature tell us that there is a great deal of overlap between the SERVQUAL dimensions (e.g. Schneider *et al.*, 1992; Finn and Lamb, 1991; and Gagliano and Hathcote, 1994). Another possible reason may be that the external service quality scale was used to measure the quality of service in the "Egyptian" commercial banks and from the perspective of "staff" rather than external customers. Cultural differences may, therefore, have had an impact. Moreover, Schneider (1992) has suggested that asking staff to assess the quality of external customer service can result in an overlapping of the service quality dimensions.

### 6.9.3 Reliability Analysis

The reliability analysis of a measurement instrument determines the consistency with which the instrument is measuring the concept (Nunnally, 1979). Malhotra and Birks (1999) argued that reliability refers to the extent to which a scale produces consistent results if repeated measurements are made. There are a numbers of different methods for assessing reliability, one of these approaches is the internal consistency method. Internal consistency is used to assess the reliability of a summated scale where several items are summed to form a total score. In a scale of this type, each item measures some aspect of the construct which is measured by the entire scale. However, to be reliable the items should be consistent in what they indicate about the characteristics of the construct. This measure of reliability, therefore, focuses on the internal consistency of the items forming the scale.

The coefficient alpha, or Cronbach alpha was used to measure the internal consistency reliability of scales. Table 6.18 summarises the reliability analysis for the internal service

quality construct. The overall reliability coefficients for the internal service quality sub-constructs ranged from: management and employees service orientation (0.850), information and service systems (0.910) and human resource management (0.837). Regarding the internal service quality dimensions, the reliability coefficients were as following: management support (0.810), management effectiveness (0.678), working atmospherics (0.693), employees service vision (0.719), communication (0.902), technology (0.908), job fit (0.874), training (0.834) and job satisfaction (0.712). As such the coefficient alpha scores are all above an acceptable minimum of 0.65 (Nunnally, 1979).

Table 6.18: Reliability Analysis for the Measure of the Internal Service Quality Dimensions

| Dimensions | Number of Items | Cronbach Alpha |
|---|---|---|
| **Management and Employees Service Orientation** | | |
| 1. Management Support | 7 | 0.810 |
| 2. Management Effectiveness | 4 | 0.678 |
| 3. Working Atmospherics | 3 | 0.693 |
| 4. Employees Service Vision | 3 | 0.719 |
| The Overall Cronbach Alpha for Management and Employees Service Orientation Scale | 17 | 0.850 |
| **Information and Service System** | | |
| 5. Communication | 8 | 0.902 |
| 6. Technology | 4 | 0.908 |
| The Overall Cronbach Alpha for Information and Service System Scale | 12 | 0.910 |
| **Human Resource Management** | | |
| 7. Job Fit | 10 | 0.874 |
| 8. Training | 4 | 0.834 |
| 9. Job Satisfaction | 4 | 0.712 |
| The Overall Cronbach Alpha for Human Resource Management Scale | 18 | 0.837 |

The reliability analysis for the external service quality construct, as shown in table 6.19, revealed Cronbach alpha for the entire 22 external service quality items scale of 0.897. It was found that the reliability coefficients for the dimensions of external service quality were: trust (0.883), interface (0.802), reliability (0.665), and tangibles (0.713). Therefore, both the overall reliability coefficient and the coefficients relating to external service quality dimensions are all the above the minimum acceptable level (Nunnally, 1979).

Table 6.19: Reliability Analysis for the Measure of the External Service Quality Dimensions

| Dimensions | Number of Items | Cronbach Alpha |
|---|---|---|
| 1. Trust | 10 | 0.883 |
| 2. Interface | 6 | 0.802 |
| 3. Reliability | 3 | 0.665 |
| 4. Tangibles | 3 | 0.713 |
| The Overall Cronbach Alpha for External Service Quality Scale | 22 | 0.897 |

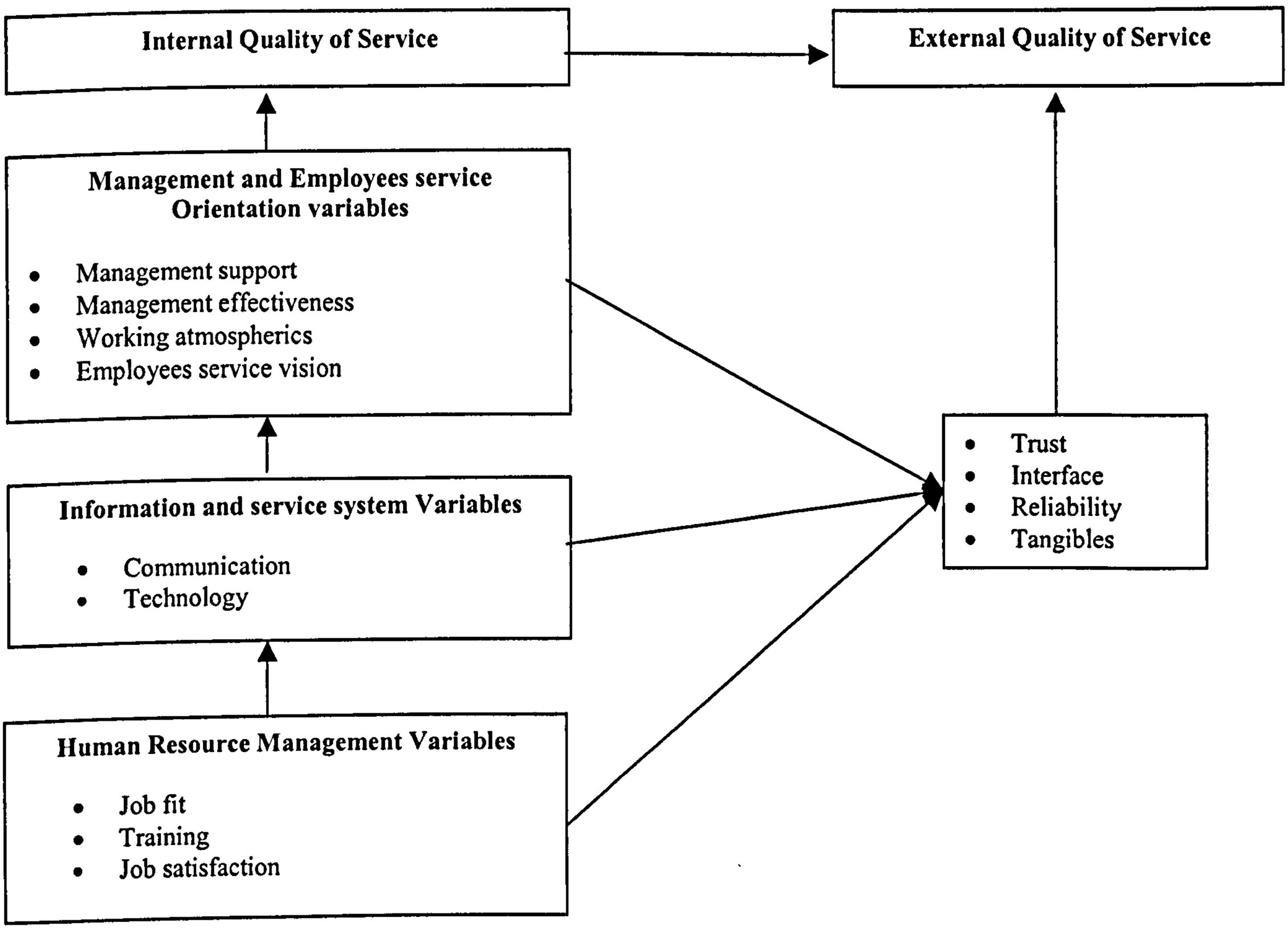
The validity and reliability analysis have, therefore, shown that scales used in the research are appropriate for measuring the internal and external service quality constructs.

## 6.10 The Modified Research Model

The internal and external dimensions of service quality suggested by factor analysis are slightly different from that were originally proposed. Accordingly, we slightly modified the proposed research model and reworded some of the research hypotheses in order to reflect the new dimensions proposed by factor analysis (see figure 6.3 and table 6.20).

Regarding the external service quality (dependent variable), the factor analysis suggested only four dimensions (trust, interface, reliability and tangibles) instead of six dimensions (trust, contact style, responsiveness, reliability, efficiency, and tangibles) of external service quality as originally proposed (see tables 6.16 and 6.17). Accordingly, the dependent variable in the research hypotheses is reworded to reflect the new four external service quality dimensions (see table 6.20).

Figure 6.3: The Modified Research Model



According to the internal service quality dimensions (independent variables), the factor analysis suggested only nine dimensions of internal service quality instead of thirteen. The factor structure for management and employees service orientation construct suggested only four factors (management support, management effectiveness, working atmospherics and employees service vision) instead of five (see tables 6.10 and 6.11). Employees empowerment dimension disappeared, therefore, the research hypotheses (H.5 and H.6) related to employees empowerment variable are deleted (see table 6.20).

Originally, the research model proposed three dimensions for information and service system: information seeking; upward, downward and horizontal communication; and technology (see table 6.12). However, the factor structure for the information and service system scale, shown in table 6.13, revealed that only two factors were extracted: communication and technology. Accordingly, the four research hypotheses (H.11, H.12, H.13 and H14) related to upward, downward and horizontal communication; and information seeking variables are deleted and replaced by two new hypotheses to represent the new variable (communication) (see table 6.20).

The factor structure for human resource management construct suggested only three factors (job fit, training and job satisfaction) instead of five (see tables 6.14 and 6.15). Accordingly, the six research hypotheses (H.17 to H.22) related to teamwork; selection and staff recruitment; and performance appraisal and reward mechanism variables are deleted and replaced by two new hypotheses to represent the new variable (job fit).

Table 6.20 shows that some of the research hypotheses are slightly reworded in order to reflect the new dimensions suggested by factor analysis. It is worth to mention that the revised hypotheses keep the same direction of the relationship between the internal and external service quality as originally proposed.

## 6.11 Statistical Analysis

Choosing the most appropriate method of statistical analysis is one of the most important decisions in achieving the research objectives. Accordingly, four types of analysis are used in this research: descriptive analysis, one-way analysis of variance (ANOVA), Pearson correlation analysis and multiple regression analysis. The descriptive analysis will be used in order to summarize the general nature of the variables included in the study. This type of analysis helps to provide descriptive information such as frequency distributions, means and standard deviations which provide deeper insight into staff perceptions of internal and external service quality.

Table 6.20: The Revised Research Hypotheses

| The proposed hypotheses | The revised hypotheses |
|---|---|
| **H.1.** Higher management support to service quality leads to higher levels of external service quality as perceived by bank staff | **No change, H.1.** Higher management support to service quality leads to higher levels of external service quality as perceived by bank staff. |
| **H.2.** Management support to service quality is positively related to the following external service quality dimensions: (1) trust, (2) contact style, (3) responsiveness, (4) reliability, (5) efficiency and (6) tangibles | **Reworded to, H.2.** Management support to service quality is positively related to the following external service quality dimensions: (1) trust, (2) interface, (3) reliability, and (4) tangibles. |
| **H3.** Management effectiveness is positively related to external service quality as perceived by bank staff | **No change, H3.** Management effectiveness is positively related to external service quality as perceived by bank staff |
| **H4.** Management effectiveness is positively related to the following external service quality dimensions: (1) trust, (2) contact style, (3) responsiveness and (4) reliability. | **Reworded to, H4.** Management effectiveness is positively related to the following external service quality dimensions: (1) trust, (2) interface, and (3) reliability. |
| **H5.** An increase in the bank management 's use of empowerment leads to higher levels of external service quality as perceived by bank staff | Deleted according to factor analysis results. |
| **H6.** An increase in the bank management 's use of empowerment is positively related to the following external service quality dimensions: (1) trust, (2) contact style, (3) responsiveness and (4) reliability | Deleted according to factor analysis results. |
| **H7.** Working atmospherics are positively related to external service quality as perceived by bank staff. | **No changes, H5.** Working atmospherics are positively related to external service quality as perceived by bank staff. |
| **H8.** Working atmospherics are positively related to the following external service quality dimensions: (1) trust, (2) contact style, (3) responsiveness and (4) reliability. | **Reworded to, H6.** Working atmospherics are positively related to the following external service quality dimensions: (1) trust, (2) interface, and (3) reliability. |
| **H9.** Employees service vision is positively related to external service quality as perceived by bank staff. | **No change, H7.** Employees service vision is positively related to external service quality as perceived by bank staff. |
| **H10.** Employees service vision is positively related to the following external service quality dimensions: (1) trust,(2) contact style, (3) responsiveness and (4) reliability. | **Reworded to, H8.** Employees service vision is positively related to the following external service quality dimensions: (1) trust, (2) interface, and (3) reliability. |
| **H11.** Information seeking is positively related to external service quality as perceived by bank staff.<br>**H12.** Information seeking is positively related to the following external service quality dimensions: (1) trust, (2) contact style, (3) responsiveness, and (4) reliability.<br>**H13.** Upward, downward and horizontal communication efficiency leads to higher levels of external service quality as perceived by bank staff.<br>**H.14** Upward, downward and horizontal communication efficiency is positively related to the following external service quality dimensions: (1) trust, (2) contact style, (3) responsiveness and (4) reliability. | According to factor analysis, hypotheses 11 and 13 are deleted and replaced by this new hypothesis:<br>**H9.** Communication efficiency is positively related to external service quality as perceived by bank staff.<br><br>According to factor analysis, hypotheses 12 and 14 are deleted and replaced by this new hypothesis:<br>**H10.** Communication efficiency is positively related to the following external service quality dimensions: (1) trust, (2) interface and (3) reliability. |
| **H15.** Technology is positively related to external service quality as perceived by bank staff. | **No change, H11.** Technology is positively related to external service quality as perceived by bank staff. |
| **H16.** Technology is positively related to the following external service quality dimensions: (1) trust, (2) contact style, (3) responsiveness, (4) reliability, (5) efficiency and (6) tangibles. | **Reworded to, H12.** Technology is positively related to the following external service quality dimensions: (1) trust, (2) interface, (3) reliability and (4) tangibles. |
| **H17.** Teamwork is positively related to external service quality as perceived by bank staff.<br>**H18.** Teamwork is positively related to the following external service quality dimensions: (1) trust, (2) contact style, (3) responsiveness and (4) reliability.<br>**H19.** Selection and staff recruitment is positively related to external service quality as perceived by bank staff.<br>**H20.** Selection and staff recruitment is positively related to the following external service quality dimensions: (1) trust, (2) contact style, (3) responsiveness and (4) reliability.<br>**H21.** Performance appraisal and reward mechanism is positively related to external service quality as perceived by bank staff.<br>**H22.** Performance appraisal and reward mechanism is positively related to the following external service quality dimensions: (1) trust, (2) contact style, (3) responsiveness and (4) reliability. | According to the factor analysis hypotheses17, 19 and 21 are deleted and replaced by this new hypothesis:<br>**H13.** Job fit is positively related to external service quality as perceived by bank staff.<br><br>According to factor analysis, hypotheses 18, 20 and 22 are deleted and replaced by this new hypothesis:<br>**H14.**Job fit is positively related to the following external service quality dimensions: (1) trust, (2) interface and (3) reliability. |
| **H23.** Quality training program is positively related to external service quality as perceived by bank staff. | **No change, H15.** Quality training program is positively related to external service quality as perceived by bank staff. |
| **H24.** Quality training program is positively related to the following external service quality dimensions: (1) trust, (2) contact style, (3) responsiveness and (4) reliability. | **Reworded to, H16.** Quality training program is positively related to the following external service quality dimensions: (1) trust, (2) Interface, and (3) reliability |
| **H25.** Higher levels of staff job satisfaction lead to higher levels of external service quality as perceived by bank staff. | **No change, H17.** Higher levels of staff job satisfaction lead to higher levels of external service quality as perceived by bank staff. |
| **H26.** Higher levels of staff job satisfaction is positively related to the following external service quality dimensions: (1) trust, (2) contact style, (3) responsiveness and (4) reliability. | **Reworded to, H18.** Higher levels of staff job satisfaction is positively related to the following external service quality dimensions: (1) trust (2) Interface and (3) reliability. |

The second analysis technique is one-way ANOVA analysis. The ANOVA is a technique for detecting relationships between a metric-scaled dependent variable and one or more categorical independent variables. The ANOVA analysis aims to see whether different levels of independent variables have significantly different impacts on the dependent variable (Parasuraman, 1991). The ANOVA analysis will be used in this research to test for differences in staff perceptions between the different subsets within the sample regarding the internal and external service quality dimensions. Eight subsets or factors were used: the four banks, the different branch locations, branch size, overall staff experience in the bank, staff experience in their current position, staff annual income, staff education level and staff job position. The ANOVA test will be followed by the Duncan's multiple range to test whenever the F-values were significant to determine precisely how many statistically significant differences actually existed.

The third statistical method is the Pearson correlation analysis which will be used to measure the nature and the degree of association between the internal and external service quality dimensions. This technique is appropriate for measuring such an association because the internal and external service quality dimensions are metric-scaled variables (measured on a seven-point Likert scale). The Pearson correlation coefficient also plays a key role in advanced multivariate analysis procedures such as multiple regression which is used in this research.

Finally, multiple regression analysis will be used to test the research hypotheses. Multiple regression analysis, which is also known as general linear modeling, is a multivariate statistical technique which is used to examine the relationship between a single dependent variable and a set of independent variables. All of the independent variables (the internal dimensions of service quality) and the dependent variable (external service quality) in this research are measured on a seven-point Likert scale. Multiple regression analysis is, therefore, an appropriate parametric technique for analysing metric data of this kind. The flexibility and adaptability of multiple regression also allows it to be used in any situation where a dependence relationship exists (Hair *et al.*, 1995). Multiple regression will be used in this research to explain and predict the relationship between the internal and external service quality dimensions. Furthermore, standardized regression coefficients (Beta) will be used in the analysis and their magnitudes will be compared across the various internal service quality dimensions which will provide insight into the relative influence of each dimension on external service quality. Multiple regression analysis also facilitates the of use dummy variables as control variables to achieve some causal indicators for the relationship between the internal and external service quality.

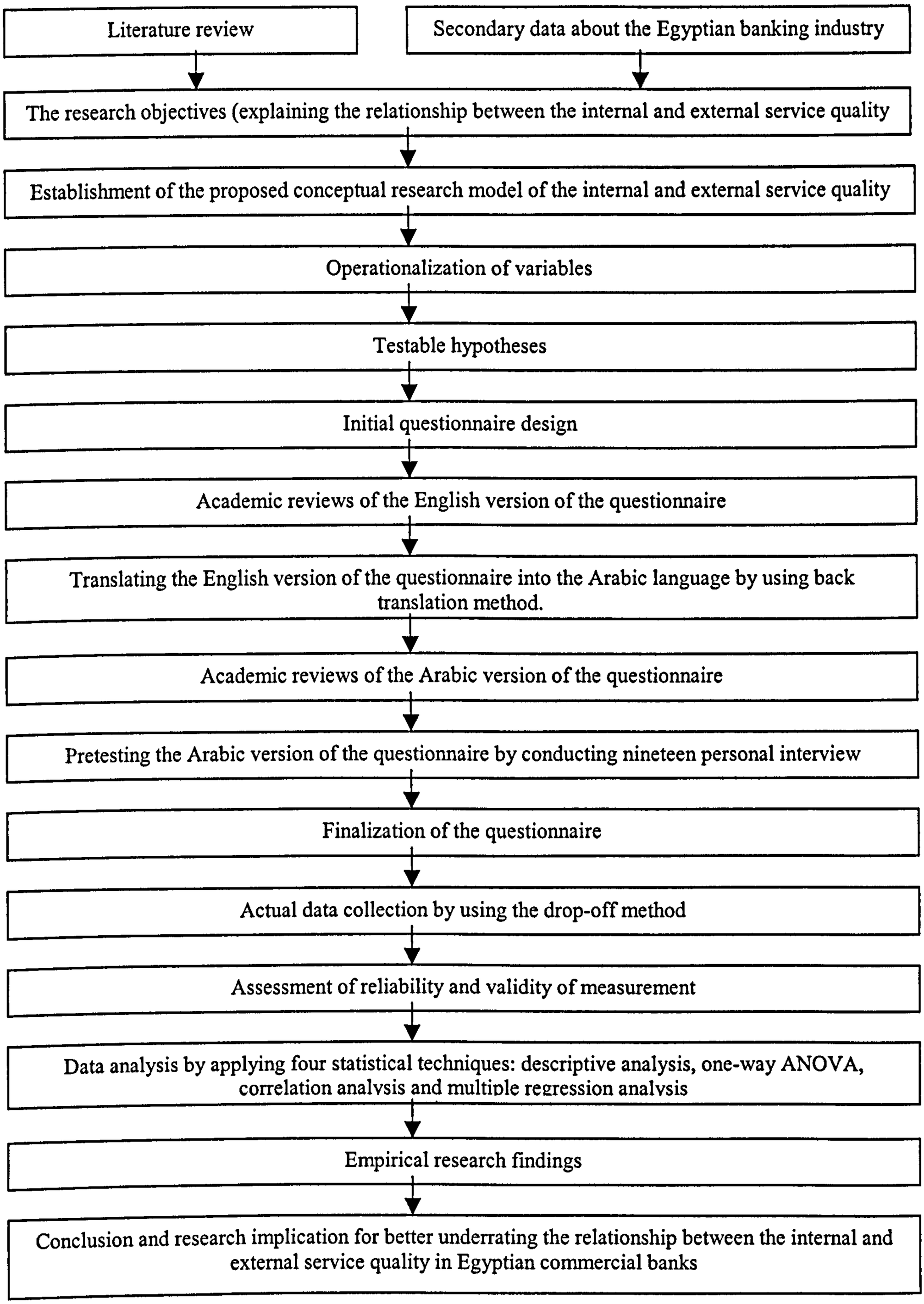
Multicollinearity is a common problem when using multiple regression analysis. It occurs when any single predictor variable is highly correlated with a set of other predictor variables and can result in a number of problems. First, it limits the size of the coefficient of determination and makes it increasingly difficult to obtain further explanatory prediction by introducing additional variables. Second, determining the contribution of each independent variable is made difficult because the effects of the independent variables are "mixed" owing to collinearity. Hair *et al.* (1995) argued that in any regression analysis, the assessment of multicollinearity should be undertaken in two steps: (1) identification of the extent of collinearity and (2) assessment of the degree to which the estimated coefficients are affected.

## 6.12 Conclusion

The main objective of this chapter has been to present the research methodology. In doing this, it was necessary to discuss the different issues relating to alternative methods of research. The chapter also focused on the basic research design, the empirical data collection approach, the research sample, the measurement and scaling, the questionnaire design, translating and pretestig the questionnaire, and the method of analysis. Operationalization of the research variables was also discussed, followed by an explanation of how the validity and reliability of the internal and external service quality constructs were tested. The chapter showed that the scales used in the research were appropriate in measuring the internal and external service quality constructs. The chapter also presented the modified research model and the revised research hypotheses in the light of factor analysis results. Hopefully, it is apparent that the research methodology was designed in the light of the research objectives, the nature of the empirical data and the research hypotheses, and previous studies in this area. Finally, we can conclude that: "***The empirical research design aims to examine the relationship between the internal and external service quality dimensions in Egyptian commercial banks. The research was based on cross sectional data which was collected from the biggest four commercial banks in Egypt through a self-administered structured questionnaire using the drop-off method. The questionnaire was circulated to branch mangers, supervisors and front line staff in forty-five branches located in Cairo, selected according to their size and their location. The target sample size is 550. Multiple regression analysis is the major statistical technique used to test the research hypotheses***". Figure 6.4 shows the overall research design and process.

This chapter discussed the research methodology and showed that descriptive analysis is one of the statistical techniques which will be used in this research. The next chapter will present a general descriptive analysis of the internal service quality dimensions.

Figure 6.4: The Overall Research Design and Process



# CHAPTER SEVEN

# INTERNAL SERVICE QUALITY: DESCRIPTIVE AND ONE-WAY ANOVA ANALYSIS

## 7.1 Introduction

This chapter is devoted to presenting a general descriptive analysis of the internal service quality dimensions. This chapter contains five sections. Section 7.2 presents the response rate and branches' profile in terms of their number, location and size. This is followed in section 7.3 by a discussion of the main attributes of the respondents by age, experience and job position, etc. Section 7.4 presents a descriptive analysis of staff perceptions of the nine internal service quality dimensions (management support, management effectiveness, working atmospherics, employees service vision, communication, technology, job fit, training and job satisfaction). The section also uses the analysis of variance (one-way ANOVA) as a statistical method to investigate and compare the difference between groups regarding the perceptions of the different dimensions of internal service quality. The main comparison factors are: The four banks, branch location, branch size, staff experience in the bank, staff experience in their current positions, staff annual income, staff education level, and staff job position. The Duncan's multiple range test was then used whenever the F-values were significant to determine precisely how many statistically significant differences actually existed between groups.

## 7.2 Response Rate and Branches' Profile

Survey data was collected from four major commercial banks in Egypt and 440 questionnaires were distributed to bank staff. In total, 362 people replied and this resulted in 332 usable questionnaires with a response rate of 75.4% (see table 7.1). The response rate for each bank was as follows: bank A (86.4%), bank B (81.6%), bank C (71.1%) and bank D (54.4%). Rather interestingly the banks with the lowest response rates (D and C) took responsibility for circulating the questionnaires. In contrast, the researcher was given permission to circulate the questionnaires in the branches of banks A and B. In this respect, there was no direct contact between the researcher and staff in banks D and C and this may partly explain the relatively low response rates. However, the response rates for all four banks are considered to be very satisfactory.

As mentioned in chapter six, the researcher used the "drop off" method to distribute and collect the questionnaires from banks A and B. Accordingly, he was in contact with the respondents in terms of circulating the questionnaires and arranging a time to collect them. The researcher tried to increase the response rate from these two banks by giving

the staff additional time to complete the questionnaires. In this respect, a future specific time and date was agreed between the researcher and the respondents and this was undoubtedly responsible for the very high response rates for banks A and B.

Forty five branches in Cairo were selected by the head offices of the four banks according to their size and location, in an endeavour to obtain a diverse sample. Table 7.1 shows that the number of branches for each bank was as follows: bank A (thirteen branches), bank B (twelve branches), bank D (ten branches), and bank C (ten branches). Table 7.2 reveals that twelve branches were regarded as being small, seventeen were medium, and sixteen were large. With respect to branch location, table 7.3 shows that four locations in Cairo were selected. Location one covers the centre of Cairo, a very busy area which involves a wide range of different branch activities. The people who live in this location are quite diverse in terms of their annual disposable income. This area also includes many commercial stores and governmental institutions. The second location is also very busy but annual disposable income is low and it is regarded as a poor area. The third location is a wealthy area with a high level of disposable income. This area also includes many commercial and governmental institutions. Finally, the fourth location has the highest level of disposable income and is regarded as the wealthiest of the four areas. The classification of these four locations according to density of residence range from: location 1 which is the most dense, followed by location 2, then location 3 and location 4. With regard to disposable income, the classification from high to low is as follows: location 4 has the highest level of income, followed by location 3, then location 1, and location 2.

## 7.3 Respondents' Personal Background

Table 7.4 shows the respondents' personal background and profile. With respect to respondents' sex, 79.2% of the respondents were male while 20.8% were female. The respondents' age profile was: 29% of the respondents were between 22 and 35 years old, 32.9% were between 36 and 45 years old and 38.1% percent were between 46 and 60 years old. Table 7.4 also indicates that the respondents had lengthy experience in the banking industry, as 40.9% had been with the bank for more than 20 years, 32.8% had between 11 and 20 years experience and only 26.2% had less than 10 years experience. Furthermore, the respondents' profile shows that they have a breadth of different experiences, as 40.65% of them had been in their current position for less than 5 years. More than 60% of the respondents earned between 7000LE to 11000LE per year while. 36.4% earned more than 11000LE per year.

Table 7.1: Response Rate and Branches Description

| | Number of distributed questionnaire | Number of returned questionnaire | Usable Questionnaire | Response Rate | Branches Number | Branches number according to their size | | | Branches number according to their location | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Small | Medium | Large | Location 1 | Location 2 | Location 3 | Location 4 |
| Bank A | 140 | 128 | 121 | 86.4% | 13 | 4 | 5 | 4 | 4 | 4 | 3 | 2 |
| Bank B | 120 | 106 | 98 | 81.6% | 12 | 3 | 4 | 5 | 3 | 5 | 2 | 2 |
| Bank C | 90 | 66 | 64 | 71.1% | 10 | 3 | 4 | 3 | 3 | 2 | 3 | 2 |
| Bank D | 90 | 62 | 49 | 54.4% | 10 | 2 | 4 | 4 | 2 | 3 | 2 | 3 |
| Total | 440 | 362 | 332 | 75.4% | 45 | 12 | 17 | 16 | 12 | 14 | 10 | 9 |

Table 7.2: Branches Size Description

| | Small | | Medium | | Large | |
|---|---|---|---|---|---|---|
| | Branches Number | Respondents Number | Branches Number | Respondents Number | Branches Number | Respondents Number |
| Bank A | 4 | 24 | 5 | 46 | 4 | 51 |
| Bank B | 3 | 22 | 4 | 26 | 5 | 50 |
| Bank C | 3 | 15 | 4 | 24 | 3 | 25 |
| Bank D | 2 | 7 | 4 | 14 | 4 | 28 |
| Total | 12 | 68 | 17 | 110 | 16 | 154 |

Table 7.3: Branches Location Description

| | Location 1 | | Location 2 | | Location 3 | | Location 4 | |
|---|---|---|---|---|---|---|---|---|
| | Branches Number | Respondents Number | Branches Number | Respondents Number | Branches Number | Respondents Number | Branches Number | Respondents Number |
| Bank A | 4 | 35 | 4 | 37 | 3 | 29 | 2 | 20 |
| Bank B | 3 | 26 | 5 | 35 | 2 | 18 | 2 | 19 |
| Bank C | 3 | 17 | 2 | 18 | 3 | 18 | 2 | 11 |
| Bank D | 2 | 9 | 3 | 11 | 2 | 11 | 3 | 18 |
| Total | 12 | 87 | 14 | 101 | 10 | 76 | 9 | 68 |

Table 7.4 further reveals that the vast majority of respondents were well educated, 69.8% of the respondents held a first degree (25% held a postgraduate degree). Regarding the respondents' position in the bank, 19.3% of them were branch mangers, 47.2% were supervisors, and 33.4% were front-line staff. As respondents in all of these three positions deal directly with external customers, they were all considered appropriate in identifying key service delivery issues that are conducive to improving levels of external customer service satisfaction.

Table 7.4: Respondents' Personal Background

| | Frequency | % | | Frequency | % |
|---|---|---|---|---|---|
| **Sex** | | | **Annual Income** | | |
| Male | 263 | 79.2 | 7000 LE or less | 89 | 27.9 |
| Female | 69 | 20.8 | 7001-11000 LE | 113 | 35.5 |
| **Age** | | | More than 11000 LE | 116 | 36.4 |
| 22-35years | 96 | 29.0 | **Education Qualifications** | | |
| 36-45 years | 109 | 32.9 | Less than university education | 99 | 30.1 |
| 46-60 years | 126 | 38.1 | University education | 147 | 44.8 |
| **Staff Experience in the Bank** | | | Postgraduate education | 82 | 25.0 |
| Less than 10 years | 87 | 26.2 | **Staff Job Position** | | |
| 11-20 years | 109 | 32.8 | Manager | 63 | 19.3 |
| More than 20 years | 136 | 40.9 | Supervisor | 154 | 47.2 |
| **Staff Experience in their Current Position** | | | Front-Line Staff | 109 | 33.4 |
| Less than 5 years | 133 | 40.6 | | | |
| 5-10 years | 91 | 27.8 | | | |
| More than 10 years | 103 | 31.5 | | | |

## 7.4 Staff Perceptions of Internal Service Quality Dimensions

This section presents a descriptive analysis of bank staff perceptions of the internal service quality dimensions. The nine internal service quality dimensions (management support, management effectiveness, working atmospherics, employees service vision, communication, technology, job fit, training and job satisfaction) were measured on a seven-point Likert scale (from 1= strongly disagree to 7= strongly agree). One-way ANOVA analysis was then used to test the differences between the groups regarding each internal quality dimension. The groups were based on eight comparison factors: the four banks, branch location, branch size, staff experience in the bank, staff experience in their current position, staff annual income, staff education level and staff job position.

### 7.4.1 Staff Perceptions of Management Support

To get a better understanding and insight into management support in Egyptian banking, seven different measures of management support were identified and incorporated into the questionnaire. As such each item is measuring different aspects or facets of the management support function. One of these items incorporated a negative question (item 7) and was, therefore, reversed when entering the data.

Table 7.5 shows that vast majority of the respondent (93.6%) agreed with statement one that: *Improving the level of service quality to our external customers is one of the major goals of our bank* (M= 6.243, S.D= 1.043). This was supported by the respondent agreement (91.2%) with statement 3 that: *The bank is committed to providing a high level of service quality to external customers* (M= 5.827, S.D= 1.144). Only 4.5% of staff disagreed with statement 2 that: *My closest supervisor emphasises the importance of delivering a high level of service quality to external customers* (M= 6.115, S.D= 1.093). Furthermore, table 7.5 shows that 82.9% of staff agreed with statement 6 that: *The bank regards improving the levels of co-operation between different departments within the bank as an important goal* (M= 5.542, S.D= 1.396).

Table 7.5: Staff Perceptions of Management Support: Descriptive Statistics

| Items | Disagree % | Do not Know % | Agree % | M | S.D |
|---|---|---|---|---|---|
| 1. Improving the level of service quality to our external customers is one of the major goals of our bank. | 2.7 | 3.7 | 93.6 | 6.243 | 1.043 |
| 2. My closest supervisor emphasises the importance of delivering a high level of service quality to external customers. | 4.5 | 2.4 | 93.1 | 6.115 | 1.093 |
| 3. The bank is committed to providing a high level of service quality to external customers. | 6.6 | 2.2 | 91.2 | 5.827 | 1.144 |
| 4. Departments within the bank have formal systems for setting and monitoring performance against service quality goals. | 9.9 | 12.6 | 77.5 | 5.430 | 1.466 |
| 5. My own performance within the bank is measured against specific service quality goals. | 19.5 | 8.5 | 72 | 5.018 | 1.685 |
| 6. The bank regards improving the levels of co-operation between different departments within the bank as an important goal. | 8.4 | 8.7 | 82.9 | 5.542 | 1.396 |
| 7. Management does not motivate me to provide a high level of service quality to external customers. | 21 | 1.3 | 77.7 | 5.452 | 1.895 |
| Management Support (Overall Score) | | | | 5.661 | .972 |

See table 1 in Appendix B for detailed analysis

Staff motivation is one of the most important aspects of management support and in this respect, 77.7% of staff agree with the reverse or opposite of statement 7. In other words, the vast majority of respondent believed that (*Management does motivate me to provide a high level of service quality to external customers*) (M= 5.452, S.D= 1.895). Given the importance of service standards in improving the quality of external service, two items were included to assess the extent to which bank staff perceived management to be actively in motivating the performance of staff. The responses indicate that 77.5% of staff agreed with statement 4 that: *Departments within the bank have formal systems for setting and monitoring performance against service quality goals* (M= 5.430, S.D= 1.466). Similarly, only 19.5% of staff disagreed with assertion 5 that: *My own performance within the bank is measured against specific service quality goals* (M= 5.018, S.D= 1.685).

From the above descriptive analysis, we can conclude that staff in the four banks have positive perceptions about the importance of management support in improving service quality, this was clearly evident from the overall score of management support (M=

5.661) (see table 7.5). The responses clearly reveal that the quality of external customer service is an important bank objective. Staff with direct contact with external customers are actually aware of how management and immediate supervisors regularly re-emphasise this importance and keep it fresh and foremost in their minds. Formal mechanisms for monitoring performance against specific targets and improving co-operation between different departments of the banks are also used by management to support the overriding objective of improving the levels of external customer service.

### 7.4.2 One-Way ANOVA for Staff Perceptions of Management Support

As mentioned earlier, analysis of variance (one-way ANOVA) was chosen as a statistical method to investigate and compare the differences between groups regarding the perceptions of the different dimensions of internal service quality. The main comparison factors are: the four major banks, branch location, branch size, staff experience in the bank, staff experience in their current positions, staff annual income, staff education level, and staff job position. The Duncan's multiple range test was then used whenever the F-values were significant to determine precisely how many statistically significant differences actually existed between groups. The one-way ANOVA for staff perceptions of management support revealed the following results:

***The Four Banks***

According to the ANOVA by the four banks, significant differences were found between the groups' mean relating to statement 1 and 5 (P=0.024, 0.042) (see table 3 in appendix B). Bank B staff have higher perceptions of the importance of statement 1 (*Improving the level of service quality to our external customers is one of the major goals of our bank*) than staff in banks C and D (M2= 6.454, S.D2= 0.930, M3= 6.132, S.D3= 0.951, M4= 5.964, S.D4= 1.338, P< 0.1). With regard to statement 5 (*The bank regards improving the levels of co-operation between different departments within the bank as an important goal*), it was found that bank C staff ranked it significantly higher than staff in banks B, D, A (M3= 5.968, S.D3= 1.221, M2= 5.522, S.D2= 1.369, M4= 5.408, S.D= 1.553, M1= 5.357, S.D1= 1.416, P< 0.1). However, the ANOVA revealed that there was no significant difference between the four banks when the overall score of management support was used (see table 7.6). Management, therefore, in the four banks are supporting and trying to foster a customer oriented culture within their respective organizations. This interpretation is supported by the relatively high positive perceptions of staff regarding management support in the four banks (see table 7.5).

### *Branch Location*

According to branch location, the ANOVA shows no significant difference between the four branch locations regarding the overall score of management support and its measurement items (see tables 7.6; and 4 in appendix B). This may be because as we saw earlier there was a strong belief amongst staff in all of the banks that management was committed to improving external customer service.

Table 7.6: The ANOVA for Staff Perceptions of Management Support

| ANOVA by Four Banks | (1) Bank A N= 121 | | (2) Bank B N=98 | | (3) Bank C N=64 | | (4) Bank D N=49 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| | 5.563 | .969 | 5.699 | .963 | 5.771 | .904 | 5.621 | 1.089 | .688 | .560 | N.D* | |
| ANOVA by Branch Location | Location 1 N= 87 | | Location 2 N= 101 | | Location 3 N= 76 | | Location 4 N=68 | | F | | Duncan Test | |
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| | 5.719 | .958 | 5.534 | .974 | 5.627 | .996 | 5.777 | .959 | .970 | .407 | N.D | |
| ANOVA by Branch Size | (1) Small N= 68 | | (2) Medium N= 110 | | (3) Large N=154 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.730 | .946 | 5.618 | .963 | 5.661 | .994 | .279 | .757 | N.D | | | |
| ANOVA by Staff Experience in The Bank | (1) Less than 10 years N= 87 | | (2) 10-20 years N= 109 | | (3) More than 20 years N= 136 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.244 | 1.065 | 5.557 | 1.011 | 5.860 | .862 | 10.756 | .000 | 3>2>1 | 0.05 | | |
| ANOVA by Staff Experience in Their Current Positions | (1) Less than 5 years N= 133 | | (2) 5-10 years N= 91 | | (3) More than 10 years N= 103 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.626 | .955 | 5.606 | 1.092 | 5.757 | .858 | .574 | .564 | N.D | | | |
| ANOVA by Staff Annual Income | (1) 7000 LE or less N= 89 | | (2) 7001-11000 LE N= 113 | | (3) More than 11000 LE N= 116 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.370 | 1.058 | 5.654 | .963 | 5.769 | .923 | 3.902 | .021 | 3,2>1 | 0.05 | | |
| ANOVA by Staff Education Level | (1) Less than University Education N= 99 | | (2) University Education N= 147 | | (3) Postgraduate Education N= 82 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.671 | .852 | 5.682 | .936 | 5.591 | 1.158 | .224 | .800 | N.D | | | |
| ANOVA by Staff Job Position | (1) Managers N= 63 | | (2) Supervisors N= 154 | | (3) Front line staff N= 109 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 6.065 | .714 | 5.637 | 1.011 | 5.439 | .983 | 8.667 | .000 | 1>2,3 | 0.05 | | |

See tables 3 to 10 in appendix B for a more detailed analysis

*N.D (No Difference)

***Branch Size***

The ANOVA by branch size revealed that there is a significant difference between the groups' (small, medium and large) mean relating to statement 7 (P= 0.021) (see table 5 in appendix B). Small branches staff revealed higher perceptions of the assertion that: *My own performance within the bank is measured against specific service quality goals*, than medium and large branches staff (M1= 5.470, S.D1= 1.470, M2= 5.055, S.D2= 1.618, M3= 4.792, S.D= 1.784, P< 0.1). The reason for this may be that it is much easier to monitor staff performance in small branches and compare it with specific service goals than in medium and large branches where staff number are much greater. However, table 7.6 shows that there is no significant difference between groups regarding the overall score of management support.

***Staff Experience in the Bank***

With respect to staff experience in the bank, ANOVA results indicate that there were significant differences between groups' mean relating to statements 1, 2, 3, 4 5 and 7 (P= 0.014, 0.000, 0.000, 0.002, 0.000, and 0.003) (see table 6 in appendix B). Group 3 (staff with more than 20 years experience) have higher positive perceptions of statement 1 (*Improving the level of service quality to our external customers is one of the major goals of our bank*) than groups 2 (staff with 10-20 years experience) and 1 (staff with less than 10 years experience) (M3= 6.388, S.D3= 0.941, M2= 6.133, S.D2= 1.048, M1= 5.984, S.D1= 1.240, P< 0.1). Table 6 in appendix B shows that the most experience group also ranked statement 2 (*My closest supervisor emphasises the importance of delivering a high level of service quality to external customers*) significantly higher than the other groups (M3= 6.346, S.D3= 0.847, M2= 5.931, S.D2= 1.257, M1= 5.720, S.D1= 1.303, P< 0.05). With respect to statement 3 (*The bank is committed to providing a high level of service quality to external customers*), the Duncan test also revealed that the more experienced staff had a greater awareness of its importance (M3= 6.049, S.D3= 1.010, M2= 5.738, S.D2= 1.139, M1= 5.328, S.D1= 1.334, P< 0.1).

This trend of greater experience correlating to a heightened awareness of the importance of customer service and the role of management support was also revealed by a number of other responses. For example, the mean scores for groups 3 and 2 are significantly higher than the mean score for group 1 with regard to statement 4 (*Departments within the bank have formal systems for setting and monitoring performance against service quality goals*) (M3= 5.638, S.D3= 1.344, M2= 5.386, S.D2= 1.465, M1= 4.906, S.D1= 1.668, P< 0.05). Groups 2 and 1 similarly have lower perceptions relating to statement 5 (*The bank regards improving the levels of co-operations between different departments within the*

*bank as an important goal*) (M3= 5.842, S.D3= 1.198, M2= 5.342, S.D2= 1.572, M1= 5.000, S.D1= 1.458, P< 0.05). Likewise, groups 2 and 1 ranked (*My own performance within the bank is measured against specific service quality goals*) significantly lower than group 3 (M3= 5.300, S.D3= 1.553, M2= 4.772, S.D2= 1.733, M1= 4.562, S.D1= 1.842, P< 0.05).

By using the overall score of management support to test the difference between the three staff experience groups, ANOVA shows that there is a significant difference between the groups' mean (P= 0.000) (see table 7.6). The Duncan test revealed that the higher the experience of staff in the bank, the higher the staff perceptions are of the importance of management support in improving external service quality (M3= 5.860, S.D3= 0.862, M2= 5.557, S.D2= 1.011, M1= 5.244, S.D1= 1.065, P< 0.05). This may be indicating that staff with greater experience are more able to better understand bank policies and management style. Moreover, they are generally in more senior positions and, therefore, have more responsibility for implementing bank policy on service quality.

***Staff Experience in their Current Positions***

Tables 7.6 and 7 in appendix B show ANOVA by staff experience in their current positions. Once again three groups are identified: Group 1 (less than 5 years in the current position), group 2 (between 5 years and 10 years) and group 3 (more than 10 years). Although there was slightly more emphasis placed on service quality by staff with greater experience in their current positions, no significant differences were found between groups' mean regarding the overall score of management support and its measurement items.

***Staff Annual Income***

According to staff annual income, the ANOVA revealed some significant differences between groups' mean relating to statements 1, 3 and 5 (P= 0.01, 0.034 and 0.014). Table 8 in appendix B shows that group 3 (staff with an annual income of more than 11000LE) placed more importance on statement 1 (*improving the level of service quality to our external customers is on of the major goals of our bank*) than group 1 (staff with annual income less than 7000LE) (M3= 6.414, S.D3= 0.888, M1= 5.968, S.D1= 1.344, P< 0.05). Group 3 also ranked statement 3 (*the bank is committed to providing a high level of service quality to external customers*) significantly higher than groups 2 (staff with an annual income of between 7001LE and 11000LE) and 1 (M3= 5.981, S.D3= 1.079, M2= 5.687, S.D2= 1.145, M1= 5.609, S.D1= 1.203, P< 0.1). Furthermore, the mean scores of groups 3 and 2 relating to statement 5 (*the bank regards improving the levels of co-*

*operation between different departments within the bank as an important goal*) are significantly higher than group 1 (M3= 5.655, S.D3= 1.318, M2= 5.625, S.D2= 1.299, M1= 5.071, S.D1= 1.690, P< 0.05). The ANOVA by staff annual income also shows a significant difference between groups' mean in respect of the overall score of management support (P= 0.05). Groups 3 and 2 placed more importance on management support than group 1 (M3= 5.769, S.D3= 0.923, M2= 5.645, S.D2= 0.963, M1= 5.370, S.D1= 1.058, P< 0.05) (see table 7.6). It was evident from these results that staff on higher annual income have positive attitudes about management support in improving external service quality compared to staff on lower annual income. One possible explanation might be that staff with high annual incomes are more satisfied with their salary and enjoy higher job satisfaction levels and, therefore, feel that bank management is committed to improving external service quality. Alternatively, the results may possibly be reflecting the fact that staff on higher salaries occupy supervisory or management positions, i.e. they are more senior. In this respect the results would broadly accord with those relating to staff with greater experience in the bank and were it was assumed that greater experience corresponds to more senior staff positions.

***Staff Education Level***

The ANOVA by staff education level shows that there is no significant difference between groups' mean relating to management support (see tables 7.6; and 9 in appendix B). It was anticipated that staff with different education qualifications would have different perceptions but as was mentioned earlier all members of staff had positive attitudes towards management support (M= 5.661) (see table 7.5), and this would appear to be the case in respect of differences in terms of education levels.

***Staff Job Position***

With respect to staff job position, the ANOVA results revealed significant differences between groups 1 (managers), 2 (supervisors), and 3 (front line staff) in relation to statements 2, 3, 5 and 7 (P= 0.001, 0.001, 0.000, and 0.004). Table 10 in appendix B shows that the managers' mean score relating to statement 2 (*My closest supervisor emphasises the importance of delivering a high level of service quality to external customers*) is significantly higher than that of supervisors and front line staff (M1= 6.509, S.D1= 0.617, M2=6.131, S.D2= 1.118, M3= 5.863, S.D3= 1.213, P<0.05). Similarly, supervisors and front line staff perceptions of statement 3 (*The bank is committed to providing a high level of service quality to external customers*) are significantly lower than managers (M1= 6.206, S.D1= 0.882, M2= 5.863, S.D2= 1.160, M3= 5.548, S.D3= 1.205, P<0.05). Likewise, with regard to statement 5 (*The banks regards improving the*

*levels of co-operation between different departments within the bank as an important goal*), the Duncan test revealed that the higher the staff level the greater the level of agreement (M1= 6.103, S.D1= 0.937, M2= 5.546, S.D2= 1.450, M3= 5.188, S.D3= 1.454, P< 0.1) (See Table APP> 9). Managers also ranked statement 7 (*My own performance within the bank is measured against specific service quality goals*) higher than supervisors and front line staff (M1= 5.524, S.D1= 1.435, M2= 5.026, S.D2= 1.733, M3= 4.651, S.D3= 1.690, P< 0.05).

By using the overall score of management support, table 7.6 shows significant differences between managers, supervisors and front line staff (P= 0.000). Table 7.6 also indicates that managers place more emphasis on the importance of management support in achieving high levels of customer service than supervisors and front line staff (M1= 6.065, S.D1= 0.714, M2= 5.637, S.D2= 1.011, M3= 5.439, S.D3= 0.983, P< 0.05). This may be explained by the fact that managers are themselves responsible for supporting their subordinates in achieving higher levels of customer service. In this respect, it naturally follows that they would place more emphasis on this dimension.

### 7.4.3 Staff Perceptions of Management Effectiveness

This dimension was measured by four negative items, therefore, respondents' scores were reversed when entering the data. Accordingly, the responses in table 7.7 should be interpreted as relating to the reverse or opposite of the statement items. Table 7.7 shows that 64.8% of the respondents agreed with the reverse of statement 8 that: *Time pressures do not usually prevent me from providing a high level of service quality to external customers* (M= 4.803, S.D= 1.894). The table also indicates that 67.5% of the respondents agreed with the reverse of statement 9 that: *I never feel confused about what management expects from me when dealing with external customers* (M= 5.015, S.D= 1.716). Somewhat interestingly bearing in mind the earlier emphasis placed on the importance of customer service, 54.8% of staff agreed with the reverse of statement 10 that: *Management does not have far more important issues to address than helping me to provide a high level of service quality to external customers* (M= 4.609, S.D= 1.983). Nevertheless, 48.2% of the respondents agreed with the reverse of statement 11 that: *Other considerations do not often take precedence over the goal of improving the quality of external customer service* (M= 4.493, S.D= 1.964).

The overall mean score of management effectiveness, shown in table 7.7, is 4.730 i.e. only moderate, and less than the overall mean score for management support. Consequently, staff perceptions about management effectiveness in helping them to

provide a high level of service quality to external customers is not particularly high. This may be because staff recognize that bank management has many different and times conflicting objectives and external service quality is only one of these. Moreover, as service quality is a recent concept in Egyptian banking, management may not be giving it sufficient attention. Although management shows its support for improving the level of external service quality (see table 7.5), it perhaps needs to transfer its support into tangible policies and messages which help staff to priorities their objectives and provide a consistently high level of customer service.

Table 7.7: Staff Perceptions of Management Effectiveness: Descriptive Statistics

| Items | Disagree % | Do not Know % | Agree % | M | S.D |
|---|---|---|---|---|---|
| 8. Time pressures usually prevent me from providing a high level of service quality to external customers. | 32.2 | 3.0 | 64.8 | 4.803 | 1.894 |
| 9. I sometimes feel confused about what management expects from me when dealing with external customers. | 23.8 | 8.7 | 67.5 | 5.015 | 1.716 |
| 10. Management has far more important issues to address than helping me to provide a high level of service quality to external customers. | 39.7 | 5.5 | 54.8 | 4.609 | 1.983 |
| 11. Other considerations frequently take precedence over the goal of improving the quality of external customer service. | 36.2 | 15.6 | 48.2 | 4.493 | 1.964 |
| Management effectiveness (overall score) | | | | 4.730 | 1.350 |

See table 1 in appendix B for a detailed analysis

### 7.4.4 One-Way ANOVA for Staff Perceptions of Management Effectiveness

The ANOVA analysis by the eight comparison factors for staff perceptions of management effectiveness revealed the following results:

***Four Bank***

The ANOVA by the four banks revealed significant differences in the mean scores relating to statements 8 and 11 (P= 0.000, 0.036). Table 3 in appendix B shows that the mean scores of banks A, C, and D relating to reversed statement 8 (*Time pressures do not usually prevent me from providing a high level of service quality to external customers*) are significantly higher than the mean score for bank B (M1= 5.351, S.D1= 1.646, M3= 4.934, S.D3= 1.876, M4= 4.918, S.D4= 1.630, M2= 4.244, S.D2= 2.053, P< 0.05). With regard to reversed statement 11 (*Other considerations do not often take precedence over the goal of improving the quality of external customer service*), bank A staff perceptions are significantly lower than banks C and D staff (M3= 4.945, S.D3= 1.821, M4= 4.975, S.D4= 1.986, M1= 4.102, S.D1= 2.082, P< 0.05). In examining the overall score of management effectiveness, table 7.8 shows that there is no significant difference between the four banks ,i.e. there is no difference in management effectiveness across the four banks in helping staff to provide a high level of external customer service.

***Branch Location***

With regard to branch locations, ANOVA shows significant differences between groups' mean relating to statements 8, 9 and 11 (P= 0.001, 0.013 an d 0.003) (see table 4 in appendix B). Staff in location 4 appear to place more importance on reversed statement 8 (*Time pressures do not usually prevent me from providing a high level of service quality to external customers*) than staff in locations 1 and 2 (M4= 5.340, S.D4= 1.979, M1= 4.642, S.D1= 2.037, M2= 4.111, S.D2= 1.779, P< 0.1). This may be because as was mentioned earlier, branches in locations 1 and 2 are busier than those in location 4. Consequently, staff in location 4 staff may not feel the time pressures as acutely as those in locations 1 and 2. With regard to reversed statement 9 (*I never feel confused about what management expects from me when dealing with external customers*), table table 4 in appendix B shows that the mean scores for locations 2, 3 and 4 are significantly lower than location 1 (M1= 5.426, S.D1= 1.711, M2= 4.977, S.D2= 1.366, M3= 4.908, S.D3= 1.782, M4= 4.573, S.D4= 1.994, P< 0.1). One possible explanation might be that even though location 1 represents the busiest and most dense location in Cairo, staff are nevertheless committed to providing a high level of customer service. This may also be reflecting the possibility that the banks put better quality staff in the busy, high profile branch locations. This interpretation is supported, to some extent, by the fact that staff in location 1 also placed more emphasis on reversed statement 11 (*Other considerations do not often take precedence over the goal of improving the quality of external customer service*) compared to staff in locations 3 and 2 (M1= 4.980, S.D1= 2.006, M3= 4,302, S.D3= 1.858, M2= 3.965, S.D2= 1.842, P< 0.05).

However, the ANOVA in table 7.8 revealed no significant differences between the four branch locations regarding the overall score of management effectiveness. Consequently, we can conclude that there is no difference in management effectiveness in the four locations in helping staff in providing a high level of external customer service. This may be because as was shown in table 7.5, the four study banks are all trying to emphasise the importance of external customer service.

***Branch Size***

Regarding branch size and management effectiveness, ANOVA shows no significant differences between mean scores for the three groups of branches (see tables 7.8; and 5 in appendix B). Consequently, there is no significant difference between staff perceptions of the effectiveness of management in small, medium and large branches. As such these results were consistent with the ANOVA by branch size regarding management support.

***Staff Experience in the Bank***

The ANOVA by staff experience in the bank revealed a number of differences between the three groups' mean regarding management effectiveness. There were significant differences between the mean scores of the three groups relating to statements 8, 9 and 10 (P= 0.005, 0.002 and 0.026). Table 6 in appendix B shows that groups 3 (staff with more than 20 years experience) and 2 (staff with between 10 and 20 years experience) had significantly higher mean scores relating to reversed statement 8 (*Time pressures do not usually prevent me from providing a high level of service quality to external customers*) than group 1 (staff with less than 10 years experience) (M3= 5.019, S.D3= 1.911, M2= 4.856, S.D2= 1.775, M1= 4.125, S.D1= 1.872, P< 0.05). Group 3 also placed more emphasis on reversed assertion 9 (*I never feel confused about what management expects from me when dealing with external customers*) compared to groups 2 and 1 (M3= 5.316, S.D3= 1.622, M2= 4.739, S.D2= 1.853, M1= 4.547, S.D1= 1.632, P< 0.05). Similarly, group 3 ranked reversed statement 10 (*Management has does not have more important issues to address than helping me to provide a high level of service quality to external customers*) significantly higher than group 1 (M3= 4.851, S.D3= 2.036, M1= 4.097, S.D1= 1.750, P< 0.05).

The ANOVA results also showed significant differences between the groups' mean relating to the overall effectiveness of management (P= 0.001) (see table 7.8). The Duncan test revealed that the greater the experience of staff, the higher the perceptions of management effectiveness (M3= 4.958, S.D3= 1.350, M2= 4.603, S.D2= 1.352, M1= 4.264, S.D1= 1.216, P< 0.1). This may be reflecting the fact that staff with greater experience in the bank are more able to understand and interpret management policies compared to staff with less experience. The more experienced staff may also hold more senior positions (or management positions) compared to the less experienced staff. Therefore, they have more empathy with what management is attempting to accomplish in respect of customer service. These results are also broadly consistent with the ANOVA for management support based on staff experience in the bank.

***Staff Experience in their Current Positions***

With regard to staff experience in their current positions, the ANOVA test revealed no significant differences between the three groups' mean relating to management effectiveness (see tables 7.8 and 7 in appendix B).

***Staff Annual Income***

The ANOVA by staff annual income revealed a significant difference between the mean scores of the three different groups relating to statements 10 and 11 (P= 0.038, 0.023)

(see table 8 in appendix B). Group 3 (staff with annual income more than 11000 LE) had higher perceptions relating to reversed statement 10 (*Management does not have more important issues to address than helping me to provide a high level of service quality to external customers*) than group 1 (staff with annual income 7000LE or less) (M3= 4.892, S.D3= 1.947, M1= 4.212, S.D1= 2.025, P< 0.05). Furthermore, groups 2 (staff with annual income between 7001LE and 11000LE) and 3 ranked reversed statement 11 (*Other considerations does not often take precedence over the goal of improving the quality of external customer service*) significantly higher than group 1 (M2= 4.687, S.D2= 1.858, M3= 4.657, S.D3= 1.934, M1= 3.914, S.D1= 2.129, P< 0.05).

Table 7.8: ANOVA for Staff Perceptions of Management Effectiveness

| ANOVA by Four Banks | (1) Bank A N= 121 | | (2) Bank B N=98 | | (3) Bank C N=64 | | (4) Bank D N=49 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| | 4.745 | 1.346 | 4.509 | 1.356 | 4.989 | 1.301 | 4.911 | 1.357 | 2.190 | .089 | N.D* | |

| ANOVA by Branch Location | Location 1 N= 87 | | Location 2 N= 101 | | Location 3 N= 76 | | Location 4 N=68 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| | 5.033 | 1.302 | 4.670 | 1.236 | 4.582 | 1.370 | 4.524 | 1.494 | 2.621 | .051 | N.D | |

| ANOVA by Branch Size | (1) Small N= 68 | | (2) Medium N= 110 | | (3) Large N=154 | | F | | Duncan Test | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 4.745 | 1.324 | 4.650 | 1.354 | 4.781 | 1.365 | .303 | .739 | N.D | | | |

| ANOVA by Staff Experience in The Bank | (1) Less than 10 years N= 87 | | (2) 10-20 years N= 109 | | (3) More than 20 years N= 136 | | F | | Duncan Test | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 4.264 | 1.216 | 4.603 | 1.352 | 4.958 | 1.350 | 7.007 | .001 | 3>2>1 | 0.1 | | |

| ANOVA by Staff Experience in Their Current Positions | (1) Less than 5 years N= 133 | | (2) 5-10 years N= 91 | | (3) More than 10 years N= 103 | | F | | Duncan Test | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 4.796 | 1.347 | 4.719 | 1.405 | 4.514 | 1.292 | 1.088 | .338 | N.D | | | |

| ANOVA by Staff Annual Income | (1) 7000 LE or less N= 89 | | (2) 7001-11000 LE N= 113 | | (3) More than 11000 LE N= 116 | | F | | Duncan Test | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 4.510 | 1.405 | 4.650 | 1.390 | 4.882 | 1.312 | 1.993 | .138 | N.D | | | |

| ANOVA by Staff Education Level | (1) Less than University Education N= 99 | | (2) University Education N= 147 | | (3) Postgraduate Education N= 82 | | F | | Duncan Test | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 4.667 | 1.467 | 4.735 | 1.348 | 4.773 | 1.311 | .073 | .929 | N.D | | | |

| ANOVA by Staff Job Position | (1) Managers N= 63 | | (2) Supervisors N= 154 | | (3) Front line staff N= 109 | | F | | Duncan Test | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.505 | 1.199 | 4.630 | 1.331 | 4.403 | 1.304 | 15.128 | .000 | 1>2,3 | 0.05 | | |

See tables 3 to 10 in appendix B for a more detailed analysis
*N.D (No Difference)

Despite these differences the ANOVA by using the overall score of managemnet effectiveness revealed no significant differences between the three groups (see table 7.8). This indicates that staff on different annual incomes believe that management is broadly effective in improving external service quality.

***Staff Education Level***

The ANOVA by staff education showed no significant differences between the mean scores of the three different groups relating to management effectiveness (see tables 7.8; and 9 in appendix B).

***Staff Job Position***

The ANOVA by staff job position revealed a number of significant differences between managers, supervisors and front line staff for all of the reversed management effectiveness items (statements 8, 9, 10 and 11) (P= 0.034, 0.002, 0.000 and 0.000) . Table 10 in appendix B indicates that managers have higher levels of agreement with reversed statement 8 (*Time pressures do not usually prevent me from providing a high level of service quality to external customers*) than supervisors and front line staff (M1= 5.282, S.D1= 1.699, M2= 4.800, S.D2= 1.916, M3= 4.502, S.D3= 1.931, P< 0.1). The Duncan test also revealed that the higher the management level , the higher staff agreement with reversed statement 9 (*I never feel confused about what management expects from me when dealing with external customers*) (M1=5.571, S.D1= 1.862, M2= 5.039, S.D2= 1.729, M3= 4.624, S.D3= 1.709, P< 0.1). Furthermore, managers ranked reversed statement 10 (*Management does not have more important issues to address than helping me to provide a high level of service quality to external customers*) significantly higher than the supervisors and front line staff (M3= 5.603, S.D1= 1.699, M2= 4.439, S.D2= 2.031, M3= 4.258, S.D3= 1.911, P< 0.05). Similarly, the mean scores for supervisors and front line staff regarding reversed statement 11 (*Other considerations do not often take precedence over the goal of improving the quality of external customer service*) are significantly lower than that of managers (M1= 5.563, S.D1= 1.637, M2= 4.243, S.D2= 1.947, M3= 4.229, S.D3= 1.955, p< 0.05).

With respect to the overall score of management effectiveness, the ANOVA revealed that there was significant difference between managers, supervisors and front line staff (P= 0.000). Managers had higher perceptions about managemnet effectiveness in improving external service quality than supervisors and front line staff (M1= 5.505, S.D1= 1.199, M2= 4.630, S.D2= 1.331, M3= 4.403, S.D3= 1.304, P< 0.05) (see table 7.8). One explanation for this may be that they are being asked to comment on their own

effectiveness. In this respect the managers responses are not that surprising. The responses of supervisors and front line staff are, however, quite revealing and suggest that there is a perceptible "gap" between what managers think (or would like to believe) and the reality of their effectiveness as experienced by more junior members of staff.

### 7.4.5 Staff Perceptions of Working Atmospherics

The literature suggests that working atmospherics is one of the most important aspects of internal service quality and it has a big role to play in helping and motivating staff to provide a high level of service quality to external customers. The variable, working atmospherics, was measured by three items. Table 7.9 shows that more than half of the respondents (54.6%) agreed with statement 12 that: *The working environment within the bank is comfortable* (M= 4.240, S.D= 1.986). The "supervision style" is also very important in helping staff to provide a high level of service quality to external customers and in this respect, 67.4% of staff agreed with statement 13 that: *I am satisfied with the supervision which I receive within the bank* (M= 4.602, S.D= 1.629). Given the emphasis placed on employee empowerment, it was interesting to see that only 16.2% of the respondents disagreed with statement 14 that: *I personally have sufficient authority and discretion to provide a high level of service quality to external customers* (M= 4.935, S.D= 1.587). By looking at the overall mean score of working atmospherics, table 7.9 reveals that it is only slightly above the "moderate level", i.e. 4, (M= 4.593, S.D= 1.372). This suggests that banks staff have only moderate levels of satisfaction with working atmospherics within their organizations. Bank management, therefore, perhaps need to put more effort into improving working atmospherics to motivate staff to provide a higher level of customer service.

Table 7.9: Staff Perceptions of Working Atmospherics: Descriptive Statistics

| Items | Disagree % | Do not Know % | Agree % | M | S.D |
|---|---|---|---|---|---|
| 12. The working environment within the bank is comfortable. | 36.4 | 9.0 | 54.6 | 4.240 | 1.986 |
| 13. I am satisfied with the supervision which I receive within the bank. | 25.8 | 6.8 | 67.4 | 4.602 | 1.629 |
| 14. I personally have sufficient authority and discretion to provide a high level of service quality to external customers. | 16.2 | 4.1 | 79.7 | 4.935 | 1.587 |
| Working Atmospherics (Overall Score) | | | | 4.593 | 1.372 |

See table 1 in appendix B for a more detailed analysis

### 7.4.6 One Way ANOVA for Staff Perceptions of Working Atmospherics

The ANOVA analysis by the eight comparison factors for staff perceptions of working atmospherics revealed the following results:

***Four Banks***

The ANOVA based on the four banks revealed that there were significant differences between the four groups relating to statements 12 and 13 (P= 0.035, 0.018) (see table 3 in

appendix B). Staff in bank C were more in agreement with statement 12 (*The working environment within the bank is comfortable*) than staff in banks A, B and D staff (M3= 5.071, S.D3= 1.289, M1= 4.561, S.D1= 1.650, M2= 4.552, S.D2= 1.705, M4= 4.196, S.D4= 1.692, P< 0.1). One explanation for this may be that Bank C staff were also more in agreement with statement 5 under management support (*The bank regards improving the levels of co-operation between different departments within the bank as an important goal*) than staff in the other three banks. Co-operation between different departments is clearly very important and this may partly explain why staff in bank C feel more comfortable in their working environment than the other three banks. This interpretation was supported by the ANOVA which indicates that staff in bank C were significantly more in agreement with statement 13 (*I am satisfied with the supervision which I receive within the bank*) than staff in banks B and A (M3= 5.359, S.D3= 1.239, M2= 4.857, S.D2= 1.762, M1= 4.622, S.D1= 1.659, P< 0.1). However, by using the overall score of working atmospherics, the ANOVA revealed no significant difference between the four banks. This suggests that working atmospherics across the four banks are broadly similar (see table 7.10).

***Branch Location***

With respect to branch location, the ANOVA revealed that there were significant differences between groups' mean relating to statement 13 (P= 0.003). Table 4 in appendix B shows that staff in locations 1 and 4 have higher levels of agreement relating to statement 13 (*I am satisfied with the supervision, which I receive within the bank*) than staff in locations 3 and 2 (M1= 5.287, S.D1= 1.597, M4= 5.189, S.D4= 1.704, M3= 4.668, S.D3= 1.676, M2= 4.563, S.D2= 1.321, P< 0.05). A possible reason for this might be the fact that, as mentioned earlier, location 1 represents the centre of Cairo and is, therefore, a very busy location, including diverse activities and equally diverse levels of disposable incomes. Similarly, branches in location 4 have a wealthy customer base. It might follow, therefore that bank management emphasizes the importance of delivering a high level of external service quality by providing a highly effective level of supervision in order to motivate staff and thereby enhance customer satisfaction. This interpretation is supported by ANOVA results relating to reversed statement 11 under management effectiveness (*Other considerations do not often take precedence over the goal of improving the quality of external customer service*) which shows that locations 1 and 4 staff have higher levels of agreement with the statement than staff in locations 3 and 2. This emphasizes how branches in prime locations may have better quality or more experienced staff. However, the ANOVA results revealed that there was no significant difference between branch locations based on the overall score of working atmospherics.

Once again, this suggests that staff across the different four branch locations perceived working atmospherics to be broadly similar (see table7.10).

***Branch Size***

The ANOVA by branch size shows that there is a significant difference between the different groups' mean relating to statement 12 (P= 0.048) (see table 5 in appendix B). The Duncan test revealed that staff in medium sized branches ranked the statement (*The working environment within the bank is comfortable*) significantly higher than staff in large branches (M2= 4.854, S.D2= 1.531, M3= 4.371, S.D3= 1.675, P= 0.05). This suggests that staff prefer or feel more "comfortable" in smaller branches. However, the ANOVA of working atmospherics overall revealed no significant differences between small, medium, and large branches (see table 7.10). Consequently, we can conclude that branch size has no significant effect on staff perceptions of working atmospherics.

***Staff Experience in the Bank***

With regard to staff experience in the bank, the ANOVA revealed that there were significant differences between groups' mean relating to statements 12 and 14 (P= 0.008, 0.004) (see table 6 in appendix B). Groups 3 and 2 had higher perceptions of statement 12 (*The working environment within the bank is comfortable*) than group 1 (M3= 4.793, S.D3= 1.562, M2= 4.609, S.D2= 1.621, M1= 4.056, S.D1= 1.723, P< 0.05). Table 6 in appendix B also shows that groups 2 and 3 ranked statement 14 (*I personally have sufficient authority and discretion to provide a high level of service quality to external customers*) significantly higher than group 1 (M2= 4.423, S.D2= 1.969, M3= 4.415, S.D3= 1.970, M1= 3.500, S.D1= 1.910, P< 0.05). This suggests that greater experience in the bank carries with it higher levels of discretion or independence of action. This in turn may explain why the more experienced staff feel more comfortable in the bank. The ANOVA also shows that there is a significant difference between the different staff experience groups based on the overall score of working atmospherics (P= 0.001) (see table 7.10). Experienced staff has, once again, have higher perceptions about working atmospherics than staff with less experience (M3= 4.767, S.D3= 1.346, M2= 4.643, S.D2= 1.331, M1= 4.034, S.D1= 1.376, P< 0.05).

***Staff Experience in their Current Positions***

According to the ANOVA by staff experience in their current positions, the analysis revealed no significant differences between groups' mean (see tables 7.10; and 7 in appendix B). In other words, staff had broadly similar views on working atmospherics.

***Staff Annual Income***

With respect to staff annual income, the ANOVA revealed that there was a significant difference between the mean scores of annual income groups relating to statement 13 (P= 0.037). Table 8 in appendix B indicates that groups 3 and 2 have higher levels of agreement with statement 13 (*I am satisfied with the supervision, which I receive within the bank*) than the lower income group 1 (M3= 5.068, S.D3= 1.636, M2= 5.020, S.D2= 1.414, M1= 4.384, S.D1= 1.652, P< 0.05). Once again, this result is in accordance with the earlier analysis.

Table 7.10: ANOVA for Staff Perceptions of Working Atmospherics

| ANOVA by Four Banks | (1) Bank A N= 121 | | (2) Bank B N=98 | | (3) Bank C N=64 | | (4) Bank D N=49 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| | 4.440 | 1.393 | 4.555 | 1.511 | 4.956 | 1.097 | 4.516 | 1.244 | 1.997 | .114 | N.D* | |
| **ANOVA by Branch Location** | **Location 1 N= 87** | | **Location 2 N= 101** | | **Location 3 N= 76** | | **Location 4 N=68** | | **F** | | **Duncan Test** | |
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| | 4.790 | 1.342 | 4.392 | 1.175 | 4.420 | 1.535 | 4.749 | 1.457 | 2.027 | .110 | N.D | |
| **ANOVA by Branch Size** | **(1) Small N= 68** | | **(2) Medium n= 110** | | **(3) Large N=154** | | **F** | | **Duncan Test** | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 4.670 | 1.167 | 4.717 | 1.310 | 4.469 | 1.492 | 1.184 | .303 | N.D | | | |
| **ANOVA by Staff Experience in The Bank** | **(1) Less than 10 years N= 87** | | **(2) 10-20 years N= 109** | | **(3) More than 20 years N= 136** | | **F** | | **Duncan Test** | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 4.034 | 1.376 | 4.643 | 1.331 | 4.767 | 1.346 | 7.066 | .001 | 3,2>1 | 0.05 | | |
| **ANOVA by Staff Experience in Their Current Positions** | **(1) Less than 5 years N= 133** | | **(2) 5-10 years N= 91** | | **(3) More than 10 years N= 103** | | **F** | | **Duncan Test** | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 4.625 | 1.405 | 4.587 | 1.315 | 4.505 | 1.408 | .189 | .827 | N.D | | | |
| **ANOVA by Staff Annual Income** | **(1) 7000 LE or less N= 89** | | **(2) 7001-11000 LE N= 113** | | **(3) More than 11000 LE N= 116** | | **F** | | **Duncan Test** | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 4.183 | 1.401 | 4.695 | 1.233 | 4.715 | 1.402 | 3.843 | .022 | 3,2>1 | 0.05 | | |
| **ANOVA by Staff Education Level** | **(1) Less than University Education N= 99** | | **(2) University Education N= 147** | | **(3) Postgraduate Education N= 82** | | **F** | | **Duncan Test** | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 4.549 | 1.075 | 4.569 | 1.429 | 4.644 | 1.359 | .085 | .918 | N.D | | | |
| **ANOVA by Staff Job Position** | **(1) Managers N= 63** | | **(2) Supervisors N= 154** | | **(3) Front line staff N= 109** | | **F** | | **Duncan Test** | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.205 | 1.100 | 4.567 | 1.351 | 4.244 | 1.426 | 10.401 | .000 | 1>2>3 | 0.1 | | |

See tables 3 to10 in appendix B for a more detailed analysis

*N.D (No Difference)

By using the overall score of working atmospherics to test the difference between the three groups, the ANOVA reveals significant differences between the groups' mean scores (P= 0.022). Staff on high annual income have more positive perceptions about working atmospherics in the branch than staff on low annual incomes (M3= 4.715, S.D3= 1.402, M2= 4.695, S.D2= 1.233, M1= 4.183, S.D1= 1.401, P< 0.05) (see table 10-7). Once again, these results are in broad accordance with the results relating to management support and management effectiveness. This may be explained by the possibility that staff on high annual incomes are more satisfied than staff on low incomes and, therefore, have a more positive attitude towards working atmospherics and, perhaps, the bank in general.

***Staff Education Level***

The ANOVA by staff education revealed that there was no significant difference between the three groups regarding working atmospherics within the bank. Therefore, education level has no significant effect on staff perceptions of working atmospherics (see tables 7.10; and 9 in appendix B).

***Staff Job Positions***

With regard to staff job positions, the ANOVA revealed significant differences between managers, supervisors and front line staff relating to statements 12, 13 and 14 (P= 0.002, 0.002 and 0.001) (see table 10 in appendix B). Managers had the highest levels of agreement with statement 12 (*The working environment within the bank is comfortable*) (M1= 5.184, S.D1= 1.231, M2= 4.537, S.D2= 1.624, M3= 4.308, S.D3= 1.745, P< 0.05). Managers also ranked statement 13(*I am satisfied with the supervision which I receive within the bank*) significantly higher than supervisors and front line staff (M1= 5.523, S.D1= 1.119, M2= 4.862, S.D2= 1.676, M3= 4.660, S.D3= 1.628, P< 0.05). The Duncan test also shows that the higher the level of management, the higher staff perceptions are about statement 14 (*I personally have sufficient authority and discretion to provide a high level of service quality to external customers*) (M1= 4.908, S.D1= 1.764, M2= 4.301, S.D2= 1.993, M3= 3.763, S.D3= 1.986, P< 0.1). Once again, these results are in accordance with the earlier analysis and probably reflect the greater the levels of satisfaction and authority that managers have. The ANOVA analysis based on the overall score of working atmospherics reveals also significant differences between managers, supervisors and front line staff (P= 0.000). According to the Duncan test, the higher the level of management, the more positive the perceptions of working atmospherics (M11= 5.205, S.D1= 1.100, M2= 4.567, S.D2= 1.351, M3= 4.244, S.D3= 1.426, P< 0.1) (see table7.10).

### 7.4.7 Employees Service Vision

To provide external customers with a high level of service quality, bank staff should clearly have positive attitudes towards customer service. Table 7.11 shows that only 3.6% disagreed with statement 15 that: *I feel personally responsible for creating a good impression of the bank to external customers* (M= 5.987, S.D= 1.112). Almost all of the staff (97.9%) agreed with statement 16 that: *My most important objective is to satisfy the needs of customers* (M= 6.390, S.D= .808). Given the importance of staff co-operation in helping each other in satisfying external customers, 96.4% of staff agreed with statement 17 that: *I feel that it is my responsibility to help colleagues within my department* (M= 6.390, S.D= 0.978). According to the overall score of employees service vision, it is clear that banks staff have positive attitudes towards the importance of customer service orientation (M= 6.199, S.D= 0.780). One possible explanation for this may be the high level of management support and emphasis placed on delivering a high level of customer service (M= 5.661, S.D= 0.0972) (see table 7.5).

Table 7.11: Employees Service Vision: Descriptive Statistics

| Items | Disagree % | Do not Know % | Agree % | M | S.D |
|---|---|---|---|---|---|
| 15. I feel personally responsible for creating a good impression of the bank to external customers. | 3.6 | 4.9 | 91.5 | 5.987 | 1.112 |
| 16. My most important objective is to satisfy the needs of customers. | 0.9 | 1.2 | 97.9 | 6.390 | .808 |
| 17. I feel that it is my responsibility to help colleagues within my department. | 2.7 | 0.9 | 96.4 | 6.220 | .978 |
| Employees service vision overall score | | | | 6.199 | .780 |

See table 1 in appendix B for a detailed analysis

### 7.4.8 One-Way ANOVA for Employees Service Vision

***Four Banks***

The ANOVA by four banks revealed that there was no significant difference between the four banks regarding employees service vision (see tables 7.12; and 3 in appendix B). This was in accordance with the ANOVA results relating to management support which also showed no significant differences between the four banks.

***Branch Location***

With regard to branch location, the ANOVA revealed no significant differences between the four different branch locations relating to employees service vision (see tables 7.12; and 4 in appendix B). This suggests that bank staff across the different branch locations have broadly the same positive vision towards customer service.

***Branch Size***

The ANOVA by branch size also revealed that there was no significant difference between small, medium and large sized branches regarding employees service vision (see

table 7.12; and 5 in appendix B). Consequently, we can state that branch size has no effect on employees service vision. This may be reflecting the strong management support and commitment to customer service. This interpretation is certainly supported by the ANOVA by branch size which also showed no significant differences between staff perceptions relating to management support (see table 7.6).

Table 7.12: ANOVA for Employees Service Vision

| ANOVA by Four Banks | (1) Bank A N= 121 | | (2) Bank B N=98 | | (3) Bank C N=64 | | (4) Bank D N=49 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| | 6.266 | .656 | 6.171 | .975 | 6.162 | .544 | 6.183 | .736 | .345 | .793 | N.D* | |
| | | | | | | | | | | | | |
| ANOVA by Branch Location | Location 1 n= 87 | | Location 2 n= 101 | | Location 3 n= 76 | | Location 4 n=68 | | F | | Duncan Test | |
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| | 6.246 | .672 | 6.218 | .525 | 6.150 | .941 | 6.166 | 1.006 | .263 | .852 | N.D | |
| | | | | | | | | | | | | |
| ANOVA by Branch Size | (1) Small N= 68 | | (2) Medium n= 110 | | (3) Large N=154 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 6.166 | .645 | 6.144 | .806 | 6.254 | .815 | .711 | .492 | N.D | | | |
| | | | | | | | | | | | | |
| ANOVA by Staff Experience in the bank | (1) Less than 10 years N= 87 | | (2) 10-20 years N= 109 | | (3) More than 20 years N= 136 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.964 | .981 | 6.212 | .746 | 6.277 | .699 | 3.876 | .022 | 3,2>1 | .05 | | |
| | | | | | | | | | | | | |
| ANOVA by Staff Experience in Their Current Position | (1) Less than 5 years N= 133 | | (2) 5-10 years N= 91 | | (3) More than 10 years N= 103 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 6.169 | .813 | 6.205 | .709 | 6.256 | .813 | .307 | .736 | N.D | | | |
| | | | | | | | | | | | | |
| Staff Annual Income | (1) 7000 LE or less N= 89 | | (2) 7001-11000 LE N= 113 | | (3) More than 11000 LE N= 116 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 6.125 | 1.022 | 6.211 | .694 | 6.238 | .720 | .479 | .620 | N.D | | | |
| | | | | | | | | | | | | |
| Staff Education Level | (1) Less than University Education N= 99 | | (2) University Education N= 147 | | (3) Postgraduate Education N= 82 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 6.038 | .577 | 6.197 | .765 | 6.353 | .650 | 2.376 | .095 | N.D | | | |
| | | | | | | | | | | | | |
| Staff Job Position | (1) Managers N= 63 | | (2) Supervisors N= 154 | | (3) Front line staff N= 109 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 6.195 | .905 | 6.223 | .672 | 6.145 | .854 | .318 | .728 | N.D | | | |

See tables 3 to 10 in appendix B for a more detailed analysis
*N.D (No Difference)

### *Staff Experience in the Bank*

The ANOVA by staff experience in the bank revealed that there was a significant difference between the staff experience groups' mean relating to statement 16 (P= 0.007).

The Duncan test showed that staff with greater experience in the bank placed more emphasis on statement 16 (*My most important objective is to satisfy the needs of customers*) than staff with less experience (group 1) (M3= 6.476, S.D3= 0.694, M2= 6.420, S.D2= 0.769, M1= 6.109, S.D1= 1.070, P< 0.05) (see table 6 in appendix B). By using the overall score of employees service vision, the ANOVA by staff experience in the bank similarly revealed significant difference between the groups' mean (P= 0.022). Staff with greater experience in the bank had more positive attitudes towards customer service than staff with less experience (M3= 6.277, S.D3= 0.699, M2= 6.212, S.D2= 0.746, M1= 5.964, 0.981, P< 0.05) (see table 7.12).

***Staff Experience in their Current Positions***

With regard to staff experience in their current positions, the ANOVA results showed no significant difference between the groups' mean relating to employees service vision (see tables 7.12; and 7 in appendix B).

***Staff Annual Income***

The ANOVA by staff annual income also revealed no significant difference between the groups' mean relating to employees service vision (see tables 712; and 8 in appendix B).

***Staff Education Level***

The ANOVA by staff education level did show a significant difference between the groups' mean relating to statement 15 (P= 0.002). Staff with university and postgraduate education ranked statement 15 (*I feel personally responsible for creating a good impression of the bank to external customers*) significantly higher than staff with no university education (M3= 6.153, S.D3= 1.003, M2= 6.048, S.D2= 1.044, M1= 5.420, S.D1= 1.265, p< 0.05) (see table 9 in appendix B). However, the ANOVA revealed no significant difference between the groups' mean by using the overall score for employees service vision (see table 7.12).

***Staff Job Position***

With regard to staff job position, the ANOVA results show no significant difference between managers, supervisors and front line staff (see tables 7.12; and 10 in appendix B). This is interesting because it means that staff at different level of management have relatively the same positive orientation towards external customer service.

### 7.4.9 Staff Perceptions of Communication

Effective communication is generally regarded as an essential facet of good people management (Oakland and Oakland, 1998). Keeping employees fully informed increases

their feelings of well being and provides a basis for improving the quality of external service. In this respect it was, therefore, pleasing to see how positive the questionnaire respondents were regarding the communication dimension. Table 7.13 shows that 66% of staff agreed with statement 18 (the *bank regularly seeks information from staff about how to improve the quality of external customer service*) (M= 4.741, S.D= 1.817). More than 77% of staff were in agreement with statement 19 (*the bank encourages staff to make suggestions for improving the quality of external customer service*) (M= 5.190, S.D= 1.712). With respect to statement 19, 71.4% of staff felt that: *the bank uses staff suggestions to improve the quality of external customer service* (M= 4.920, S.D= 1.695). Similarly, With regard to motivating staff to make suggestions for improving customer service, 62.4% of staff agread with statement 21 that: *the bank rewards staff who make good suggestions for improving the quality of external customer service* (M= 4.778, S.D= 1.735). With statement 23, more than half of the respondents felt that: *bank staff regularly make suggestions to managers/supervisors about how to improve the quality of external customer service* (M= 4.483, S.D= 1.716).

Table 7.13: Staff Perceptions of Communication: Descriptive Statistics

| Items | Disagree % | Do not Know % | Agree % | M | S.D |
|---|---|---|---|---|---|
| 18. The bank regularly seeks information from staff about how to improve the quality of external customer service. | 23.1 | 10.9 | 66.0 | 4.741 | 1.817 |
| 19. The bank encourages staff to make suggestions for improving the quality of external customer service. | 17.1 | 5.7 | 77.2 | 5.190 | 1.712 |
| 20. The bank uses staff suggestions to improve the quality of external customer service. | 18.6 | 10.0 | 71.4 | 4.920 | 1.695 |
| 21. The bank rewards staff who make good suggestions for improving the quality of external customer service. | 18.9 | 18.7 | 62.4 | 4.778 | 1.735 |
| 22. Senior management within the bank regularly communicate to employees the importance of providing a high level of service quality to external customers. | 6.3 | 4.2 | 89.5 | 5.782 | 1.333 |
| 23. Bank staff regularly make suggestions to managers/supervisors about how to improve the quality of external customer service. | 24.3 | 17.6 | 58.1 | 4.483 | 1.716 |
| 24. The objective of delivering a high level of service quality to external customers is clearly communicated to all employees and departments. | 10.8 | 11.5 | 77.7 | 5.368 | 1.511 |
| 25. Changes in work methods (for example, the introduction of new technology to provide a speedier service) made to improve the quality of external customer service are clearly communicated to all employees and departments. | 10.8 | 7.8 | 81.4 | 5.475 | 1.500 |
| Communication Overall Score | | | | 5.092 | 1.260 |

See table 1 in appendix B for a detailed analysis

Given the importance of the internal communication process in promoting a high level of external service, it was reassuring to see that the vast majority of respondents (89.5%) agreed with statement 22 that: s*enior management within the bank regularly communicate to employees the importance of providing a high level of service quality to external customers* (M= 5.782, S.D= 1.333). Similarly, only 10.8% of staff disagreed with statement 24 that: *the objective of delivering a high level of service quality to external customers is clearly communicated to all employees and departments* (M= 5.368, S.D=

1.511). Table 7.13 also indicates that 81.4% of staff agreed with statement 25 that: *changes in work methods (for example, the introduction of new technology to provide a speedier service) made to improve the quality of external customer service are clearly communicated to all employees and departments* (M= 5.475, S.D= 1.500). Not surprisingly, therefore, the overall score of communication in table 7.13 shows that staff have relatively positive attitudes towards communication within the bank (M= 5.092, S.D= 1.260). This may to some extent be reflecting the positive perceptions bank staff have towards management support in helping to improve the quality of customer service (M= 5.661) (see table 7.5). In this respect, an important aspect of effective management is good two-way internal communication within the banking organizations.

### 7.4.10 One-Way ANOVA for Staff Perceptions of Communication

***Four Banks***

The ANOVA by the four banks revealed significant differences between the four groups relating to statements 19, 20, 21 and 23 (P= 0.021, 0.009, 0.003 and 0.05) (see table 3 in appendix B). Staff in bank C were significantly more in agreement with statement 19 (*The bank encourages staff to make suggestions for improving the quality of external customer service*) than bank B staff (M3= 5.609, S.D3= 1.609, M2= 4.834, S.D2= 1.767, P< 0.05). In this respect it was interesting to note that staff in banks C and D ranked statement 20 (*The bank uses staff suggestions to improve the quality of external customer service*) significantly higher than satff in bank B (M3= 5.389, S.D3= 1.549, M4= 5.183, S.D4= 1.728, M2= 4.562, SD2= 1.662, P< 0.05). Likewise with regard to statement 21 (*The bank rewards staff who make good suggestions for improving the quality of external customer service*) bank C staff were significantly more in agreement with this than staff in banks A and B (M3= 5.371, S.D3= 1.658, M1= 4.671, S.D1= 1.745, M2= 4.444, S.D2= 1.707, P< 0.05). Staff in bank D also ranked statement 21 significantly higher than staff in bank B (M4= 5.040, S.D4= 1.695, M2= 4.444, S.D2= 1.707, P< 0.05). For statement 23 (*Bank staff regularly make suggestions to managers/supervisors about how to improve the quality of external customer service*) the mean scores of staff in banks C and A were significantly higher than that of bank B staff (M3= 4.750, S.D3= 1.613, M1= 4.734, S.D1= 1.714, M2= 4.169, S.D2= 1.738, P< 0.1).

By using the overall score of communication, the ANOVA revealed that there is a significant difference between the four groups (P= 0.040). Table 7.14 shows that staff in bank C perceive communication efficiency within their bank to be significantly higher than staff in banks A, D and B (M3= 5.454, S.D3= 1.198, M1= 5.105, S.D1= 1.249, M4= 5.081, S.D4= 1.399, M2= 4.895, S.D2= 1.214, P< 0.1). From this analysis it would appear

that bank C places more emphasis on internal communication ,especially, in terms of seeking information from staff, compared with banks A, B and D.

***Branch Location***

The ANOVA by branch location revealed that there were significant differences between the four groups' mean relating to statements 19, 20 and 21 (P= 0.029, 0.030 and 0.007) (see table 4 in appendix B). Staff in location 1 were significantly more in agreement with statement 19 (*the bank encourages staff to make suggestions for improving the quality of external customer service*) than staff in locations 4 and 3 (M1= 5.554, S.D1= 1.699, M4= 4.941, S.D4= 1.769, M3= 4.857, S.D3= 1.726, P< 0.05). Similarly, the mean scores of staff in location 1 relating to statement 20 (*the bank uses staff suggestions to improve the quality of external customer service*) were significantly higher than those of staff in locations 4 and 3 (M1= 5.306, S.D1= 1.758, M4= 4.764, S.D4= 1.594, M3= 4.578, S.D3= 1.805, P< 0.1). With respect to statement 21 (*the bank rewards staff who make good suggestions for improving the quality of external customer service*) staff in location 1 ranked this significantly higher than staff in locations 3, 2 and 4 (M1= 5.275, S.D1= 1.742, M3= 4.605, S.D3= 1.673, M2= 4.583, S.D2= 1.650, M4= 4.482, S.D4= 1.798, P< 0.05). Managers in branch location 1 are seemingly more interested in obtaining information from staff about how to improve external service quality. They also motivate staff to provide such information compared to other branch locations. This may be explained by the fact that location 1 covers the centre of Cairo, a very busy and highly competitive area which involves a wide range of different branch activities. Therefore, management actively uses information from staff to improve the quality of customer service and give these high profile branches a competitive edge. However, by using the overall score of communication, ANOVA revealed no significant differences between the four locations (see table 7.14). Accordingly, we can conclude that there is no significant difference between staff perceptions regarding communication efficiency across the four different branch locations.

***Branch Size***

With regard to branch size, the ANOVA shows that there is a significant difference between the groups' mean relating to statement 20 (p= 0.033). Staff in small and medium sized branches were in stronger agreement with statement 20 (*the bank uses staff suggestions to improve the quality of external customer service*) than staff in large branches (M1= 5.188, S.D1= 1.632, M2= 5.118, S.D2= 1.612, M3= 4.661, S.D3= 1.753, P< 0.1) (see table 5 in appendix B). However, the ANOVA based on the overall score of

communication revealed that there is no significant difference between small, medium and large branches regarding the communication within the bank (see table 7.14).

***Staff Experience in the Bank***

The ANOVA by staff experience in the bank revealed that there were significant differences between the groups' mean relating to all of the communication measurement items, i.e. from statements 18 to 25 (P= 0.001, 0.000, 0.001, 0.022, 0.031, 0.005, 0.026 and 0.000). Groups 3 (staff with more than 20 years experience) and 2 (Staff with between 10-20 years experience) were in stronger agreement with statement 18 (the *bank regularly seeks information from staff about how to improve the quality of external customer service*) than staff in group 1 (staff with less than 10 years experience) (M3= 5.038, S.D3= 1.699, M2= 4.613, S.D2= 1.865, M1= 4.078, S.D1= 1.904, P< 0.05) (see table 6 in appendix B). The Duncan test also shows that staff with more experience in the bank are more in agreement with statement 19 (*the bank encourages staff to make suggestions for improving the quality of external customer service*) (M3= 5.551, S.D3= 1.525, M2= 4.965, S.D2= 1.751, M1= 4.484, S.D1= 1.902, P< 0.05). Staff in group 3 also ranked statement 20 (*the bank uses staff suggestions to improve the quality of external customer service*) significantly higher than staff in groups 2 and 1 (M3= 5.220, S.D3= 1.601, M2= 4.726, S.D2= 1.746, M1= 4.343, S.D1= 1.720, P< 0.05).

Similarly, table 6 in appendix B shows that the mean scores of groups 3 and 2 relating to statement 21 (*the bank rewards staff who make good suggestions for improving the quality of external customer service*) were significantly higher than that of group 1 (M3= 4.980, S.D3= 1.722, M2= 4.715, S.D2= 1.660, M1= 4.293, S.D1= 1.795, P< 0.1). Furthermore, Staff with greater experience in the bank (groups 3 and 2) ranked statement 22 (*senior management within the bank regularly communicate to employees the importance of providing a high level of service quality to external customers*) significantly higher than staff with less experience (group 1) (M3= 5.887, S.D3= 1.373, M2= 5.852, S.D2= 1.088, M1= 5.390, S.D1= 1.465, P< 0.05). Groups 3 and 2 also ranked statement 23 (*bank staff regularly make suggestions to managers/supervisors about how to improve the quality of external customer service*) significantly higher than group 1 (M3= 4.680, S.D3= 1.639, 4.552, S.D2= 1.735, M1= 3.875, S.D1= 1.786, P< 0.05).

Likewise, staff with greater experience have significantly higher levels of agreement with statement 24 (*the objective of delivering a high level of service quality to external customers is clearly communicated to all employees and departments*) than staff with less experience (M3= 5.546, S.D3= 1.407, M1= 4.964, S.D1= 1.629, P< 0.05). Finally, with

regard to statement 25 (*changes in work methods, for example, the introduction of new technology to provide a speedier service, made to improve the quality of external customer service are clearly communicated to all employees and departments*) the mean score of group 1 was significantly lower than that of groups 3 and 2 (M3= 5.694, S.D3= 1.382, M2= 5.500, S.D2= 1.381, M1= 4.828, S.D1= 1.786, P< 0.05).

Table 7.14: ANOVA for Staff Perceptions of Communication

| ANOVA by Four Banks | (1) Bank A N= 121 | | (2) Bank B N=98 | | (3) Bank C N=64 | | (4) Bank D N=49 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| | 5.105 | 1.249 | 4.895 | 1.214 | 5.454 | 1.198 | 5.081 | 1.399 | 2.798 | .040 | 3>1,4,2 | 0.1 |

| ANOVA by Branch Location | Location 1 N= 87 | | Location 2 N= 101 | | Location 3 N= 76 | | Location 4 N=68 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| | 5.320 | 1.232 | 5.067 | 1.262 | 4.896 | 1.277 | 5.021 | 1.255 | 1.710 | .165 | N.D* | |

| ANOVA by Branch Size | (1) Small N= 68 | | (2) Medium N= 110 | | (3) Large N=154 | | F | | Duncan Test | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.282 | 1.105 | 5.200 | 1.273 | 4.931 | 1.303 | 2.449 | .088 | N.D | | | |

| ANOVA by Staff Experience in the bank | (1) Less than 10 years N= 87 | | (2) 10-20 years N= 109 | | (3) More than 20 years N= 136 | | F | | Duncan Test | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 4.532 | 1.363 | 5.024 | 1.268 | 5.325 | 1.155 | 10.029 | .000 | 3>2>1 | 0.1 | | |

| ANOVA by Staff Experience in Their Current Position | (1) Less than 5 years N= 133 | | (2) 5-10 years N= 91 | | (3) More than 10 years N= 103 | | F | | Duncan Test | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.027 | 1.249 | 5.082 | 1.407 | 5.195 | 1.109 | .440 | .644 | N.D | | | |

| Staff Annual Income | (1) 7000 LE or less N= 89 | | (2) 7001-11000 LE N= 113 | | (3) More than 11000 LE N= 116 | | F | | Duncan Test | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 4.755 | 1.393 | 5.119 | 1.303 | 5.209 | 1.158 | 3.027 | .050 | 3,2>1 | 0.05 | | |

| Staff Education Level | (1) Less than University Education N= 99 | | (2) University Education N= 147 | | (3) Postgraduate Education N= 82 | | F | | Duncan Test | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.481 | .952 | 5.049 | 1.271 | 5.042 | 1.375 | 1.993 | .138 | N.D | | | |

| Staff Job Position | (1) Managers N= 63 | | (2) Supervisors N= 154 | | (3) Front line staff N= 109 | | F | | Duncan Test | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.700 | .914 | 5.067 | 1.252 | 4.750 | 1.325 | 12.114 | .000 | 1>2>3 | 0.1 | | |

See tables 3 to 10 in appendix B for a more detailed analysis

*N.D (No Difference)

Not surprisingly, therefore, table 7.14 shows that there is a significant differences between the staff experience groups based on the overall score of communication (p= 0.000). The Duncan test similarly revealed that staff with greater experience within the bank were more in agreement with the importance of communication (M3= 5.325, S.D3= 1.155, M2= 5.024, S.D2= 1.268, M1= 4.532, S.D1= 1.363, P< 0.1).

***Staff Experience in their Current Positions***

The ANOVA by staff experience in their current positions revealed that there is no significant difference between the groups' mean scores relating to communication (see tables 7.14; and 7 in appendix B). In other words, irrespective of time spent in their current positions there was no difference of opinion on the importance of communication. The mean scores for communication also indicates that there is strong agreement with the importance of communication across the groups.

***Staff Annual Income***

Regarding staff annual income, table 8 in appendix B shows that there was a significant difference between the groups' mean relating to statement 19 (P= 0.045). The Duncant test indicates that staff with high annual incomes (more than 11000 LE) ranked statement 19 (*the bank encourages staff to make suggestions for improving the quality of external customer service*) significantly higher than staff on low annual incomes (M3= 5.405, S.D3= 1.531, M1= 4.796, S.D1= 1.985, P< 0.05). Similarly, by using the overall score of communication, the ANOVA revealed that there is a significant difference between the groups' mean (P< 0.05). Table 7.14 shows that, once again, the mean scores of groups 3 and 2 were significantly higher than that of group 1 (M3= 5.209, S.D3= 1.158, M2= 5.119, S.D2= 1.303, M1= 4.755, S.D1= 1.393, P< 0.05). As previously mentioned, this may be due to greater job satisfaction for staff on higher salaries. Similarly, more senior people on higher salaries may feel partly responsible for effectice communication within their respective organnizations.

***Staff Education Level***

With staff education and qualifications, table 9 in appendix B indicates that there were significant differences between the groups' mean relating to statements 18 and 19 (P= 0.025, 0.024). Staff with less than a university education perceived statement 18 (*the bank regularly seeks information from staff about how to improve the quality of external customer service*) to be significantly more important than staff with a university education (M1= 5.394, S.D1= 1.405, M2= 4.582, 1.914, P< 0.05). Table 9 in appendix B also shows that the mean scores for staff with postgraduate and university education relating to

statement 19 (*the bank encourages staff to make suggestions for improving the quality of external customer service*) were significantly lower than that of staff with less than a university education (M1= 5.842, S.D1= 1.174, M3= 5.323, S.D3= 1.630, M2= 5.048, S.D2= 1.788, P< 0.1). However, by using the overall score of communication, the ANOVA revealed no significant difference between staff education groups' mean (see table 7.14). In other words, staff with different levels of education reveal no difference in their perceptions of communication efficiency within the bank. Moreover, internal communication was regarded as important by all of the respondents, irrespective of education level.

***Staff Job Position***

The ANOVA by staff job position revealed that there are significant differences between managers, supervisors and front line staff relating to statements 20, 21, 23 and 25 (P= 0.033, 0.000, 0.027 and 0.003). Table 10 in appendix B shows that Managers were significantly more in agreement with statement 20 (*the bank uses staff suggestions to improve the quality of external customer service*) than supervisors and front line staff (M1= 5.188, S.D1= 1.632, M2= 5.118, S.D2= 1.612, M3= 4.661, S.D3= 1.753, P< 0.05). Managers also ranked statement 21 (*the bank rewards staff who make good suggestions for improving the quality of external customer service*) significantly higher than supervisors and front line staff (M 1= 5.777, S.D1= 1.099, M2= 4.646, S.D2= 1.758, M3= 4.364, S.D3= 1.797, P< 0.05). Table 10 in appendix B also indicates that supervisors and front line staff were significantly less in agreement with statement 23 (*bank staff regularly make suggestions to managers/supervisors about how to improve the quality of external customer service*) than managers (M1= 4.944, S.D1= 1.420, M2= 4.467, S.D2= 1.782, M3= 4.211, S.D3= 1.764, P< 0.1). Furthermore, the mean score for managers relating to statement 25 (*changes in work methods, for example, the introduction of new technology to provide a speedier service, made to improve the quality of external customer service are clearly communicated to all employees and departments*) was significantly higher than that for supervisors and front line staff (M1= 5.968, S.D1= 1.177, M2= 5.500, S.D2= 1.474, M3= 5.156, S.D3= 1.650, P< 0.05).

Table 7.14 shows that based on the overall score of communication, the ANOVA revealed that there were significant differences between managers, supervisors and front line staff (P= 0.000). The Duncan test revealed that the more senior the management the higher their agreement with the importance of communication efficiency in the bank (M1= 5.700, S.D1= 0.914, M2= 5.067, S.D2= 1.252, M3= 4.750, S.D3= 1.325, P< 0.1). This may reflect the fact that management regards internal communication as one of their key

responsibilities and one which is essential in helping to improve the level of external customer service.

### 7.4.11 Staff Perceptions of Technology

Technology can be regarded as an aid to delivering a high level of external service quality. Zeithaml *et al.* (1988) claimed that the provision of a high level of customer service depends on the appropriateness of the tools or technology that employees use. Table 7.15 shows that 74.7% of respondents agreed with statement 26 that: *bank technology helps me to provide an error free service to external customers* (M= 5.003, S.D= 1.678). The vast majority of respondents (79.6%) agreed with statement 27 that: *bank technology helps me to provide a fast service to external customers* (M= 5.283, S.D= 1.603) and only 14.1% of staff disagreed with statement 28 that: *bank technology provides me with easy-to-access information on external customers* (M= 5.387, S.D= 1.540). Table 7.15 also shows that 72.3% of staff agreed with statement 29 that: *bank technology has given me more time to talk to external customers and discuss their needs* (M= 4.942, S.D= 1.715). With regard to the overall score of technology, table 7.15 shows that staff have fairly positive attitudes towards technology support within the bank in helping them to provide a high level of external service quality (M= 5.154, S.D= 1.448).

Table 7.15: Staff Perceptions of Technology: Descriptive Statistics

| Items | Disagree % | Do not Know % | Agree % | M | S.D |
|---|---|---|---|---|---|
| 26. Bank technology helps me to provide an error free service to external customers. | 18.9 | 6.4 | 74.7 | 5.003 | 1.678 |
| 27. Bank technology helps me to provide a fast service to external customers. | 15.9 | 4.5 | 79.6 | 5.283 | 1.603 |
| 28. Bank technology provides me with easy-to-access information on extenral customers. | 14.1 | 3.9 | 82.0 | 5.387 | 1.540 |
| 29. Bank technology has given me more time to talk to external customers and discuss their needs. | 21.9 | 5.8 | 72.3 | 4.942 | 1.715 |
| Technology Overall Score | | | | 5.154 | 1.448 |

See table 1 in appendix B for a more detailed analysis

### 7.4.12 One-Way ANOVA for Staff Perceptions of Technology

The ANOVA analysis by the eight comparison factors for staff perceptions of technology revealed the following results:

***Four Banks***

The ANOVA by the four banks revealed that there were no significant differences between the groups' mean regarding technology support (see tables 7.16; and 3 in appendix B).

***Branch Location***

Tables 7.16; and 4 in appendix B show that the ANOVA based on branch location revealed no significant differences between the groups' mean relating to bank technology.

This may be explained by the fact that branch staff, irrespective of location, perceive a high level of management support in helping them to provide a high level of external customer service (see tables 7.6) and technology could well be regarded as one facet of management support.

***Branch Size***

The ANOVA by branch size shows no significant differences between small, medium and large sized branches regarding staff perceptions of bank technology support (see tables 7.16; and 5 in appendix B). All staff, irrespective of branch size, regarded technology as important in helping them to be more effective and provide a better quality of customer service.

***Staff Experience in the Bank***

With staff experience within the bank, the ANOVA revealed that there were significant differences between the groups' mean relating to statements 26, 27, 28 and 29 (P= 0.001, 0.000, 0.001 and 0.002). Table 6 in appendix B shows that group 3 were in more agreement with statement 26 (*bank technology helps me to provide an error free service to external customers*) than groups 2 and 1 (M3= 5.305, S.D3= 1.510, M2= 4.795, S.D2= 1.716, M1= 4.437, S.D1= 1.901, P< 0.05). The Duncan test revealed that greater the staff experience within the bank the more in agreement they were with statement 27 (bank *technology helps me to provide a fast service to external customers*) (M3= 5.610, S.D3= 1.406, M2= 5.170, S.D2= 1.577, M1= 4.520, S.D1= 1.878, P< 0.1). Table 6 in appendix B also indicates that staff with greater experience in the bank were more in agreement with statement 28 (*bank technology provides me with easy-to-access information on extenral customers*) (M3= 5.650, S.D3= 1.316, M2= 5.261, S.D2= 1.664, M1= 4.818, S.D1= 1.781, P< 0.1). With statement 29 ( *bank technology has given me more time to talk to external customers and discuss their needs*, the mean score of staff with less experience in the bank (group 1) were significantly lower than that of more experienced staff (groups 3 and 2) (M3= 5.193, S.D3= 1.554, M2= 4.863, S.D2= 1.762, M1= 4.342, S.D1= 1.937, P< 0.05).

Based on the overall score of technology, table 7.16 shows that there were significant differences between the groups' mean relating to bank technology support (P= 0.000). The Duncan test revealed that staff with greater experience in the bank were more suportive of the benefits of technology (M3= 5.440, S.D3= 1.268, M2= 5.022, S.D2= 1.435, M1= 4.529, S.D1= 1.718, P< 0.05).

### *Staff Experience in their Current Positions*

Tables 7.16; and 7 in appendix B show that the ANOVA by staff experience in their current position revealed no significant differences between the groups' mean relating to staff perceptions of the importance of technology.

Table 7.16: ANOVA for Staff Perceptions of Technology

| ANOVA by Four Banks | (1) Bank A N= 121 | | (2) Bank B N=98 | | (3) Bank C N=64 | | (4) Bank D N=49 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| | 5.117 | 1.525 | 5.101 | 1.514 | 5.310 | 1.260 | 5.153 | 1.381 | .320 | .811 | N.D* | |
| ANOVA by Branch Location | Location 1 N= 87 | | Location 2 N= 101 | | Location 3 N= 76 | | Location 4 N=68 | | F | | Duncan Test | |
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| | 5.236 | 1.514 | 5.076 | 1.243 | 5.086 | 1.438 | 5.207 | 1.666 | .242 | .867 | N.D | |
| ANOVA by Branch Size | (1) Small N= 68 | | (2) Medium N= 110 | | (3) Large N=154 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.183 | 1.346 | 5.046 | 1.495 | 5.217 | 1.463 | .468 | .627 | N.D | | | |
| ANOVA by Staff Experience in the bank | (1) Less than 10 years N= 87 | | (2) 10-20 years N= 109 | | (3) More than 20 years N= 136 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 4.529 | 1.718 | 5.022 | 1.435 | 5.440 | 1.268 | 10.369 | .000 | 3>2>1 | 0.05 | | |
| ANOVA by Staff Experience in Their Current Position | (1) Less than 5 years N= 133 | | (2) 5-10 years N= 91 | | (3) More than 10 years N= 103 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.084 | 1.422 | 4.979 | 1.642 | 5.474 | 1.219 | 2.599 | .076 | N.D | | | |
| Staff Annual Income | (1) 7000 LE or less N= 89 | | (2) 7001-11000 LE N= 113 | | (3) More than 11000LE N= 116 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 4.912 | 1.648 | 5.010 | 1.434 | 5.309 | 1.353 | 2.274 | .105 | N.D | | | |
| Staff Education Level | (1) Less than University Education N= 99 | | (2) University Education N= 147 | | (3) Postgraduate Education N= 82 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.210 | 1.726 | 5.115 | 1.427 | 5.192 | 1.371 | .120 | .887 | N.D | | | |
| Staff Job Position | (1) Managers N= 63 | | (2) Supervisors N= 154 | | (3) Front line staff N= 109 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.705 | .803 | 5.099 | 1.482 | 4.884 | 1.620 | 6.730 | .001 | 1>2,3 | 0.05 | | |

See tables 3 to 10 in appendix B for more detailed analysis
*N.D (No Difference)

### *Staff Annual Income*

The ANOVA by staff annnual income revealed no significant differences between the groups' mean relating to staff perceptions of the importance of bank technology in

helping to improve customer service. The mean scores reveal that all staff, irrespective of income level, regard technology as important (see tables 7.16; and 8 in appendix B).

***Staff Education Level***

According to staff education level, the ANOVA revealed that there was no significant difference between groups' mean regarding to staff perceptions of bank technology (see table 7.16; and 9 in appendix B).

***Staff Job Position***

Table 10 in appendix B shows that the ANOVA by staff job position revealed significant differences between managers, supervisors and front line staff relating to statements 26, 27, 28 and 29 (P= 0.010, 0.002, 0.011 and 0.002). Managers were more supportive of statement 26 (*bank technology helps me to provide an error free service to external customers*) than supervisors and front line staff (M1= 5.492, S.D1= 1.134, M2= 5.000, S.D2= 1.715, M3= 4.688, S.D3= 1.854, P< 0.05). The Duncan test also indicates that the higher the management level the greater the level of agreement with statement 27 ( *bank technology helps me to provide a fast service to external customers*) (M1= 5.809, S.D1= 0.997, M2= 5.304, S.D2= 1.604, M3= 4.910, S.D3= 1.813, P< 0.1). Table 10 in appendix B also shows that the mean scores for supervisors and front line staff with regard to statement 28 (*bank technology provides me with easy-to-access information on external customers*) were significantly lower than that for managers (M1= 5.901, S.D1= 0.834, M2= 5.268, S.D2= 1.617, M3= 5.242, S.D3= 1.688, P< 0.05). Supervisors and front line staff also ranked statement 29 (*bank technology has given me more time to talk to external customers and discuss their needs*) significantly lower than managers (M1= 5.618, S.D1= 1.054, M2= 4.823, S.D2= 1.741, M3= 4.697, S.D3= 1.912, P< 0.05). Based on the overall score of technology, table 7.16 shows that there were significant differences between managers, supervisors and front line staff regarding the importance of bank technology (P= 0.05). The Duncan test revealed that managers ranked bank technology support significantly higher than supervisors and front line staff (M1= 5.705, S.D1= 0.803, M2= 5.099, S.D2= 1.482, M3= 4.884, S.D3= 1.620, P< 0.05).

### 7.4.13 Staff Perceptions of Job Fit

Matching employees to the job through efficient selection procedures and developing their abilities and skills increases the levels of external service quality (Zeithaml *et al.*, 1988). Teamwork is also essential to increase co-operation between staff and departments and thereby satisfy external customers. Similarly, the link between employees reward and service performance is another important element in improving external service quality. In

this respect, 10 items were included in the questionnaire to ascertain staff perceptions of job fit dimension. Two of these items incorporated negative questions (items 32 and 39) (see table 7.17) and were, therefore, reversed when entering the data. Table 7.17 shows that 66% of staff agreed with statement 30 that: *in recruiting employees, the bank attempts to ensure that staff have good communication skills* (M= 4.909, S.D= 1.681). Given the importance of teamwork skills, it was not surprising that 65% of staff agreed with statement 31 that: *when i was recruited by the bank, i was assessed in terms of my teamwork skills* (M= 4.750, S.D= 1.763). Likewise more than 72 % of staff agreed with reversed statement 32 that: *staff within my department work in teams rather than as individuals* (M= 5.204, S.D= 1.770). Similarly, only 11.4% of staff disagreed with statement 33 that: *colleagues within my department regularly help each other to provide a high level of service quality to external customers* (M= 5.398, S.D= 1.514). Table 7.17 also indicates that 70.9% of staff agreed with statement 34 that: *the performance appraisal systems within the bank include co-operation and team-based performance indicators* (M= 5.095, S.D= 1.566).

Table 7.17: Staff Perceptions of Job Fit: Descriptive Statistics

| Items | Disagree % | Do not Know % | Agree % | M | S.D |
|---|---|---|---|---|---|
| 30. In recruiting employees, the bank attempts to ensure that staff have good communication skills. | 17.4 | 16.6 | 66 | 4.909 | 1.681 |
| 31. When I was recruited by the bank, I was assessed in terms of my teamwork skills. | 22.5 | 12.5 | 65 | 4.750 | 1.763 |
| 32. Staff within my department work as individuals rather than in teams. | 22.8 | 4.6 | 72.6 | 5.204 | 1.770 |
| 33. Colleagues within my department regularly help each other to provide a high level of service quality to external customers. | 11.4 | 7.9 | 80.7 | 5.398 | 1.514 |
| 34. The performance appraisal systems within the bank include co-operation and team-based performance indicators. | 14.1 | 15 | 70.9 | 5.095 | 1.566 |
| 35. The bank rewards me when I provide a high level of service quality to external customers. | 27 | 11.3 | 61.7 | 4.542 | 1.903 |
| 36. My supervisor usually praises my performance when I provide a high level of service quality to external customers. | 15.3 | 7.6 | 77.1 | 5.141 | 1.604 |
| 37. The performance appraisal systems and reward mechanisms within the bank depend upon specific performance standards which include customer care indicators. | 18.9 | 15.4 | 65.7 | 4.817 | 1.832 |
| 38. Management motivates me to do my best. | 18 | 7.3 | 74.7 | 5.036 | 1.704 |
| 39. The performance appraisal systems within the bank do not motivate me to deliver a high level of service quality to external customers. | 39.5 | 7.2 | 53.3 | 4.384 | 2.022 |
| Job Fit Overall Score | | | | 4.928 | 1.194 |

See table 1 in appendix B for a detailed analysis

With regard to linking staff performance with the reward mechanism within the bank in order to improve external service quality, 61.7% of respondent agreed with statement 35 that: *the bank rewards me when I provide a high level of service quality to external customers* (M= 4.542, S.D= 1.903). Similarly, 77.1% of staff agreed with statement 36 that: *my supervisor usually praises my performance when I provide a high level of service*

*quality to external customers* (M= 5.141, S.D= 1.604). Given the importance of the role of the appraisal systems and reward mechanisms in improving customer care within the bank, 65.7% of staff agreed with statement 37 that: *The performance appraisal systems and reward mechanisms within the bank depend upon specific performance standards which include customer care indicators* (M= 4.817, S.D= 1.832). Somewhat interestingly, more than half of the respondents agreed with reversed statement 39 that: *the performance appraisal systems within the bank motivate me to deliver a high level of service quality to external customers* (M= 4.384, S.D= 2.022). With regard to the role of management in motivating staff, table 7.17 shows that 74.7 of staff agreed with statement 38 that: *management motivates me to do my best* (M= 5.036, S.D= 1.704).

By looking at the overall score of job fit, table 7.17 reveals that it is only just above the "moderate level", i.e. 4 (M= 4.928, S.D= 1.194). This suggest that bank staff have only slightly higher than moderate levels of agreement with the different aspects of job fit. This suggests that bank management needs to put more effort into improving staff selection procedures, encouraging co-operation between staff, optimalising performance appraisal and reward systems to improve external service quality, etc.

### 7.4.14 One-Way ANOVA for Staff Perceptions of Job Fit

The ANOVA analysis by the eight comparison factors for staff perceptions of job fit revealed the following results:

***Four Banks***

The ANOVA by the four banks revealed that there were significant differences between the four banks relating to statements 31and 37 (P= 0.022 and 0.013) (see table 3 in appendix B). Staff in banks D and C ranked statement 31 (*when I was recruited by the bank, I was assessed in terms of my teamwork skills*) significantly higher than staff in bank A (M4= 5.158, S.D4= 1.345, M3= 5.058, S.D3= 1.632, M1= 4.352, S.D1= 1.877, P< 0.05). Table table 3 in appendix B also shows that staff in bank C ranked statement 37 (*the performance appraisal systems and reward mechanisms within the bank depend upon specific performance standards which include customer care indicators*) significantly higher than staff in banks B, D and A (M3= 5.421, S.D3= 1.551, M2= 4.823, S.D2= 1.878, M4= 4.706, S.D4= 1.644, M1= 4.469, S.D1= 1.954, P< 0.05).

However, by using the overall score of job fit, table 7.18 shows that no significant differences were found between the four banks. This suggests that staff across the different four banks have broadly the same views on job fit.

***Branch Location***

The ANOVA by branch location, as shown in table 4 in appendix B, revealed that there were significant differences between the four locations relating to statements 31 and 37 (P= 0.050 and 0.004). The Duncan test shows that staff in locations 1, 3 and 4 have significantly higher levels of agreement with statement 31 (*when I was recruited by the bank, I was assessed in terms of my teamwork skills*) than staff in location 2 (M1= 4.948, S.D= 1.855, M3= 4.937, S.D3= 1.688, M4= 4.816, S.D4= 1.884, M2= 4.304, S.D2= 1.602, P< 0.1). Staff in locations 1 and 4 also ranked statement 37 (*the performance appraisal systems and reward mechanisms within the bank depend upon specific performance standards which include customer care indicators*) significantly higher than staff in locations 3 and 2 (M1= 5.174, S.D1= 1.944, M4= 5.173, S.D4= 1.836, M3= 4.484, S.D3= 1.879, M2= 4.413, S.D2= 1.584, P< 0.05). A possible explanation for this might be found in the fact that (as mentioned earlier) location 1 represents the centre of Cairo and is, therefore, a very busy location, with diverse activities and equally diverse levels of disposable income and branches in location 4 have a wealthy customer base. It might follow, therefore, that bank management is trying to improve the level of external service quality by linking performance appraisal systems and reward mechanisms with customer care performance in these important and high profile branches. However, by using the overall score of job fit, the ANOVA results as shown in table 7.18 indicates that there were no significant differences between the four locations.

***Branch Size***

The ANOVA by branch size revealed that there was a significant difference between the three different groups relating to statement 35 (P= 0.012) (see table 5 in appendix B). Staff in the medium and small sized branches were generally more in agreement with statement 35 (*the bank rewards me when I provide a high level of service quality to external customers*) than staff in large branches (M2= 4.841, S.D2= 1.719, M1= 4.810, S.D1= 1.753, M3= 4.211, S.D3= 2.044, P< 0.012). A possible explanation for this may be that it is easier to link staff performance with reward systems in small and medium branches than in large branches where staff number are much greater. However, table 7.18 revealed that in general there was no significant difference between the branch size groups based on the overall score of job fit.

***Staff Experience in the Bank***

The ANOVA by staff experience in the bank, as shown in table (6 in appendix B), revealed significant differences between the three groups relating to statements 30, 31, 32, 33, 34, 35, 37, and 38 (P= 0.000, 0.002, 0.001, 0.000, 0.016, 0.000, 0.003 and 0.031).

Given the importance of staff selection procedures, staff in groups 3 (staff with more than 20 years experience) and 2 (staff with between 10 to 20 years experience) were significantly more in agreement with statement 30 (*in recruiting employees, the bank attempts to ensure that staff have good communication skills*) than staff in group 1 (staff with less than 10 years experience) (M3= 5.200, S.D3= 1.601, M2= 4.818, S.D2= 1.608, M1= 4.218, S.D1= 1.803, P< 0.05). Similarly, Staff in groups 3 and 2 ranked statement 31 (*when I was recruited by the bank, I was assessed in terms of my teamwork skills*) significantly higher than staff in group 1 (M3= 5.006, S.D3= 1.673, M2= 4.69, S.D2= 1.650, M1= 4.125, S.D1= 2.004, P< 0.05). Regarding co-operation between staff, the Duncan test results ,as shown in table 6 in appendix B, revealed that staff with greater experience were more in greement with reversed statement 32 (*staff within my department work teams rather than as individuals*) (M3= 5.500, S.D3= 1.625, M2= 5.045, S.D2= 1.825, M1= 5.006, S.D1= 1.673, P< 0.1).

The Duncan test results also showed that more experienced staff were in stronger agreement than less experienced staff with statement 33 (*colleagues within my department regularly help each other to provide a high level of service quality to external customers*) (M3= 5.737, S.D3= 1.366, M2= 5.186, S.D2= 1.557, M1= 4.734, S.D1= 1.596, P< 0.05). Likewise, staff in group 3 were in more agreement with statement 34 (*the performance appraisal systems within the bank include co-operation and team-based performance indicators*) than staff in group 1 (M3= 5.309, S.D3= 1.460, M1= 4.703, S.D1= 1.787, P< 0.05). With regard to performance and reward mechanisms role in improving the level of external service quality, staff in groups 3 and 2 ranked statement 35 (*the bank rewards me when I provide a high level of service quality to external customers*) significantly higher than staff in group 1 (M3= 4.806, S.D3= 1.881, M2= 4.602, S.D2= 1.803, M1= 3.720, S.D1= 1.896, P< 0.05). Likewise, with statement 37 (*the performance appraisal systems and reward mechanisms within the bank depend upon specific performance standards which include customer care indicators*), staff in groups 3 and 2 were significantly more in agreement than staff in group 1 (M3= 5.090, S.D3= 1.780, M2= 4.715, S.D2= 1.800, M1= 4.187, S.D1= 1.876, P< 0.05). Giving the importance of staff motivation in achieving high levels of performance, staff in group 3 ranked statement 38 (*management motivates me to do my best*) significantly higher than staff in groups 2 and 1 (M3= 5.261, S.D3= 1.607, M2= 4.807, S.D2= 1.868, M1= 4.719, S.D1= 1.666, P< 0.1).

Regarding the overall score of job fit, table 7.18 shows that there was a significant difference between the three groups (P= 0.031). The Duncan test results revealed that staff with greater experience ranked job fit much higher than staff with less experience. This

may be the case because staff with the longest service in the bank and, therefore the greatest experience, are generally in more senior positions and, therefore, have direct responsibility for matching the right employees with the right job through recruitment and selection procedures, and developing the skills of employees to perform the job well. They also have responsibility for linking employees reward to their service performance and increasing the co-operation between staff.

***Staff Experience in their Current Positions***

The ANOVA by staff experience in their current positions as shown in table (7 in appendix B) revealed that there was a significant difference between the three groups relating to statement 35 (P= 0.038). Staff in group 3 (Staff with more than 10 years experience) were significantly more in agreement with statement 35 (*the bank rewards me when I provide a high level of service quality to external customers*) than the other groups (M3= 4.902, S.D3= 1.801, M2= 4.143, S.D2= 2.007). However, no significant difference was found between the three groups regarding the overall score of job fit (see table 7.18).

***Staff Annual Income***

The ANOVA by staff annual income revealed that there were significant differences between the three groups relating to statements 30, 33, 35, 36, 37 and 38 (P= 0.000, 0.060, 0.008, 0.000, 0.022, 0.037 and 0.033) (see table 8 in appendix B). Staff in groups 3 (staff with an annual income of more than 11000 LE) and 2 (staff with an annual income between 7001 to 11000 LE) ranked statement 30 (*in recruiting employees, the bank attempts to ensure that staff have good communication skills*) significantly higher than staff in group 1 (staff with an annual income of less than 7000LE) (M3=5.132, S.D3= 1.588, M2= 4.989, S.D2= 1.572, M1= 4.187, S.D1= 1.842, P< 0.05). The Duncan test results also revealed that staff in groups 3 and 2 were significantly more in agreement with statement 33 (*colleagues within my department regularly help each other to provide a high level of service quality to external customers*) than staff in group 1 (M3= 5.564, S.D3= 1.340, 5.416, S.D2= 1.419, M1= 4.875, S.D1= 1.906, P< 0.05). Furthermore, staff in groups 2 and 3 ranked statement 35 (*the bank rewards me when I provide a high level of service quality to external customers*) significantly higher than staff in group 1 (M2= 4.829, S.D2= 1.719, M3= 4.762, S.D3= 1.837, M1= 3.593, S.D1= 2.029, P< 0.05). Similarly, staff in groups 2 and 3 have mean scores relating to statement 36 (*my supervisor usually praises my performance when I provide a high level of service quality to external customers*) significantly higher than staff in group 1 (M2= 5.332, S.D2= 1.387, M3= 5.227, S.D3= 1.646, M1= 4.656, S.D1= 1.711, P< 0.05). Staff in groups 3 and 2 also ranked statement 37 (*the performance appraisal systems and reward mechanisms*

*within the bank depend upon specific performance standards which include customer care indicators*) significantly higher than staff in group 1 (M3= 5.015, S.D3= 1.768, M2= 4.916, S.D2= 1.769, M1= 4.328, S.D1= 2.016, P< 0.05). With regard to staff motivation, the Duncan test results, as shown in table 8 in appendix B, revealed that staff in groups 2 and 3 perceived the importance of statement 38 (*management motivates me to do my best*) significantly higher than those in group 1 (M2= 5.240, S.D2= 1.513, M3= 5.146, S.D3= 1.692, M1= 4.578, S.D1= 1.824, P< 0.05).

Table 7.18: ANOVA for Staff Perceptions of Job Fit

| ANOVA by Four Banks | (1) Bank A N= 121 | | (2) Bank B N=98 | | (3) Bank C N=64 | | (4) Bank D N=49 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| | 4.830 | 1.207 | 4.836 | 1.262 | 5.217 | 1.131 | 4.972 | 1.035 | 1.744 | .158 | N.D* | |
| **ANOVA by Branch Location** | **Location 1 N= 87** | | **Location 2 N= 101** | | **Location 3 N= 76** | | **Location 4 N=68** | | **F** | | **Duncan Test** | |
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| | 5.106 | 1.187 | 4.797 | 1.099 | 4.813 | 1.183 | 4.959 | 1.333 | 1.353 | .257 | N.D | |
| **ANOVA by Branch Size** | **(1) Small N= 68** | | **(2) Medium N= 110** | | **(3) Large N=154** | | **F** | | **Duncan Test** | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.002 | 1.099 | 5.019 | 1.119 | 4.829 | 1.282 | .979 | .377 | N.D | | | |
| **ANOVA by Staff Experience in the bank** | **(1) Less than 10 years N= 87** | | **(2) 10-20 years N= 109** | | **(3) More than 20 years N= 136** | | **F** | | **Duncan Test** | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 4.401 | 1.209 | 4.798 | 1.238 | 5.178 | 1.098 | 11.368 | .000 | 3>2>1 | 0.05 | | |
| **ANOVA by Staff Experience in Their Current Position** | **(1) Less than 5 years N= 133** | | **(2) 5-10 years N= 91** | | **(3) More than 10 years N= 103** | | **F** | | **Duncan Test** | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 4.913 | 1.168 | 4.828 | 1.281 | 5.020 | 1.155 | .513 | .599 | N.D | | | |
| **Staff Annual Income** | **(1) 7000 LE or less N= 89** | | **(2) 7001-11000 LE N= 113** | | **(3) More than 11000 LE N= 116** | | **F** | | **Duncan Test** | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 4.450 | 1.329 | 5.016 | 1.087 | 5.079 | 1.148 | 6.940 | .001 | 3,2>1 | 0.05 | | |
| **Staff Education Level** | **(1) Less than University Education N= 99** | | **(2) University Education N= 147** | | **(3) Postgraduate Education N= 82** | | **F** | | **Duncan Test** | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.121 | 1.022 | 4.912 | 1.208 | 4.838 | 1.261 | .688 | .503 | N.D | | | |
| **Staff Job Position** | **(1) Managers N= 63** | | **(2) Supervisors N= 154** | | **(3) Front line staff N= 109** | | **F** | | **Duncan Test** | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.512 | .834 | 4.920 | 1.185 | 4.572 | 1.255 | 13.303 | .000 | 1>2>3 | 0.05 | | |

See tables 3 to 10 in appendix B for a more detailed analysis
*N.D (No Difference)

By using the overall score of job fit to test the difference in perceptions between the three groups, the ANOVA results, as shown in table 7.18, revealed a significant difference between the three groups (P= 0.001). The Duncan test showed that, once again, staff on higher annual income perceived the different aspects of job fit to be significantly higher than staff on lower incomes. As previously mentioned, this may be due to the greater job satisfaction of staff on higher salaries. Similarly, more senior people are usually more experienced and may feel partly responsible for developing and improving the abilities of employees.

***Staff Education Level***

The ANOVA by staff education revealed that there was significant difference between the different three groups relating to reversed statement 32 (P= 0.038) (see table 9 in appendix B). Staff in group 2 (Staff with university education) were significantly more in agreement with reversed statement 32 (*staff within my department work in teams rather than as individuals*) than staff in group 3 (staff with postgraduate education) (M2= 5.351, S.D2= 1.694, M3= 4.738, S.D3= 1.994, P< 0.1). However, by using the overall score of job fit, the ANOVA indicate that there was no significance difference in perceptions between the different groups (see table 7.18).

***Staff Job Position***

The ANOVA by staff job position revealed that there were significant differences in perceptions between managers, supervisors and front line staff relating to the majority of statements, i.e. 30, 31, 32, 33, 35, 36, 37, 38, and 39 (P= 0.000, 0.006, 0.002, 0.000, 0.000, 0.001, 0.000, 0.006 and 0.000) (see table 10 in appendix B). With respect to staff selection process, the Duncan test indicates that the more senior management the higher their agreement with statement 30 (*in recruiting employees, the bank attempts to ensure that staff have good communication skills*) (M1= 5.555, S.D1= 1.201, M2= 4.941, S.D2= 1.689, M3= 4.431, S.D3= 1.771, P< 0.05). Managers and supervisors also perceived the importance of statement 31 (*when I was recruited by the bank, I was assessed in terms of my teamwork skills*) to be significantly higher than that of front line staff (M1= 5.138, S.D1= 1.585, M2= 4.870, S.D2= 1.700, M3= 4.325, S.D3= 1.884, P< 0.05). Regarding teamwork, bank supervisors and managers were significantly more in agreement with reversed statement 32 (*staff within my department work in teams rather than as individuals*) than front line staff (M2= 5.461, S.D2= 1.661, M1= 5.428, S.D1= 1.710, M3= 4.733, S.D3= 1.864, P< 0.05). In accordance with this, the Duncan test, shown in table (table 10 in appendix B), also revealed that managers and supervisors ranked the importance of statement 33 (*colleagues within my department regularly help each other to*

*provide a high level of service quality to external customers*) significantly higher than front line staff (M1= 5.815, S.D1= 1.056, M2= 5.550, S.D2= 1.503, M3= 4.880, S.D3= 1.637, P< 0.05). Given the importance of appraisal and reward systems in motivating staff to achieve high levels of quality service, managers perceived the importance of statement 35 (*the bank rewards me when I provide a high level of service quality to external customers*) significantly higher than supervisors and front line staff (M1= 5.428, S.D1= 1.477, M2= 4.445, S.D2= 1.901, M3= 4.151, S.D3= 1.971, P< 0.05). Similarly, managers had a significantly higher mean score relating to statement 36 (*my supervisor usually praises my performance when I provide a high level of service quality to external customers*) than that of supervisors and front line staff (M1= 5.793, S.D1= 0.953, M2= 5.000, S.D2= 1.730, M3= 4.945, S.D3= 1.660, P< 0.05). In keeping with this result, table 10 in appendix B also shows that managers ranked the importance of statement 37 (*the performance appraisal systems and reward mechanisms within the bank depend upon specific performance standards which include customer care indicators*) significantly higher than supervisors and front line staff (M1= 5.660, S.D1= 1.221, M2= 4.731, S.D2= 1.919, M3= 4.440, S.D3= 1.877, P< 0.05). The mean score of managers perceptions of the importance of statement 38 (*management motivates me to do my best*) was also significantly higher than that of supervisors and front line staff (M1= 5.634, S.D1= 1.383, M2= 4.942, S.D2= 1.708, M3= 4.799, S.D3= 1.814, P< 0.05).

Finally, regarding reversed statement 39 (*the performance appraisal systems within the bank motivate me to deliver a high level of service quality to external customers*) managers were significantly more in agreement with it than supervisors and front line staff (M1= 5.266, S.D1= 1.788, M2= 4.173, S.D2= 2.057, M3= 4.110, S.D3= 1.987, P< 0.05). By using the overall score of job fit, the ANNOVA test revealed that there was a significant difference in perceptions between managers, supervisors and front line staff (P= 0.000) (see table 7-18). The Duncan test results indicate that the more senior the management the greater the level of agreement with the importance of job fit aspects (M1= 5.512, S.D1= 0.834, M2= 4.920, S.D2= 1.185, M3= 4.572, S.D3= 1.255, P< 0.05). This may reflect the fact that management regards staff job fit as one of its primary responsibilities, i.e. improving staff performance in order to provide a high level of external customer service.

### 7.4.15 Staff Perceptions of Training

Training is a critical success factor in delivering a high level of quality service, because training determines what service is to be delivered and how it will be delivered (McAtarsney, 1999). Four items were identified and incorporated into the questionnaire to

measure staff perceptions of training. Table 7.19 shows that 89.1% of staff agreed with statement 40 that: *training programmes within the bank should place more emphasis on the importance of providing a high level of service quality to external customers* (M= 5.876, S.D= 1.328). Likewise, more than 89% of staff agreed with statement 41 that: *The bank should place more emphasis in bank training on how to improve my communication skills* (M= 5.710, S.D= 1.357). Given the importance of training in improving staff teamwork skills, only 9.6% of staff disagreed with statement 42 that: *I would like to receive more bank training on how to improve my teamwork skills* (M= 5.604, S.D= 1.378). Furthermore, 88.9% of staff agreed with statemnet 43 that : *The bank should place more emphasis in bank training on how to improve my information technology skills* (M= 5.831, S.D= 1.382). With regard to the overall score of training, table 7.19 shows that staff believed that training should take place more often, suggesting a need for increased investment on training in order to achieve high levels of customer service (M= 5.755, S.D= 1.113).

Table 7.19: Staff Perceptions of Training: Descriptive Statistics

| Items | Disagree % | Do not Know % | Agree % | M | S.D |
|---|---|---|---|---|---|
| 40. Training programmes within the bank should place more emphasis on the importance of providing a high level of service quality to external customers. | 6.9 | 4.0 | 89.1 | 5.876 | 1.328 |
| 41. The bank should place more emphasis in bank training on how to improve my communication skills. | 8.6 | 1.9 | 89.5 | 5.710 | 1.357 |
| 42. I would like to receive more bank training on how to improve my teamwork skills. | 9.6 | 2.1 | 88.3 | 5.604 | 1.378 |
| 43. The bank should place more emphasis in bank training on how to improve my information technology skills. | 8.4 | 2.7 | 88.9 | 5.831 | 1.382 |
| Training Overall Score | | | | 5.755 | 1.113 |

See table 1 in appendix B for a detailed analysis

### 7.4.16 One-way ANOVA for Staff Perceptions of Training

***Four Banks***

The ANOVA by the four banks revealed that there were significant differences between the four banks relating to items 40, 41, 42 and 43 (P= 0.020, 0.018, 0.003 and 0.000) (see table 3 in appendix B). Staff in banks D, A and B were significantly more in agreement with statement 40 (*Training programmes within the bank should place more emphasis on the importance of providing a high level of service quality to external customers*) than staff in bank C (M4= 6.142, S.D4= 0.816, M1= 5.989, S.D1= 1.126, M2= 5.908, S.D2= 1.316, M3= 5.437, S.D3= 1.798, P< 0.05). Staff in banks A, B and D also ranked statement 41 (*The bank should place more emphasis in bank training on how to improve my communication skills*) significantly higher than staff in bank C (M1= 5.857, S.D1= 1.166, M2= 5.809, S.D2= 1.213, M4= 5.795, S.D4= 1.224, M3= 5.229, S.D3= 1.830, P< 0.05). With respect to statement 42 (*I would like to receive more bank training on how to improve my teamwork skills*), table 3 in appendix B shows that staff in banks D and C

have mean scores that are significantly lower than those of staff in banks A and B (M1= 5.832, S.D1= 1.282, M2= 5.768, S.D2= 1.153, M4= 5.367, S.D4= 1.424, M3= 5.125, S.D3= 1.722, P< 0.1). Similarly, staff in banks B and A perceived statement 43 (*The bank should place more emphasis in bank training on how to improve my information technology skills*) to be significantly higher than staff in banks D and C ( M2= 6.140, S.D2= 0.887, M1= 5.979, S.D1= 1.323, M4= 5.510, S.D4= 1.709, M3= 5.265, S.D3= 1.729, P< 0.05). By using the overall score of training, the ANOVA revealed that there is a significant difference between the four banks (P= 0.001). The Duncan test in table 7.20 shows that staff in banks A, B and D were significantly more in agreement that training should take place more often in order to improve external service quality than staff in bank C (M1= 5.914, S.D1= 0.997, M2= 5.906, S.D2= 0.800, M4= 5.704, S.D4= 0.993, M3= 5.264, S.D3= 1.638, P< 0.05).

***Branch location***

According to branch location, the ANOVA results in table 4 in appendix B show that there were significant differences between the groups' mean relating to statements 41, 42 and 43 (P= 0.026, 0.009 and 0.000). Staff in location 4 were significantly more in agreement with statement 41 (*The bank should place more emphasis in bank training on how to improve my communication skills*) than staff in locations 3 and 1 (M4= 6.029, S.D4= 0.945, M3= 5.605, S.D3= 1.443, M1= 5.442, S.D1= 1.132, P< 0.05). With respect to statement 42 (*I would like to receive more bank training on how to improve my teamwork skills*) the mean scores of locations 2, 4 and 3 staff were significantly higher than that of location 1 staff (M2= 5.846, S.D2= 1.624, M4= 5.779, S.D4= 1.130, M3= 5.671, S.D3= 1.340, M1= 5.227, S.D1= 1.196, P< 0.05). Staff in locations 3, 4 and 2 also ranked statement 43 *(The bank should place more emphasis in bank training on how to improve my information technology skills*) significantly higher than staff in location 1 (M3= 6.118, S.D3= 0.893, M4= 6.117, S.D4= 0.985, M2= 5.965, S.D2= 1.787, M1= 5.306, S.D1= 1.306, P< 0.05).

Table 7.20 shows that there is a significant difference between the different branch locations when using the overall score of training (P= 0.002). The Duncan test results indicate that staff in locations 4, 2 and 3 perceived that training should take place more often compared to location 1 staff (M4= 6.021, S.D4= 0.863, M2= 5.915, S.D2= 0.922, M3= 5.776, S.D3= 0.895, M1= 5.422, S.D1= 1.445, P< 0.05). This might be because as location 1 captures a very busy and highly competitive area of Cairo, bank management is using highly trained staff in an endeavour to give these branches a competitive edge.

### *Branch Size*

The ANOVA by branch size revealed that no significant differences were found between groups' mean regarding staff perceptions of training (see tables 7.20; and 5 in appendix B).

Table 7.20: ANOVA for Staff Perceptions of Training

| ANOVA by Four Banks | (1) Bank A N= 121 | | (2) Bank B N=98 | | (3) Bank C N=64 | | (4) Bank D N=49 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| | 5.914 | .997 | 5.906 | .800 | 5.264 | 1.638 | 5.704 | .993 | 5.840 | .001 | 1,2,4>3 | 0.05 |
| | | | | | | | | | | | | |
| ANOVA by Branch Location | Location 1 N= 87 | | Location 2 N= 101 | | Location 3 N= 76 | | Location 4 N=68 | | F | | Duncan Test | |
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| | 5.422 | 1.445 | 5.915 | .992 | 5.776 | .895 | 6.021 | .863 | 5.093 | .002 | 4,2,3>1 | 0.05 |
| | | | | | | | | | | | | |
| ANOVA by Branch Size | (1) Small N= 68 | | (2) Medium N= 110 | | (3) Large N=154 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.797 | .852 | 5.576 | 1.215 | 5.864 | 1.130 | 2.227 | .109 | N.D* | | | |
| | | | | | | | | | | | | |
| ANOVA by Staff Experience in the bank | (1) Less than 10 years N= 87 | | (2) 10-20 years N= 109 | | (3) More than 20 years N= 136 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.765 | 1.046 | 5.712 | 1.224 | 5.772 | 1.085 | .088 | .915 | N.D | | | |
| | | | | | | | | | | | | |
| ANOVA by Staff Experience in Their Current Position | (1) Less than 5 years N= 133 | | (2) 5-10 years N= 91 | | (3) More than 10 years N= 103 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.645 | 1.148 | 5.788 | 1.097 | 5.989 | 1.037 | 2.433 | .089 | N.D | | | |
| | | | | | | | | | | | | |
| Staff Annual Income | (1) 7000 LE or less N= 89 | | (2) 7001-11000 LE N= 113 | | (3) More than 11000 LE N= 116 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.914 | 1.003 | 5.606 | 1.184 | 5.757 | 1.144 | 1.452 | .236 | N.D | | | |
| | | | | | | | | | | | | |
| Staff Education Level | (1) Less than University Education N= 99 | | (2) University Education N= 147 | | (3) Postgraduate Education N= 82 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.782 | .844 | 5.672 | 1.188 | 6.029 | .974 | 2.601 | .076 | N.D | | | |
| | | | | | | | | | | | | |
| Staff Job Position | (1) Managers N= 63 | | (2) Supervisors N= 154 | | (3) Front line staff N= 109 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.403 | 1.296 | 5.784 | 1.163 | 5.928 | .894 | 4.543 | .011 | 3,2>1 | 0.05 | | |

See tables 3 to 10 in appendix B for a more detailed analysis

*N.D (No Difference)

***Staff Experience in the Bank***

Regarding staff experience in the bank, the ANOVA revealed that there is no significant difference between groups' mean relating to training (see tables 7.20; and 6 in appendix B).

***Staff Experience in their Current Positions***

The ANOVA by staff experience in their current positions revealed a significant difference between the three groups relating to statement 40 (P= 0.012) (see table7 in appendix B). Groups 3 (staff with more than 20 years experience) and 2 (staff with between 10-20 years experience) ranked statement 44 (*Training programmes within the bank should place more emphasis on the importance of providing a high level of service quality to external customers*) significantly higher than staff in group 1 (staff with less than 10 years experience). However, with regard to the overall score of training, the ANOVA results in table 7.20 revealed no significant difference between the three different groups.

***Staff Annual Income***

The ANOVA by staff annual income revealed no significant differences between the different three groups relating to staff perceptions of training (see tables 7.20; and 8 in appendix B).

***Staff Education Level***

The ANOVA by staff education level revealed no significant differences between staff perceptions of training quality in the different groups (see tables 7.20; and 9 in appendix B).

***Staff Job Position***

The ANOVA by staff job position revealed significant differences between managers, supervisors and front line staff regarding statements 40 and 43 (P= 0.033 and 0.011) (see table 10 in appendix B). The Duncan results indicate that supervisors and front line staff were in stronger agreement with statement 40 (*Training programmes within the bank should place more emphasis on the importance of providing a high level of service quality to external customers*) than managers (M2= 5.967, S.D2= 1.325, M3= 5.962, S.D3= 1.178, M1= 5.467, S.D1= 1.564, P< 0.05). The Duncan results also show that junior levels of staff were more in agreement with statement 43 (*The bank should place more emphasis in bank training on how to improve my information technology skills)* than senior levels of staff (M3= 6.174, S.D3= 0.989, M2= 5.798, S.D2= 1.465, M1= 5.333, S.D1= 1.636, p< 0.1). Based on the overall score of training, table 7.20 shows that there is a significant

difference between managers, supervisors and front line staff (P= 0.011). Front line staff and supervisors believe that training should take place more often in order to improve their customer service skills compared to managers (M3= 5.928, S.D3= 0.894, M2= 5.784, S.D2= 1.163, M1= 5.403,S.D1= 1.296, P< 0.05).

### 7.4.17 Staff Job Satisfaction

Job satisfaction has a direct impact on staff willingness to deliver a high level of customer service (Tansuhaj *et al.*, 1988). Given the importance of job satisfaction in improving external service quality, four items were incorporated into the questionnaire to measure staff job satisfaction. Table 7.21 shows that 90.7% of staff agreed with statement 44 that: *I am satisfied with my job* (M= 5.728, S.D= 1.272). The vast majority of respondents 93.1% agreed with statement 45 that: *overall the benefits I receive from the bank such as medical insurance, vacation, etc, are good*) (M= 5.746, S.D= 1.118). Moreover, 89.2% of staff agreed with statement 46 (*I have a strong desire to remain in the bank*) and only 3.1% of staff disagreed with statement 47 that (*I regard my work in the bank as an imoprtant part of my life*). Not surprisingly, therefore, the overall score of job satisfaction, shown in table 7.21, indicates that staff have positive views on job satisfaction (M= 5.889, S.D= 0.871).

Table 7.21: Staff Perceptions of Job Satisfaction: Descriptive Statistics

| Items | Disagree % | Do Not Know % | Agree % | M | S.D |
|---|---|---|---|---|---|
| 44. I am satisfied with my job. | 7.1 | 2.2 | 90.7 | 5.728 | 1.272 |
| 45. Overall the benefits I receive from the bank such as medical insurance, vacation, etc, are good. | 5.4 | 1.5 | 93.1 | 5.746 | 1.118 |
| 46. I have a strong desire to remain in the bank. | 6.3 | 4.5 | 89.2 | 5.851 | 1.305 |
| 47. I regard my work in the bank as an imoprtant of my life. | 3.1 | 2.4 | 94.5 | 6.232 | 1.043 |
| Job Satisfaction Overall Score | | | | 5.889 | 0.871 |

See table 1 in appendix B for a detailed analysis

### 7.4.18 One-way ANOVA for Staff Job Satisfaction

***Four Banks***

The ANOVA by the four banks revealed a significant difference between the four banks relating to statement 47 (*I regard my work in the bank as an important part of my life*) (P= 0.004) (see table 3 in appendix B). Staff in Banks A and D were significantly more in agreement with this statement than staff in bank C (M1= 6.445, S.D1= 0.639, M4= 6.428, S.D4= 0.736, M3= 5.890, S.D3= 1.358, P< 0.05). However, the ANOVA analysis based on the overall score of job satisfaction, shown in table 7.22, reveals that there is no significant difference between the four banks.

***Branch Location***

No significant differences were founded between groups' mean relating to staff perceptions of job satisfaction (see tables 7.22; and 4 in appendix B).

### *Branch Size*

The ANOVA by branch size revealed no significant differences between the different branch locations relating to staff perceptions of job satisfaction (see tables 7.22; and 5 in appendix B).

Table 7.22: ANOVA for Staff Job Satisfaction

| ANOVA by Four Banks | (1) Bank A N= 121 | | (2) Bank B N=98 | | (3) Bank C N=64 | | (4) Bank D N=49 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| | 6.044 | .717 | 5.830 | .944 | 5.816 | .862 | 5.821 | .961 | 1.471 | .222 | N.D* | |
| | | | | | | | | | | | | |
| ANOVA by Branch Location | Location 1 N= 87 | | Location 2 N= 101 | | Location 3 N= 76 | | Location 4 N=68 | | F | | Duncan Test | |
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| | 6.018 | .733 | 5.861 | .868 | 5.717 | .974 | 5.960 | .902 | 1.824 | .143 | N.D | |
| | | | | | | | | | | | | |
| ANOVA by Branch Size | (1) Small N= 68 | | (2) Medium N= 110 | | (3) Large N=154 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.842 | .872 | 5.837 | .928 | 5.947 | .830 | .639 | .529 | N.D | | | |
| | | | | | | | | | | | | |
| ANOVA by Staff Experience in The Bank | (1) Less than 10 years N= 87 | | (2) 10-20 years N= 109 | | (3) More than 20 years N= 136 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.659 | .908 | 5.775 | .936 | 6.027 | .802 | 5.362 | .005 | 3>2,1 | 0.05 | | |
| | | | | | | | | | | | | |
| ANOVA by Staff Experience in Their Current Positions | (1) Less than 5 years N= 133 | | (2) 5-10 years N= 91 | | (3) More than 10 years N= 103 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.879 | .859 | 5.885 | .902 | 5.910 | .895 | .031 | .969 | N.D | | | |
| | | | | | | | | | | | | |
| ANOVA by Staff Annual Income | (1) 7000 LE or less N= 89 | | (2) 7001-11000 LE N= 113 | | (3) More than 11000 LE N= 116 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.786 | .990 | 5.831 | .856 | 5.971 | .812 | 1.392 | .250 | N.D | | | |
| | | | | | | | | | | | | |
| ANOVA by Staff Education Level | (1) Less than University Education N= 99 | | (2) University Education N= 147 | | (3) Postgraduate Education N= 82 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 6.059 | .754 | 5.908 | .856 | 5.722 | .983 | 1.971 | .141 | N.D | | | |
| | | | | | | | | | | | | |
| ANOVA by Staff Job Position | (1) Managers N= 63 | | (2) Supervisors N= 154 | | (3) Front line staff N= 109 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 6.138 | .655 | 5.844 | .879 | 5.801 | .946 | 3.386 | .033 | 1>2,3 | 0.05 | | |

See tables 3 to 10 in appendix B for a more detailed analysis
*N.D (No Difference)

### *Staff Experience in the bank*

The ANOVA by staff experience in the bank revealed that there were significant differences between the three groups relating to statements 44 and 47 (P= 0.006, 0.036) (see table 6 in appendix B). The Duncan test showed that group 3 (staff with more than 20

years experience) ranked statement 44 (*I am satisfied with my job*) significantly higher than groups 2 (staff with 10 to 20 years experience) and 1 (staff with less than 10 years experience) (M3= 5.933, S.D3= 1.203, M2= 5.488, S.D2= 1.224, M1= 5.484, S.D1= 1.259, P< 0.05). Staff with more than 20 years were also in more agreement with statement 47 (*I have a strong desire to remain in the bank*) than staff with less than 10 years experience (M3= 6.347, S.D3= 0.036, M1= 5.484, S.D1= 1.343, P< 0.05).

By using the overall score of job satisfaction, the ANOVA revealed that there is a significant difference between the different three groups (P= 0.005) (see table 7.22). The Duncan test results show that staff in group 3 have apparently more job satisfaction than staff in groups 2 and 1 (M3= 6.027, S.D3= 0.802, M2= 5.775, S.D2= 0.936, M1= 5.659, S.D1= 0.908, P< 0.05). A possible reason may be that more experienced staff have more senior positions and, therefore, more responsibility and higher rewards compared to less experienced staff.

***Staff Experience in their Current Positions***

No significant differences were found between the three groups' mean regarding staff perceptions of job satisfaction (see tables 7.22; and 7 in appendix B).

***Staff Annual Income***

The ANOVA by staff annual income revealed that there were no significant differences between the groups' mean relating to staff perceptions of job satisfaction (see tables 7.22; and 8 in appendix B).

***Staff Education Level***

No significant differences were found between the different groups relating to staff perceptions of job satisfaction (see tables 7.22; and 9 in appendix B).

***Staff Job Position***

According to the overall score of job satisfaction, the ANOVA by staff job position revealed that there is a significant difference between managers, supervisors and front line staff (P= 0.05). Table 7.22 shows that managers have more job satisfaction than supervisors and front line staff (M1= 6.138, S.D1= 0.655, M2= 5.844, S.D2= 0.879, M3= 5.801, S.D3= 0.946, P< 0.05). On the assumption that seniority is correlated to greater experience, these results make sense and are once again reflect the greater levels of responsibility and reward which managers receive compared to more junior staff.

## 7.5 Conclusion

This chapter has presented the descriptive analysis of the collected data in three sections. The first section discussed two points: the response rate and the profile of branches in terms of their number, location and size in order to provide a general description of the selected branches. The second section presented the profile and personal background of the respondents in order to provide a description of the characteristics of respondents. The third part presented a descriptive analysis of bank staff perceptions of the internal service quality dimensions. The descriptive analysis revealed that staff have different perceptions. However, table 7.23 shows that bank staff had strong positive views on service vision and are, therefore, customer care orientated (M= 6.199). They also showed fairly high levels of job satisfaction (M= 5.889) and staff believed that bank management support them in order to improve the quality of external customer service (M= 5.661). Table 7.23 also shows that staff believed that training programs on customer service should take place more often (M= 5.755). Staff also recognized the importance of technology and communication in delivering a high level of quality customer service (M= 5.154, 5.092). The responses regarding staff perceptions of job fit, management effectiveness and working atmospherics were regarded as less important but, nevertheless, the mean scores were above the "moderate level" (M= 4.928, 4.730 and 4.593).

Table 7.23: Internal Service Quality Dimensions: Descriptive Statistics Summary

| Dimensions | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|
| Management support | 1.57 | 7.00 | 5.661 | .972 |
| Management effectiveness | 1.25 | 7.00 | 4.730 | 1.350 |
| Working atmospherics | 1.00 | 7.00 | 4.593 | 1.372 |
| Employees service vision | 1.00 | 7.00 | 6.199 | .780 |
| Communication | 1.00 | 7.00 | 5.092 | 1.260 |
| Technology | 1.00 | 7.00 | 5.154 | 1.448 |
| Job fit | 1.00 | 7.00 | 4.928 | 1.194 |
| Training | 1.25 | 7.00 | 5.755 | 1.113 |
| Job satisfaction | 2.00 | 7.00 | 5.889 | .871 |

The third section presented the ANOVA analysis which was used to test the differences between staff perceptions of the internal service quality dimensions in the different groups. One-way ANOVA analysis revealed that there were significant differences between the different groups based on staff experience in the bank, staff annual income and staff job position. With regard to staff experience in the bank, it was found that staff with greater experience place more emphasis on the importance of management support, working atmospherics, employees service vision, communication, technology, job fit and job satisfaction (see table 7.24). Similarly, ANOVA by staff job position also revealed that managers had the strongest agreement with the importance of management support, management effectiveness, working atmospherics, communication, technology, job fit, training and job satisfaction. On the assumption that management command the highest

incomes, it was perhaps not surprising that staff on higher annual incomes ranked the importance of mangement support, working atmospherics, communication and job fit significantly higher than staff on lower annual income. All of the ANOVA results for the internal service quality dimensions are based on a 5% significant level, i.e. we would expect 5% to be marked as "significant" by chance. This was the case with the ANOVA by the four banks and branch locations. Table 7.24 shows that there were significant differences in staff perceptions in the four banks relating to communication and training. The ANOVA by branch location also revealed that there was a significant difference in staff perceptions of training. Finally, the ANOVA test by branch size, staff experience in their current positions and staff education revealed no significant differences between the groups.

As mentioned earlier, the main objective of this research is to examine the relationship between the internal and external service quality. This chapter presented a detailed descriptive analysis of the internal dimensions of service quality and examined the differences between groups regarding each dimension. The next chapter will present the descriptive analysis of the external service quality and one-way ANOVA for its dimensions in order to complete the descriptive picture of both variables (the internal and external service quality).

Table 7.24: ANOVA for Internal Service Quality Dimensions: Summary

| Dimensions | The four banks | | Branch location | | Branch size | | Staff experience in the bank | | Staff experience in current positions | | Staff annual income | | Staff education level | | Staff job position | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Results | Sig. | Results | Sig. | Results | Sig. | Results | Sig. | Results | Sig. | Results | Sig. | Results | Sig. | Results | Sig. |
| Management support | N.D* | | N.D | | N.D | | S.D | .000 | N.D | | S.D | .021 | N.D | | S.D | .000 |
| Management Effectiveness | N.D | | N.D | | N.D | | S.D | .001 | N.D | | N.D | | N.D | | S.D | .000 |
| Working Atmospherics | N.D | | N.D | | N.D | | S.D | .001 | N.D | | S.D | .022 | N.D | | S.D | .000 |
| Employees service vision | N.D | | N.D | | N.D | | S.D | .022 | N.D | | N.D | | N.D | | N.D | |
| Communication | S.D | .040 | N.D | | N.D | | S.D | .000 | N.D | | S.D | .050 | N.D | | S.D | .000 |
| Technology | N.D | | N.D | | N.D | | S.D | .000 | N.D | | N.D | | N.D | | S.D | .001 |
| Job fit | N.D | | N.D | | N.D | | S.D | .000 | N.D | | S.D | .001 | N.D | | S.D | .000 |
| Training | S.D | .001 | S.D | .002 | N.D | | N.D | | N.D | | N.D | | N.D | | S.D | .011 |
| Job satisfaction | N.D | | N.D | | N.D | | S.D | .005 | N.D | | N.D | | N.D | | S.D | .033 |

*N.D (No Difference), S.D (Significant Difference)

# CHAPTER EIGHT
# EXTERNAL SERVICE QUALITY: DESCRIPTIVE AND ONE-WAY ANOVA ANALYSIS

## 8.1 Introduction

This chapter is devoted to present a descriptive analysis of staff perceptions of external service quality dimensions. The four external service quality dimensions (trust, interface, reliability and tangibles) were measured on a seven-point Likert scale (from 1= strongly disagree to 7= strongly agree). A one-way ANOVA analysis will be used to test the differences between groups regarding the perceptions of each external service quality dimension. Eight comparison factors will be used: the four banks, different branch locations, branch size, staff experience in the bank, staff experience in their current positions, staff annual income, staff education level and staff job position. The ANOVA test will be followed by the Duncan's multiple range test whenever the F-values were significant to determine precisely how many statistically significant differences actually existed. Specifically, this chapter consists of nine sections. Sections 8.2, 8.4, 8.6, and 8.8 will present a descriptive analysis of staff perceptions of the four external service quality dimensions (trust, interface, reliability and tangibles). Sections 8.3, 8.5, 8.7 and 8.9 will investigate and compare the difference between groups regarding the perceptions of the different dimensions of external service quality. Finally, the descriptive analysis and one-way ANOVA for staff perceptions of external service quality overall will be discussed in section 8.10.

## 8.2 Staff Perceptions of Trust

The literature suggests that the ability of employees to inspire trust and instil confidence in bank customers is an important dimension in achieving high levels of external service quality. Accordingly, to measure trust, 10 items were identified and incorporated into the questionnaire. Table 8.1 shows that 90.4% of staff agreed with statement 1 that: *branch staff instil trust and confidence in customers* (M= 5.751, S.D= 1.052). Giving the importance of staff ability to answer customer questions, 86.2% of staff agreed with statement 2 that: *branch staff are able to answer customer questions* (M= 5.531, S.D= 1.221) and only 3.6% of staff disagreed with statement 3 that: *branch staff give positive advice to customers when they have a problem* (M= 5.842, S.D= 0.998). To deliver a high level of service quality, branch staff should also be able to fully understand the needs of customers. In this respect, more than 91% of staff agreed with statement 4 that: *branch staff understand the needs of customers* (M= 5.682, S.D= 0.993). Table 8.1 also shows that 81.1% of staff agreed with statement 5 that: *branch staff are sympathetic and*

*reassuring to customers* (M= 5.367,S.D= 1.388). Likewise, more than 88% of staff agreed with statement 6 that: *branch staff resolve customers' complaints quickly* (M= 5.660, S.D= 1.145). Given the importance of keeping external customers fully informed about new services, 82.3% of staff agreed with statement 7 that: *branch staff keep external customers fully informed about new services* (M= 5.503, S.D= 1.316). Staff willingness to help bank customers is very important in delivering a high level of service quality. In this respect, table 8.1 revealed that only 8.1% of staff disagreed with statement 8 that: *branch staff are willing to help customers* (M= 5.572, S.D= 1.217). With regard to staff appearance, 88% of staff agreed with statement 9 that: *branch staff are well dressed and appear neat and tidy* (M= 5.676, S.D= 1.282). Keeping and handling customers' financial affairs accurately is also important in creating confidence between the bank and its customers. In this respect, 87.4% of staff agreed with statement 10 that: *the branch handles and keeps the customers' financial affairs accurately* (M= 5.489, S.D= 1.279). According to the overall score for trust, bank staff believed that they are able to instil trust in external customers (M= 5.605, S.D= 0.836).

Table 8.1 Staff Perceptions of Trust: Descriptive Statistics

| Items | Disagree % | Do not Know % | Agree % | M | S.D |
|---|---|---|---|---|---|
| 1. Branch staff instil trust and confidence in customers. | 3 | 6.6 | 90.4 | 5.751 | 1.052 |
| 2. Branch staff are able to answer customer questions. | 7.8 | 6 | 86.2 | 5.531 | 1.221 |
| 3. Branch staff give positive advice to customers when they have a problem. | 3.6 | 3.9 | 92.5 | 5.824 | .998 |
| 4. Branch staff understand the needs of customers. | 3.9 | 4.8 | 91.3 | 5.682 | .993 |
| 5. Branch staff are sympathetic and reassuring to customers. | 9.6 | 9.3 | 81.1 | 5.367 | 1.388 |
| 6. Branch staff resolve customers' complaints quickly. | 6 | 5.7 | 88.3 | 5.660 | 1.145 |
| 7. Branch staff keep external customers fully informed about new services. | 8.1 | 9.6 | 82.3 | 5.503 | 1.316 |
| 8. Branch staff are willing to help customers. | 8.1 | 4.5 | 87.4 | 5.572 | 1.217 |
| 9. Branch staff are well dressed and appear neat and tidy. | 7.8 | 4.2 | 88.0 | 5.676 | 1.282 |
| 10. The branch handles and keeps the customers' financial affairs accurately. | 9 | 3.6 | 87.4 | 5.489 | 1.279 |
| Trust Overall Score | | | | 5.605 | 0.836 |

See table 2 in appendix B for a detailed analysis

## 8.3 One-Way ANOVA for Staff Perceptions of Trust

The one-way ANOVA analysis is used to test the differences between the different groups regarding staff perceptions of trust. The ANOVA revealed the following results:

### *The Four Banks*

The ANOVA by the four banks revealed that there were no significant differences between staff perceptions relating to trust (see tables 8.2; and 11 in appindix B). This suggests that staff across the four banks have broadly similar attitudes about their ability to instil trust in customers. As mentioned in the previous chapter, there were no significant differences between staff in the four banks regarding management support (see

table 3 in appindix B). Therefore, staff may be reflecting confidence in their own abilities which is engendered by management support and commitment to the objective of good external customer service.

***Branch Location***

The ANOVA by branch location revealed that there was a significant difference between the four branch locations relating to statement 8 (*branch staff are willing to help customers*) (P= 0.035) (see table 12 in appendix B). Staff in locations 4, 3 and 1 were significantly more in agreement with this statement than staff in location 2 (M4= 5.892, S.D4= 1.121, M3= 5.703, S.D3= 1.332, M1= 5.701, S.D1= 1.046, M2= 5.350, S.D2= 1.054, P< 0.1). A possible explanation might be that as branches in location 2 deal with the poorest customers, staff might find it more difficult to instill trust. Poor customers may, by their very nature, be more mistrustful of banks and this would make the jobs of staff more difficult. However, the ANOVA test revealed no significant differences between the four locations relating to the overall score of trust (see table 8.2).

***Branch Size***

The ANOVA results, as shown in tables (8.2; and 13 in appendix B), revealed no significant differences between staff perceptions in small, medium and large sized branches relating to trust. This suggests that branch size has no significant effect on staff perception of trust.

***Staff Experience in the Bank***

The ANOVA analysis for trust based on staff experience in the bank revealed that there were significant differences between the three groups relating to statements 1, 3, 5, 6, 7, and 8 (P= 0.000, 0.015, 0.000, 0.000, 0.042 and 0.001) (see table 14 in appendix B). Staff in group 3 (staff with more than 20 years experience) ranked statement 1 (*branch staff instil trust and confidence in customers*) significantly higher than staff in groups 2 (staff with 10 to 20 years experience) and 1 (staff with less than 10 years experience) (M3= 6.009, S.D3= 0.955, M2= 5.500, S.D2= 1.114, M1= 5.371, S.D1= 1.044, P< 0.05). Table 14 in appendix B also shows that staff in group 3 perceived the importance of statement 3 (*branch staff give positive advice to customers when they have a problem*) to be significantly higher than staff in groups 1 and 2 (M3= 5.965, S.D3= 0.851, M2= 5.613, S.D2= 1.178, M1= 5.716, S.D1= 1.060, P< 0.1). Similarly, the mean scores for staff perceptions in group 3 relating to statement 5 (*branch staff are sympathetic and reassuring to customers*) were significantly higher than that of staff in groups 2 and 1 (M3= 5.803, S.D3= 1.052, M2= 5.392, S.D2= 1.253, M1= 5.171, S.D1= 1.453, P< 0.05).

Moreover, the Duncan test revealed that more experienced staff were more in agreement with statement 6 (*branch staff resolve customers' complaints quickly*) (M3= 5.750, S.D3= 1.240, M2= 5.397, S.D2= 1.335, M1= 4.953, S.D1= 1.335, P< 0.1). Likewise, staff with more experience (group 3) were significantly more in agreement with statement 7 (*branch staff keep external customers fully informed about new services*) than staff with less experience (group 1) (M3= 5.537, S.D3= 1.286, M1= 5.083, S.D1= 1.418, P< 0.05). Likewise, Table 14 in appendix B shows that staff in group 3 ranked the importance of statement 8 (*branch staff are willing to help customers*) significantly higher than staff in groups 2 and 1 (M3= 5.842, S.D3= 0.996, M2= 5.609, S.D2= 1.168, M1= 5.218, S.D1= 1.374, P< 0.05).

The ANOVA analysis by staff experience in the bank also revealed that there was a significant difference between groups relating to the overall score of trust (see table 8-2). The Duncan test showed that staff with higher levels of experience (group 3) perceived trust to be significantly higher than staff with less experience (groups 2 and 1) (M3= 5.770, S.D3= 0.776, M2= 5.490, S.D2= 0.910, M1= 5.302, S.D1= 0.790, P< 0.05). One possible explanation might be that more experienced staff have more skill in dealing with external customers and more confidence in their ability to instil trust in customers. Staff with greater experience may also have had more training on service quality than staff with less experience. Moreover, more experienced staff might be in more senior positions and deal with fewer but important customers who place a greater emphasis on trust and having a relationship with the bank.

***Staff Experience in their Current Positions***

The ANOVA by staff experience in their current positions revealed that there was a significant difference between staff perceptions in the different groups relating to statement 8 (*branch staff are willing to help customers*) (P= 0.025) (see table 15 in appendix B). The Duncan test suggested that staff in group 3 (staff with more than 10 years experience) were significantly more in agreement with the statement than staff in groups 1 (Staff with less than 5 years experience) and 2 (staff between 5 to 10 years experience) (M3= 5.972, S.D3= 0.604, M1= 5.573, S.D1= 1.263, M2= 5.531, S.D2= 1.221, P< 0.05). This might be reflecting the sort of consideration raised within the context of more experience in the bank. Likewise with experience in the job, it breeds confidence and familiarity with specific tasks and customers. However, by using the overall score of trust, the ANOVA by staff experience in their current position revealed that there was no significant difference between the three groups (see table 8-2). This

indicates that staff experience in their current positions has no significant effect on their overall perceptions of trust.

***Staff Annual Income***

The ANOVA by staff annual income, as shown in table 16 in appendix B, revealed there were significant differences between staff perceptions in the three groups relating to statements 1, 3, 5, 6, 8, and 10 (P= 0.015, 0.018, 0.044, 0.000, 0.005 and 0.049). Staff in groups 3 (staff with more than 11000LE) and 2 (staff between 7001 to 11000LE) perceived statement 1 (*branch staff instil trust and confidence in customers*) significantly higher than staff in group 1 (staff with 7000LE or less) (M3= 5.868, S.D3= 1.026, M2= 5.744, S.D2= 0.950, M1= 5.418, S.D1= 1.204, P< 0.05). Similarly, staff in groups 3 and 2 ranked the importance of statement 3 (*branch staff give positive advice to customers when they have a problem*) significantly higher than staff in group1 (M3= 5.905, S.D3= 0.976, M2= 5.873, S.D2= 0.931, M1= 5.497, S.D1= 1.125, P< 0.05). The Duncan test, as shown in table 16 in appendix B, also revealed that staff on high annual incomes (groups 3 and 2) were significantly more in agreement with statement 5 (*branch staff are sympathetic and reassuring to customers*) than staff on low annual incomes (group 1) (M3= 5.661, S.D3= 1.176, M2= 5.635, S.D2= 1.087, M1= 5.227, S.D1= 1.442, P< 0.05).

Likewise, the mean scores for staff on high annual incomes relating to statement 6 (*branch staff resolve customers' complaints quickly*) were significantly higher than that of staff on low annual income (M3= 5.756, S.D3= 1.146, M2= 5.474, S.D2= 1.203, M1= 4.812, S.D1 = 1.660, P< 0.05). Table 16 in appendix B also shows that staff in groups 3 and 2 perceived the importance of statement 8 (*branch staff are willing to help customers*) significantly higher than staff in group 1 (M3= 5.808, S.D3= 0.971, M2= 5.656, S.D2= 1.150, M1= 5.260, S.D1= 1.414, P< 0.05). Furthermore, staff on high annual incomes were significantly more in agreement with statement 10 (*the branch handles and keeps the customers' financial affairs accurately*) than staff on low annual incomes (M2= 5.812, S.D2= 1.046, M3= 5.795, S.D3= 1.186, M1= 5.386, S.D1= 1.460, P< 0.05).

The ANOVA analysis by staff annual income based on the overall score of trust revealed that there was a significant difference between staff perceptions in the different groups (P= 0.001) (see table 8.2). The Duncan test revealed that staff on high annual incomes believed that they are more able to instil trust and confidence in external customers than staff on low annual incomes (M3= 5.716, S.D3= 0.771, M2= 5.642, S.D2= 0.781, M1= 5.262, S.D1= 0.993, P< 0.05). These results are in accordance with those relating to seniority and greater experience in the bank and to some extent greater experience in the

job. A further explanation may be, as mentioned earlier, that staff on higher salaries enjoy greater jobs satisfaction and are, therefore, more motivated to create a good impression of the bank to external customers.

***Staff Education level***

The ANOVA analysis by staff education level revealed no significant difference between the groups relating to staff perceptions of trust (see tables 8.2; and 17 in appendix B). This suggests that staff education level has no significant effect on their perceptions of trust.

Table 8.2: ANOVA for Staff Perceptions of Trust

| ANOVA by Four Banks | (1) Bank A N= 121 | | (2) Bank B N=98 | | (3) Bank C N=64 | | (4) Bank D N=49 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| | 5.582 | .809 | 5.623 | .851 | 5.732 | .677 | 5.444 | 1.016 | 1.139 | .333 | N.D* | |
| **ANOVA by Branch Location** | **Location 1 N= 87** | | **Location 2 N= 101** | | **Location 3 N= 76** | | **Location 4 N=68** | | **F** | | **Duncan Test** | |
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| | 5.645 | .811 | 5.465 | .799 | 5.586 | .927 | 5.739 | .801 | 1.490 | .217 | N.D | |
| **ANOVA by Branch Size** | **(1) Small N= 68** | | **(2) Medium N= 110** | | **(3) Large N=154** | | **F** | | **Duncan Test** | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.572 | .763 | 5.628 | .884 | 5.604 | .836 | .097 | .908 | N.D | | | |
| **ANOVA by Staff Experience in the Bank** | **(1) Less than 10 years N= 87** | | **(2) 10-20 years N= 109** | | **(3) More than 20 years N= 136** | | **F** | | **Duncan Test** | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.302 | .790 | 5.490 | .910 | 5.770 | .776 | 8.956 | .000 | 3>2,1 | 0.05 | | |
| **ANOVA by Staff Experience in Their Current Positions** | **(1) Less than 5 years N= 133** | | **(2) 5-10 years N= 91** | | **(3) More than 10 years N= 103** | | **F** | | **Duncan Test** | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.608 | .844 | 5.505 | .940 | 5.678 | .663 | .893 | .410 | N.D | | | |
| **Staff Annual Income** | **(1) 7000 LE or less N= 89** | | **(2) 7001-11000 LE N= 113** | | **(3) More than 11000 LE N= 116** | | **F** | | **Duncan Test** | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.262 | .993 | 5.642 | .781 | 5.716 | .771 | 7.070 | .001 | 3,2>1 | 0.05 | | |
| **Staff Education Level** | **(1) Less than University Education N= 99** | | **(2) University Education N= 147** | | **(3) Postgraduate Education N= 82** | | **F** | | **Duncan Test** | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.600 | .914 | 5.622 | .787 | 5.500 | .948 | .543 | .582 | N.D | | | |
| **Staff Job Position** | **(1) Managers N= 63** | | **(2) Supervisors N= 154** | | **(3) Front line staff N= 109** | | **F** | | **Duncan Test** | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.814 | .710 | 5.598 | .901 | 5.458 | .781 | 3.690 | .026 | 1>2,3 | 0.1 | | |

See tables 11 to 18 in appendix B for a more detailed analysis

*No difference

***Staff Job Position***

With regard to staff job position, the ANOVA revealed significant differences between managers, supervisors and front line staff relating to statements 1, 5 and 6 (P= 0.001, 0.008 and 0.034) (see table18 in appendix B). The Duncan test suggested that managers perceived statement 1 (*branch staff instil trust and confidence in customers*) significantly higher than supervisors and front line staff (M1= 6.138, S.D1= 0.760, M2= 5.722, S.D2= 1.149, M3= 5.536, S.D3= 0.994, P< 0.05). Managers and supervisors were also significantly more in agreement with statement 5 (*branch staff are sympathetic and reassuring to customers*) than front line staff (M1= 5.873, S.D1= 0.991, M2= 5.627, S.D2= 1.125, M3= 5.298, S.D3= 1.422, P< 0.1). Likewise, the mean score for managers relating to statement 6 (*branch staff resolve customers' complaints quickly*) was significantly higher than that of front line staff (M1= 5.769, S.D1= 1.142, M3= 5.247, S.D3= 1.297, P< 0.05).

The ANOVA by staff job position based on the overall score of trust revealed that there was a significant difference between managers, supervisors and front line staff (P= 0.026) (see table 8.2). The Duncan test revealed that managers believed that they are more able to instill trust and confidence in external customers than supervisors and front line staff (M1= 5.814, S.D1= 0.710, M2= 5.598, S.D2= 0.901, M3= 5.458, S.D3= 0.781, P< 0.1). Once again, these results support the earlier findings on the assumption that senior staff are generally more experienced and are paid higher salaries.

## 8.4 Staff Perceptions of Interface

The quality of interaction between the bank and customers, through staff and bank communication tools, i.e. bank brochures, leaflets and statements, has potentially a significant impact on the quality of service delivered to external customers. In this respect, 6 items were identified and incorporated into the questionnaire to measure staff perceptions of "interface". All items were negative statements and were, therefore, reversed when entering the data (see table 8.3). Table 8.3 shows that 76.5% of staff agreed with reversed statement 11 that: *branch staff are able to provide customers with individual attention* (M= 5.436, S.D= 1.540). More than 76% of staff also agreed with reversed statement 12 that: *branch staff have the customers' best interests at heart* (M= 5.524, S.D= 1.549). Given the importance of bank brochures and leaflets in providing information, only 16.8% of staff disagreed with reversed statement 13 that: *bank brochures and leaflets are informative* (M= 4.693, S.D= 1.753). Giving a prompt service to external customers also has a big impact on customers' perceptions of service quality. In this respect, table 8.3 revealed that 63% of staff agreed with reversed statement 14 that:

*branch staff find it easy to give a prompt service to customers* (M= 4.779, S.D= 1.754). Co-operation between staff is also very important in improving the quality of contact between staff and external customers. Only 13.2% of staff disagreed with reversed statement 15 that: *branch staff work as part of a team rather than as individuals in providing a high level of service quality to customers* (M= 5.649, S.D= 1.404). With respect to customers' statements, 53.35% of staff agreed with reversed statement 16 that: *bank customers' statements are not complicated and are easy to understand* (M= 4.454, S.D= 1.758). With regard to the overall score of interface, table 8.3 shows that bank staff have fairly high perceptions of the quality of interaction between staff and customers and the quality of bank communication materials (M= 5.089, S.D= 1.157).

Table 8.3: Staff Perceptions of Interface: Descriptive Statistics

| Items | Disagree % | Do not Know % | Agree % | M | S.D |
|---|---|---|---|---|---|
| 11. Branch staff are not able to provide customers with individual attention. | 18.1 | 5.4 | 76.5 | 5.436 | 1.540 |
| 12. Branch staff do not have the customers' best interests at heart. | 16.8 | 7.1 | 76.1 | 5.524 | 1.549 |
| 13. Bank brochures and leaflets are not informative. | 31.4 | 6.8 | 61.8 | 4.693 | 1.753 |
| 14. Branch staff find it difficult to give a prompt service to customers. | 31.3 | 5.7 | 63 | 4.779 | 1.754 |
| 15. Branch staff work as individuals rather than as part of a team in providing a high level of service quality to customers. | 13.2 | 2.4 | 84.4 | 5.649 | 1.404 |
| 16. Bank customers' statements are complicated and not easy to understand. | 37.4 | 9.3 | 53.3 | 4.454 | 1.758 |
| Interface Overall Score | | | | 5.605 | 1.157 |

See table 2 in appendix B for a detailed analysis

**8.5 One-Way ANOVA for Staff Perceptions of Interface**

The one-way ANOVA analysis for staff perceptions of interface revealed the following results:

***The Four Banks***

The ANOVA by the four banks revealed that there was a significant difference between the four groups relating to reversed statement 15 (*branch staff work as part of a team rather than as individuals in providing a high level of service quality to customers*) (P= 0.031) (see table 11 in appendix B). The Duncan test suggested that staff in banks D and C were significantly more in greement with this statement than staff in banks B and A (M4= 5.142, S.D4= 1.594, M3= 5.046, S.D3= 1.557, M2= 4.399, S.D2= 1.802, M1= 4.476, S.D1= 1.833, P< 0.1). This may be because management in banks D and C placed greater emphasis on the importance of teamwork skills in staff selection. This was revealed by the results shown in table 3 in appendix B where staff in bank D and C were significantly more in agreement with statement 31 under job fit that: *when I was recruited by the bank, I was assessed in terms of my teamwork skills*, than staff in bank A. However, table 8.4 shows that the ANOVA by the four banks based on the overall score of interface revealed no significant difference between staff perceptions.

***Branch Location***

The ANOVA analysis based on branch location revealed that there was a significant difference between staff perceptions in the three groups relating to reversed statement 15 *(branch staff work as part of a team rather than as individuals in providing a high level of service quality to customers*) (P= 0.039) (see table 12 in appendix B). Staff in location 1 (busy and diverse disposable income area) were significantly more in agreement with this statement than Staff in locations2 (busy and low disposable income area) and 4 (high disposable income and wealthy area) (M1= 5.069, S.D1= 1.821, M2= 4.467, S.D2= 1.576, M4= 4.377, S.D4= 1.946, P< 0.05). However, by using the overall score of interface, the ANOVA analysis showed that there were no significant differences between staff perceptions in the different groups relating to the quality of interface. This means that branch location has apparently no significant effect on staff perceptions of interface (see table 8-4).

***Branch Size***

The ANOVA by branch size revealed a significant difference between the groups' mean relating to reversed statement 11 (*branch staff are able to provide customers with individual attention*) (P= 0.008) (see table 13 in appendix B). The Duncan test indicates that staff in large branches were significantly more in agreement with this statement than staff in medium and small branches (M3= 5.707, S.D= 1.409, M2= 5.281, S.D2= 1.416, M1= 5.073, S.D1= 1.614, P< 0.05). However, table 8.4 shows that the ANOVA analysis by branch size based on the overall score of interface revealed no significant differences between the groups' mean.

***Staff Experience in the Bank***

The ANOVA analysis by staff experience in the bank revealed significant differences between staff perceptions in the three groups relating to statements 11, 12, 14 and 15 (P= 0.000, 0.015, 0.000 and 0.000). Table 14 in appendix B shows that staff in group 3 (staff with more than 20 years experience) were significantly more in agreement with reversed statement 11 (*branch staff are able to provide customers with individual attention*) than staff in groups 2 (staff between 10 to 20 years experience) and 1 (staff with less than 10 years experience) (M3= 5.744, S.D3= 1.461, M2= 5.204, S.D2= 1.525, M1= 4.890, S.D1= 1.594, P< 0.05). Table 14 in appendix B also shows that staff in group 3 were significantly more in agreement with reversed statement 12 (*branch staff have the customers' best interests at heart*) than staff in group 1 (M3= 5.739, S.D3= 1.517, M1= 5.140, S.D1= 1.551, P< 0.05). Further, the Duncan test suggested that staff with more experience in the bank were in greater agreement with reversed statement 14 (*branch staff*

*find it easy to give a prompt service to customers*) (M3= 5.132, S.D3= 1.712, M2= 4.545, S.D2= 1.767, M1= 4.109, S.D1= 1.624, P< 0.1). With regard to the co-operation between staff, group 3 were also significantly more in agreement with reversed statement 15 (*branch staff work part of a team rather than as individuals in providing a high level of service quality to customers*) than staff in groups 2 and 1 (M3= 5.100, S.D3= 1.671, M2= 4.333, S.D2= 1.841, M1= 4.042, S.D1= 1.565, P< 0.05).

The ANOVA analysis by staff experience in the bank based on the overall score of interface revealed a significant difference between staff perceptions of the quality of interface in the three groups (P< 0.000) (see table 8-4). The Duncan test revealed that more experienced staff perceived the quality of contact between bank staff, and communication materials and customers to be significantly higher than less experienced staff (M3= 5.33, S.D= 1.089, M2= 4.899, S.D2= 1.256, M1= 4.656, S.D1= 1.033, P< 0.05). As mentioned earlier, these results may be reflecting the fact that more experienced staff have better functional expertise, i.e. better interpersonal skill and mannerisms when dealing with customers needs. Staff with the longest service in the bank may also have more senior positions and , therefore, have more responsibility for achieving quality service goals.

***Staff Experience in their Current Positions***

The ANOVA by staff experience in their current positions revealed no significant difference between staff perceptions of the quality of interface in the three groups (see tables 8.4; and 15 in appendix B). This suggests, once again, that staff experience in their current positions has no effect on their perceptions of interface.

***Staff Annual Income***

The ANOVA results based on staff annual income shown in table 16 in appendix B revealed that there were significant differences between the different income groups relating to statements 11, 15 and 16 (P= 0.044, 0.027 and 0.010). Staff on high annual incomes were significantly more in agreement with reversed statement 11 (*branch staff are able to provide customers with individual attention*) than staff on low annual incomes (M3= 5.639, S,D3= 1.463, M1= 5.078, S.D1= 1.556, P< 0.05). Similarly, staff on high annual incomes were significantly more in agreement with reversed statement 15 (*branch staff work as part of a team rather than as individuals in providing a high level of service quality to customers*) than staff on low annual incomes (M3= 4.928, S.D3= 1.697, M1= 4.260, S.D1= 1.817, P< 0.05). The Duncan test results shown in table 16 in appendix A suggested that staff in groups 3 and 2 were significantly more in agreement with reversed

statement 16 (*bank customers' statements are not complicated and easy to understand*) than staff in group 1 (M3= 5.839, S.D3= 1.336, M2= 5.687, S.D2= 1.353, M1= 5.217, S.D1= 1.523, P< 0.05).

The ANOVA results by staff annual income based on the overall score of interface (see table 8.4) reveals that there was a significant difference between staff perceptions of the quality of interface in the different groups (P= 0.004). The Duncan test suggested that staff on high annual incomes perceived the quality of contact between staff and bank customers and the quality of bank communication materials to be significantly higher than staff on low incomes (M3= 5.283, S.D3= 1.133, M2= 5.058, S.D2= 1.178, M1= 4.721, S.D1= 1.109, P< 0.05). This accords with the earlier results and is not surprising especially, if staff on high annual incomes enjoy greater job statisfaction and are motivated to contact with external customers in a professional manner .

***Staff Education Level***

The ANOVA by staff education revealed that there was a significant difference between staff perceptions in the three groups relating to reversed statement 11 (*branch staff are able to provide customers with individual attention*) (P= 0.005) (see table 17 in appendix B). The results of Duncan test suggested that staff with a university/postgraduate education were significantly more in agreement with the statement than staff with no university education (M2= 5.564, S.D2= 1.459, M3= 55.369, S.D3= 1.505, M1= 4.684, S.D1= 1.890, P< 0.05). The reason might be that staff with university and postgraduate qualifications have better communication skills or are more efficient in their jobs than staff with no university education. Table 8.4, however, shows that the ANOVA based on the overall score of interface revealed no significant difference between staff perceptions of the quality of comunication between staff and bank customers and the quality of bank communication materials in the three groups.

***Staff Job Position***

The ANOVA results by staff job position, as shown in table 18 in appendix B, revealed that there were significant differences between the perceptions of managers, supervisors and front line staff relating to all interface items, i.e. items from 11 to 16 (P= 0.006, 0.017, 0.007, 0.000, 0.000 and 0.013). Managers and supervisors were significantly more in agreement with reversed statement 11 (*branch staff are able to provide customers with individual attention*) than front line staff (M1= 5.825, S.D1= 1.409, M2= 5.513, S.D2= 1.543, M3= 5.082, S.D3= 1.558, P< 0.1). Managers also were significantly more in agreement with reversed statement 12 (*branch staff have the customers' best interests at*

*heart*) than supervisors and front line staff (M1= 5.952, S.D1= 1.262, M2= 5.513, S.D2= 1.542, M3= 5.256, S.D3= 1.657, P< 0.05). Similarly, managers were significantly more in agreement with reversed statement 13 (*bank brochures and leaflets are informative*) than supervisors and front line staff (M1= 5.039, S.D1= 1.622, M2= 4.376, S.D2= 1.777, M3= 4.178, S.D3= 1.747, P< 0.05).

Table 8.4: ANOVA for Staff Perceptions of Interface

| ANOVA by Four Banks | (1) Bank A N= 121 | | (2) Bank B N=98 | | (3) Bank C N=64 | | (4) Bank D N=49 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| | 5.022 | 1.131 | 5.101 | 1.140 | 5.201 | 1.205 | 5.049 | 1.210 | .331 | .803 | N.D* | |

| ANOVA by Branch Location | Location 1 N= 87 | | Location 2 N= 101 | | Location 3 N= 76 | | Location 4 N=68 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| | 5.163 | 1.127 | 5.001 | 1.196 | 5.036 | 1.147 | 5.151 | 1.162 | .417 | .741 | N.D | |

| ANOVA by Branch Size | (1) Small N= 68 | | (2) Medium N= 110 | | (3) Large N=154 | | F | | Duncan Test | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 4.925 | 1.115 | 5.084 | 1.188 | 5.165 | 1.152 | 1.012 | .365 | N.D | | | |

| ANOVA by Staff Experience in the Bank | (1) Less than 10 years N= 87 | | (2) 10-20 years N= 109 | | (3) More than 20 years N= 136 | | F | | Duncan Test | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 4.656 | 1.033 | 4.899 | 1.256 | 5.33 | 1.089 | 10.321 | .000 | 3>2,1 | 0.05 | | |

| ANOVA by Staff Experience in Their Current Positions | (1) Less than 5 years N= 133 | | (2) 5-10 years N= 91 | | (3) More than 10 years N= 103 | | F | | Duncan Test | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.094 | 1.142 | 5.034 | 1.165 | 5.108 | 1.219 | .101 | .904 | N.D | | | |

| Staff Annual Income | (1) 7000 LE or less N= 89 | | (2) 7001-11000 LE N= 113 | | (3) More than 11000 LE N= 116 | | F | | Duncan Test | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 4.721 | 1.109 | 5.058 | 1.178 | 5.283 | 1.133 | 5.618 | .004 | 3,2>1 | 0.05 | | |

| Staff Education Level | (1) Less than University Education N= 99 | | (2) University Education N= 147 | | (3) Postgraduate Education N= 82 | | F | | Duncan Test | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 4.770 | 1.275 | 5.122 | 1.130 | 5.114 | 1.177 | 1.534 | .217 | N.D | | | |

| Staff Job Position | (1) Managers N= 63 | | (2) Supervisors N= 154 | | (3) Front line staff N= 109 | | F | | Duncan Test | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.589 | 1.022 | 5.116 | 1.109 | 4.721 | 1.168 | 12.319 | .000 | 1>2>3 | 0.05 | | |

See tables 11 to 18 in appendix B for a more detailed analysis

* N.D (No Difference)

The Duncan test results, shown in table 18 in appendix B, revealed that the more senior the management the higher their agreement was with reversed statement 14 (*branch staff find it easy to give a prompt service to customers*) (M1= 5.444, S.D1= 1.511, M2= 4.842, S.D2= 1.753, M3= 4.220, S.D3= 1.739, P< 0.05). With regard to the co-operation

between staff to deliver a better quality of service to external customers, managers and supervisors were significantly more in agreement with reversed statement 15 (*branch staff work part of a team rather than as individuals in providing a high level of service quality to customers*) than front line staff (M1= 5.174, S.D1= 1.641, M2= 4.954, S.D2= 1.634, M3= 4.019, S.D3= 1.739, P< 0.05). Furthermore, managers were significantly more in agreement with reversed statement 16 (*bank customers' statements are not complicated and are easy to understand*) than front line staff and supervisors (M1= 6.100, S.D1= 1.020, M3= 5.571, S.D3= 1.472, M2= 5.499, S.D2= 1.453, P< 0.05).

The ANOVA by staff job position based on the overall score of interface, shown in table 8.4, revealed that there was a significant difference between managers, supervisors and front line staff in terms of their perceptions of the quality of interface (P= 0.000). The Duncan test revealed that the higher level of management the more positive the perceptions of the quality of communication between staff and bank customers and the quality of bank's communication materials (M1= 5.589, S.D1= 1.022, M2= 5.116, S.D2= 1.109, M3= 4.721, S.D3= 1.168, P< 0.05). To some extent, this may be reflecting the greater experience of senior staff and consequently, their better communication skills. Senior staff also have greater and more direct responsibilities for improving the quality of service delivered to external customers. The responses of senior staff clearly reflect their different responsibilities compared to junior staff and also reveal how committed they are to improving the level of external customer service.

## 8.6 Staff Perceptions of Reliability

Staff ability to perform the promised service dependably and accurately has an important role in delivering a high level of external customer service. In this respect, 3 items were identified and incorporated into the questionnaire to measure staff perceptions of reliability. All the three items were negative statements and were, therefore, reversed when entering the data (see table 8.5).

Table 8.5: Staff Perceptions of Reliability: Descriptive Statistics

| Items | Disagree % | Do not Know % | Agree % | M | S.D |
|---|---|---|---|---|---|
| 17. Branch staff find it difficult to keep promises made to customers because of other demands on their time. | 15.9 | 4.9 | 79.2 | 5.475 | 1.614 |
| 18. High workloads make it difficult for branch staff to perform an error-free service to customers. | 28.6 | 7.5 | 63.9 | 4.829 | 1.743 |
| 19. Branch opening hours are not convenient for customers. | 36.1 | 8.7 | 55.2 | 4.500 | 1.804 |
| Reliability Overall Score | | | | 4.934 | 1.333 |

See table 2 in appendix B for a detailed analysis

Table 8.5 shows that 79.2% of staff agreed with reversed statement 17 that: *branch staff do not find it difficult to keep promises made to customers because of other demands on their time* (M= 5.475, S.D= 1.614). Giving the importance of performing an error-free service to external customers, 63.9% of staff agreed with reversed statement 18 that: *high workloads do not make it difficult for branch staff to perform an error-free service to customers* (M= 4.829, S.D= 1.743). Table 8-5 also revealed that 36.1% of staff disagreed with reversed statement 19 that: *branch opening hours are convenient for customers* (M= 4.500, S.D= 1.804). With regard to the overall score of reliability, it is only just above the "moderate level", i.e. 4 (M= 4.934, S.D= 1.333). This suggests that bank staff have only moderate perceptions regarding the reliability of bank service.

## 8.7 One-Way ANOVA for Staff Perceptions of Reliability

### *The Four Banks*

The ANOVA by the four banks, as shown in table 11 in appendix B, revealed that there was a significant difference between staff perceptions in the four banks relating to reversed statement 17 (*branch staff do not find it difficult to keep promises made to customers because of other demands on their time*) (P= 0.020). The Duncan test suggested that staff in banks D and C were significantly more in agreement with the statement than staff in bank B (M4= 5.224, S.D= 1.503, M3= 5.213, S.D3= 1.609, M2= 4.509, S.D2= 1.932, P< 0.05). One possible explanation might be that staff in bank D and C are less under time pressure than staff in bank B. This was supported by the results shown in table 3 in appendix B, which indicated that staff in bank D were significantly more in agreement with reversed statement 8 under management effectiveness (*time pressures do not usually prevent me from providing a high level of service quality to external customers*) compared to staff in bank B. However, the ANOVA by the four banks based on the overall score of reliability revealed no significant difference between staff perceptions of the reliability of service they delivered to external customers in the four banks (see table 8.6).

### *Branch Location*

With regard to branch location, the ANOVA revealed that there were significant differences between staff perceptions in the four groups relating to reversed statement 17 and 19 (P= 0.012 and 0.043) (see 12 in appendix B). Staff in location 1 (busy and diverse disposable income area) were significantly more in agreement with reversed statement 17 (*branch staff do not find it difficult to keep promises made to customers because of other demands on their time*) than staff in location 2 (busy and low disposable income area), 4 (wealthy customer base area) and 3 (busy and high disposable income area) (M1= 5.263,

S.D1= 1.605, M2= 4.804, S.D2= 1.529, M4= 4.659, S.D4= 1.928, M3= 4.432, S.D3= 1.892, P< 0.1). Further, the Duncan test results, as shown in table 12 in appendix. A, revealed that staff in locations 1 and 3 were significantly more in agreement with reversed statement 19 (*branch opening hours are convenient for customers*) than staff in location 4 (M1= 5.682, S.D1= 1.600, M3= 5.677, S.D3= 1.567, M4= 5.034, S.D4= 1.857, P< 0.05).

Table 8.6: ANOVA for Staff Perceptions of Reliability

| ANOVA by Four Banks | (1) Bank A N= 121 | | (2) Bank B N=98 | | (3) Bank C N=64 | | (4) Bank D N=49 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| | 4.955 | 1.219 | 4.702 | 1.449 | 5.209 | 1.342 | 5.108 | 1.168 | 2.444 | .064 | N.D | |
| ANOVA by Branch Location | Location 1 N= 87 | | Location 2 N= 101 | | Location 3 N= 76 | | Location 4 N=68 | | F | | Duncan Test | |
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| | 5.238 | 1.234 | 4.992 | 1.249 | 4.744 | 1.390 | 4.662 | 1.449 | 3.017 | .030 | 1>3,4 | 0.05 |
| ANOVA by Branch Size | (1) Small N= 68 | | (2) Medium N= 110 | | (3) Large N=154 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 4.607 | 1.325 | 4.989 | 1.344 | 5.040 | 1.314 | 2.647 | .072 | N.D* | | | |
| ANOVA by Staff Experience in the Bank | (1) Less than 10 years N= 87 | | (2) 10-20 years N= 109 | | (3) More than 20 years N= 136 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 4.552 | 1.412 | 4.899 | 1.307 | 5.088 | 1.295 | 3.918 | .021 | 3,2>1 | 0.1 | | |
| ANOVA by Staff Experience in Their Current Positions | (1) Less than 5 years N= 133 | | (2) 5-10 years N= 91 | | (3) More than 10 years N= 103 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 4.889 | 1.357 | 5.030 | 1.314 | 4.851 | 1.328 | .446 | .640 | N.D | | | |
| Staff Annual Income | (1) 7000 LE or less N= 89 | | (2) 7001-11000 LE N= 113 | | (3) More than 11000 LE N= 116 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 4.864 | 1.337 | 4.755 | 1.395 | 5.066 | 1.308 | 1.708 | .183 | N.D | | | |
| Staff Education Level | (1) Less than University Education N= 99 | | (2) University Education N= 147 | | (3) Postgraduate Education N= 82 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 4.780 | 1.533 | 4.960 | 1.257 | 4.943 | 1.440 | .298 | .743 | N.D | | | |
| Staff Job Position | (1) Managers N= 63 | | (2) Supervisors N= 154 | | (3) Front line staff N= 109 | | F | | Duncan Test | | | |
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.503 | 1.153 | 4.787 | 1.334 | 4.758 | 1.350 | 7.894 | .000 | 1>2,3 | 0.05 | | |

See tables 11 to 18 in appendix B for a more detailed analysis
*N.D (No Difference)

The ANOVA by branch location based on the overall score of reliability (see table 8.6) revealed that there was a significant difference between staff perceptions in the four locations relating to the reliability of bank service (P= 0.05). The Duncan test suggested that staff in location 1 perceived the reliability of bank service to be significantly higher

than staff in locations 3 and 4 (M1= 5.238, S.D1= 1.234, M3= 4.744, S.D3= 1.390, M4= 4.662, S.D4= 1.449, P< 0.05). Location 1 represents the centre of Cairo and is, therefore, a very busy location, incorporating diverse activities and equally diverse levels of disposable income. Branches in this location tend to be "flagships" branches. Bank management in these locations might, therefore, be putting greater emphasis on the importance of delivering a high level of customer service. This interpretation was supported by the results shown in table 4 in appendix B which revealed that staff in location 1 were significantly more in agreement with reversed statement 9 under management effectiveness (*I never feel confused about what management expects from me when dealing with external customers*) than staff in locations 2, 3 and 4. This suggests that staff in location 1 are fully aware of what management expects from them in dealing with external customers.

***Branch Size***

The ANOVA analysis by branch size revealed that there was a significant difference between staff perceptions in the three groups relating to reversed statement 17 (*branch staff do not find it difficult to keep promises made to customers because of other demands on their time*) (P= 0.028) (see table 13 in appendix B). The Duncan test results suggested that staff in large and medium branches were significantly more in agreement with this statement than staff in small branches (M3= 5.010, S.D1= 1.741, M2= 4.878, S.D2= 1.711, M1= 4.338, S.D1= 1.733, P< 0.05). This may reflect the better quality of staff in large and medium sized branches and also explain why management in large and medium branches apparently place greater emphasis on customer service than management in smaller branches. However, the ANOVA by branch size based on the overall score of reliability revealed no significant difference between staff perceptions in large, medium and small branches relating to the reliability of bank service (see table 8.6).

***Staff Experience in the Bank***

The ANOVA by staff experience in the bank revealed a significant difference between the groups' mean relating to reversed statement 17 (*branch staff do not find it difficult to keep promises made to customers because of other demands on their time*) (P= 0.0004) (see table 14 in appendix B). The Duncan test suggested that more experienced staff were significantly more in agreement with this statement than less experienced staff (M3= 5.092, S.D3= 1.683, M1= 4.291, S.D1= 1.777, P< 0.05). Similarly, the ANOVA based on the overall score of reliability showed a significant difference between staff perceptions in the different groups (P= 0.021) (see table 8-6). The Duncan test suggested that staff with greater experience in the bank perceived the reliability of bank service to be significantly

higher than staff with less experience (M3= 5.088, S.D3= 1.295, M2= 4.899, S.D2= 1.307, M1= 4.552, S.D1= 1.412, P< 0.1).

***Staff Experience in their Current Positions***

The ANOVA analysis by staff experience in their current positions revealed no significant difference between the different groups relating to the reliability of bank service (see tables 8.6; and 15 in appendix B). Consequently, staff experience in current positions has no significant impact on their perceptions of the reliability of bank service.

***Staff Annual Income***

With regard to staff annual income, the ANOVA results revealed no significant differences between the income groups' mean relating to staff perceptions of the reliability of bank service (see tables 8.6; and 16 in appendix B). Therefore, staff on different annual incomes perceived the reliability of bank service in broadly the same way.

***Staff Education Level***

The ANOVA by staff education level revealed no significant differences between the groups' mean relating to staff perceptions of reliability (see tables 8.6; 17 in appendix B).

***Staff Job Position***

The ANOVA by staff job position revealed significant differences between the perceptions of managers, supervisors and front line staff relating to statements 17, 18 and 19 (P= 0.001, 0.007 and 0.016) (see table 18 in appendix B). Managers were significantly more in agreement with reversed statement 17 (*branch staff do not find it difficult to keep promises made to customers because of other demands on their time*) than supervisors and front line staff (M1= 5.470, S.D1= 1.503, M2= 4.785, S.D2= 1.711, M3= 4.464, S.D3= 1.848, P< 0.05). Similarly, managers were significantly more in agreement with reversed statement 18 (*high workloads do not make it difficult for branch staff to perform an error-free service to customers*) than supervisors and front line staff (M1= 5.127, S.D1= 1.601, M2= 4.350, S.D2= 1.865, M3= 4.302, S.D3= 1.754, P< 0.05). Given the importance of branch opening hours, managers were also significantly more in agreement with reversed statement 19 (*branch opening hours are convenient for customers*) than supervisors and front line staff (M1= 5.912, S.D1= 1.249, M2= 5.226, S.D2= 1.679, M3= 5.508, S.D3= 1.673, P< 0.1). The ANOVA by staff job position based on the overall score of reliability revealed a significant difference between managers, supervisors and front line staff (P= 0.000) (see table 8.6). The Duncan test suggested that managers perceived the reliability of bank service to be significantly higher than supervisors and front line staff (M1= 5.503,

S.D1= 1.153, M2= 4.787, S.D2= 1.334, M3= 4.758, S.D3= 1.350, P= 0.000). These results, once again, reflect the different responsibilities of managers compared to supervisors and front line staff.

### 8.8 Staff Perceptions of Tangibles

The literature suggests that the appearance of physical facilities, equipment and communication materials are important dimensions in achieving high levels of external service quality. In this respect, 3 items were incorporated into the questionnaire to measure tangibles. One of these items is a negative statement (item 21) and was, therefore, reversed when entering the data. Table 8.7 shows that 50.4% of staff agreed with statement 20that: *the branch has up-to-date technology*) (M= 4.492, S.D= 1.271). Given the importance of bank brochures, leaflets and statements as effective communication tools between the bank and external customers, it was a little surprising that 49.2% of staff agreed with reversed statement 21 that: *bank brochures, leaflets and statements, etc, are visually appealing* (M= 4.264, S.D= 1.901). However, more than 63% of staff agreed with statement 22 that: *the customer waiting area in the branch is comfortable* (M= 4.440, S.D= 1.885). The overall score of tangibles shown in table 8.7 was, however, slightly above the moderate level, i.e. 4 (M= 4.399, S.D= 1.364). In other words bank staff believed that the appearance of bank's physical facilities are only moderate in terms of facilitating customer service. This suggests that bank management should place more emphasis on improving the bank's physical facilities in order to achieve a better quality of external customer service.

Table 8.7: Staff Perceptions of Tangibles: Descriptive Statistics

| Items | Disagree % | Do not Know % | Agree % | M | S.D |
|---|---|---|---|---|---|
| 20. The branch has up-to-date technology. | 22.8 | 26.8 | 50.4 | 4.492 | 1.271 |
| 21. Bank brochures, leaflets and statements, etc, are not visually appealing. | 40.1 | 10.7 | 49.2 | 4.264 | 1.901 |
| 22. The customer waiting area in the branch is comfortable. | 30.7 | 5.8 | 63.5 | 4.440 | 1.885 |
| Tangibles Overall Score | | | | 4.399 | 1.364 |

See table 2 in appendix B for a detailed analysis

### 8.9 One-Way ANOVA for Staff Perceptions of Tangibles

#### *Four Banks*

The ANOVA analysis by the four banks, as shown in table 11 in appendix B, revealed significant differences between staff perceptions in the four banks relating to statements 20 and 21 (P= 0.005 and 0.31). Staff in banks C and B were significantly more in agreement with statement 20 (*the branch has up-to-date technology*) than staff in bank D and A (M3= 4.869, S.D3= 1.321, M2= 4.604, S.D2= 1.162, M4= 4.244, S.D4= 1.185, M1= 4.231, S.D1= 1.343, P< 0.1). With regard to bank communication with external customers, the mean scores for staff perceptions in banks B and C relating to reversed

satement 21 (*bank brochures, leaflets and statements, etc, are visually appealing*) were significantly higher than those in banks A and D (M2= 4.545, S.D2= 1.851, M3= 4.523, S.D3= 2.037, M1= 3.961, S.D1= 1.861, M4= 3.836, S.D4= 1.806, P< 0.1). By using the overall score of tangibles, the ANOVA revealed significant differences betweeen staff perceptions in the four banks (P= 0.031) (see table 8-8). The Duncan test results suggested that staff in bank C perceived the quality of bank's physical facilities to be significantly higher than staff in banks A and D (M3= 4.745, S.D3= 1.483, M1= 4.229, S.D1= 1.426, M4= 4.077, S.D4= 1.265, P< 0.1). The Duncan test also showed that staff in bank B ranked the appearance of bank's physical facilities significantly higher than staff in bank D (M2= 4.483, S.D2= 1.247, M4= 4.077, S.D4= 1.265, P< 0.1). However, no significant difference was found between banks C and B. These results suggest that management in banks C and B put more emphasis and resources into improving bank's physical facilities.

***Branch Location***

The ANOVA by branch location revealed that there were significant differences between staff perceptions in the four branch locations relating to statements 20 and 22 (P= 0.001, 0.001) (see table 12 in appendix B). Staff in locations 4 (high disposable income and wealthy area) and 1 (busy and diverse disposable income area) ranked statement 20 (*the branch has up-to-date technology*) significantly higher than staff in locations 3 (busy and high disposable income area) and 2 (busy and low disposable income area) (M4= 4.918, S.D4= 1.053, M1= 4.645, S.D1= 1.313, M3= 4.248, S.D3= 1.205, M2= 4.186, S.D2= 1.328, P< 0.05). Table 12 in appendix B also shows that staff in locations 4, 1 and 3 perceived the importance of statement 22 (*the customer waiting area in the branch is comfortable*) to be significantly higher than staff in location 2 (M4= 4.968, S.D4= 1.851, M1= 4.545, S.D1= 1.776, M3= 4.499, S.D3= 2.020, M2= 3.769, S.D2= 1.477, P< 0.05).

The ANOVA results, as shown in table 8.8, revealed that there was a significant difference between staff perceptions in the different four loctions based on the overall score of tangibles (P= 0.001). The Duncan test showed that staff in location 4 ranked the physical appearance of the bank significantly higher than staff in locations 3 and 2 (M4= 4.823, S.D4= 1.155, M3= 4.246, S.D3= 1.252, M2= 4.075, S.D2= 1.477, P< 0.1). At the same time, staff in loction 1 perceived the physical appearance of the bank significantly higher than staff in location 2 (M1= 4.488, S.D1= 1.396, M2= 4.075, S.D2= 1.477, P< 0.1). As mentioned earlier, location 1 represents the centre of Cairo and is a very busy location, with diverse activities and equally diverse levels of disposable income . Similarly, branches in location 4 have a wealthy customers base. It might follow, therefore, that bank management regard these branches as "flagships" and improve their

physical appearance to attract external customers. This interpretation was supported by the fact that the ANOVA results for management effectiveness, as shown in table 4 in appendix B, indicated that staff in location 1 and to some extent staff in location 4 were significantly more in agreement with reversed statement 11 (*other considerations do not often take precedence over the goal of improving the quality of external customer service*) than staff in locations 3 and 2.

Table 8.8: ANOVA for Staff Perceptions of Tangibles

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **ANOVA by Four Banks** | **(1) Bank A N= 121** | | **(2) Bank B N=98** | | **(3) Bank C N=64** | | **(4) Bank D N=49** | | **F** | | **Duncan Test** | |
| | **M** | **S.D.** | **M** | **S.D.** | **M** | **S.D.** | **M** | **S.D.** | **Value** | **Sig.** | **Results** | **Sig.** |
| | 4.229 | 1.426 | 4.483 | 1.247 | 4.745 | 1.483 | 4.077 | 1.265 | 2.998 | .031 | 3>1,4; 2>4 | 0.1 |
| **ANOVA by Branch Location** | **Location 1 N= 87** | | **Location 2 N= 101** | | **Location 3 N= 76** | | **Location 4 N=68** | | **F** | | **Duncan Test** | |
| | **M** | **S.D.** | **M** | **S.D.** | **M** | **S.D.** | **M** | **S.D.** | **Value** | **Sig.** | **Results** | **Sig.** |
| | 4.488 | 1.396 | 4.075 | 1.477 | 4.246 | 1.252 | 4.823 | 1.155 | 4.247 | .006 | 4>3,2; 1>2 | 0.1 |
| **ANOVA by Branch Size** | **(1) Small N= 68** | | **(2) Medium N= 110** | | **(3) Large N=154** | | **F** | | **Duncan Test** | | | |
| | **M** | **S.D.** | **M** | **S.D.** | **M** | **S.D.** | **Value** | **Sig.** | **Results** | **Sig.** | | |
| | 4.567 | 1.273 | 4.339 | 1.342 | 4.367 | 1.420 | .661 | .517 | N.D* | | | |
| **ANOVA by Staff Experience in the Bank** | **(1) Less than 10 years N= 87** | | **(2) 10-20 years N= 109** | | **(3) More than 20 years N= 136** | | **F** | | **Duncan Test** | | | |
| | **M** | **S.D.** | **M** | **S.D.** | **M** | **S.D.** | **Value** | **Sig.** | **Results** | **Sig.** | | |
| | 4.034 | 1.268 | 4.385 | 1.370 | 4.535 | 1.377 | 3.222 | .041 | 3,2>1 | 0.1 | | |
| **ANOVA by Staff Experience in Their Current Positions** | **(1) Less than 5 years N= 133** | | **(2) 5-10 years N= 91** | | **(3) More than 10 years N= 103** | | **F** | | **Duncan Test** | | | |
| | **M** | **S.D.** | **M** | **S.D.** | **M** | **S.D.** | **Value** | **Sig.** | **Results** | **Sig.** | | |
| | 4.315 | 1.378 | 4.380 | 1.446 | 4.644 | 1.229 | 1.473 | .231 | N.D | | | |
| **Staff Annual Income** | **(1) 7000 LE or less N= 89** | | **(2) 7001-11000 LE N= 113** | | **(3) More than 11000 LE N= 116** | | **F** | | **Duncan Test** | | | |
| | **M** | **S.D.** | **M** | **S.D.** | **M** | **S.D.** | **Value** | **Sig.** | **Results** | **Sig.** | | |
| | 4.052 | 1.330 | 4.366 | 1.379 | 4.589 | 1.361 | 3.622 | .028 | 3>1 | 0.05 | | |
| **Staff Education Level** | **(1) Less than University Education N= 99** | | **(2) University Education N= 147** | | **(3) Postgraduate Education N= 82** | | **F** | | **Duncan Test** | | | |
| | **M** | **S.D.** | **M** | **S.D.** | **M** | **S.D.** | **Value** | **Sig.** | **Results** | **Sig.** | | |
| | 4.497 | 1.154 | 4.366 | 1.338 | 4.468 | 1.599 | .243 | .784 | N.D | | | |
| **Staff Job Position** | **(1) Managers N= 63** | | **(2) Supervisors N= 154** | | **(3) Front line staff N= 109** | | **F** | | **Duncan Test** | | | |
| | **M** | **S.D.** | **M** | **S.D.** | **M** | **S.D.** | **Value** | **Sig.** | **Results** | **Sig.** | | |
| | 4.947 | 1.178 | 4.326 | 1.382 | 4.162 | 1.370 | 7.184 | .001 | 1>2,3 | 0.05 | | |

See tables 11 to 18 in appendix B for a more detailed analysis

*N.D (No Difference)

*Branch Size*

The ANOVA by branch size revealed no significant differences between staff perceptions in small, medium and large sized branches relating to tangibles (see tables 8.8; and 13 in appendix B). This suggests that bank staff in small, medium and large branches have broadly the same attitudes towards the physical facilities of their branches. This was not that surprising because the ANOVA analysis for management support to improve external service quality, as shown in table 5 in appendix B, revealed no significant differences between staff perceptions in the three different branch sizes.

*Staff Experience in the Bank*

The ANOVA by staff experience in the bank revealed that there were significant differences between the three different experience groups relating to statements 20 and 21 (P= 0.012 and 0.036) (see table 14 in appendix B). Staff in groups 3 (staff with more than 20 years experience) and 2 (staff with 10 to 20 years experience) ranked statement 20 (*the branch has up-to-date technology*) significantly higher than staff in group 1 (staff with less than 10 years experience) (M3= 4.651, S.D3= 1.265, M2= 4.444, S.D2= 1.270, M1= 4.109, S.D1= 1.221, P< 0.1. Table 14 in appendix B also shows that more experienced staff were significantly more in agreement with reversed statement 21 (*bank brochures, leaflets and statements, etc, are visually appealing*) than less experienced staff (M3= 4.474, S.D3= 1.890, M1= 3.769, S.D1= 1.833, P< 0.05). Likewise, the ANOVA results based on the overall score of tangibles revealed that there was a significant difference between staff perceptions in the three experience groups (P= 0.041) (see table 8.8). The Duncan test revealed that staff in groups 3 and 2, i.e. more experienced staff, perceived the quality of bank's physical facilities significantly higher than staff in group 1 (M3= 4.535, S.D3= 1.377, M2= 4.385, S.D2= 1.370, M1= 4.034, S.D1= 1.268, P< 0.1). A possible explanation might be that, as mentioned earlier, staff who have the longest service in the bank are better able to understand bank policies and may be more loyal to the bank and what it is trying to achieve.

*Staff Experience in their Current Positions*

The ANOVA by staff experience in their current positions revealed that there was no significant difference between staff perceptions in the three groups relating to tangibles (see tables 8.8; and 15 in appendix B).

*Staff Annual Income*

With regard to staff annual income, the ANOVA revealed that there were significant differences between staff perceptions in the three groups relating to statements 20 and 21

(P= 0.011 and 0.008) (see table 16 in appendix B). Staff in group 3 (staff with more than 11000LE annual income) ranked the importance of statement 20 (*the branch has up-to-date technology*) significantly higher than staff in group 1 (staff with 7000LE or less annual income) (M3= 4.693, S.D3= 1.225, M1= 4.140, S.D1= 1.253, P< 0.05). Likewise, with regard to reversed statement 21 (*bank brochures, leaflets and statements, etc, are not visually appealing*), staff in group 3 were significantly more in agreement with the statement than staff in groups 2 (staff with 7001 to 11000LE annual income) and 1 (M3= 4.616, S.D3= 1.916, M2= 4.127, S.D2= 1.742, M1= 3.801, S.D1= 1.986, P< 0.1).

The ANOVA by staff annual income based on the overall score of tangibles revealed that there was a significant difference between staff perceptions in the different groups (P= 0.028). The Duncan test results as shown in table 8.8 suggested that staff on higher annual incomes ranked the quality of bank's physical facilities significantly higher than staff on lower annual incomes (M3= 4.589, S.D3= 1.361, M1= 4.052, S.D1= 1.330, P< 0.05).

***Staff Education Level***

The ANOVA by staff education level revealed no significant differences between the three groups relating to tangibles (see tables 8.8; and 17 in appendix B). This indicates that staff with different educational qualifications have broadly similar perceptions and views on the bank's physical facilities.

***Staff Job Position***

With regard to staff job position, the ANOVA analysis revealed significant differences between the perceptions of managers, supervisors and front line staff relating to statements 20 and 21 (P= 0.000 and 0.000) (see table 18 in appendix B). Managers ranked statement 20 (*the branch has up-to-date technology*) significantly higher than supervisors and front line staff (M1= 5.060, S.D1= 1.015, M2= 4.445, S.D2= 1.280, M3= 4.213, S.D3= 1.306, P< 0.05). The Duncan test also showed that the more senior the management the higher their agreement with reversed statement 21 (*bank brochures, leaflets and statements, etc, are visually appealing*) (M1= 4.965, S.D1= 1.653, M2= 4.326, S.D2= 1.949, M3= 3.741, S.D3= 1.845, P< 0.05).

With regard to the overall score of tangibles the ANOVA results, as shown in table 8.8, revealed that there was a significant difference between managers, supervisors and front line staff (P= 0.001). The managers' mean scores relating to the quality of bank's physical facilities were significantly higher than those of supervisors and front line staff (M1= 4.947, S.D1= 1.178, M2= 4.326, S.D2= 1.382, M3= 4.162, S.D3= 1.370, P< 0.05). This is in accordance with the assumption that senior staff are on higher salaries and may have

greater empathy with what the banks are trying to achieve in terms of improving the banks' physical facilities.

## 8.10 Staff Perceptions of External Service Quality Overall

The overall score of external service quality indicates that bank staff have fairly positive perceptions (M= 5.208, S.D= 0.832) (see table 8-10). According to the results discussed in the previous chapter, this is not surprising for three reasons: firstly, bank staff were favourably disposed towards the quality of management support they received in helping them to deliver high levels of external service quality (M= 5.661). Secondly, staff revealed a high positive service vision toward external customers (M= 6.199). Thirdly, staff had a high job satisfaction level (M= 5.889), therefore, they were motivated to provide external customers with a high quality service. Nevertheless, bank management could potentially increase the level of external service by putting more emphasis on service quality training programs and improving the working atmospherics within the bank. Bank management also need to put more effort into "job fit" through more efficient staff selection procedures, increasing staff co-operation and linking performance more closely to reward.

The ANOVA by staff experience in the bank, staff annual income and staff job position based on the overall score of external service quality, revealed significant differences between staff perceptions (P= 0.000, 0.001 and 0.000) (see table 8-9). With regard to staff experience in the banks, the Duncan test revealed that the greater the experience of staff, the higher their perceptions of external service quality (M3= 5.390, S.D3= 0.771, M2= 5.097, S.D2= 0.910, M1= 4.851, S.D1= 0.747, P< 0.05). This may be reflecting the fact that more experienced staff are more adept at delivering external customer service. Likewise, more experienced staff generally hold more senior positions and have greater empathy with what management is trying to accomplish.

Regarding staff annual income, the Duncan test revealed that staff on high annual incomes perceived the level of external customer service to be significantly higher than staff on low annual incomes (M3= 5.355, S.D3= 0.824, M2= 5.188, S.D2= 0.845, M1= 4.895, S.D1= 0.769, P< 0.05) (see table 8.9). On the assumption that experience generally results in more seniority and greater reward, the explanation is similar to the above interpretation.

With regard to staff job position, the Duncan test results, as shown in table 8.9, revealed that more senior levels of management had higher perceptions of external customer service quality (M1= 5.592, S.D1= 0.762, M2= 5.182, S.D2= 0.822, M3= 4.985, S.D3= 0.798, P< 0.1).

As suggested earlier, this may be reflecting the fact that they either have direct responsibility or feel that they ought to be responsible for the level of customer service quality.

In contrast, the ANOVA by the four banks, branch location, branch size, staff experience in their current positions and staff education level revealed no significant differences between the groups regarding staff perceptions of the overall external service quality they deliver to the bank customers.

Table 8.9: ANOVA for Staff Perceptions of External Service Quality Overall

| ANOVA by Four Banks | (1) Bank A N= 121 | | (2) Bank B N=98 | | (3) Bank C N=64 | | (4) Bank D N=49 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| | 5.159 | .795 | 5.199 | .853 | 5.381 | .841 | 5.104 | .829 | 1.296 | .276 | N.D | |

| ANOVA by Branch Location | Location 1 N= 87 | | Location 2 N= 101 | | Location 3 N= 76 | | Location 4 N=68 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| | 5.296 | .827 | 5.163 | .794 | 5.056 | .884 | 5.307 | .812 | 1.645 | .180 | N.D | |

| ANOVA by Branch Size | (1) Small N= 68 | | (2) Medium N= 110 | | (3) Large N=154 | | F | | Duncan Test | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.127 | .805 | 5.217 | .829 | 5.23 | .848 | .434 | .649 | N.D | | | |

| ANOVA by Staff Experience in the Bank | (1) Less than 10 years N= 87 | | (2) 10-20 years N= 109 | | (3) More than 20 years N= 136 | | F | | Duncan Test | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 4.851 | .747 | 5.097 | .910 | 5.390 | .771 | 11.702 | .000 | 3>2>1 | 0.05 | | |

| ANOVA by Staff Experience in Their Current Positions | (1) Less than 5 years N= 133 | | (2) 5-10 years N= 91 | | (3) More than 10 years N= 103 | | F | | Duncan Test | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.193 | .831 | 5.159 | .906 | 5.269 | .750 | .359 | .698 | N.D | | | |

| Staff Annual Income | (1) 7000 LE or less N= 89 | | (2) 7001-11000 LE N= 113 | | (3) More than 11000 LE N= 116 | | F | | Duncan Test | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 4.895 | .769 | 5.188 | .845 | 5.355 | .824 | 7.230 | .001 | 3,2>1 | 0.05 | | |

| Staff Education Level | (1) Less than University Education N= 99 | | (2) University Education N= 147 | | (3) Postgraduate Education N= 82 | | F | | Duncan Test | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.112 | .848 | 5.224 | .784 | 5.178 | .983 | .328 | .720 | N.D | | | |

| Staff Job Position | (1) Managers N= 63 | | (2) Supervisors N= 154 | | (3) Front line staff N= 109 | | F | | Duncan Test | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. | | |
| | 5.592 | .762 | 5.182 | .822 | 4.985 | .798 | 11.443 | .000 | 1>2>3 | 0.1 | | |

## 8.11 Conclusion

This chapter aimed to present a descriptive analysis of the external service quality and its four dimensions. In doing so, the chapter used descriptive analysis, i.e. mean scores, standard deviation and frequency distribution in order to describe staff perceptions of the external service quality and its dimensions. This was followed by using one-way ANOVA in order to identify the significant differences between groups relating to their perceptions of external service quality.

The descriptive analysis of the external dimensions of service quality revealed that bank staff have different attitudes towards external service quality and its four dimensions (trust, interface, reliability and tangibles). Table 8.10 shows that staff have fairly positive perceptions about the level of service quality they deliver to external customer. This was apparent form the overall mean score for external service quality (M= 5.208) and from the mean scores for the various external quality dimensions, the highest mean score related to trust (M= 5.605), followed by interface (M= 5.089), then reliability (M= 4.934) and finally, tangibles (M=4.399).

Table 8.10: External Service Quality Dimensions: Descriptive Statistics Summary

| Dimensions | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|
| Trust | 2.20 | 7.00 | 5.605 | .836 |
| Interface | 2.00 | 7.00 | 5.089 | 1.157 |
| Reliability | 1.67 | 7.00 | 4.934 | 1.333 |
| Tangibles | 1.00 | 7.00 | 4.399 | 1.364 |
| External Service Quality Overall | 2.71 | 7.00 | 5.208 | .832 |

The ANOVA analysis revealed that staff experience in the bank, staff annual incomes and staff job position have a significant effect on staff perceptions of the quality of external customer service and its different dimensions. Significant differences between staff perceptions were found in the different groups (see table 8.11). For example, based on staff experience in the bank, staff annual income and staff job position, it was found that more experienced staff those on higher incomes and those at a senior level of management perceived the quality of external service to be significantly higher than less experienced staff those on less income or at more junior levels of management.

The ANOVA based on the four banks and branch location revealed few significant differences. Table 8.11 shows that there was a significant difference between staff perceptions of tangibles in the four banks. Likewise, with regard to branch location, the ANOVA revealed significant differences between staff perceptions of tangibles and reliability in the four locations. The ANOVA also suggested that branch size, staff experience in their current positions and staff education level have no significant impact

on staff perceptions of the quality of external customer service and its different dimensions.

The previous chapter and this one extensively presented the descriptive analysis and analysis of variance for the internal and external service quality dimensions. These statistical techniques have examined the internal and external service quality separately, therefore, the next chapter will examine the relationship between them by applying the correlation and multiple regression analysis.

Table 8.11: ANOVA for External Service Quality overall and its Dimensions: Summary

| Dimensions | The four banks | | Branch location | | Branch size | | Staff experience in the bank | | Staff experience in current positions | | Staff annual income | | Staff education level | | Staff job position | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Results | Sig. | Results | Sig. | Results | Sig. | Results | Sig. | Results | Sig. | Results | Sig. | Results | Sig. | Results | Sig. |
| Trust | N.D** | | N.D | | N.D | | S.D | 0.000 | N.D | | S.D | 0.001 | N.D | | S.D | 0.026 |
| Interface | N.D | | N.D | | N.D | | S.D | 0.000 | N.D | | S.D | 0.004 | N.D | | S.D | 0.000 |
| Reliability | N.D | | S.D | 0.030 | N.D | | S.D | 0.021 | N.D | | N.D | | N.D | | S.D | 0.000 |
| Tangibles | S.D* | 0.031 | S.D | 0.006 | N.D | | S.D | 0.041 | N.D | | S.D | 0.028 | N.D | | S.D | 0.001 |
| External Service Quality Overall | N.D | | N.D | | N.D | | S.D | 0.000 | N.D | | S.D | 0.001 | N.D | | S.D | 0.000 |

*S.D (Significant Difference), **N.D (No Difference)

# CHAPTER NINE

# RESEARCH HYPOTHESES TESTING: FINDINGS AND INTERPRETATIONS

## 9.1 Introduction

The main objective of this chapter is to test the research hypotheses which examine the relationship between the internal and external service quality. The first section presents the justifications for using multiple regression analysis as an appropriate statistical technique. This is followed by section 9.3 which discusses some of the fundamental assumptions in multiple regression analysis. The issue of multicollinearity is presented in section 9.4 and section 9.5 focuses on the use of dummy variables as control variables in the regression models. Section 9.6 discusses backward elimination approach to variables selection and section 9.7 presents the correlation analysis between the internal and external dimensions of service quality. The testing of the research hypotheses is discussed in section 9.8 and the regression models which examine the relationship between the internal and external service quality on different levels of management (different job positions) are presented in section 9.9.

## 9.2 Justifications for Applying Multiple Regression Analysis

Multiple regression analysis, also known as general linear modeling, is a multivariate statistical technique used to examine the relationship between a single dependent variable and a set of independent variables. The flexibility and adaptability of multiple regression allows it to be used in almost any circumstance where there is a dependence relationship. Multiple regression has been used for many purposes but its most popular application is in the areas of prediction and explanation (Hair *et al.*, 1995).

***Prediction with Multiple Regression Analysis.*** One fundamental purpose of multiple regression is the prediction of a dependent variable from a set of independent variables. Predictive accuracy is crucial to ensure the validity of the independent variable(s), thus allowing for the subsequent interpretation of the variate. The statistical tests regarding the significant of the predictive power of the regression model can be made. In general, the regression analysis must achieve acceptable levels of predictive accuracy in order to justify its application (Hair *et al.*, 1995).

***Explanation with Multiple Regression Analysis.*** Multiple regression provides a means of objectively assessing the relationships between dependent and independent variables by

forming the variate of independent variables (Hair *et al.*, 1995). Interpretation of the regression variate may be influenced by three considerations: the importance of the independent variables, the types of relationships found, or the interrelationships between the independent variables. The most direct interpretation of the regression variate is a determination of the relative importance of each independent variable in the prediction of the dependent variable. Regression analysis provides a means of objectively assessing the magnitude and the direction (positive or negative) of each independent variable's relationship. The multivariate character of multiple regression differentiates it from its univariate counterparts, and means that it can simultaneously assess relationships between each independent variable and the dependent variable. In making this simultaneous assessment, the relative importance of each predictor is determined. In addition to assessing the importance of each independent variable, multiple regression can also provide a means of assessing the nature of the relationships between predictors and dependent variable.

The two primary research objectives were to identify the nature of the relationship between internal and external service quality and to identify some of the most significant internal quality dimensions affecting employees' perceptions of external service quality. Multiple regression analysis was identified as an appropriate statistical method for achieving these objectives.

## 9.3 Assumptions in Multiple Regression analysis

Multiple regression analysis is a parametric technique and, accordingly, the data must be metric data. Multiple regression is also a dependence technique, therefore, the research variables must be classified into independent and dependent variables. Accordingly, interval scales (a seven-point Likert scale) were used to measure the research variables which were divided into independent (internal service quality) and dependent (external service quality) variables.

Hair *et al.* (1995) have argued that sample size affects the generalizability of the results and recommended that as a general rule the ratio of independent to dependent variables should never fall below five. This means that there should be five observations for each independent variable in the regression model. Although the minimum ratio is 5 to 1, Hair *et al.* (1995) argued that the desired level is between 15 to 20. When this level is achieved, the regression results should be generalizable, provided the sample is representative. In this research there are nine independent variables and a sample size of 332, therefore, the ratio was 37

observations for each independent variable. However, when the control variables (15 control variables) were used along with the nine independent variables (forming 24 independent variables), this ratio decreased to 14 observations for each independent variable. Therefore, the number of observations are sufficient to justify the use of multiple regression.

Three fundamental assumptions of multiple regression need to be examined: the linearity of the phenomenon measured, the constant variance of the error terms and the normality of the error term distribution (Malhotra and Birks, 1999; and Hair, *et al.*, 1995). The basic purpose in examining these three assumptions is to ensure that the errors in the predictive capacity of the model are due to an absence of a significant relationship between the variables, or they (i.e., errors) are caused by some characteristics of the data not accommodated by the regression model.

### 9.3.1 Linearity of the Phenomenon

Hair *et al.* (1995) argued that the relationship between dependent and independent variables represents the degree to which the change in the dependent variable associated with the predictor variables (the regression coefficient) is constant across the range values for the independent variable. Hair *et al.* (1995); and Malhotra and Birks (1999) stated that linearity is easily examined by residual plots. A scatter-plot of residuals against predicted values for each of the five regression models used in this research was performed and did not show any patterns indicating the existence of nonlinear relationships (see appendix C). It was concluded, therefore, that the linearity assumption was observed. In multiple regression with more than one independent variable, an examination of the residuals shows the combined effects of all the predictor variables, but it is not possible to examine any predictor variable separately in a residual plot. To examine the effects of the separate predictor variables, the partial regression plots for each independent variable in each of the five regression models was examined and it was also concluded that the linearity assumption was observed for each independent variable.

### 9.3.2 Constant Variance of the Error Term (Homoscedasticity)

Homoscedasticity is an assumption related primarily to dependence relationships between variables. It refers to the assumption that dependent variable(s) should exhibit equal levels of variance across the range of predictors variable(s) (Hair *et al.*, 1995). Homoscedasticity is desirable because the variance of the dependent variable being explained in the dependence relationship should not be concentrated in only a limited range of the independent values.

Therefore, when the variance of the error terms appears constant over a range of predictor variables, the data are said to be homoscedastic. The assumption of constant variance of the error term can be examined by plotting the residuals against the predicted values of the dependent variables, and if the pattern is not random, the variance of the error term is not constant (Malhotra and Birks, 1999). This assumption was examined for all the five regression models by plotting the residuals against the predicted values. The residual plots for all of the regression models showed that the residuals were randomly scattered around a horizontal line through 0 (see appendix C). Therefore, the assumption of Homoscedasticity was achieved.

### 9.3.3 Normality of the Error Term Distribution

Normality is the most important assumption in multivariate analysis. If the variation from normality is sufficiently large, all resulting statistical tests are invalid (Hair *et al.*, 1995). Both the univariate and multivariate statistical methods are based on the assumption of univariate normality, with the multivariate methods also assuming multivariate normality. Multivariate normality (the combination of two or more variables) means that the individual variables are normal in a univariate sense and that their combinations are also normal. Thus, if a variable is multivariable normal, it is by definition also univariate normal. However, the reverse is not necessarily true (two or more univariate normal variables are not necessarily multivariate normal). Therefore, the literature suggests that the test of normality is necessary for each individual variable (independent and dependent variables) and at the multivariate level. Regarding individual variables, the simplest and most popular diagnostic test for normality is a visual check of the histogram. The histogram compares the observed data values with a distribution approximating to a normal distribution. Histograms for all the independent and dependent variables in the five regression model were produced by using SPSS and a visual examination revealed no significant departure from normality.

To examine multivariate normality, the normal probability plot is used to assess the normality of the error term distribution. The normal probability plot compares the cumulative distribution of actual data values with the cumulative distribution of a normal distribution. The normal distribution makes a straight diagonal line, and the plotted data values are compared with the diagonal. If a distribution is normal, the line representing the actual data distribution closely follows the diagonal. Five normal probability plot graphs (one for each regression models) were produced by SPSS and these revealed no significant departure from the diagonal line indicating normality (see appendix C).

## 9.4 Multicollinearity

Multicollinearity is an expression of the relationship between three or more independent variables. Multicollinearity occurs when any single predictor variable is highly correlated with other predictor variables. Hair *et al.* (1995) argued that multicollinearity can result in several problems. First, it limits the size of the coefficient of determination and makes it increasingly difficult to add additional explanatory variables. Second, determining the contribution of each independent variable becomes more difficult because the effects of the independent variables are "mixed" owing to collinearity. Two of the more common measures for assessing multicollinearity are: the tolerance value and the variance inflation factor (VIF). These measures show the degree to which each independent variable is explained by the other independent variables. Tolerance is the amount of variability of the selected independent variable not explained by the other independent variables. Thus, very small tolerance values (and large VIF values) denote high collinearity. A common cut-off point is a tolerance value of .10, which corresponds to a VIF value above 10.

To assess the multicollinearity in the five regression models, the variance inflation factor (VIF) was estimated for each independent variable in each regression model using SPSS (as shown later in the regression models tables). The VIF values for each independent variable in the five regression models indicates no evidence of multicollinearity in the five regression models. The VIF values were all below the cut-off point 10 and, therefore, the level of multicollinearity present in each of the five regression models is acceptable.

## 9.5 Using Dummy Variables as Control Variables

Nominal or categorical variables may be used as predictor or independent variables by coding them as dummy variables (Malhotra and Birks, 1999). Hair *et al.* (1995) defined a dummy variable as a dichotomous variable that represents one category of a nonmetric independent variable. Any no-nmetric variable with *k* categories can be represented as *k-1* dummy variables. In this research we have seven categorical variables (non metric variables), they are: branch location (four categories); branch size (three categories); staff experience in the bank (three categories); staff experience in their current positions (three categories); staff annual income (three categories); staff education level (three categories); and staff job position (three categories). These categorical variables can be presented in the regression model by creating a new dummy variable for each one. The branch location variable, for example, has three dummy variables (location 2, location 3 and location 4) which need to be presented in the regression models and the fourth variable (location 1) will be omitted and

considered as a reference category or comparison group. The same will apply for the other categorical variables. This form of dummy variable coding is known as indicator coding. The regression coefficients for the dummy variables represent deviations from the comparison group (i.e., the omitted group that received all zeros) on the criterion variable. The deviations represent the differences between the means for each group of respondents formed by a dummy variable and the comparison group.

Previous research has used some of the above dummy variables as control variables. For example, Johnson (1996) used branch size and branch location as control variables in order to make a link between employees' perceptions of service climate and customer satisfaction. Paradise-Tornow (1991) also argued that bank size has a moderating effect on the relationship between management practices and organizational performance measures. Furthermore, Hallowell *et al.* (1996) used both different levels of management and education level as control variables in their study to examine the relationship between internal service quality and customer satisfaction. Gabielsen (1993) also found that staff education and staff experience in the bank have a significant impact on their perceptions of service quality management.

Table 9.1: Control Variables Used in the Regression Models

| Categorical Variables | Dummy Variables |
|---|---|
| Branch location | 1. Branch locations 2 (busy and low disposable income area). |
| | 2. Branch location 3 (busy and high disposable income area). |
| | 3. Branch location 4 (high disposable income and wealthy area). |
| Branch size | 4. Medium size branches |
| | 5. Large size branches |
| Staff experience in the bank | 6. Staff experience 2 (staff with 10 to 20 years experience). |
| | 7. Staff experience 3 (staff with more than 20 years experience). |
| Staff experience in their current positions | 8. Current position 2 (staff between 5 to 10 years experience). |
| | 9. Current position 3 (staff with more than 10 years experience). |
| Staff annual income | 10. Staff annual income 2 (staff between 7001 to 11000LE). |
| | 11. Staff annual income 3 (staff with more than 11000LE). |
| Staff education level | 12. University education |
| | 13. Postgraduate education. |
| Staff job position | 14. Supervisors |
| | 15. Front line staff |

As revealed by one-way ANOVA analysis in the previous two chapters, there were a number of significant differences between staff perceptions of internal and external service quality dimensions in the different groups based on the seven categorical variables. Based on the evidence from previous studies and one-way ANOVA analysis, it was decided to use branch location, branch size, staff experience in the bank, staff experience in their current positions, staff annual income, staff education level and staff job position as control variables by

creating new dummy variables. For each regression model 15 control variables were used as shown in table 9.1. The main objective in including control variables in the regression models is to control the effect they might have on the dependent variables (external service quality and its various dimensions). Consequently, it is possible to determine the main effect of the nine independent variables (management support, management effectiveness, working atmospherics, employees service vision, communication, technology, job fit, training and job satisfaction) on the dependent variable. Hierarchical regression analysis was used to determine the effect of the control variables and independent variables on the dependent variables. Thus, every regression model has two nested models (two models are nested if one model contains all the terms of the second model and at least one additional term), the first model includes the control variables only and this model is referred to as the first-order or reduced model. The second model includes both controls and independent variables and is called the second-order or complete model. Hierarchical regression analysis identifies whether the second-order model provides better predictions of the dependent variables than the first-order model. By calculating $\Delta R^2$ and $\Delta$ Adj. $R^2$ values, it is possible to determine whether the independent variables accounted for a significant amount of incremental variance. By calculating F change value, it is also possible to assess the significant level of the incremental variance accounted for by including the independent variables in the complete model.

## 9.6 Backward Elimination as an Approach to Variable Selection

There are a number of different approaches to selecting variables for inclusion in the regression equation. However, they all involve selectively adding or deleting variables from the regression equitation until some overall criterion measure is achieved. This general approach provides an objective method for selecting variables that maximizes prediction with the smallest number of variables. Backward elimination is largely a trial-and-error procedure for finding the best regression estimates. The main purpose of this approach is to select, from a large number of predictor variables, a small subset of variables that account for most of the variation in the dependent variable. Thus, backward elimination involves computing a regression equation with all the predictor variables, then going back and deleting independent variables that do not make a significant contribution. In this research, backward elimination was used for selecting the independent variables that maximizes the prediction of dependent variables. This approach is conducted by SPSS for the second-order models (complete models) and comparisons were made between the independent variables by using the

standardized regression coefficients (Beta coefficients) to identify the most significant independent variables affecting the dependent variable.

### 9.7 The Correlation Analysis Between Internal and External Service Quality

This section is concerned with examining the relationship between internal and external service quality by applying the correlation analysis. The internal service quality dimensions (management support, management effectiveness, working atmospherics, employees service vision, communication, technology, job fit, training, and job satisfaction) are the independent variables in the relationship and the external service quality and its four dimensions (trust, interface, reliability and tangibles) are the dependent variables. Table 9.2 shows that all of the internal service quality dimensions except training were positively related to the overall score of external service quality ($P< 0.01$). Specifically, the strongest correlates of the overall score of external service quality were management support, job fit and management effectiveness ($r= 0.694, 0.677, 0.608, P< 0.01$). No significant relationship was found between training and external service quality. One possible explanation may be that, as revealed in chapter seven, bank staff felt that training programs on external service quality should take place more often. These results were consistent with the work of Schneider *et al* (1992) who found a significant positive correlation between the total SEVQUAL score and responsiveness to customer opinion and hiring procedures ($r= 0.45, 0.42$) but no significant relationship between the total SERVQUAL score and training.

Table 9.2: Internal and External Service Quality Correlation Matrix

| | MSU | MEF | WAT | ESV | COM | TEC | JFI | TRA | JSA |
|---|---|---|---|---|---|---|---|---|---|
| Trust | .664** | .429** | .542** | .184** | .551** | .513** | .653** | -.036 | .523** |
| Interface | .564** | .583** | .432** | .185** | .412** | .362** | .555** | -.0.003 | .316** |
| Reliability | .353** | .528** | .304** | .121* | .316** | .217** | .315** | -.0.003 | .198** |
| Tangibles | .445** | .337** | .498** | .044 | .404** | .383** | .444** | -.025 | .265** |
| External Service Quality Overall Score | .694** | .608** | .589** | .191** | .567** | .505** | .677** | -.019 | .461** |

**Notes:** * Significant at $P<0.05$, ** Significant at $P<0.01$ (Two-tailed test)
MSU: Management Support; MEF: Management Effectiveness; WAT: Working Atmospherics; ESV: Employees Service Vision; COM: Communication; TEC: Technology; JFI: Job Fit; TRA: Training; JSA: Job Satisfaction.

Regarding trust, a significant positive relationship was found between all of the internal service quality dimensions except training and trust. Table 9.2 reveals that the strongest correlates of trust were management support, job fit and job satisfaction ($r= 0.664, 0.653, 0.523, P< 0.01$). These results were once again consistent with the work of Schneider *et al.* (1992) who found significant positive relationships between trust and hiring procedures ($r= 0.45$). The correlation analysis also revealed significant positive relationship between interface and all the internal service quality dimensions except training ($P< 0.01$). The

strongest correlates of interface were management effectiveness, management support and job fit (r= 0.583, 0.564, 0.555 and P< 0.01). With regard to reliability, significant positive relationships were found with all the internal dimensions of service quality except training (P< 0.0.05, 0.01). The strongest correlate of reliability was management effectiveness (r= 0.528, P< 0.01). Table 9.2 also shows that all the internal service quality dimensions except employees service vision and training were positively related to tangibles (P< 0.01). The strongest correlates of tangible were working atmospherics, management support, job fit and communication (*r*= 0.498, 0.445, 0.444, 0.404, P< 0.01). In summary, the correlation analysis between the internal and external service quality revealed that management support, management effectiveness, working atmospherics and job fit have the strongest positive relationships with external service quality and its four dimensions. However, no significant relationship found between training and external service quality. One possible explanation may be the infrequency of training courses on customer service in Egyptian banks.

## 9.8 Multiple Regression Analysis Estimations for the Relationship between Internal and External Service Quality (Hypotheses Testing)

This section is concerned with testing the research hypotheses. The research model is based on the relationship between the internal and external service quality. As mentioned earlier, there are nine internal service quality dimensions: management support, management effectiveness, working atmospherics, employees service vision, communication, technology, job fit, training and job satisfaction. These dimensions are the independent variables in the regression models. The external service quality and its four dimensions: trust, interface, reliability and interface represent the dependent variables in the regression models. Testing the relationship between the internal and external service quality dimensions require five regression models. The independent variables for each model will remain the same (the nine internal service quality dimensions) but each model has a different dependent variable. The overall score of external service quality is the dependent variable in the first regression model. Trust is the dependent variable in the second model, interface is the dependent variable in the third model, reliability is the dependent variable in the fourth model and finally tangibles is the dependent variable in the fifth model.

### 9.8.1 Model 1. The Relationship Between the Internal Service Quality Dimensions and External Service Quality Overall

This model investigates the relationship between the internal dimensions of service quality and external service quality overall. Accordingly, the independent variables in this model are

the internal service quality dimensions and the dependent variable is the overall score of external service quality. This model tests the first nine research hypotheses. Table 9.3 shows the results of the hierarchical regression analysis of the internal service quality dimensions on perceived external service quality. The table shows that the first hierarchical regression model has two nested models, model A (the first-order or reduced model) includes the control variables and model B (the second-order or complete model) includes both control and independent variables. The main objective of including control variables in this model is to control the effect of branch location, branch size, staff experience in the bank, staff experience in their current positions, staff annual income, staff education level and staff job position on the prediction of external service quality. Consequently, it is possible to determine the main effect of the nine independent variables (management support, management effectiveness, working atmospherics, employees service vision, communication, technology, job fit, training and job satisfaction) on external service quality.

Table 9.3 shows that in model A only 12.1% of the total variation in external service quality is explained by the control variables and the F test is significant (F= 2.892, P= 0.000). In model B both the control and the independent variables explained 73.3% of the total variation in the external service quality and once again, the F test is significant (F= 32.427, P= 0.000).

Hierarchical regression aims to examine whether the second-order model (model B) provides better prediction of the dependent variable than the first-order model (model A). By calculating $\Delta R^2$ and $\Delta$ Adj. $R^2$, it is possible to determine whether the independent variables accounted for a significant amount of incremental variance. F change value is also calculated to assess the significance of the incremental variance accounted for by including the independent variables in model B. Entering the independent variables in the regression model (model B) accounted for a significant amount of incremental variance ($\Delta R^2 = 0.612$, F change = 86.829, $P < 0.001$).

Hair *et al.* (1995) claimed that the adjusted coefficient of determination (adjusted $R^2$) is quite useful for comparing equations with different numbers of predictor variables. The adjusted $R^2$, therefore, is a modified measure of the coefficient of determination ($R^2$) which takes into account the number of predictor variables included in the regression equation. While the addition of predictor variables will always cause the coefficient of determination ($R^2$) to rise, the adjusted coefficient of determination (adjusted $R^2$) could fall if the added predictor variables have little explanatory power and are statistically insignificant. Accordingly, table

9.3 shows that entering the internal service quality dimensions in model B increased the adjusted $R^2$ from 0.079 to 0.710 ($\Delta$ Adj. $R^2 = 0.631$). This, therefore, suggests that the internal service quality dimensions have a strong and significant explanatory power in predicting the dependent variable (external service quality).

The results of the hierarchical regression analysis, as shown in table 9.3, revealed that branch location, branch size, staff experience in the bank, staff experience in their current position, staff annual income, staff education levels and staff job position are controlled in the equation presented in model (A) and the main effects associated with internal service quality dimensions (independent variables) were added to estimate model (B). Overall, the nine internal service quality dimensions explain 61.2% ($\Delta$ $R^2$ ) of the total variation in external service quality after controlling the effect of the dummy variables (see table 9.3).

Table 9.3: Results of Hierarchical Regression Analysis: Predicting External Service Quality Overall

| Variables | | External Service Quality (Overall) Model A | | | | External Service Quality (Overall) Model B | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | **Beta** | **t** | **Sig.** | **VIF** | **Beta** | **t** | **Sig.** | **VIF** |
| **Control Variables** | Branch Location 2 | -.004 | -.064 | .949 | 1.770 | -.043 | -1.040 | .299 | 1.830 |
| | Branch Location 3 | -.063 | -.940 | .348 | 1.606 | -.057 | -1.413 | .159 | 1.704 |
| | Branch Location 4 | .050 | .744 | .457 | 1.624 | -.060 | -1.492 | .137 | 1.710 |
| | Medium Size Branches | .005 | .068 | .946 | 1.824 | .078 | 1.832 | .068 | 1.907 |
| | Large Size Branches | .036 | .498 | .619 | 1.878 | .093 | 2.143 | .033 | 2.018 |
| | Staff Experience 2 | .138 | 1.623 | .106 | 2.595 | -.055 | -1.104 | .271 | 2.679 |
| | Staff Experience 3 | .251 | 2.314 | .021 | 4.221 | -.097 | -1.500 | .135 | 4.444 |
| | Staff Current position 2 | -.051 | -.881 | .379 | 1.213 | .003 | .085 | .933 | 1.198 |
| | Staff Current position 3 | -.021 | -.335 | .738 | 1.423 | .009 | .245 | .806 | 1.481 |
| | Staff Annual Income 2 | .119 | 1.715 | .087 | 1.728 | .043 | 1.016 | .311 | 1.860 |
| | Staff Annual Income 3 | .147 | 1.975 | .049 | 1.997 | .052 | 1.182 | .238 | 2.080 |
| | University Education | -.006 | -.070 | .944 | 2.243 | .034 | .732 | .465 | 2.345 |
| | Postgraduate Education | -.049 | -.616 | .538 | 2.304 | -.026 | -.535 | .593 | 2.496 |
| | Supervisors | -.201 | -2.654 | .008 | 2.070 | -.044 | -.953 | .341 | 2.220 |
| | Front line staff | -.166 | -1.651 | .100 | 3.640 | -.091 | -1.514 | .131 | 3.837 |
| **Independent Variables** | Management Support | | | | | **.297** | **5.432** | **.000** | 3.168 |
| | Management Effectiveness | | | | | **.238** | **5.888** | **.000** | 1.730 |
| | Working Atmospherics | | | | | **.190** | **4.221** | **.000** | 2.157 |
| | Employees Service Vision | | | | | **.088** | **2.550** | **.011** | 1.264 |
| | Communication | | | | | -.074 | -1.320 | .188 | 3.326 |
| | Technology | | | | | **.118** | **2.905** | **.004** | 1.750 |
| | Job Fit | | | | | **.228** | **3.912** | **.000** | 3.604 |
| | Training | | | | | -.048 | -1.360 | .175 | 1.351 |
| | Job satisfaction | | | | | .020 | .461 | .645 | 1.919 |
| **$R^2$** | | **0.121** | | | | **0.733** | | | |
| **Adj. $R^2$** | | **0.079** | | | | **.710** | | | |
| **F** | | **2.892** | | | | **32.427** | | | |
| **Sig.** | | **0.000** | | | | **0.000** | | | |
| **$\Delta R^2$** | | | | | | **0.612** | | | |
| **$\Delta$ Adj. $R^2$** | | | | | | **0.631** | | | |
| **F change** | | | | | | **86.829*** | | | |

(a) * Significant at $P<0.001$
(b) Regression coefficients are standardized
(c) All significant levels are based on two-tailed test

In order to test the research hypotheses which examine the relationship between the nine internal service quality dimensions and external service quality overall, the backward elimination method was performed (see table 9.4). This method also aims to determine which of the internal service quality dimensions has the most significant effect on external service quality. Table 9.4 shows that 71.5% of the total variation in external service quality is explained by the control and independent variables. The power in multiple regression analysis refers to the probability of detecting statistically significant level of $R^2$. Hair *et al.* (1995) identified the minimum $R^2$ based on specified sample size and a given number of independent variables. According to the research model, there are nine independent variables with a sample size of 332, Hair *et al.* (1195) suggested that 8 percent to be the minimum value of $R^2$ to be significant at 0.01 significant level. However, the values of $R^2$ (0.723) and Adj. $R^2$ (0.715) are much higher than the suggested value, therefore, the results in this model are very satisfactory. Table 9.4 also showed that there is no evidence of multicollinearity in the regression model as the VIF values are below the cut-off point of 10 (Hair *et al.*, 1995).

Table 9.4 shows that there is a significant positive relationship between six of the nine internal service quality dimensions and the overall score of external service quality. The regression results revealed that there is a significant positive relationship between management support and external service quality *($\beta$= 0.252, t= 6.558, P= 0.000)*. Therefore, *H1* (*higher management support to service quality leads to higher levels of external service quality as perceived by bank staff*) is supported by the data. The Beta coefficient for management effectiveness also suggests that there is a significant positive relationship between management effectiveness and external service quality *($\beta$= 0.250, t= 5.208, P= 0.000)*. Thus, *H3* (*Management effectiveness is positively related to external service quality as perceived by bank staff*) is supported by the evidence.

Table 9.4 also shows a significant positive relationship between working atmospherics and external service quality *($\beta$= 0.189, t= 4.447, P= 0.000)*. Therefore, *H5* (*working atmospherics are positively related to external service quality as perceived by bank staff*) is supported by the research. Regarding the relationship between employees service vision and external service quality, a positive relationship was revealed *($\beta$= 0.081, t= 2.522, P= 0.012)*. Thus, *H7* (*employees service vision is positively related to external service quality as perceived by bank staff*) is supported by the evidence. The backward regression analysis also revealed that there is a significant positive relationship between technology and external

service quality ($\beta$= 0.105, $t$= 2.691, $P$= 0.008). Thus, *H11* (*technology is positively related to external service quality as perceived by bank staff*) is accepted. Furthermore, there is a significant positive relationship between job fit and external service quality *($\beta$= 0.233, $t$= 4.589, P= 0.000)*. Thus, *H13* (*job fit is positively related to external service quality as perceived by bank staff*) is supported by the evidence. However, no significant relationship was found between communication, training and job satisfaction and external service quality (see table 9.4). Thus, *H9* (*communication efficiency is positively related to external service quality as perceived by bank staff*), *H15* (*quality training program is positively related to external service quality as perceived by bank staff*), and *H17* (*higher levels of staff job satisfaction lead to higher levels of external service quality as perceived by bank staff*) are rejected. Despite the non-significant associations revealed by regression analysis, the correlation analysis showed significant positive correlation between communication and external service quality ($r$= 0.567, $P$< 0.01) and also between job satisfaction and external service quality ($r$= 0.461, $P$< 0.01) (see table9.2).

Table 9.4: Results of Backward Regression Analysis: Predicting External Service Quality

Overall

| Variables | | Beta | t | Sig. | VIF |
|---|---|---|---|---|---|
| **Control Variables** | Branch Location 2 | | | | |
| | Branch Location 3 | | | | |
| | Branch Location 4 | | | | |
| | Medium Size Branches | .076 | 1.843 | .066 | 1.814 |
| | Large Size Branches | .098 | 2.368 | .019 | 1.838 |
| | Staff Experience 2 | | | | |
| | Staff Experience 3 | | | | |
| | Staff Current position 2 | | | | |
| | Staff Current position 3 | | | | |
| | Staff Annual Income 2 | | | | |
| | Staff Annual Income 3 | | | | |
| | University Education | .063 | 2.043 | .042 | 1.015 |
| | Postgraduate Education | | | | |
| | Supervisors | | | | |
| | Front line staff | | | | |
| **Independent variables** | Management Support | **.252** | **6.558** | **.000** | **2.527** |
| | Management Effectiveness | **.250** | **5.208** | **.000** | **1.573** |
| | Working Atmospherics | **.189** | **4.447** | **.000** | **1.822** |
| | Employees Service Vision | **.081** | **2.522** | **.012** | **1.104** |
| | Communication | | | | |
| | Technology | **.105** | **2.691** | **.008** | **1.655** |
| | Job Fit | **.233** | **4.589** | **.000** | **2.964** |
| | Training | | | | |
| | Job satisfaction | | | | |
| **$R^2$** | | **0.723** | | | |
| **Adj. $R^2$** | | **0.715** | | | |
| **F** | | **86.748** | | | |
| **Sig.** | | **0.000** | | | |

(a) Regression coefficients are standardised
(b) All significant levels are based on two-tailed test
(c) Empty cells mean that these independent variables are not significant.

As mentioned earlier, the Beta coefficient is used to compare the independent variables and determine their relative importance in the prediction of the dependent variable. Accordingly, table 9.4 shows that management support is the strongest predictor of variation in external service quality ($\beta$= 0.252). Next in sequential order are management effectiveness ($\beta$= 0.250), job fit ($\beta$= 0.233), working atmospherics ($\beta$= 0.189), technology ($\beta$= 0.105) and employees service vision ($\beta$= 0.081).

The service marketing literature emphasizes the importance of managing customer-contact employees because the delivery of service occurs during the interaction between contact employees and customers. Gronroos (1983) argued that the attitudinal and behavioral responses of customer-contact employees are important because of the interactive nature of service delivery (how the service is delivered). Research has also shown that the attitudes and behaviour of contact employees can have both positive and negative affects on customers' perceptions of service quality (Bowen and Schneider, 1985; and Bitner, 1990). The relationship between the internal dimensions of service quality and external service quality has been examined in the literature in different ways. Schneider and Bowen (1985); Schneider *et al.* (1980); and Schneider *et al.* (1998), for example, examined the relationship between customers' perceptions of service quality and employees' perceptions of service climate (service climate refers to employees' perceptions of the practices, procedures, and behaviour that get rewarded, supported, and expected with regard to customer service quality). A key finding of this research was that customer contact employees' perceptions of their organizations' service climate were related to their customer's perceptions to service quality. Wiley (1991); Schmit and Allscheid (1995); and Hartline and Ferrell (1993) also showed similar results in linking employee and customer perceptions, and Heskett *et al.* (1997) reported on several studies which related employee experiences to customer satisfaction.

In another study, Hallowell *et al.* (1996) examined the relationship between the internal service quality dimensions and service capability. They identified eight dimensions of internal service quality: tools, policies and procedures, teamwork, management support, goal alignment, effective training, communication, and rewards and recognition. They defined service capability as the employees' ability to serve their customers and found a significant positive relationship between six dimensions of internal service quality (tools, appropriate policies and procedures, teamwork, management support, goal alignment and training) and

service capability. However, they did not find a significant relationship between service capability and communication and reward and recognition. Nevertheless, one of the key findings of this study is that internal service quality has an indirect relationship with customer satisfaction through employees' service capability. Johnson (1996) also examined the relationship between employee perceptions of service climate and customer satisfaction. This study reported that the dimensions of information seeking, training, and reward and recognition showed the strongest relationships with overall customer satisfaction. On the other hand, service support, management service orientation, and employee service orientation had the weakest relationships with overall customer satisfaction.

The results of the present study support a number of assumptions commonly made in the service marketing literature about the relationship between employees' perceptions of the way their organization functions and external service quality. One of the main findings of the present study is that there is a significant positive relationship between management support and staff perceptions of external service quality ($\beta$= 0.252) (see table 9.4). Some researchers argued that management support is the single most important determinant of good external customer service (George, 1990; and Gronroos, 1993). Previous studies which examined the relationship between service contact employees' attitudinal and behavioral responses to external service quality (Bitner, 1990; and Bitner *et al.*, 1994) also found that managers can influence customer-contact employees' attitudes and thereby, enhance service quality. Furthermore, Heskett *et al.* (1990); Hallowell *et al.* (1996); and Church (1995) argued that employees who receive support from their managers, are more likely to provide better service to external customers. This is because management support is important and necessary in motivating staff to provide a high level of external customer service (Albrecht and Zemke, 1985; Heskett, 1986; Heskett, 1987; and Heskett *et al.*, 1990). Although previous studies failed to find a direct relationship between management commitment to service quality and external service quality (Parasuraman *et al.*, 1990), the present study does report a significant positive relationship between management support and external service quality.

The present study also shows a significant positive relationship between management effectiveness and external service quality ($\beta$= 0.250) which was consistent with previous studies. Management effectiveness refers to the effectiveness of management in reducing staff feelings of role conflict and role ambiguity. Early studies by Schneider (1980) and Shamir (1980) revealed that employees' role stress (conflict and ambiguity) are major

contributors to their inability to deliver good service. Singh (1993) provides empirical evidence that role ambiguity experienced by service contact staff greatly reduces their job performance. Contact employees who experience ambiguous or conflicting role expectations are also likely to exhibit decreased job performance, which leads to a decrease in customers' perception of service quality (Schneider, 1980). Although Parasuraman *et al.* (1990) found no support for a direct relationship between role conflict or ambiguity and external service quality, the present study reveals that the more management effective in reducing staff feelings of role conflict and ambiguity, the higher the level of service quality delivered to external customers.

The present study also revealed a significant positive relationship between working atmospherics and staff perceptions of external service quality ($\beta$= 0.189) (see table9-4). The working atmospherics variable in this research refers to the quality of working environment, the supervision quality and employees empowerment. Researchers have argued that to effectively manage customer contact employees, managers should maintain a flexible working environment (schneider, 1980) and increase employees' discretion (empowerment) in serving customers (Bowen and Lawler, 1992; and Kelley, 1993). Hartline and Ferrell (1996) argued that empowerment is necessary because customer contact employees need the flexibility to make important decisions and, thereby, completely satisfy customers. Allowing contact employees to use their discretion in serving customers has a number of positive influences. For example, Bowen and Lawler (1992) suggested that empowered employees feel better about their jobs and more enthusiastic about serving customers. Regarding the quality of supervision, Schneider and Bowen (1993) proposed that when employees are supported by supervisors, they can then devote themselves more fully to meeting the demands of external customers. The present study was, therefore, broadly consistent with previous studies in reporting that the higher staff perceptions of the quality of working atmospherics, the higher the level of service quality delivered to external customers.

The regression analysis results, as shown in table 9.4, revealed a significant positive relationship between employees service vision and external service quality ($\beta$= 0.081). This relationship is consistent with the fact that to manage customer contact employees, managers need to increase their commitment to service (George, 1990; and Zeithaml *et al.*, 1988). Employees service vision directly impacts on customers' perceptions of the quality of service they receive (Berry *et al.*, 1994; Bitner, 1990, 1992; Bitner *et al.*, 1990; sasser and Jones,

1995; and Schneider *et al.*, 1992). Seddon (1992); and Lewis and Gabrielsen, (1998) also argued that employees feelings of responsibility for meeting and exceeding customer expectations are important in delivering high levels of external service quality. Likewise, Albrecht and Zemke (1985) argued that having service-oriented people at all levels of the organization determines an organization's ability to deliver high quality service. The present study supports, therefore, these previous studies in that the more the service-oriented staff are, the higher the level of service quality delivered to external customers.

A finding from the present research that does not fit quite so well with previous research concerns the finding on the relationship between communication efficiency and staff perceptions of external service quality. No significant relationship between communication efficiency and external service quality was found. However, the correlation analysis did reveal a significant positive correlation between the two variables ($r = 0.567$, $P< 0.01$) (see table 9.2). Similar studies in the service marketing area revealed no significant relationship between communication efficiency and staff ability to serve their customers well (Hallowell *et al.*, 1996).

The present study also revealed a significant positive relationship between technology and staff perceptions of external service quality ($\beta= 0.105$). This is consistent with the fact that organizations use of technology and technology-based systems is arguably one of the most critical ingredients of success because it supports staff in delivering a superior customer service (Lytle *et al.*, 1998). Zeithaml *et al.* (1988) also argued that provision of a high quality service depends on the appropriateness of the tools or technology the employees use.

Regarding the relationship between job fit and external service quality, a significant positive relationship was found between the two variables ($\beta= 0.233$). The job fit variable in the present study refers to the ability of staff to do a good job and satisfy external customers. Previous studies have discussed the relationship between job fit and external service quality in a number of different ways. Hartline and Ferrell (1996), for example, used the term "employee self-efficacy" to refer to an employee's belief in his or her ability to perform job-related tasks. Gris and Mitchell (1992) argued that self-efficacy grows stronger over time as employees successfully perform tasks and build confidence necessary to fulfill their role in the organization. As self-efficacy increases, employees typically exert more effort, become more persistent, and learn to cope with task-related obstacles (Bandura, 1977; and Gist, 1987).

Empirical studies confirm that self-efficacy has a strong, positive relationship with employee performance (Earley, 1994). The self-efficacy of contact employees, therefore, plays an important role in shaping customers' perceptions of the service encounter because employee performance during a service encounter normally involves responding to customer needs, handling special requests, and performing under adverse circumstances (Bitner *et al.*, 1990). Because of the increased effort that accompanies self-efficacy, highly self-efficacious contact employees should perform better in these service activities, thereby increasing customers' perceptions of service quality. Likewise, self-efficacious contact employees should be able to cope with demanding situations that arise during the service encounter. Hartline and Ferrell (1996) also argued that when customers are served by employees who believe strongly in their own abilities, they are likely to receive higher-quality service.

Hartline and Ferrell (1996) also used the term of "employee adaptability" to refer to the ability of contact employees to adjust their behaviour to the interpersonal demands of the service encounter. Employee adaptability has been linked with customers' perceptions of the service encounter. Humphery and Ashforth (1994), for example, provided evidence to show that employees who "mindlessly" follow a service script are more likely to make mistakes and less likely to meet the individual needs of their customers. Bitner (1990); and Bitner *et al.* (1990) showed that customers evaluate the service encounter more favorably when employees adapt to meet their specific needs and requests. Moreover, Hartline and Ferrell (1996) claimed that contact employees who adapt their behaviour during customer interactions are more likely to fulfill the needs and requests of their customers and thereby increase customers' perceptions of service quality.

Reward and performance appraisal systems are important motivating factors for customer contact staff. Accordingly, researchers have argued that to effectively manage customer contact employees, managers should place greater emphasis on rewarding employees for their contribution to customer satisfaction (Bowen and Schneider, 1985; and Reardon and Enis, 1990). Similarly, Parasuraman *et al.* (1994); Heskett *et al.* (1990); Schlesinger and Heskett (1991); and Schneider and Bowen (1995) argued that the linkage between employee reward and service performance is an important element in delivering a high level of external service quality. Anderson and Oliver (1987) also made the same claim for that behaviour-based. Under a behaviour-based system, contact employees are evaluated and compensated on the basis of set criteria such as effort, commitment, teamwork, customer orientation, friendless, the ability to solve customer problems, and other behaviour that are directed toward improved

service quality (Bowen and Schneider, 1985; and Reardon and Enis, 1990). Linking evaluation to service-related behavioral criteria gives employees the incentive to engage in behaviour that is conducive to improved service quality (George, 1990; and Gronroos, 1983). Just as important, it also gives employees more control over the functions that affect performance evaluation (Anderson and Oliver, 1987; and Cravens *et al.*, 1993). Finally, Johnson (1996) found that employee rewards and recognition are significantly and strongly related to levels of customer satisfaction. This discussion indicates that the present study is consistent with previous studies in revealing that staff job fit has a positive impact on the quality of external service.

Another finding from the present research that does not fit well with most current thinking concerns the finding on the relationship between quality training programs and staff perceptions of external service quality. No significant relationship between training and external service quality was found. It was expected that training would have a positive and direct impact on the quality of external service. Lewis and Gabrielsen, (1998), for example, argued that the ability of employees to satisfy external customers depends on the quantity and quality of training. McAtarsney (1999) also argued that training is a critical success factor in delivering a quality service, because it determines what service is to be delivered and how it will be delivered. Johnson (1996) accordingly reported a significant positive relationship between training and customers satisfaction. Similarly, Hallowell *et al.* (1996) revealed a significant positive relationship between training and staff ability to perform their job. The absence of a significant relationship between training and external service quality in the present study may be due to that training programs in Egyptian banks do not emphasis the importance of external service quality. The descriptive analysis in chapter seven also revealed that quality service training programs should take place more often.

Regarding the relationship between job satisfaction and external service quality, Churchill *et al.* (1985) argued that job satisfaction is closely related to employees' behavioral performance. Some academic commentators have argued that during the service encounter, employee behavioral performance often is the service, as perceived by customers (Bitner, 1990). The job satisfaction-service quality relationship is, therefore, grounded in the notion that satisfied employees are more likely to engage in behaviour that assists customers (Locke and Latham, 1990; and Weatherly and Tansik, 1993). Schneider (1980) for example, found that job satisfaction is a primary reason in explaining why employees deliver a good service. Furthermore, many other researchers have argued that customers' perceptions of a service are

influenced by employee job satisfaction (Hartline and Ferrell; 1996; Bowen and Schneider, 1985; and Gronroos, 1983). Despite this almost intuitive connection between job satisfaction and employee performance, Brown and Peterson (1993) found a modest correlation only (0.15) between employee satisfaction and performance. Moreover, Schneider *et al.* (1980) reported no significant relationship between employee job satisfaction and customers' perceptions of service quality. In accord with these latter studies, the present study revealed no significant relationship between staff job satisfaction and staff perceptions of external service quality. However, the correlation analysis showed a significant positive correlation between the two variables ($r = 0.461$, $P< 0.01$) (see table9.2).

In concluding this part of the chapter, the Beta coefficient has been used to compare the independent variables and determine their relative importance in predicting the dependent variable. Table 9.4 showed that management support was the strongest predictor of variation in external service quality ($\beta= 0.252$) and the literature review showed this was consistent with previous studies. Some researchers have argued that management support to improve external service quality is the single most important determinant of good external service (George, 1990; and Gronroos, 1993). Next in terms of importance was management effectiveness ($\beta= 0.250$), therefore, it would appear that this research has identified management support and effectiveness as the most significant independent variables affecting the prediction of external service quality. This indicates that service orientation of bank management has a strong impact on the service quality delivered by customer contact employees to external customers.

The next four models examine the relationship between the internal and external service quality dimensions.

### 9.8.2 Model 2. The Relationship Between the Internal Service Quality Dimensions and Trust

This model examines the relationship between the internal dimensions of service quality and trust as an external service quality dimension. Accordingly, the independent variables for this model are the internal service quality dimensions and the dependent variable is trust. Table 9.5 shows the hierarchical regression analysis results of the relationship between the internal service quality dimensions and trust. In model A, where only the control variables are entered as independent variables, only 10.6% of the total variation in trust is explained, however, it is significant in terms of the F test (F= 2.486, P= 0.002). In model B both the control and the

independent variables are used. They explained 67.3% of the total variation in trust and it is significant in terms of the F test (F= 24.839, P= 0.000). Entering the independent variables in the regression model (model B) accounted for a significant amount of incremental variance ($\Delta R^2 = 56.7\%$, $\Delta$ Adj. $R^2 = 58.3\%$, F change = 76.779, P< 0.001). The nine internal service quality dimensions explain 56.7% ($\Delta R^2$) of the total variation in trust after controlling the effect of the dummy variables. Therefore, the internal service quality dimensions have a strong and significant explanatory power in predicting the trust.

Table 9.5: Results of Hierarchical Regression Analysis: Predicting Trust

| Variables | | Trust Model A | | | | Trust Model B | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Beta | t | Sig. | VIF | Beta | t | Sig. | VIF |
| **Control Variables** | Branch Location 2 | -.016 | -.228 | .820 | 1.770 | -.030 | -.649 | .517 | 1.839 |
| | Branch Location 3 | -.076 | -1.129 | .260 | 1.606 | -.098 | -2.246 | .025 | 1.699 |
| | Branch Location 4 | .078 | 1.145 | .253 | 1.624 | -.010 | -.231 | .818 | 1.717 |
| | Medium Size Branches | -.017 | -.239 | .811 | 1.824 | .068 | 1.481 | .140 | 1.890 |
| | Large Size Branches | -.016 | -.217 | .828 | 1.878 | -.003 | -.054 | .957 | 1.942 |
| | Staff Experience 2 | .157 | 1.832 | .068 | 2.595 | .003 | .055 | .956 | 2.746 |
| | Staff Experience 3 | .326 | 2.984 | .003 | 4.221 | .030 | .424 | .672 | 4.535 |
| | Staff Current position 2 | -.113 | -1.930 | .055 | 1.213 | -.064 | -1.730 | .085 | 1.213 |
| | Staff Current position 3 | -.056 | -.878 | .381 | 1.423 | -.062 | -1.528 | .128 | 1.475 |
| | Staff Annual Income 2 | .166 | 2.370 | .018 | 1.728 | .038 | .842 | .401 | 1.822 |
| | Staff Annual Income 3 | .164 | 2.177 | .030 | 1.997 | .046 | .956 | .340 | 2.064 |
| | University Education | -.053 | -.671 | .503 | 2.243 | -.055 | -1.057 | .291 | 2.371 |
| | Postgraduate Education | -.124 | -1.537 | .125 | 2.304 | -.095 | -1.785 | .075 | 2.496 |
| | Supervisors | -.073 | -.950 | .343 | 2.070 | .090 | 1.805 | .072 | 2.179 |
| | Front line staff | .017 | .166 | .868 | 3.640 | .067 | 1.029 | .304 | 3.798 |
| **Independent Variables** | Management Support | | | | | **.296** | **5.213** | **.000** | 2.862 |
| | Management Effectiveness | | | | | -.001 | -.019 | .985 | 1.728 |
| | Working Atmospherics | | | | | **.114** | **2.326** | **.021** | 2.133 |
| | Employees Service Vision | | | | | **.131** | **3.437** | **.001** | 1.279 |
| | Communication | | | | | .025 | .416 | .678 | 3.094 |
| | Technology | | | | | **.124** | **2.847** | **.005** | 1.671 |
| | Job Fit | | | | | **.247** | **4.003** | **.000** | 3.367 |
| | Training | | | | | .004 | .110 | .913 | 1.335 |
| | Job satisfaction | | | | | **.125** | **2.712** | **.007** | 1.877 |
| **$R^2$** | | **0.106** | | | | **0.673** | | | |
| **Adj. $R^2$** | | **0.063** | | | | **0.646** | | | |
| **F** | | **2.486** | | | | **24.839** | | | |
| **Sig.** | | **0.002** | | | | **0.000** | | | |
| **$\Delta R^2$** | | | | | | **0.567** | | | |
| **$\Delta$ Adj. $R^2$** | | | | | | **0.583** | | | |
| **F change** | | | | | | **76.779*** | | | |

(a) * Significant at $P<0.001$
(b) Regression coefficients are standardised
(c) All significant levels are based on two-tailed test

The backward elimination method is then used in order to test the research hypotheses which examine the relationship between the nine internal service quality dimensions and trust. It is also used to identify the most significant internal service quality dimensions affecting trust. Table 9.6 shows that 66% of the total variation in trust is explained by the control and independent variables. It was also clear that there is no evidence of multicollinearity in the regression model as the VIF values are below the cut-off point of 10 (Hair *et al.*, 1995).

The regression analysis results shown in table 9.6 revealed that there is a significant and positive relationship between six of the nine internal service quality dimensions and trust. The Beta coefficient has been used to compare the internal dimensions of service quality and to determine their relative importance in predicting trust. Management support is the strongest predictor of variation in trust *(β= 0.293, t= 6.025, P= 0.000)*. Next in sequential order are job fit *(β= 0.271, t= 4.953, P= 0.000)*, job satisfaction *(β= 0.145, t= 3.398, P= 0.001)*, technology *(β= 0.117, t= 2.787, P= 0.006)*, employees service vision *(β= 0.115, t= 3.195, P= 0.002)* and working atmospherics ($\beta$= 0.108, $t$= 2.418, $P$= 0.016). In contrast, no significant relationships were found between management effectiveness, communication and training and trust. However, the correlation analysis revealed a significant and positive correlation between management effectiveness and trust ($r$= 0.429, $P$< 0.01) and also between communication and trust ($r$= 0.551, $P$< 0.01) (see table 9.2).

Table 9.6: Results of Backward Regression Analysis: Predicting Trust

| Variables | | Beta | t | Sig. | VIF |
|---|---|---|---|---|---|
| **Control Variables** | Branch Location 2 | | | | |
| | Branch Location 3 | -.068 | -2.011 | .045 | 1.024 |
| | Branch Location 4 | | | | |
| | Medium Size Branches | .072 | 2.113 | .035 | 1.031 |
| | Large Size Branches | | | | |
| | Staff Experience 2 | | | | |
| | Staff Experience 3 | | | | |
| | Staff Current position 2 | | | | |
| | Staff Current position 3 | | | | |
| | Staff Annual Income 2 | | | | |
| | Staff Annual Income 3 | | | | |
| | University Education | | | | |
| | Postgraduate Education | | | | |
| | Supervisors | | | | |
| | Front line staff | | | | |
| **Independent variables** | Management Support | .293 | 6.025 | .000 | 2.130 |
| | Management Effectiveness | | | | |
| | Working Atmospherics | .108 | 2.418 | .016 | 1.795 |
| | Employees Service Vision | .115 | 3.195 | .002 | 1.167 |
| | Communication | | | | |
| | Technology | .117 | 2.787 | .006 | 1.593 |
| | Job Fit | .271 | 4.953 | .000 | 2.695 |
| | Training | | | | |
| | Job satisfaction | .145 | 3.398 | .001 | 1.635 |
| **$R^2$** | | **0.660** | | | |
| **Adj. $R^2$** | | **0.651** | | | |
| **F** | | **74.220** | | | |
| **Sig.** | | **0.000** | | | |

(a) Regression coefficients are standardised
(b) All significant levels are based on two-tailed test
(c) Empty cells mean that these independent variables are not significant.

### 9.8.3 Model 3. The Relationship Between the Internal Service Quality Dimensions and Interface

This model investigates the relationship between the internal service quality dimensions and interface. The independent variables in this model are the internal service quality dimensions and the dependent variable is interface. Table 9.7 shows the hierarchical regression analysis results of the relationship between the internal service quality dimensions and interface. In model A, only 10.5% of the total variation in interface is explained, however, it is significant in terms of the F test (F= 2.466, P= 0.002). In model B both the control and the independent variables are used and they explained 57.8% of the total variation in interface and it is significant in terms of the F test (F= 16.440, P= 0.000).

Table 9.7: Results of Hierarchical Regression Analysis: Predicting interface

| Variables | | Interface Model A | | | | Interface Model B | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Beta | t | Sig. | VIF | Beta | t | Sig. | VIF |
| **Control Variables** | Branch Location 2 | -.028 | -.390 | .697 | 1.770 | .001 | .013 | .989 | 1.807 |
| | Branch Location 3 | -.003 | -.041 | .967 | 1.606 | .053 | 1.062 | .289 | 1.729 |
| | Branch Location 4 | .014 | .208 | .835 | 1.624 | -.027 | -.527 | .598 | 1.724 |
| | Medium Size Branches | .036 | .500 | .617 | 1.824 | .077 | 1.469 | .143 | 1.871 |
| | Large Size Branches | .085 | 1.171 | .242 | 1.878 | .094 | 1.762 | .079 | 1.941 |
| | Staff Experience 2 | .054 | .631 | .528 | 2.595 | -.078 | -1.221 | .223 | 2.783 |
| | Staff Experience 3 | .153 | 1.402 | .162 | 4.221 | -.061 | -.738 | .461 | 4.729 |
| | Staff Current position 2 | -.031 | -.523 | .601 | 1.213 | .020 | .471 | .638 | 1.235 |
| | Staff Current position 3 | -.011 | -.169 | .866 | 1.423 | .074 | 1.595 | .112 | 1.474 |
| | Staff Annual Income 2 | .111 | 1.580 | .115 | 1.728 | .084 | 1.652 | .100 | 1.777 |
| | Staff Annual Income 3 | .129 | 1.718 | .087 | 1.997 | .099 | 1.811 | .071 | 2.032 |
| | University Education | .058 | .730 | .466 | 2.243 | .076 | 1.296 | .196 | 2.342 |
| | Postgraduate Education | .033 | .406 | .685 | 2.304 | .044 | .730 | .466 | 2.451 |
| | Supervisors | -.164 | -2.137 | .033 | 2.070 | -.008 | -.140 | .889 | 2.212 |
| | Front line staff | -.231 | -2.271 | .024 | 3.640 | -.108 | -1.412 | .159 | 4.007 |
| **Independent Variables** | Management Support | | | | | **.200** | **3.026** | **.003** | 2.969 |
| | Management Effectiveness | | | | | **.373** | **7.455** | **.000** | 1.706 |
| | Working Atmospherics | | | | | -.005 | -.093 | .926 | 2.315 |
| | Employees Service Vision | | | | | **.082** | **1.956** | **.051** | 1.207 |
| | Communication | | | | | -.061 | -.876 | .382 | 3.274 |
| | Technology | | | | | -.016 | -.320 | .749 | 1.779 |
| | Job Fit | | | | | **.311** | **4.260** | **.000** | 3.637 |
| | Training | | | | | -.019 | -.446 | .656 | 1.297 |
| | Job satisfaction | | | | | -.009 | -.172 | .863 | 1.747 |
| **$R^2$** | | **0.105** | | | | **0.578** | | | |
| **Adj. $R^2$** | | **0.062** | | | | **0.543** | | | |
| **F** | | **2.466** | | | | **16.440** | | | |
| **Sig.** | | **0.002** | | | | **0.000** | | | |
| **$\Delta R^2$** | | | | | | **0.473** | | | |
| **$\Delta$ Adj. $R^2$** | | | | | | **0.481** | | | |
| **F change** | | | | | | **49.076*** | | | |

(a) * Significant at $P<0.001$
(b) Regression coefficients are standardised
(c) All significant levels are based on two-tailed test

Entering the independent variables in the regression model (model B) accounted for a significant amount of incremental variance ($\Delta R^2 = 47.3$, $\Delta$ Adj. $R^2 = 48.1\%$, F change = 49.076, P< 0.001). The nine internal service quality dimensions explain 47.3% ($\Delta R^2$) of the

total variation in interface after controlling the effect of the dummy variables. Therefore, the internal service quality dimensions have a strong and significant explanatory power in predicting interface.

The backward elimination method was used to test the research hypotheses which examine the relationship between the internal service quality dimensions and interface. It is also used to determine the most significant internal service quality dimensions affecting the prediction of interface. Table 9.8 shows that 55.7% of the total variation in interface is explained by the control and independent variables. No evidence of multicollinearity was found in the regression model as the VIF values are below the cut-off point of 10 (Hair *et al.*, 1995).

Table 9.8: Results of Backward Regression Analysis: Predicting Interface

| Variables | | Beta | t | Sig. | VIF |
|---|---|---|---|---|---|
| **Control Variables** | Branch Location 2 | | | | |
| | Branch Location 3 | | | | |
| | Branch Location 4 | | | | |
| | Medium Size Branches | | | | |
| | Large Size Branches | | | | |
| | Staff Experience 2 | | | | |
| | Staff Experience 3 | | | | |
| | Staff Current position 2 | | | | |
| | Staff Current position 3 | | | | |
| | Staff Annual Income 2 | | | | |
| | Staff Annual Income 3 | | | | |
| | University Education | .068 | 1.787 | .075 | 1.009 |
| | Postgraduate Education | | | | |
| | Supervisors | | | | |
| | Front line staff | -.093 | -2.382 | .018 | 1.051 |
| **Independent variables** | Management Support | .171 | 3.028 | .003 | 2.196 |
| | Management Effectiveness | .368 | 7.793 | .000 | 1.537 |
| | Working Atmospherics | | | | |
| | Employees Service Vision | .086 | 2.209 | .028 | 1.050 |
| | Communication | | | | |
| | Technology | | | | |
| | Job Fit | .279 | 5.087 | .000 | 2.084 |
| | Training | | | | |
| | Job satisfaction | | | | |
| **$R^2$** | | **0.557** | | | |
| **Adj. $R^2$** | | **0.548** | | | |
| **F** | | **64.108** | | | |
| **Sig.** | | **0.000** | | | |

(a) Regression coefficients are standardised
(b) All significant levels are based on two-tailed test
(c) Empty cells mean that these independent variables are not significant.

The results of the regression analysis shown in table 9.8 reveals that four of the nine internal service quality dimensions have a significant and positive impact on interface. In sequential order of the predicting power, management effectiveness has the most significant impact on interface *($\beta$= 0.368, t= 7.793, P= 0.000)*, followed by job fit *($\beta$= 0.279, t= 5.087, P= 0.000)*,

management support *(β= 0.171, t= 3.028, P= 0.003)* and employees service vision *(β= 0.086, t= 2.209, P= 0.028)*. In contrast, the regression analysis revealed no significant relationships between working atmospherics, communication, technology, training and job satisfaction and interface. However, the correlation analysis did reveal a significant positive correlation between working atmospherics, communication, technology and job satisfaction and interface ($r$= 0.432, 0.412, 0.362, 0.316, P< 0.01) (see table 9.2).

### 9.8.4 Model 4. The Relationship Between the Internal Service Quality Dimensions and Reliability

This model investigates the relationship between the internal dimensions of service quality and reliability. Table 9.9 shows the results of the hierarchical regression analysis of the relationship between the internal dimensions of service quality and reliability.

Table 9.9: Results of Hierarchical Regression Analysis: Predicting Reliability

| Variables | | Reliability Model A | | | | Reliability Model B | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | **Beta** | **t** | **Sig.** | **VIF** | **Beta** | **t** | **Sig.** | **VIF** |
| **Control Variables** | Branch Location 2 | .032 | .448 | .654 | 1.770 | -.046 | -.787 | .432 | 1.845 |
| | Branch Location 3 | -.071 | -1.047 | .296 | 1.606 | -.137 | -2.438 | .015 | 1.727 |
| | Branch Location 4 | -.118 | -1.735 | .084 | 1.624 | -.144 | -2.588 | .010 | 1.690 |
| | Medium Size Branches | .114 | 1.587 | .114 | 1.824 | .141 | 2.439 | .015 | 1.814 |
| | Large Size Branches | .162 | 2.226 | .027 | 1.878 | .152 | 2.558 | .011 | 1.920 |
| | Staff Experience 2 | .109 | 1.276 | .203 | 2.595 | .008 | .109 | .913 | 2.769 |
| | Staff Experience 3 | .113 | 1.030 | .304 | 4.221 | -.077 | -.851 | .396 | 4.483 |
| | Staff Current position 2 | .046 | .782 | .435 | 1.213 | .034 | .734 | .464 | 1.201 |
| | Staff Current position 3 | -.031 | -.483 | .630 | 1.423 | -.031 | -.591 | .555 | 1.494 |
| | Staff Annual Income 2 | -.066 | -.943 | .347 | 1.728 | -.111 | -1.895 | .059 | 1.879 |
| | Staff Annual Income 3 | .009 | .126 | .900 | 1.997 | -.066 | -1.059 | .290 | 2.122 |
| | University Education | .030 | .382 | .703 | 2.243 | .047 | .701 | .484 | 2.417 |
| | Postgraduate Education | .019 | .236 | .813 | 2.304 | -.009 | -.124 | .901 | 2.601 |
| | Supervisors | -.268 | -3.497 | .001 | 2.070 | -.064 | -1.016 | .310 | 2.185 |
| | Front line staff | -.183 | -1.798 | .073 | 3.640 | -.045 | -.545 | .586 | 3.760 |
| **Independent Variables** | Management Support | | | | | **.191** | **2.557** | **.011** | 3.057 |
| | Management Effectiveness | | | | | **.457** | **8.032** | **.000** | 1.767 |
| | Working Atmospherics | | | | | **.156** | **2.521** | **.012** | 2.098 |
| | Employees Service Vision | | | | | **.109** | **2.338** | **.020** | 1.186 |
| | Communication | | | | | -.052 | -.681 | .497 | 3.134 |
| | Technology | | | | | -.011 | -.199 | .842 | 1.694 |
| | Job Fit | | | | | -.054 | -.668 | .505 | 3.543 |
| | Training | | | | | -.063 | -1.270 | .205 | 1.334 |
| | Job satisfaction | | | | | .022 | .383 | .702 | 1.867 |
| **$R^2$** | | **0.105** | | | | **0.484** | | | |
| **Adj. $R^2$** | | **0.062** | | | | **0.440** | | | |
| **F** | | **2.461** | | | | **11.000** | | | |
| **Sig.** | | **0.002** | | | | **0.000** | | | |
| **Δ $R^2$** | | | | | | **0.379** | | | |
| **Δ Adj. $R^2$** | | | | | | **0.378** | | | |
| **F change** | | | | | | **32.454*** | | | |

(a) * Significant at $P$<0.001
(b) Regression coefficients are standardised
(c) All significant levels are based on two-tailed test

In model A only 10.5% of the total variation in reliability is explained by the control variables but it is significant in terms of the F test (F= 2.461, P= 0.002). In model B the control and independent variables explained 48.4% of the total variation in reliability and it is significant in terms of the F test (F= 11.000, P= 0.000). Entering of the independent variables in the regression model (model B) accounted for a significant amount incremental variance ($\Delta R^2$ = 37.9%, $\Delta$ Adj. $R^2$ = 37.8%, F change = 32.454, P< 0.001). The internal service quality dimensions explain 37.9 ($\Delta R^2$) of the total variation in reliability after controlling the effect of the dummy variables. Therefore, the internal service quality dimensions have a strong and significant explanatory power in predicting reliability.

The backward elimination results, as shown in table 9.10, revealed that 46.3% of the total variation in reliability is explained by the control and independent variables. Table 9.10 also shows that there is no evidence of multicollinearity in the regression model as the VIF values are below the cut-off point of 10 (Hair *et al.*, 1995).

Table 9.10: Results of Backward Regression Analysis: Predicting Reliability

| **Variables** | | **Beta** | **t** | **Sig.** | **VIF** |
|---|---|---|---|---|---|
| **Control Variables** | Branch Location 2 | | | | |
| | Branch Location 3 | -.102 | -2.270 | .024 | 1.117 |
| | Branch Location 4 | -.137 | -3.001 | .003 | 1.145 |
| | Medium Size Branches | .153 | 2.721 | .007 | 1.742 |
| | Large Size Branches | .176 | 3.067 | .002 | 1.827 |
| | Staff Experience 2 | | | | |
| | Staff Experience 3 | -.078 | -1.736 | .084 | 1.116 |
| | Staff Current position 2 | | | | |
| | Staff Current position 3 | | | | |
| | Staff Annual Income 2 | | | | |
| | Staff Annual Income 3 | | | | |
| | University Education | | | | |
| | Postgraduate Education | | | | |
| | Supervisors | | | | |
| | Front line staff | | | | |
| **Independent variables** | Management Support | .127 | 2.166 | .031 | 1.904 |
| | Management Effectiveness | .471 | 8.753 | .000 | 1.598 |
| | Working Atmospherics | .142 | 2.720 | .007 | 1.510 |
| | Employees Service Vision | .095 | 2.167 | .031 | 1.060 |
| | Communication | | | | |
| | Technology | | | | |
| | Job Fit | | | | |
| | Training | | | | |
| | Job satisfaction | | | | |
| **$R^2$** | | **0.463** | | | |
| **Adj. $R^2$** | | **0.446** | | | |
| **F** | | **28.412** | | | |
| **Sig.** | | **0.000** | | | |

(a) Regression coefficients are standardised
(b) All significant levels are based on two-tailed test
(c) Empty cells mean that these independent variables are not significant.

The regression results revealed that there is a significant and positive relationship between four of the nine internal service quality dimensions and reliability. Regarding the relative importance of the internal service quality dimensions in predicting reliability, table 9.10 shows that management effectiveness is the strongest predictor of variations in reliability *(β= 0.471, t= 8.753, P= 0.000)*. Next in sequential order are working atmospherics *(β= 0.142, t= 2.720, P= 0.007)*, management support *(β= 0.127, t= 2.166, P= 0.031)* and employees service vision *(β= 0.095, t= 2.167, P= 0.031)*.

In contrast, the regression results in table 9.10 revealed that there are no significant relationships between communication, technology, job fit, training and job satisfaction and reliability. However, the correlation analysis shows a significant positive correlation between communication, technology, job fit, training and job satisfaction and reliability ($r$= 0.316, 0.217, 0.315, 0.198, P< 0.01) (see table 9.2).

Table 9.11: Results of Hierarchical Regression Analysis: Predicting Tangibles

| Variables | | Tangibles Model A | | | | Tangibles Model B | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | **Beta** | **t** | **Sig.** | **VIF** | **Beta** | **t** | **Sig.** | **VIF** |
| **Control Variables** | Branch Location 2 | .029 | .406 | .685 | 1.770 | -.058 | -.983 | .327 | 1.813 |
| | Branch Location 3 | -.052 | -.767 | .443 | 1.606 | -.116 | -2.010 | .045 | 1.729 |
| | Branch Location 4 | .156 | 2.298 | .022 | 1.624 | .027 | .463 | .644 | 1.775 |
| | Medium Size Branches | -.116 | -1.608 | .109 | 1.824 | -.120 | -2.049 | .041 | 1.792 |
| | Large Size Branches | -.110 | -1.510 | .132 | 1.878 | -.100 | -1.669 | .096 | 1.874 |
| | Staff Experience 2 | .097 | 1.133 | .258 | 2.595 | -.056 | -.780 | .436 | 2.680 |
| | Staff Experience 3 | .085 | .779 | .436 | 4.221 | -.097 | -1.031 | .304 | 4.622 |
| | Staff Current position 2 | .009 | .156 | .876 | 1.213 | .052 | 1.080 | .281 | 1.226 |
| | Staff Current position 3 | .068 | 1.063 | .289 | 1.423 | .129 | 2.431 | .016 | 1.464 |
| | Staff Annual Income 2 | -.044 | -.553 | .581 | 2.243 | .028 | .414 | .679 | 2.389 |
| | Staff Annual Income 3 | -.041 | -.512 | .609 | 2.304 | .058 | .850 | .396 | 2.470 |
| | University Education | .070 | 1.000 | .318 | 1.728 | -.005 | -.077 | .939 | 1.815 |
| | Postgraduate Education | .096 | 1.270 | .205 | 1.997 | .042 | .668 | .504 | 2.112 |
| | Supervisors | -.213 | -2.776 | .006 | 2.070 | -.076 | -1.165 | .245 | 2.241 |
| | Front line staff | -.208 | -2.046 | .042 | 3.640 | -.111 | -1.273 | .204 | 3.991 |
| **Independent Variables** | Management Support | | | | | **.375** | **5.955** | **.000** | 2.078 |
| | Management Effectiveness | | | | | **.144** | **1.920** | **.056** | 2.941 |
| | Working Atmospherics | | | | | **.107** | **1.883** | **.061** | 1.686 |
| | Employees Service Vision | | | | | -.047 | -.991 | .323 | 1.170 |
| | Communication | | | | | -.044 | -.582 | .561 | 3.027 |
| | Technology | | | | | **.202** | **3.535** | **.000** | 1.715 |
| | Job Fit | | | | | -.006 | -.076 | .939 | 3.564 |
| | Training | | | | | -.048 | -1.000 | .318 | 1.217 |
| | Job satisfaction | | | | | .026 | .443 | .658 | 1.840 |
| **$R^2$** | | **0.102** | | | | **0.466** | | | |
| **Adj. $R^2$** | | **0.059** | | | | **0.421** | | | |
| **F** | | **2.384** | | | | **10.164** | | | |
| **Sig.** | | **0.003** | | | | **0.000** | | | |
| **$\Delta R^2$** | | | | | | **0.364** | | | |
| **$\Delta$ Adj. $R^2$** | | | | | | **0.362** | | | |
| **F change** | | | | | | **32.795*** | | | |

(a) * Significant at $P$<0.001
(b) Regression coefficients are standardised
(c) All significant levels are based on two-tailed test

### 9.8.5 Model 5. The Relationship Between the Internal Service Quality Dimensions and Tangibles

This model examined the relationship between the internal dimensions of service quality and tangibles. Table 9.11 in the previous page shows the results of the hierarchical regression analysis of the relationship between the internal service quality dimensions and tangibles. In model A, only 10.2% of the total variation in tangibles is explained by the control variables and it is significant in terms of the F test (F= 2.384, P= 0.003). In model B, the control and independent variables explained 46.6% of the total variation in tangibles and it is significant in terms of the F test (F= 10.164, P= 0.000). Entering of the independent variables in the regression model (model B) accounted for a significant amount of incremental variance ($\Delta R^2$ = 36.4%, $\Delta$ Adj. $R^2$ = 36.2%, F change = 32.795, P< 0.001). The internal service quality dimensions explain 36.4% ($\Delta R^2$) of the total variation in tangibles after controlling the effect of the dummy variables. Therefore, the internal service quality dimensions have a strong and significant explanatory power in predicting tangibles.

Table 9.12: Results of Backward Regression Analysis: Predicting Tangibles

| Variables | | Beta | t | Sig. | VIF |
|---|---|---|---|---|---|
| **Control Variables** | Branch Location 2 | | | | |
| | Branch Location 3 | -.108 | -2.441 | .015 | 1.027 |
| | Branch Location 4 | | | | |
| | Medium Size Branches | | | | |
| | Large Size Branches | | | | |
| | Staff Experience 2 | | | | |
| | Staff Experience 3 | | | | |
| | Staff Current position 2 | | | | |
| | Staff Current position 3 | .103 | 2.291 | .023 | 1.056 |
| | Staff Annual Income 2 | | | | |
| | Staff Annual Income 3 | | | | |
| | University Education | | | | |
| | Postgraduate Education | | | | |
| | Supervisors | | | | |
| | Front line staff | | | | |
| **Independent variables** | Management Support | .376 | 6.955 | .000 | 1.542 |
| | Management Effectiveness | .124 | 1.983 | .048 | 2.063 |
| | Working Atmospherics | .117 | 2.184 | .030 | 1.512 |
| | Employees Service Vision | | | | |
| | Communication | | | | |
| | Technology | .183 | 3.510 | .001 | 1.433 |
| | Job Fit | | | | |
| | Training | | | | |
| | Job satisfaction | | | | |
| **$R^2$** | | **0.436** | | | |
| **Adj. $R^2$** | | **0.425** | | | |
| **F** | | **38.304** | | | |
| **Sig.** | | **0.000** | | | |

(a) Regression coefficients are standardised
(b) All significant levels are based on two-tailed test
(c) Empty cells mean that these independent variables are not significant.

The results of backward elimination, shown in table 9-12, revealed that 43.6% of the total variation in tangibles is explained by the control and independent variables. No evidence of multicollinearity was found in the regression model as the VIF values are below the cut-off point of 10 (Hair *et al.*, 1995). The findings suggested that a significant and positive relationship exists between four of the nine internal service quality dimensions and tangibles. In sequential order of predictive power, management support is the strongest *($\beta$= 0.376, t= 6.955, P= 0.000)*, followed by technology *($\beta$= 0.183, t= 3.510, P= 0.001)*, management effectiveness *($\beta$= 0.1124, t= 1.983, P= 0.048)* and working atmospherics *($\beta$= 0.117, t= 2.184, P= 2.184)*.

As mentioned earlier, the main objective of the previous four regression models is to test the hypotheses of the relationship between the internal and external service quality dimensions. Tables 9.6, 9.8, 9.10 and 9.12 revealed a significant positive relationship between management support and trust, interface, reliability and tangibles ($\beta$=0.293, 0.171, 0.127 and 0.376). Thus, *H2* (*management support to service quality is positively related to the following external service quality dimensions: (1) trust, (2) interface, (3) reliability, and (4) tangibles*) is supported by the findings. The results also revealed a positive association between management effectiveness and interface and reliability ($\beta$= 0.368 and 0.471) and a non significant association between management effectiveness and trust. It can be seen from these results that *H4* (*management effectiveness is positively related to the following external service quality dimensions: (1) trust, (2) interface, and (3) reliability*) is, therefore, only partially supported.

Furthermore, the regression results showed a significant positive relationship between working atmospherics and trust, and reliability ($\beta$= 0.108 and 0.142) and a non significant relationship between working atmospherics and interface. Thus, *H6* (*working atmospherics are positively related to the following external service quality dimensions: (1) trust, (2) interface, and (3) reliability*) is partially supported by the findings. Regarding *H8* (*employees service vision is positively related to the following external service quality dimensions: (1) trust, (2) interface, and (3) reliability*), the regression models revealed a significant positive relationship between employees service vision and trust, interface, and reliability ($\beta$= 0.115, 0.086, 0.095). Therefore, these results provide strong support for *H8*.

The regression results for the relationship between technology and trust, interface, reliability, and tangibles revealed that that there is a significant positive relationship between technology

and trust, and tangibles ($\beta$= 0.117 and 0.183). Conversely, the results showed no significant relationship between technology and interface, and reliability, therefore, *H12* (*technology is positively related to the following external service quality dimensions: (1) trust, (2) interface, (3) reliability and (4) tangibles*) is only partially supported by the evidence. The regression results presented in tables 9.6, 9.8, 9.10 and 9.12 also revealed that there is a significant positive relationship between job fit and trust, and interface ($\beta$= 0.271 and 0.279). There was, however, no significant relationship between job fit and reliability. Thus, *H14* (*job fit is positively related to the following external service quality dimensions: (1) trust, (2) interface and (3) reliability*) is only partially supported by the data.

The regression models also showed a significant positive relationship between job satisfaction and trust ($\beta$= 0.145) but no significant relationship between job satisfaction and interface, and reliability. Therefore, *H18* (*higher levels of staff job satisfaction is positively related to the following external service quality dimensions: (1) trust (2) Interface and (3) reliability*) is only partially supported. Regarding *H10* (*communication efficiency is positively related to the following external service quality dimensions: (1) trust, (2) interface and (3) reliability*), the regression results did not reveal a significant relationship between communication and trust, interface, and reliability. Consequently, *H10* is not supported by the results. The regression models also showed no significant relationship between training and trust, interface, and reliability. Thus, *H16* (*quality training program is positively related to the following external service quality dimensions: (1) trust, (2) Interface, and (3) reliability*) is not supported. The absence of significant relationship between training, and the communication process and the external service quality dimensions may be due to that communication and training programs in Egyptian banks didn't emphasis the importance of service quality.

In concluding the regression results of the relationship between the internal and external service quality dimensions, it was found that the most significant predictor of trust is management support (see table 9.6). This suggests that the ability of staff to instil trust and confidence in the external customers could be improved if they receive sufficient support from management in terms of emphasizing the importance of good customer service and clear service quality objectives. The regression results, as shown in table 9.8, also revealed that management effectiveness is the most significant predictor of interface. Therefore, bank management can improve the communication between staff and bank customers by reducing staff feelings of time pressure and by making it clear what is expected when dealing with

external customers. Bank's communication materials such as bank brochures and leaflets could also be improved by making high service quality a priority. Regarding the relationship between the internal dimensions of service quality and reliability, table 9.10 showed that management effectiveness is again the most significant predictor of reliability. Staff ability to provide an error-free service to external customers and keep promises to customers and, thereby, increase the reliability of bank service become important. Finally, the regression results revealed that management support is the most significant predictor of tangibles (see table 9.12). This suggests that the appearance of bank's physical facilities, i.e. equipment and communication materials could be improved by management support in devoting a greater proportion of resources to service quality.

## 9.9 Multiple Regression Analysis Estimations for the Relationship Between Internal and External Service Quality Based on Different Levels of Management

Regression analysis was performed to examine the relationship between the internal and external dimensions of service quality on different levels of management. Accordingly, fifteen regression models were used to examine this relationship on the three different levels of management (managers, supervisors and front line staff) (five models for each level). As revealed in chapters seven and eight, the ANOVA analysis by staff job position showed that there were significant differences in perceptions between managers, supervisors and front line staff regarding the internal and external service quality dimensions. Therefore, the main objective of applying the regression analysis on the three levels of management is to determine the relative importance of the internal dimensions of service quality in predicting external service quality and how this differs according to the different levels of management. Multiple regression assumptions (the linearity of the phenomenon measured; the constant variance of the error terms and the normality of the error term distribution) were examined for each model and the results indicate that these assumptions are approved (see appendix C). Multicollinearity for each regression model was also assessed by estimating the variance inflation factor values (VIF) and it was clear that the level of multicollinearity present in the regression models are accepted as the VIF values are below the cut-off point of 10 (Hair *et al.*, 1995) (as shown later in the regression models tables).

### 9.9.1 Multiple Regression Analysis Estimations for the Relationship Between Internal and External Service Quality Based on Branch Managers Level

As mentioned earlier, Hair *et al.* (1995) argued that the ratio of observations to independent variables should never fall below five, this means that there should be five observations for

each independent variable in the regression model. According to the five regression models based on the branch managers level, there are nine independent variables with a sample size of 63. This resulted in a ratio of 7 observations for each independent variable. Therefore, the number of observations is sufficient to run multiple regression analysis on the branch managers level.

Five regression models were performed to examine the relationship between the internal and external service quality on branch managers level. Table 9.13 presents the first regression model which examines the relationship between the internal service quality dimensions and the overall score of external service quality. Accordingly, the independent variables for this model are the internal service quality dimensions and the dependent variable is the overall score for external service quality. Overall, 72.1% of the total variation in external service quality is explained by the internal dimensions of service quality. Based on the sample size and the number of independent variables, the $R^2$ value is considered to be very satisfactory (Hair *et al.*, 1995). The findings indicate a significant and positive association between four of the nine dimensions of internal service quality and external service quality overall. Technology ($\beta$= 0.304) is the strongest predictor of variations in external service quality. Next in sequential order are management effectiveness ($\beta$= 0.281), job fit ($\beta$= 0.269) and working atmospherics ($\beta$= 0.265).

Table 9.13 also shows the regression results of the relationship between the internal service quality dimensions and trust. The internal dimensions of service quality account for 66.4% of the variation in trust and it can be seen that there is a significant positive relationship between three of the nine internal service quality dimensions and trust. In order of predictive power, job fit ($\beta$= 0.413) is the strongest, followed by working atmospherics ($\beta$= 0.285) and technology ($\beta$= 0.258).

Regarding the relationship between the internal service quality dimensions and interface, table 9.13 shows that 59.1% of the total variation in interface is explained by internal service quality dimensions. It is also clear from these results that three of the nine internal service quality dimensions have a significant positive association with interface. Staff job fit ($\beta$= 0.409) makes the most significant impact on interface, followed by working atmospherics ($\beta$= 0.296) and management effectiveness ($\beta$= 0.225).

Table 9.13: Results of Backward Regression Analysis: Predicting External Service Quality and Its Dimensions (Branch Managers Level)

| Independent Variables | External Service Quality (Overall) Model 1 | | | | Trust Model 2 | | | | Interface Model 3 | | | | Reliability Model 4 | | | | Tangibles Model 5 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Beta | t | Sig. | VIF | Beta | t | Sig. | VIF | Beta | t | Sig. | VIF | Beta | t | Sig. | VIF | Beta | t | Sig. | VIF |
| Management Support | | | | | | | | | | | | | | | | | .418 | 3.938 | .000 | 1.293 |
| Management Effectiveness | .281 | 3.590 | .001 | 1.203 | | | | | .225 | 2.305 | .025 | 1.306 | .454 | 4.222 | .000 | 1.215 | .302 | 3.068 | .003 | 1.116 |
| Working Atmospherics | .265 | 2.605 | .012 | 2.031 | .285 | 2.580 | .012 | 2.073 | .296 | 2.705 | .009 | 1.637 | | | | | | | | |
| Employees Service Vision | | | | | | | | | | | | | | | | | | | | |
| Communication | | | | | | | | | | | | | | | | | | | | |
| Technology | .304 | 3.601 | .001 | 1.402 | .258 | 2.793 | .007 | 1.446 | | | | | | | | | .223 | 2.132 | .037 | 1.262 |
| Job Fit | .269 | 2.489 | .016 | 2.306 | .413 | 3.778 | .000 | 2.032 | .409 | 3.496 | .001 | 1.873 | .337 | 3.138 | .003 | 1.215 | | | | |
| Training | | | | | | | | | | | | | | | | | | | | |
| Job satisfaction | | | | | | | | | | | | | | | | | | | | |
| $R^2$ | 0.721 | | | | 0.664 | | | | 0.591 | | | | 0.448 | | | | 0.504 | | | |
| Adj. $R^2$ | 0.700 | | | | 0.647 | | | | 0.569 | | | | 0.429 | | | | 0.478 | | | |
| F | 35.467 | | | | 37.632 | | | | 26.936 | | | | 23.577 | | | | 19.340 | | | |
| Sig. | 0.000 | | | | 0.000 | | | | 0.000 | | | | 0.000 | | | | 0.000 | | | |

(a) Regression coefficients are standardised
(b) All significant levels are based on two-tailed test
(c) Empty cells mean that these independent variables are not significant

Table 9.14: Results of Backward Regression Analysis: Predicting External Service Quality and its Dimensions (Supervisors Level)

| Independent Variables | External Service Quality (Overall) Model 1 | | | | Trust Model 2 | | | | Interface Model 3 | | | | Reliability Model 4 | | | | Tangibles Model 5 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Beta | t | Sig. | VIF | Beta | t | Sig. | VIF | Beta | t | Sig. | VIF | Beta | t | Sig. | VIF | Beta | t | Sig. | VIF |
| Management Support | .259 | 3.604 | .000 | 2.573 | .276 | 4.213 | .000 | 2.169 | .193 | 2.304 | .023 | 2.435 | | | | | .328 | 3.948 | .000 | 1.515 |
| Management Effectiveness | .221 | 4.163 | .000 | 1.409 | | | | | .408 | 6.369 | .000 | 1.421 | .423 | 5.928 | .000 | 1.204 | .208 | 2.335 | .021 | 1.741 |
| Working Atmospherics | .196 | 3.420 | .001 | 1.641 | .158 | 2.865 | .005 | 1.531 | | | | | .172 | 2.012 | .046 | 1.720 | | | | |
| Employees Service Vision | | | | | | | | | .209 | 3.793 | .000 | 1.049 | .125 | 1.906 | .059 | 1.021 | | | | |
| Communication | | | | | | | | | | | | | .146 | 1.686 | .094 | 1.774 | | | | |
| Technology | | | | | .120 | 2.161 | .032 | 1.552 | | | | | | | | | .168 | 2.144 | .034 | 1.355 |
| Job Fit | .271 | 3.839 | .000 | 2.491 | .269 | 3.689 | .000 | 2.690 | .231 | 2.866 | .005 | 2.250 | | | | | | | | |
| Training | | | | | | | | | | | | | | | | | | | | |
| Job satisfaction | .118 | 2.195 | .030 | 1.437 | .244 | 4.466 | .000 | 1.502 | | | | | | | | | | | | |
| $R^2$ | 0.702 | | | | 0.715 | | | | 0.573 | | | | 0.394 | | | | 0.334 | | | |
| Adj. $R^2$ | 0.692 | | | | 0.705 | | | | 0.562 | | | | 0.377 | | | | .0320 | | | |
| F | 70.137 | | | | 72.255 | | | | 49.709 | | | | 23.24 | | | | 24.424 | | | |
| Sig. | 0.000 | | | | 0.000 | | | | 0.000 | | | | 0.000 | | | | 0.000 | | | |

(a) Regression coefficients are standardised
(b) All significant levels are based on two-tailed test
(c) Empty cells mean that these independent variables are not significant

Table 9.15: Results of Backward Regression Analysis: Predicting External Service Quality and its Dimensions (Front Line Staff Level)

| Independent Variables | External Service Quality (Overall) Model 1 | | | | Trust Model 2 | | | | Interface Model 3 | | | | Reliability Model 4 | | | | Tangibles Model 5 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Beta** | **t** | **Sig.** | **VIF** | **Beta** | **t** | **Sig.** | **VIF** | **Beta** | **t** | **Sig.** | **VIF** | **Beta** | **t** | **Sig.** | **VIF** | **Beta** | **t** | **Sig.** | **VIF** |
| Management Support | .246 | 2.802 | .006 | 2.113 | .241 | 2.069 | .041 | 3.015 | .245 | 2.488 | .015 | 1.743 | | | | | .449 | 5.298 | .000 | 1.375 |
| Management Effectiveness | .240 | 3.190 | .002 | 1.556 | | | | | .394 | 4.532 | .000 | 1.358 | .480 | 5.656 | .000 | 1.022 | .204 | 2.475 | .015 | 1.297 |
| Working Atmospherics | .189 | 2.314 | .023 | 1.825 | | | | | | | | | | | | | | | | |
| Employees Service Vision | | | | | | | | | | | | | .222 | 2.613 | .010 | 1.022 | | | | |
| Communication | | | | | .222 | 1.994 | .049 | 2.762 | | | | | | | | | | | | |
| Technology | .180 | 2.356 | .021 | 1.606 | .181 | 2.178 | .032 | 1.536 | .186 | 2.047 | .043 | 1.479 | | | | | .220 | 2.628 | .010 | 1.338 |
| Job Fit | .171 | 1.739 | .085 | 2.654 | .223 | 2.130 | .036 | 2.449 | | | | | | | | | | | | |
| Training | | | | | .177 | 2.474 | .015 | 1.143 | | | | | | | | | | | | |
| Job satisfaction | | | | | | | | | | | | | | | | | | | | |
| **$R^2$** | **0.650** | | | | **0.560** | | | | **0.450** | | | | **0.310** | | | | **0.493** | | | |
| **Adj. $R^2$** | **0.632** | | | | **0.537** | | | | **0.433** | | | | **0.296** | | | | **0.477** | | | |
| **F** | **35.641** | | | | **24.916** | | | | **26.994** | | | | **22.041** | | | | **31.404** | | | |
| **Sig.** | **0.000** | | | | **0.000** | | | | **0.000** | | | | **0.000** | | | | **0.000** | | | |

(a) Regression coefficients are standardised
(b) All significant levels are based on two-tailed test
(c) Empty cells mean that these independent variables are not significant

Table 9.13 also shows the regression results of the relationship between the internal service quality dimensions and reliability. Overall, 44.8% of the total variation in reliability is explained by the internal service quality dimensions and the findings indicate a significant positive relationship between two of the internal service quality dimensions and reliability, i.e. management effectiveness and job fit. Of these two dimensions, management effectiveness ($\beta$= 0.454) has a relatively stronger impact than job fit ($\beta$= 0.337) on reliability.

Finally, table 9.13 shows that internal service quality accounts for 50.4% of the variation in tangibles. It can be also seen that there is a significant positive relationship between three of the nine internal service quality dimensions and tangibles. Management support ($\beta$= 0.418) has the most significant affect on tangibles, followed by management effectiveness ($\beta$= 0.302) and technology ($\beta$= 0.223).

### 9.9.2 Multiple Regression Analysis Estimations for the Relationship Between Internal and External Service Quality Based on Supervisors Level

Five regression models were used to examine the relationship between the internal and external service quality on the supervisors level. The supervisors sample size is 154 which means that there is a ratio of 17 observations for each independent variables. The sample size is, therefore, considered to be sufficient to run the regression analysis (Hair *et al.*, 1995). Table 9-14 shows the regression results of the relationship between internal service quality and the overall score of external service quality. Overall, 70.2% of the total variation in external service quality is explained by the internal service quality dimensions. The findings indicate a significant positive relationship between five of the nine internal service quality dimensions and external service quality overall. Job fit ($\beta$= 0.271) is the strongest predictor of variations in external service quality followed by management support ($\beta$= 0.259), management effectiveness ($\beta$= 0.221), working atmospherics ($\beta$= 0.196) and job satisfaction ($\beta$= 0.118).

The regression results of the relationship between the internal service quality dimensions and trust shown in table 9.14 revealed that internal service quality dimensions account for 71.5% of the variation in trust. It can also be seen that there is a significant positive relationship between five of the nine internal service quality dimensions and trust. In order of predictive power, management support is the strongest ($\beta$= 0.276), followed by job fit ($\beta$= 0.269), job satisfaction ($\beta$= 0.244), working atmospherics ($\beta$= 0.158) and technology ($\beta$= 0.120).

The regression analysis of the relationship between the internal service quality dimensions and interface shows that internal service quality dimensions account for 57.3% of the variance in interface (see table 9.14) and it is clear that four of the nine internal service quality dimensions have a significant and positive association with interface. Management effectiveness ($\beta$= 0.408) makes the most significant contribution to the explanation of variance in interface, followed by job fit ($\beta$= 0.231), employees service vision ($\beta$= 0.209) and management support ($\beta$= 0.193).

Regarding the relationship between the internal service quality dimensions and reliability, table 9-14 reveals that overall, 39.4% of the total variation in reliability is explained by the internal service quality dimensions. The findings indicate a significant positive relationship between four of the nine internal service quality dimensions and reliability. Management effectiveness ($\beta$= 0.423) is the strongest predictor of variation in reliability followed by working atmospherics ($\beta$= 0.172), communication ($\beta$= 0.146) and employees service vision ($\beta$= 0.125).

Finally, table 9.14 shows the regression results of the relationship between the internal service quality dimensions and tangibles. The internal service quality dimensions account for 33.4% of the variation in tangibles and there is a significant positive relationship between three of the nine internal service quality dimensions and tangibles. In order of predictive power, management support ($\beta$= 0.328) is the strongest, followed by management effectiveness ($\beta$= 0.208) and technology ($\beta$= 0.168).

### 9.9.3 Multiple Regression Analysis Estimations for the Relationship Between Internal and External Service Quality Based on Front Line Staff Level

Five regression models were used to examine the relationship between the internal and external service quality on the front line staff level. The sample size for front line staff level is 109, means that there is a ratio of 12 observations for each independent variable. The sample size is, therefore, considered to be sufficient to run the regression analysis (Hair *et al.*, 1995). Table 9.15 shows the results of the regression analysis for the relationship between the internal service quality dimensions and the overall score for external service quality. The internal service quality dimensions account for 65% of the total variation in external service quality and it is clear from these results that five of the nine internal service quality dimensions have a significant positive affect on external service quality. Management support

($\beta$= 0.246) makes the most significant contribution to the explanation of variance in external service quality, followed by management effectiveness ($\beta$= 0.240), working atmospherics ($\beta$= 0.189), technology ($\beta$= 0.180) and job fit ($\beta$= 0.171).

The results of the regression analysis on the relationship between the internal service quality dimensions and trust is provided in table 9.15 which shows that overall, 56% of the total variation in trust is explained by the internal service quality dimensions. The findings also indicate a significant positive relationship between five of the nine internal service quality dimensions and trust. Management support ($\beta$= 0.241) is the strongest predictor of variations in trust followed by job fit ($\beta$= 0.223), communication ($\beta$= 0.222), technology ($\beta$= 0.181) and training ($\beta$= 0.177).

Table 9.15 also shows the regression results of the relationship between the internal service quality dimensions and interface. The internal service quality dimensions account for 45% of the variation in interface. Three of the nine internal service quality dimensions have a significant positive association with interface. In order of predictive power, management effectiveness ($\beta$= 0.394) is the strongest, followed by management support ($\beta$= 0.245) and technology ($\beta$= 0.186).

The regression results of the relationship between the internal service quality dimensions and reliability, as shown in table 9.15, revealed that internal service quality dimensions account for 31% of the variation in reliability. Moreover, two of the nine internal service quality dimensions have a significant positive relationship with reliability. Of these two dimensions, management effectiveness ($\beta$= 0.480) is stronger than employees service vision ($\beta$= 0.222) in predicting of the variation in reliability.

Finally, table 9.15 reveals the regression results of the relationship between the internal service quality dimensions and tangibles. Overall, 49.3% of the total variation in tangibles is explained by the internal service quality dimensions and the findings indicate a significant positive relationship between three of the nine internal service quality dimensions and tangibles. These include management support which is the strongest predictor of variations in tangibles ($\beta$= 0.449), followed by technology ($\beta$= 0.220) and management effectiveness ($\beta$= 0.204).

In concluding the regression results of the relationship between the internal and external service quality on the different levels of management, tables 9.13, 9.14 and 9.15 revealed that with branch managers level, the most significant predictor of external service quality is technology. This indicates that branch managers believed that bank technology is one of the most important factors in improving the levels of external customer service. Regarding supervisors, job fit is the most significant predictor of external service quality. This reflects the fact that as supervisors deal directly with the external customers, they consider the ability of staff to perform their jobs as the most important dimension in satisfying bank customers. With regard to front line staff, management support is the most important predictor of external service quality which means that they regard the support they receive from bank management as a vital dimension in improving the external customer service.

The regression results also revealed that managers regard job fit as the most significant predictor of trust. This finding reflects the fact that one management most important responsibilities is matching employees to the job through efficient selection procedures and developing their abilities and skills. Moreover, based on the findings of both supervisors and front line staff, the most significant predictor of trust is management support. It is clear form these results, therefore, that the ability of supervisors and front line staff to instil trust in bank customers can be improved by getting strong support from bank management.

The results based on branch managers also revealed that job fit is the most significant predictor of interface. This means that from branch managers point of view, the quality of interaction between staff and customers could be more effective if staff have the ability and skill to deal with customers. The results showed that supervisors and front line staff regard management effectiveness as the most significant predictor of interface and this means they believe that the quality of contact between staff and customers could be improved if management could relieve the time constraints felt by them.

Finally, the regression models based on managers, supervisors and front line staff revealed that management effectiveness is the most significant predictor of the reliability of bank service. Consequently, management effectiveness has an important role in helping staff to perform an error-free service and keep promises made to the customers. Similarly, The most significant predictor of tangibles is management support. This means that management support in terms of the resources committed to improve service quality, i.e. the appearance of physical facilities, equipment and communication materials has an important role to play.

## 9.10 Conclusion

This chapter examined the research hypotheses of the relationship between the internal and external service quality. These hypotheses, together with a summary of the test results are shown in table 9.16. The chapter also presented the justifications of using the multiple regression analysis and its appropriateness as a statistical technique in achieving the research objectives. This was followed by a discussion of the basic assumptions in the multiple regression analysis and the issue of multicollinearity. There was no evidence of multicollinearity in the regression models as the VIF values for each independent variable were below the cut-off point of 10. Using dummy variables as control variables in the regression models and using backward elimination as a method of selecting the most significant independent variables were also presented in this chapter. This chapter also discussed the correlation analysis between the internal and external service quality. This analysis revealed that eight of the nine internal service quality dimensions were positively correlated with external service quality. Testing the research hypotheses by applying multiple regression analysis was also discussed. Finally, the chapter discussed the regression models which examined the relationship between the internal and external service quality based on different levels of management and these models revealed that the relative importance of the internal service quality dimensions in predicting external service quality differs according to the different levels of management.

Based on the research hypotheses test results, the next chapter will present the research findings and implications. The next chapter will also introduce the reader to the research contributions, limitations and suggestions for future research.

Table 9.16: Summary of Hypotheses Testing

| Hypotheses | Results |
|---|---|
| **H1.** Higher management support to service quality leads to higher levels of external service quality as perceived by bank staff. | Supported |
| **H2.** Management support to service quality is positively related to the following external service quality dimensions: (1) trust, (2) interface, (3) reliability, and (4) tangibles. | Supported |
| **H3.** Management effectiveness is positively related to external service quality as perceived by bank staff. | Supported |
| **H4.** Management effectiveness is positively related to the following external service quality dimensions: (1) trust, (2) interface, and (3) reliability. | Partially supported |
| **H5.** Working atmospherics are positively related to external service quality as perceived by bank staff. | Supported |
| **H6.** Working atmospherics are positively related to the following external service quality dimensions: (1) trust, (2) interface, and (3) reliability. | Partially supported |
| **H7.** Employees service vision is positively related to external service quality as perceived by bank staff. | Supported |
| **H8.** Employees service vision is positively related to the following external service quality dimensions: (1) trust, (2) interface, and (3) reliability. | Supported |
| **H9.** Communication efficiency is positively related to external service quality as perceived by bank staff. | Not supported |
| **H10.** Communication efficiency is positively related to the following external service quality dimensions: (1) trust, (2) interface and (3) reliability. | Not supported |
| **H11.** Technology is positively related to external service quality as perceived by bank staff. | Supported |
| **H12.** Technology is positively related to the following external service quality dimensions: (1) trust, (2) interface, (3) reliability and (4) tangibles. | Partially supported |
| **H13.** Job fit is positively related to external service quality as perceived by bank staff. | Supported |
| **H14.**Job fit is positively related to the following external service quality dimensions: (1) trust, (2) interface and (3) reliability. | Partially supported |
| **H15.** Quality training program is positively related to external service quality as perceived by bank staff. | Not supported |
| **H16.** Quality training program is positively related to the following external service quality dimensions: (1) trust, (2) Interface, and (3) reliability. | Not supported |
| **H17.** Higher levels of staff job satisfaction lead to higher levels of external service quality as perceived by bank staff. | Not supported |
| **H18.** Higher levels of staff job satisfaction is positively related to the following external service quality dimensions: (1) trust (2) Interface and (3) reliability. | Partially supported |

# CHAPTER TEN
# CONCLUSION AND RESEARCH IMPLICATIONS

## 10.1 Introduction

A common theme emerging from the service quality literature is that organizations must create and maintain a climate for service in order for employees to effectively deliver excellent service (Schneider, 1990; and Schneider & Bowen, 1995). In other words, employees are more likely to deliver excellent service to customers when the organization expects and rewards such behaviour and establishes practices that facilitate service delivery (Schneider *et al.*, 1992). Although much has been written on the topic of service quality, there is little research investigating the effectiveness of management practices designed to enhance service delivery. Therefore, this research aimed to link employees' perceptions of the internal dimensions of service quality to the quality of service they delivered to external customers. This chapter aims to outline the major findings of the research and to discuss the research implications. Specifically, section 10.2 will present the research findings. This is followed by a discussion of the research implications in section 10.3. Finally, section 10.4 presents the research contributions, limitations and suggestions for future research.

## 10.2 Research Findings

In order to detail the major findings of the study, it is worth mentioning that two statistical techniques were used in this research to analyze the empirical data collected from Egyptian commercial banks, they are: one-way ANOVA and multiple regression analysis. The one-way ANOVA followed by the Duncan's multiple range test were applied to examine the differences between staff perceptions of the internal and external service quality dimensions in the different groups. Multiple regression analysis was used to test the research hypotheses of the relationship between the internal and external service quality dimensions. Therefore, the research findings could be classified under two categories: the first category is the findings from the ANOVA analysis and the second is the findings from the multiple regression analysis.

The one way ANOVA analysis was applied based on eight comparisons factors: the four banks, branch location, branch size, staff experience in the bank, staff experience in their current positions, staff annual income, staff education level and staff job position. Three main findings were revealed by the ANOVA and the Duncan's multiple range test. First, staff with greater experience in the bank have higher positive perceptions about the internal and

external service quality dimensions than staff with less experience. This may be indicating that staff with greater experience are more able to better understand bank policies and management style. Moreover, they are generally in more senior positions and, therefore, have more responsibility for implementing bank policy. They are also more empathy with what management is attempting to accomplish in respect of customer service.

The second finding was that staff on high annual incomes have more positive perceptions about the internal and external service quality dimensions than staff on low annual incomes. One possible explanation might be that staff on high annual incomes are more satisfied with their salary and enjoy higher job satisfaction levels and, therefore, feel that bank management is committed to improving service quality. Alternatively, the results may possibly be reflecting the fact that staff on higher salaries occupy supervisory or management positions, i.e. they are more senior. In this respect, the results would broadly accord with those relating to staff with greater experience in the bank and were it was assumed that greater experience corresponds to more senior staff positions. The third finding was that the more senior the management, the more positive the perceptions of the internal and external service quality. This may reflect the fact that staff on senior positions regard improving the internal and external service quality dimensions as one of their key responsibilities.

In order to test the research hypotheses of the relationship between the internal and external service quality, the multiple regression analysis was applied. Five regression models were examined and seven categorical variables (branch location, branch size, staff experience in the bank, staff experience in their current positions, staff annual income, staff education level and staff job position) were used in the regression models as control variables by creating new dummy variables. For each regression model, the hierarchical regression analysis was firstly applied in order to control the impact of the dummy variables they might have on the dependent variable and then backward regression was used to test the research hypotheses and to determine the relative importance of each internal service quality dimension in predicting the external service quality.

The first regression model examined the relationship between the internal service quality dimensions and external service quality overall as perceived by bank staff. The findings indicated that six internal service quality dimensions: management support, management effectiveness, working atmospherics, employees service vision, technology and job fit, have a significant positive impact on external service quality overall. Management support was

identified as an important predictor of external service quality overall, followed by management effectiveness, job fit, working atmospherics, technology and employees service vision. It may be concluded that banks with supportive and effective management in improving external customer service are likely to be the banks that deliver high levels of external service quality. Banks also with good working atmospherics and high technology are more able to satisfy their external customers. Further, bank staff who have a positive service vision and have the ability to perform their customer service tasks are more likely to be the staff who are able to deliver high levels of external service quality.

The second regression model examined the relationship between the internal dimensions of service quality and the ability of staff to instil trust and confidence in external customers. The main finding of this model is that there is a significant positive relationship between six of the nine internal service quality dimensions and trust. These dimensions according to their relative importance in predicting trust are: management support, job fit, job satisfaction, technology, employees service vision, and working atmospherics. It could be seen that staff ability to instil trust and confidence in bank customers could be improved if they get strong support from bank management in terms of clear service quality objectives and good motivation. Management efforts in increasing staff job fit by improving the selection and recruitment procedures, increasing the co-operation between staff and linking the reward and appraisal system to staff performance have a strong impact on improving external customer service. Further, staff who enjoy job satisfaction and have positive service visions are more likely to be the staff who have the ability to deliver high levels of external service quality. Banks with good working atmospherics and high technology could also help their staff to satisfy external customers' needs.

The third model examined the relationship between the internal dimensions of service quality and the interface between staff and bank customers. The results revealed that four of the nine internal service quality dimensions have a significant positive relationship with interface. These dimensions according to their relative importance in predicting interface are: management effectiveness, job fit, management support and employees service vision. The findings indicated that management effectiveness in improving staff ability to serve bank customers, by relieving the time pressure on staff and increasing the clarity of management, is the most important dimension in improving the contact style between staff and bank customers. Staff job fit has also an important role in improving the contact between staff and bank customers. Further, management support in terms of the resources committed to

improve the quality of banks communication materials such as bank statements, leaflets and brochures has a vital role in improving the contact between the bank and its customers. Finally, staff who have a positive service vision are likely to be the staff who have a good contact style with bank customers.

The fourth model examined the relationship between the internal service quality dimensions and the reliability of bank service. The main finding of this model is that there is a significant positive relationship between four internal service quality dimensions: management effectiveness, working atmospherics, management support and employees service vision, and reliability. The results revealed that management effectiveness is the most important dimension in improving the reliability of bank service. Therefore, management effectiveness in terms of relieving time pressure on staff could improve staff ability to perform an error-free service to external customers and to keep promises made to them.

Finally, the fifth model investigated the relationship between the internal service quality dimensions and the quality of bank physical facilities. Four of the nine internal service quality dimensions had a significant positive relationship with tangibles. Management support made the highest significant contribution to the explanation of variance in tangibles, followed in sequential order by technology, management effectiveness and working atmospherics. The findings indicated that the appearance of bank physical facilities could be improved by increasing the support of management in terms of the resources committed to improve external service quality.

The multiple regression analysis was also used to examine the relationship between internal and external service quality dimensions on different levels of management (branch managers, supervisors and front line staff). The main objective of doing this was to determine if the relative importance of the internal service quality dimensions in predicting external service quality differs according to the different levels of management or not. Regarding the relationship between the internal dimensions of service quality and external service quality overall, branch managers believed that bank technology is the most important dimension in improving external customer service. On the other site, supervisors perceived that staff job fit is the most important dimension in providing high levels of external service quality. Front line staff considered the support they receive from bank management is the most important dimension in helping them to satisfy bank customers' needs.

With regard to the relationship between the internal service quality dimensions and trust, branch managers perceived that staff job fit is the most significant predictor of trust. On the other hand, both supervisors and front line staff believed that management support is the most important dimension in order to instil trust and confidence in bank customers. Further, the regression results of the relationship between the internal service quality dimensions and interface revealed that branch managers considered staff job fit as the most important dimension in improving the quality of contact between bank staff and external customers. On the other site, both supervisors and front line staff believed that management effectiveness is the most significant dimension in improving the contact between staff and bank customers.

With regard to the relationship between the internal service quality dimensions and bank service reliability, branch managers, supervisors and front line staff considered management effectiveness as the most significant dimension in improving the reliability of bank service. Finally, the regression results of the relationship between the internal service quality dimensions and tangibles revealed that all of management levels (branch managers, supervisors and front line staff) believed that management support is the most important dimension in improving the appearance of bank physical facilities.

## 10.3 Research Implications

The research results offer several important managerial implications and clearly support the positive effect of internal service quality dimensions on external service quality. A higher degree of service orientation is found to be correlated with superior external service quality. Furthermore, the finding of a strong internal and external service quality relationship illustrates the importance of a continuous service climate improvement effort. In order to improve external service quality, management should deliver what staff need to serve their customers. To meet these challenges, our results highlight the importance of ten issues.

First, the study revealed that management support is the most important determinant of employees' perceptions of external service quality. As a result, managers must find ways to increase their support to bank staff. Managers must also be committed to improving the bank's service quality. Put simply, managers who are personally committed to service quality are more likely to engage in activities that improve service quality. In our study, management support translates into developing clear service quality objectives, increasing the resources committed to improve quality of service and motivating staff to deliver better customer service. Management support to service quality is important because it helps align the

organization toward a common goal of superior service quality (Reardon and Enis, 1990). In this sense, management support to service quality can become the manager's "vision" for the organization. This vision is likely to be noticed by employees, which ultimately, improves service quality (Niehof *et al.*, 1990).

Second, managers must find ways to relieve contact employees' role conflict and ambiguity. When contact employees are unsure about how to perform their jobs, their confidence decline. This translates into a decrease in customers' perceived service quality. Role ambiguity also reduces employees' ability to adapt to changes in the service encounter. Managers should make every effort to ensure that contact employees fully understand their role requirements and expectations. Although good socialisation and training programs can help alleviate employees' role ambiguity (Hartline and Ferrell, 1993), reducing role conflict may depend on the managers' ability to communicate with their employees (Reardon and Enis, 1990). Management effectiveness in terms of relieving employees' role conflict and ambiguity, and emphasizing the objective of superior service quality has an important role in improving external customer service.

Third, managers must recognize that the use of empowerment has positive consequences for contact employees and organization's service quality. Because of the importance of self-efficacy in the employee-customer interface, the use of empowerment has positive outcomes for both employees and the organization's service quality. However, Hartline and Ferrell, (1996) argued that in some cases the use of empowerment has negative consequences for contact employees and the organization's service quality. Empowered employees can become frustrated in their attempts to balance role demands, which can lead to an increase in role conflict and may negative consequences for employees and service quality. For this reason, managers have to use empowerment under the appropriate conditions. Previous research suggests that empowerment works best when the organization's culture supports its use by guiding and limiting employee actions (Bowen and Lawler, 1992). If the organization's culture does not support employees for exercising discretion, empowerment is likely to be counter-productive (Kelley, 1993).

To support empowerment, managers should focus on behavioral criteria in evaluating contact employees. By evaluating contact employees on the basis of their behaviour, i.e. use of discretion, rather than outcomes, i.e. mistakes, behaviour-based evaluation can help reduce employees' role conflict. In addition to behaviour evaluation, managers should also train

employees on how to use their decision-making authority wisely. Training can help ensure that empowered employees decisions are in the best interests of the organization (Conger and Kanungo, 1988). Managers must also recognize that supervision style has a positive impact on external service quality. Supportive supervision in terms of motivating staff and giving them regular feed back about their performance has a vital role in helping contact employees to satisfy bank customers' needs. Further, the working environment in the organization has an important role in improving employees' performance. Managers should find ways to make the working environment more comfortable and supportive to contact employees. In fact, good working atmospherics in terms of employees empowerment, supportive supervision and comfortable working environment have positive impact on organization's service quality.

Fourth, managers must recognize that employees service vision directly impacts customers' perceptions of service quality (Berry *et al.*, 1994; Bitner, 1990, 1992; Bitner *et al.*, 1990; sasser and Jones, 1995; and Schneider *et al.*, 1992). A "top-down" service vision is important to instill customer service orientation among organizational members. Managers should reinforce the importance of service quality and customer satisfaction by consistently communicating a service vision for the organization. Further, employees feeling responsible for meeting and exceeding customer expectations, and creating lasting impressions of the bank are important in delivering high levels of external service quality. In fact, having service-oriented people at all levels of the organization is related to an organization's ability to improve customer service.

Fifth, although the results in this study revealed that there is no significant relationship between communication efficiency and external service quality, communication has an important role to play in improving organization's service quality. Therefore, managers must find different ways to increase the communication efficiency within the bank. One possible way to do this is seeking information from contact employees about how to improve customer service and encouraging them to make suggestions to bank management about service quality. Moreover, managers should regularly and clearly communicate to employees the objective of providing a high level of external service quality. Managers should also improve the communication between the different departments within the bank in order to improve the co-operation between them to achieve service quality goals.

Sixth, the research suggested that technology support has positive consequences on contact employees' performance and bank's service quality. The appropriateness of technology

employees use to perform the job supports them in delivering a superior customer service (Lytle *et al.*, 1998). Having high technology helps contact employees to provide an error-free and fast service to bank customers. High technology also provides contact employees with easy to access information on external customers. Managers must find ways to improve bank technology. Increasing the resources committed to service quality could improve the technology of the bank.

Seventh, the challenges for the service managers are to select and recruit employees who have the ability to deal with external customers. In recruiting employees, the managers have to be sure that contact employees have the skills to satisfy bank customers' needs. These skills are, for example, the ability to communicate with bank customers, the ability to work as a team and the ability to use bank technology. Managers must also find ways to increase the co-operation between staff and between bank departments. In addition to this, managers should train employees on how to work as a team in order to deliver high levels of external service quality. Moreover, the use of behaviour-based evaluation also increase employees' ability to deliver better customer service. One of the best ways to ensure that employees behave in certain ways is to reward them for doing so. Under a behaviour-based system, contact employees are evaluated on the basis of criteria such as effort, commitment teamwork, customer orientation, friendliness, the ability to solve customer problems and other behaviour that are directed toward improved service quality. Linking contact employees' performance with the reward and appraisal system gives employees the incentive to engage in behaviors that are conducive to improved service quality. In other words, to enhance customer-oriented behaviors, managers should tie the behaviour to the employee evaluation system. In fact, staff job fit in terms of behaviour-based evaluation, employees' ability to perform the job and to work as a team has positive impact on external customer service.

Eighth, managers must put more emphasis on the importance of training in improving bank's customer service. It was clear that staff in Egyptian commercial banks believed that the training on service quality should take place more often. In other words, they believed that training programs to improve their customer service skills are not sufficient enough. Managers should train employees on how to provide high levels of external service quality. Managers should also train staff on how to improve their communication, teamwork and information technology skills. Moreover, management must try to increase the recourses committed to training programs, especially, the quality training programs.

Ninth, managers must recognize that job satisfaction is closely related to employees' behavioral performance. The service encounter lies in the interaction between contact employees and customers, in which satisfied employees are more likely to engage in behaviour that assists and satisfies customers. Employees who enjoy high levels of job satisfaction will have higher levels of work effort and job performance. Managers must find ways to increase contact employees' job satisfaction. Seeking information from contact employees about their wants and needs is very important to increase staff job satisfaction. By satisfying the needs of personnel, the bank upgrades its capabilities for satisfying the needs of its customers.

Tenth, bank management must recognize that staff on different levels of management have different perceptions about what they need to satisfy external customers. Branch managers believed that bank technology is the most important dimension in order to deliver high levels of external service quality. On the other site, supervisors perceived job fit is the most important dimension in improving customer service and front line staff believed that management support is the most important in achieving high levels of service quality. Therefore, management must seek suggestions from staff in different positions about how to improve service quality and what they need to satisfy bank customers' needs.

## 10.4 Contributions, Limitations and Suggestions for Future Research

The present study makes a unique contribution to the service marketing literature. This study is one of the first studies to examine the relationship between the internal and external service quality dimensions. The previous studies have only examined the relationship between service orientation or service climate and the overall perceptions of external service quality (Schneider *et al.*, 1992; Schneider *et al.*, 1998; and Hartline and Ferrell, 1996). This study also examined this relationship by applying the hierarchical regression analysis and using dummy variables as control variables to determine the main effect of the internal service quality dimensions on external service quality. This study also makes a major contribution to the service marketing literature by applying a comprehensive ANOVA analysis and Duncan test in order to know the differences in perceptions between the different groups regarding the internal and external dimensions of service quality. Another important contribution is examining the relationship between the internal and external dimensions of service quality on different levels of management. The importance of this contribution comes from that it was the first try in the service marketing literature to examine this relationship according to different job positions. Therefore, this will help management to understand staff perceptions

in the different levels of management to improve external service quality. Finally, this research is the first of its nature in Egypt. No previous research has been conducted to investigate the relationship between the internal and external service quality in the Egyptian banking. Therefore, this study will provide valuable advises for both academicians and practitioners in Egyptian banking industry.

Although this study has provided relevant and interesting insights to the understanding of the relationship between the internal and external service quality in the context of service industry, it is important to recognize limitations associated with this study. First, cross-sectional data were used, consequently, the time sequence of the relationships among the variables cannot be determined unambiguously. The results, therefore, should not be interpreted as proof of the causal relationships, but rather as lending support or non-support for the causal for the priori causal scheme. Second, a limited sample of banking industry was used, therefore, caution is necessary in service quality generalizations to other industries without additional empirical tests of the model. Third, the respondents provided all the measures of the independent and dependent variables, and these measures were obtained at the same time using similar scaling procedures. Method variance, therefore, may have inflated the strength of some of the relationships. Fourth, regarding factor analysis results, the naming of the new factors was subjective although we tried to adopt names that are consistent with previous studies whenever possible. Fifth, the external service quality was measured from bank staff point of view, therefore, staff own assessment of external service quality may not correspond to those of customers, even though Chang and Chen (1998); and Schneider *et al.* (1992) used the same methodology. Previous research has indicated that self-reported performance measures are highly correlated with objective performance measures (Dess and Robinson, 1984). In fact, it was better to use actual data from bank customers to evaluate bank's service quality, but unfortunately it was usually difficult, if not impossible to obtain such data from the customers in Egypt.

Our findings suggest several directions for future research. First, problems of bias that may associated with this research and with such of the previous service marketing research need to be addressed. For example, method variance is a common problem in the previous related literature. Statistical analysis using LISREL (Jorekog and Sorbom, 1984) may provide an appropriate approach to this particular problem. Second, longitudinal research designs would be useful in providing evidence of causation that cannot be obtained in descriptive cross-sectional designs. Third, our study could be replicated within other services (e.g., hotels,

insurance, and hospitals) to further examine our hypothesized relationships. For example, the relationship between the internal and external service quality dimensions may vary from one service to another. Fourth, further research may also use actual data from bank customers about their perceptions of the bank's service quality instead of employees' perceptions and link these perceptions to staff perceptions of the internal service quality dimensions. Fifth, future research may also use the external service quality as an intermediate variable and explore how external service quality moderate the effect of the internal service quality on the organization's financial performance.

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# APPENDICES

**Appendix A**
**The Structured Questionnaire**

Loughborough University
Banking Centre

# STAFF PERCEPTIONS OF SERVICE QUALITY IN EGYPTIAN COMMERCIAL BANKS: AN INTERNAL AND EXTERNAL PERSPECTIVE

Dear Staff:

I am currently engaged in research for a Ph.D. in the Banking Centre, at Loughborough University. I am particularly interested in studying the relationship between the internal and external dimensions of service quality in Egyptian commercial banks. This survey is an important part of the research, therefore, your valuable co-operation and participation in answering the questionnaire will be greatly appreciated. I would be most grateful if you could spare 15 minutes to complete the enclosed questionnaire which deals with staff perceptions of the internal and external dimensions of service quality within your bank. All responses will be used for research purposes only and will be treated in confidence. Anonymity of respondents is also guaranteed. If you have any queries, please do not hesitate to contact me on:

Telephone number: 048 661630
Email address: hossamaboelanain@hotmail.com

Thank you for your assistance.

Hossam Abou Elanain
Ph.D. Student

# STAFF PERCEPTIONS OF SERVICE QUALITY IN EGYPTIAN COMMERCIAL BANKS: AN INTERNAL AND EXTERNAL PERSPECTIVE

***Please answer all of the following questions and thank you for your valuable help.***

**Section 1.** ***The following set of statements deal with your perceptions of the internal dimensions of service quality within your bank. Please indicate you level of agreement or disagreement with each of the following statements by circling only one number, where: 1=strongly disagree, 2=disagree, 3=slightly disagree, 4=neither agree nor disagree, 5=slightly agree, 6=agree, and 7=strongly agree. For example, if you strongly disagree with a specific statement put a circle around number 1.***

| | | *Strongly Disagree* | *Disagree* | *Slightly Disagree* | *Neither Agree Nor Disagree* | *Slightly Agree* | *Agree* | *Strongly Agree* |
|---|---|---|---|---|---|---|---|---|
| 1. | The bank is committed to providing a high level of service quality to external customers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. | My closest supervisor emphasises the importance of delivering a high level of service quality to external customers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. | Management does not motivate me to provide a high level of service quality to external customers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. | Improving the level of service quality to our external customers is one of the major goals of our bank. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. | Departments within the bank have formal systems for setting and monitoring performance against service quality goals. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. | My own performance within the bank is measured against specific service quality goals. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. | The bank regards improving the levels of co-operation between different departments within the bank as an important goal. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. | Other considerations frequently take precedence over the goal of improving the quality of external customer service. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9. | Management has far more important issues to address than helping me to provide a high level of service quality to external customers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10. | Time pressures usually prevent me from providing a high level of service quality to external customers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| | *Strongly Disagree* | *Disagree* | *Slightly Disagree* | *Neither Agree Nor Disagree* | *Slightly Agree* | *Agree* | *Strongly Agree* |
|---|---|---|---|---|---|---|---|
| 11. I sometimes feel confused about what management expects from me when dealing with external customers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12. When I am dealing with external customers, there are no controls imposed on me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13. I often seek the approval of my manager/supervisor when making important customer decisions. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14. I personally have sufficient authority and discretion to provide a high level of service quality to external customers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15. I would like to have more autonomy when dealing with external customers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 16. The internal working environment in the bank could be more supportive of staff. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 17. The working environment within the bank is comfortable. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 18. I think that the style of management within the bank (for example, the consultative style of management) could be improved. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 19. I am satisfied with the supervision which I receive within the bank. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 20. I do not consider that being responsive to the needs of external customers is an important part of my job. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 21. My most important objective is to satisfy the needs of customers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 22. I feel personally responsible for creating a good impression of the bank to external customers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 23. I feel that it is my responsibility to help colleagues within my department. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 24. The bank regularly seeks information from staff about how to improve the quality of external customer service. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| | *Strongly Disagree* | *Disagree* | *Slightly Disagree* | *Neither Agree Nor Disagree* | *Slightly Agree* | *Agree* | *Strongly Agree* |
|---|---|---|---|---|---|---|---|
| 25. The bank encourages staff to make suggestions for improving the quality of external customer service. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 26. The bank uses staff suggestions to improve the quality of external customer service. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 27. The bank rewards staff who make good suggestions for improving the quality of external customer service. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 28. Senior management within the bank regularly communicate to employees the importance of providing a high level of service quality to external customers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 29. Communication (for example, through the intranet, letters, memos and meetings) within my department could be much better. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 30. Communication between my department and other departments within the bank could be much better. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 31. Bank staff regularly make suggestions to managers/supervisors about how to improve the quality of external customer service. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 32. The objective of delivering a high level of service quality to external customers is clearly communicated to all employees and departments. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 33. Changes in work methods (for example, the introduction of new technology to provide a speedier service) made to improve the quality of external customer service are clearly communicated to all employees and departments. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 34. Bank technology helps me to provide an error free service to external customers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 35. Bank technology helps me to provide a fast service to external customers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 36. Bank technology provides me with easy-to-access information on extenral customers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| | *Strongly Disagree* | *Disagree* | *Slightly Disagree* | *Neither Agree Nor Disagree* | *Slightly Agree* | *Agree* | *Strongly Agree* |
|---|---|---|---|---|---|---|---|
| 37. Bank technology has given me more time to talk to external customers and discuss their needs. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 38. Staff within my department work as individuals rather than in teams. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 39. The teamwork between my department and other departments within the bank could be much better. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 40. Colleagues within my department regularly help each other to provide a high level of service quality to external customers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 41. In recruiting employees, the bank attempts to ensure that staff have good communication skills. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 42. When I was recruited by the bank, I was assessed in terms of my teamwork skills. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 43. The performance appraisal systems within the bank do not motivate me to deliver a high level of service quality to external customers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 44. I would like to receive more frequent feedback about my performance from my superiors. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 45. The performance appraisal systems within the bank include co-operation and team-based performance indicators. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 46. The bank rewards me when I provide a high level of service quality to external customers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 47. My supervisor usually praises my performance when I provide a high level of service quality to external customers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 48. The performance appraisal systems and reward mechanisms within the bank depend upon specific performance standards which include customer care indicators. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 49. Training programmes within the bank should place more emphasis on the importance of providing a high level of service quality to external customers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| | *Strongly Disagree* | *Disagree* | *Slightly Disagree* | *Neither Agree Nor Disagree* | *Slightly Agree* | *Agree* | *Strongly Agree* |
|---|---|---|---|---|---|---|---|
| 50. I would like to receive more bank training on how to provide a high level of service quality to external customers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 51. Management allows me sufficient time to attend training courses. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 52. The bank should place more emphasis in bank training on how to improve my communication skills. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 53. I would like to receive more bank training on how to improve my teamwork skills. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 54. The bank should place more emphasis in bank training on how to improve my information technology skills. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 55. I am satisfied with my job. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 56. I am dissatisfied with my salary from the bank. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 57. Overall the benefits I receive from the bank such as medical insurance, vacation, etc, are good. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 58. I have a strong desire to remain in the bank. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 59. I regard my work in the bank as an imoprtant of my life. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 60. Management motivates me to do my best. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

**Section 2.** ***The following set of statements deal with your perceptions of the external dimensions of service quality. Please indicate you level of agreement or disagreement with each of the following statements by circling only one number, where: 1=strongly disagree, 2=disagree, 3=slightly disagree, 4=neither agree nor disagree, 5=slightly agree, 6=agree, and 7=strongly agree. For example, if you strongly disagree with a specific statement put a circle around number 1.***

| | *Strongly Disagree* | *Disagree* | *Slightly Disagree* | *Neither Agree Nor Disagree* | *Slightly Agree* | *Agree* | *Strongly Agree* |
|---|---|---|---|---|---|---|---|
| 1. Branch staff instil trust and confidence in customers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. Branch staff do not follow the instructions of customers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. Branch staff are able to answer customer questions. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| | *Strongly Disagree* | *Disagree* | *Slightly Disagree* | *Neither Agree Nor Disagree* | *Slightly Agree* | *Agree* | *Strongly Agree* |
|---|---|---|---|---|---|---|---|
| 4. Branch staff give positive advice to customers when they have a problem. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. Branch staff understand the needs of customers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. Branch staff are well dressed and appear neat and tidy. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. Branch staff are able to provide a high level of service quality to external customers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. Branch staff could be more polite and courteous when dealing with customers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9. Branch staff are not able to provide customers with individual attention. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10. Branch staff do not have the customers' best interests at heart. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11. Branch staff keep external customers fully informed about new services. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12. Branch staff find it difficult to give a prompt service to customers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13. Branch staff are willing to help customers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14. Branch staff work as individuals rather than as part of a team in providing a high level of service quality to customers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15. Branch staff find it difficult to keep promises made to customers because of other demands on their time. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 16. Branch staff are sympathetic and reassuring to customers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 17. High workloads make it difficult for branch staff to perform an error-free service to customers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 18. Branch staff resolve customers' complaints quickly. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 19. Bank brochures and leaflets are not informative. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 20. Bank customers' statements are complicated and not easy to understand. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| | *Strongly Disagree* | *Disagree* | *Slightly Disagree* | *Neither Agree Nor Disagree* | *Slightly Agree* | *Agree* | *Strongly Agree* |
|---|---|---|---|---|---|---|---|
| 21. Customer waiting times in the branch are reasonable | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 22. The branch handles and keeps the customers' financial affairs accurately. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 23. Branch opening hours are not convenient for customers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 24. The branch has up-to-date technology. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 25. The branch could be made more visually attractive. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 26. Bank brochures, leaflets and statements, etc, are not visually appealing. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 27. The customer waiting area in the branch is comfortable. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

**Section 3.** ***The following questions relate to your gender, age, income, education qualifications, job position and how many years with the bank and in your current position. Please tick one box in every question.***

**Sex**

Male ☐

Female ☐

**Age**

22-35 years ☐

36-45 years ☐

46-60 years ☐

**How long have you been working in this bank?**

Less than 10 years ☐

11-20 years ☐

More than 20 years ☐

**How long have you been in your current position?**

Less than 5 years ☐

5-10 years ☐

More than 10 years ☐

**Annual income including bonuses**

7000 LE or less ☐

7001-11000 LE ☐

More than 11000 LE ☐

**Education qualifications**

Less than university education ☐

University education ☐

Postgraduate education ☐

**Job position**

Manager ☐

Supervisor ☐

Front-line staff ☐

## Appendix B

## The Frequency Distribution and ANOVA Tables for the Internal and External Service Quality Items

Table (1) Frequency Distribution for Internal service quality Items

| Items | Strongly Disagree | | Disagree | | Slightly Disagree | | Neither Agree Nor Disagree | | Slightly Agree | | Agree | | Strongly Agree | | M | S.D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | | Freq | % | | |
| **Management Support** | | | | | | | | | | | | | | | | |
| 1. Improving the level of service quality to our external customers is one of the major goals of our bank. | 1 | .3 | 5 | 1.5 | 3 | .9 | 12 | 3.7 | 31 | 9.3 | 111 | 33.4 | 169 | 50.9 | 6.243 | 1.043 |
| 2. My closest supervisor emphasises the importance of delivering a high level of service quality to external customers. | 2 | .6 | 5 | 1.5 | 8 | 2.4 | 8 | 2.4 | 29 | 8.7 | 143 | 43.1 | 137 | 41.3 | 6.115 | 1.093 |
| 3. The bank is committed to providing a high level of service quality to external customers. | 1 | .3 | 3 | .9 | 18 | 5.4 | 7 | 2.2 | 76 | 22.9 | 123 | 37 | 104 | 31.3 | 5.827 | 1.144 |
| 4. Departments within the bank have formal systems for setting and monitoring performance against service quality goals. | 6 | 1.8 | 18 | 5.4 | 9 | 2.7 | 42 | 12.6 | 54 | 16.3 | 125 | 37.7 | 78 | 23.5 | 5.430 | 1.466 |
| 5. My own performance within the bank is measured against specific service quality goals. | 14 | 4.2 | 29 | 8.7 | 22 | 6.6 | 28 | 8.5 | 77 | 23.2 | 103 | 31.0 | 59 | 17.8 | 5.018 | 1.685 |
| 6. The bank regards improving the levels of co-operation between different departments within the bank as an important goal. | 7 | 2.1 | 13 | 3.9 | 8 | 2.4 | 29 | 8.7 | 62 | 18.7 | 132 | 39.8 | 81 | 24.4 | 5.542 | 1.396 |
| 7. Management does not motivate me to provide a high level of service quality to external customers. | 20 | 6.0 | 23 | 6.9 | 27 | 8.1 | 4 | 1.2 | 34 | 10.2 | 93 | 28.0 | 131 | 39.5 | 5.452 | 1.895 |

Table (1) Continued

| Items | Strongly Disagree | | Disagree | | Slightly Disagree | | Neither Agree Nor Disagree | | Slightly Agree | | Agree | | Strongly Agree | | M | S.D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | | Freq | % | | |
| **Management Effectiveness** | | | | | | | | | | | | | | | | |
| 8. Time pressures usually prevent me from providing a high level of service quality to external customers. | 20 | 6.0 | 31 | 9.3 | 56 | 16.9 | 10 | 3.0 | 52 | 15.7 | 95 | 28.6 | 68 | 20.5 | 4.803 | 1.894 |
| 9. I sometimes feel confused about what management expects from me when dealing with external customers. | 11 | 3.3 | 20 | 6.0 | 48 | 14.5 | 29 | 8.7 | 52 | 15.7 | 100 | 30.1 | 72 | 21.7 | 5.015 | 1.716 |
| 10. Management has far more important issues to address than helping me to provide a high level of service quality to external customers. | 18 | 5.4 | 40 | 12.0 | 74 | 22.3 | 18 | 5.5 | 32 | 9.6 | 70 | 21.1 | 80 | 24.1 | 4.609 | 1.983 |
| 11. Other considerations frequently take precedence over the goal of improving the quality of external customer service. | 19 | 5.7 | 52 | 15.7 | 49 | 14.8 | 52 | 15.6 | 24 | 7.2 | 64 | 19.3 | 72 | 21.7 | 4.493 | 1.964 |
| **Working Atmospherics** | | | | | | | | | | | | | | | | |
| 12. The working environment within the bank is comfortable. | 40 | 12.0 | 53 | 16.0 | 28 | 8.4 | 30 | 9.0 | 73 | 22.0 | 64 | 19.3 | 44 | 13.3 | 4.240 | 1.986 |
| 13. I am satisfied with the supervision which I receive within the bank. | 21 | 6.3 | 26 | 7.8 | 39 | 11.7 | 22 | 6.8 | 117 | 35.2 | 82 | 24.7 | 25 | 7.5 | 4.602 | 1.629 |
| 14. I personally have sufficient authority and discretion to provide a high level of service quality to external customers. | 21 | 6.3 | 20 | 6.0 | 13 | 3.9 | 13 | 4.1 | 117 | 35.2 | 118 | 35.5 | 30 | 9.0 | 4.935 | 1.587 |

Table (1) Continued

| Items | Strongly Disagree | | Disagree | | Slightly Disagree | | Neither Agree Nor Disagree | | Slightly Agree | | Agree | | Strongly Agree | | M | S.D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | | Freq | % | | |
| **Employees Service Vision** | | | | | | | | | | | | | | | | |
| 15. I feel personally responsible for creating a good impression of the bank to external customers. | 4 | 1.2 | 3 | .9 | 5 | 1.5 | 16 | 4.9 | 39 | 11.7 | 151 | 45.5 | 114 | 34.3 | 5.987 | 1.112 |
| 16. My most important objective is to satisfy the needs of customers. | 2 | .6 | 0 | 0.0 | 1 | 0.3 | 4 | 1.2 | 21 | 6.3 | 133 | 40.1 | 171 | 51.5 | 6.390 | .808 |
| 17. I feel that it is my responsibility to help colleagues within my department. | 4 | 1.2 | 0 | 0.0 | 5 | 1.5 | 3 | 0.9 | 31 | 9.3 | 144 | 43.4 | 145 | 43.7 | 6.220 | .978 |
| **Communication** | | | | | | | | | | | | | | | | |
| 18. The bank regularly seeks information from staff about how to improve the quality of external customer service. | 26 | 7.8 | 36 | 10.8 | 15 | 4.5 | 36 | 10.9 | 71 | 21.4 | 104 | 31.3 | 44 | 13.3 | 4.741 | 1.817 |
| 19. The bank encourages staff to make suggestions for improving the quality of external customer service. | 19 | 5.7 | 24 | 7.2 | 14 | 4.2 | 19 | 5.7 | 63 | 19 | 128 | 38.6 | 65 | 19.6 | 5.190 | 1.712 |
| 20. The bank uses staff suggestions to improve the quality of external customer service. | 21 | 6.3 | 25 | 7.5 | 16 | 4.8 | 33 | 10.0 | 88 | 26.5 | 100 | 30.1 | 49 | 14.8 | 4.920 | 1.695 |
| 21. The bank rewards staff who make good suggestions for improving the quality of external customer service. | 23 | 6.9 | 29 | 8.7 | 11 | 3.3 | 62 | 18.7 | 61 | 18.4 | 102 | 30.7 | 44 | 13.3 | 4.778 | 1.735 |

Table (1) Continued

| Items | Strongly Disagree | | Disagree | | Slightly Disagree | | Neither Agree Nor Disagree | | Slightly Agree | | Agree | | Strongly Agree | | M | S.D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | | Freq | % | | |
| 22. Senior management within the bank regularly communicate to employees the importance of providing a high level of service quality to external customers. | 9 | 2.7 | 7 | 2.1 | 5 | 1.5 | 14 | 4.2 | 61 | 18.4 | 131 | 39.5 | 105 | 31.6 | 5.782 | 1.333 |
| 23. Bank staff regularly make suggestions to managers/supervisors about how to improve the quality of external customer service. | 25 | 7.5 | 38 | 11.4 | 18 | 5.4 | 58 | 17.6 | 85 | 25.6 | 80 | 24.1 | 28 | 8.4 | 4.483 | 1.716 |
| 24. The objective of delivering a high level of service quality to external customers is clearly communicated to all employees and departments. | 10 | 3.0 | 16 | 4.8 | 10 | 3.0 | 38 | 11.5 | 67 | 20.2 | 115 | 34.6 | 76 | 22.9 | 5.368 | 1.511 |
| 25. Changes in work methods (for example, the introduction of new technology to provide a speedier service) made to improve the quality of external customer service are clearly communicated to all employees and departments. | 11 | 3.3 | 13 | 3.9 | 12 | 3.6 | 26 | 7.8 | 60 | 18.1 | 129 | 38.9 | 81 | 24.4 | 5.475 | 1.500 |
| **Technology** | | | | | | | | | | | | | | | | |
| 26. Bank technology helps me to provide an error free service to external customers. | 15 | 4.5 | 32 | 9.6 | 16 | 4.8 | 21 | 6.4 | 93 | 28.0 | 100 | 30.1 | 55 | 16.6 | 5.003 | 1.678 |
| 27. Bank technology helps me to provide a fast service to external customers. | 13 | 3.9 | 20 | 6.0 | 20 | 6.0 | 15 | 4.5 | 71 | 21.4 | 126 | 38.0 | 67 | 20.2 | 5.283 | 1.603 |

Table (1) Continued

| Items | Strongly Disagree | | Disagree | | Slightly Disagree | | Neither Agree Nor Disagree | | Slightly Agree | | Agree | | Strongly Agree | | M | S.D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | | Freq | % | | |
| 28. Bank technology provides me with easy-to-access information on extenral customers. | 13 | 3.9 | 12 | 3.6 | 22 | 6.6 | 13 | 3.9 | 73 | 22.0 | 126 | 38.0 | 73 | 22.0 | 5.387 | 1.540 |
| 29. Bank technology has given me more time to talk to external customers and discuss their needs. | 19 | 5.7 | 26 | 7.8 | 28 | 8.4 | 19 | 5.7 | 78 | 23.5 | 114 | 34.3 | 48 | 14.5 | 4.942 | 1.715 |
| **Job Fit** 30. In recruiting employees, the bank attempts to ensure that staff have good communication skills. | 18 | 5.4 | 26 | 7.8 | 14 | 4.2 | 55 | 16.6 | 67 | 20.2 | 101 | 30.4 | 51 | 15.4 | 4.909 | 1.681 |
| 31. When I was recruited by the bank, I was assessed in terms of my teamwork skills. | 21 | 6.3 | 37 | 11.1 | 17 | 5.1 | 41 | 12.5 | 68 | 20.5 | 107 | 32.2 | 41 | 12.3 | 4.750 | 1.763 |
| 32. Staff within my department work as individuals rather than in teams. | 12 | 3.6 | 25 | 7.5 | 39 | 11.7 | 15 | 4.6 | 47 | 14.2 | 104 | 31.3 | 90 | 27.1 | 5.204 | 1.770 |
| 33. Colleagues within my department regularly help each other to provide a high level of service quality to external customers. | 11 | 3.3 | 15 | 4.5 | 12 | 3.6 | 26 | 7.9 | 76 | 22.9 | 114 | 34.3 | 78 | 23.5 | 5.398 | 1.514 |
| 34. The performance appraisal systems within the bank include co-operation and team-based performance indicators. | 15 | 4.5 | 17 | 5.1 | 15 | 4.5 | 50 | 15.1 | 58 | 17.5 | 132 | 39.8 | 45 | 13.6 | 5.095 | 1.566 |

Table (1) Continued

| Items | Strongly Disagree | | Disagree | | Slightly Disagree | | Neither Agree Nor Disagree | | Slightly Agree | | Agree | | Strongly Agree | | M | S.D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | | Freq | % | | |
| 35. The bank rewards me when I provide a high level of service quality to external customers. | 34 | 10.2 | 34 | 12.3 | 15 | 4.5 | 37 | 11.3 | 70 | 21.1 | 94 | 28.3 | 41 | 12.3 | 4.542 | 1.903 |
| 36. My supervisor usually praises my performance when I provide a high level of service quality to external customers. | 17 | 5.1 | 18 | 5.4 | 16 | 4.8 | 26 | 7.6 | 82 | 24.7 | 119 | 35.8 | 54 | 16.6 | 5.141 | 1.604 |
| 37. The performance appraisal systems and reward mechanisms within the bank depend upon specific performance standards which include customer care indicators. | 36 | 10.8 | 18 | 5.4 | 9 | 2.7 | 51 | 15.4 | 56 | 16.9 | 117 | 35.2 | 45 | 13.6 | 4.817 | 1.832 |
| 38. Management motivates me to do my best. | 23 | 6.9 | 16 | 4.8 | 21 | 6.3 | 24 | 7.3 | 92 | 27.7 | 94 | 28.3 | 62 | 18.7 | 5.036 | 1.704 |
| 39. The performance appraisal systems within the bank do not motivate me to deliver a high level of service quality to external customers. | 33 | 9.9 | 48 | 14.5 | 50 | 15.1 | 24 | 7.2 | 35 | 10.5 | 90 | 27.1 | 52 | 15.7 | 4.384 | 2.022 |
| **Training** | | | | | | | | | | | | | | | | |
| 40. Training programmes within the bank should place more emphasis on the importance of providing a high level of service quality to external customers. | 6 | 1.8 | 9 | 2.7 | 8 | 2.4 | 13 | 4.0 | 49 | 14.8 | 124 | 37.3 | 123 | 37.0 | 5.876 | 1.328 |

Table (1) Continued

| Items | Strongly Disagree | | Disagree | | Slightly Disagree | | Neither Agree Nor Disagree | | Slightly Agree | | Agree | | Strongly Agree | | M | S.D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | | Freq | % | | |
| 41. The bank should place more emphasis in bank training on how to improve my communication skills. | 4 | 1.2 | 18 | 5.4 | 8 | 2.4 | 5 | 1.9 | 65 | 19.6 | 138 | 41.6 | 94 | 28.3 | 5.710 | 1.357 |
| 42. I would like to receive more bank training on how to improve my teamwork skills. | 6 | 1.8 | 16 | 4.8 | 10 | 3.0 | 7 | 2.1 | 75 | 22.6 | 136 | 41.0 | 82 | 24.7 | 5.604 | 1.378 |
| 43. The bank should place more emphasis in bank training on how to improve my information technology skills. | 6 | 1.8 | 14 | 4.2 | 8 | 2.4 | 9 | 2.7 | 44 | 13.3 | 135 | 40.7 | 116 | 34.9 | 5.831 | 1.382 |
| **Job Satisfaction** | | | | | | | | | | | | | | | | |
| 44. I am satisfied with my job. | 7 | 2.1 | 6 | 1.8 | 11 | 3.3 | 7 | 2.2 | 73 | 22.0 | 139 | 41.9 | 89 | 26.8 | 5.728 | 1.272 |
| 45. Overall the benefits I receive from the bank such as medical insurance, vacation, etc, are good. | 6 | 1.8 | 4 | 1.2 | 8 | 2.4 | 5 | 1.5 | 66 | 19.9 | 180 | 54.2 | 63 | 19.0 | 5.746 | 1.118 |
| 46. I have a strong desire to remain in the bank. | 6 | 1.8 | 9 | 2.7 | 6 | 1.8 | 15 | 4.5 | 49 | 14.8 | 133 | 40.1 | 114 | 34.3 | 5.851 | 1.305 |
| 47. I regard my work in the bank as an imoprtant of my life. | 3 | 0.9 | 3 | 0.9 | 4 | 1.2 | 8 | 2.4 | 28 | 8.4 | 127 | 38.2 | 159 | 47.9 | 6.232 | 1.043 |

Table (2) Frequency Distribution for External Service Quality Items

| Items | Strongly Disagree | | Disagree | | Slightly Disagree | | Neither Agree Nor Disagree | | Slightly Agree | | Agree | | Strongly Agree | | M | S.D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | | Freq | % | | |
| **Trust** | | | | | | | | | | | | | | | | |
| 1. Branch staff instil trust and confidence in customers. | 1 | 0.3 | 5 | 1.5 | 4 | 1.2 | 22 | 6.6 | 79 | 23.8 | 142 | 42.8 | 79 | 23.8 | 5.751 | 1.052 |
| 2. Branch staff are able to answer customer questions. | 3 | 0.9 | 8 | 2.4 | 15 | 4.5 | 20 | 6.0 | 85 | 25.6 | 138 | 41.6 | 63 | 19.0 | 5.531 | 1.221 |
| 3. Branch staff give positive advice to customers when they have a problem. | 0 | 0.0 | 5 | 1.5 | 7 | 2.1 | 13 | 3.9 | 68 | 20.5 | 162 | 48.8 | 77 | 23.2 | 5.824 | .998 |
| 4. Branch staff understand the needs of customers. | 1 | 0.3 | 3 | 0.9 | 9 | 2.7 | 16 | 4.8 | 85 | 25.6 | 161 | 48.5 | 57 | 17.2 | 5.682 | .993 |
| 5. Branch staff are sympathetic and reassuring to customers. | 11 | 3.3 | 8 | 2.4 | 13 | 3.9 | 31 | 9.3 | 77 | 23.2 | 139 | 41.9 | 53 | 16.0 | 5.367 | 1.388 |
| 6. Branch staff resolve customers' complaints quickly. | 4 | 1.2 | 5 | 1.5 | 11 | 3.3 | 19 | 5.7 | 59 | 17.8 | 176 | 53.0 | 58 | 17.5 | 5.660 | 1.145 |
| 7. Branch staff keep external customers fully informed about new services. | 6 | 1.8 | 8 | 2.4 | 13 | 3.9 | 32 | 9.6 | 69 | 20.8 | 137 | 41.3 | 67 | 20.2 | 5.503 | 1.316 |
| 8. Branch staff are willing to help customers. | 3 | 0.9 | 9 | 2.7 | 15 | 4.5 | 15 | 4.5 | 76 | 22.9 | 153 | 46.1 | 61 | 18.4 | 5.572 | 1.217 |
| 9. Branch staff are well dressed and appear neat and tidy. | 6 | 1.8 | 8 | 2.4 | 12 | 3.6 | 14 | 4.2 | 57 | 17.2 | 156 | 47.0 | 79 | 23.8 | 5.676 | 1.282 |
| 10. The branch handles and keeps the customers' financial affairs accurately. | 4 | 1.2 | 12 | 3.6 | 14 | 4.2 | 12 | 3.6 | 101 | 30.4 | 125 | 37.7 | 64 | 19.3 | 5.489 | 1.279 |
| **Interface** | | | | | | | | | | | | | | | | |
| 11. Branch staff are not able to provide customers with individual attention. | 4 | 1.2 | 13 | 3.9 | 43 | 13.0 | 18 | 5.4 | 37 | 11.1 | 130 | 39.2 | 87 | 26.2 | 5.436 | 1.540 |
| 12. Branch staff do not have the customers' best interests at heart. | 3 | 0.9 | 14 | 4.2 | 39 | 11.7 | 23 | 7.1 | 25 | 7.5 | 126 | 37.9 | 102 | 30.7 | 5.524 | 1.549 |

Table (2) Continued

| Items | Strongly Disagree | | Disagree | | Slightly Disagree | | Neither Agree Nor Disagree | | Slightly Agree | | Agree | | Strongly Agree | | M | S.D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | | Freq | % | | |
| 13. Bank brochures and leaflets are not informative. | 6 | 1.8 | 52 | 15.7 | 46 | 13.9 | 23 | 6.8 | 53 | 16.0 | 110 | 33.1 | 42 | 12.7 | 4.693 | 1.753 |
| 14. Branch staff find it difficult to give a prompt service to customers. | 10 | 3.0 | 33 | 9.9 | 61 | 18.4 | 19 | 5.7 | 56 | 16.9 | 99 | 29.8 | 54 | 16.3 | 4.779 | 1.754 |
| 15. Branch staff work as individuals rather than as part of a team in providing a high level of service quality to customers. | 2 | 0.6 | 13 | 3.9 | 29 | 8.7 | 8 | 2.4 | 45 | 13.6 | 138 | 41.6 | 97 | 29.2 | 5.649 | 1.404 |
| 16. Bank customers' statements are complicated and not easy to understand. | 9 | 2.7 | 50 | 15.1 | 65 | 19.6 | 31 | 9.3 | 51 | 15.4 | 88 | 26.5 | 38 | 11.4 | 4.454 | 1.758 |
| **Reliability** 17. Branch staff find it difficult to keep promises made to customers because of other demands on their time. | 8 | 2.4 | 23 | 6.9 | 22 | 6.6 | 16 | 4.9 | 40 | 12.0 | 132 | 39.8 | 91 | 27.4 | 5.475 | 1.614 |
| 18. High workloads make it difficult for branch staff to perform an error-free service to customers. | 8 | 2.4 | 39 | 11.7 | 48 | 14.5 | 25 | 7.5 | 51 | 15.4 | 108 | 32.5 | 53 | 16.0 | 4.829 | 1.743 |
| 19. Branch opening hours are not convenient for customers. | 18 | 5.4 | 36 | 10.8 | 66 | 19.9 | 29 | 8.7 | 53 | 16.0 | 87 | 26.2 | 43 | 13.0 | 4.500 | 1.804 |
| **Tangibles** 20. The branch has up-to-date technology. | 4 | 1.2 | 19 | 5.7 | 53 | 15.9 | 88 | 26.8 | 82 | 24.6 | 74 | 22.2 | 12 | 3.6 | 4.492 | 1.271 |
| 21. Bank brochures, leaflets and statements, etc, are not visually appealing. | 27 | 8.1 | 49 | 14.8 | 57 | 17.2 | 36 | 10.7 | 46 | 13.9 | 75 | 22.6 | 42 | 12.7 | 4.264 | 1.901 |
| 22. The customer waiting area in the branch is comfortable. | 42 | 12.7 | 30 | 9.0 | 30 | 9.0 | 19 | 5.8 | 89 | 26.8 | 95 | 28.6 | 27 | 8.1 | 4.440 | 1.885 |

Table (3) ANOVA by Four Banks: Internal Service Quality Items

| Items | (1) Bank A N= 121 | | (2) Bank B N=98 | | (3) Bank C N=64 | | (4) Bank D N=49 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| **Management Support** **1.** Improving the level of service quality to our external customers is one of the major goals of our bank. | 6.193 | 1.032 | 6.454 | .930 | 6.132 | .951 | 5.964 | 1.338 | 3.197 | .024 | 2>3,4 | 0.1 |
| **2.** My closest supervisor emphasises the importance of delivering a high level of service quality to external customers. | 6.033 | 1.078 | 6.050 | 1.283 | 6.265 | .672 | 6.247 | 1.051 | .968 | .408 | N.D* | |
| **3.** The bank is committed to providing a high level of service quality to external customers. | 5.765 | 1.003 | 5.907 | 1.161 | 5.765 | 1.243 | 5.836 | 1.247 | .356 | .785 | N.D | |
| **4.** Departments within the bank have formal systems for setting and monitoring performance against service quality goals. | 5.306 | 1.515 | 5.603 | 1.480 | 5.421 | 1.294 | 5.265 | 1.538 | 1.004 | .391 | N.D | |
| **5.** The bank regards improving the levels of co-operation between different departments within the bank as an important goal. | 5.357 | 1.416 | 5.522 | 1.369 | 5.968 | 1.221 | 5.408 | 1.553 | 2.767 | .042 | 3>2,4,1 | 0.1 |
| **6.** Management does not motivate me to provide a high level of service quality to external customers. | 5.320 | 1.945 | 5.536 | 1.878 | 5.484 | 1.825 | 5.467 | 1.966 | .242 | .867 | N.D | |
| **7.** My own performance within the bank is measured against specific service quality goals. | 4.969 | 1.627 | 4.818 | 1.839 | 5.359 | 1.536 | 5.163 | 1.545 | 1.600 | .189 | N.D | |
| Management Support (overall) | 5.563 | .969 | 5.699 | .963 | 5.771 | .904 | 5.621 | 1.089 | .688 | .560 | N.D | |
| **Management Effectiveness** **8.** Time pressures usually prevent me from providing a high level of service quality to external customers. | 5.351 | 1.646 | 4.244 | 2.053 | 4.934 | 1.876 | 4.918 | 1.630 | 6.737 | .000 | 1,3,4>2 | 0.05 |
| **9.** I sometimes feel confused about what management expects from me when dealing with external customers. | 5.020 | 1.680 | 4.752 | 1.845 | 5.438 | 1.478 | 5.102 | 1.673 | 2.308 | .076 | N.D | |
| **10.** Management has far more important issues to address than helping me to provide a high level of service quality to external customers. | 4.506 | 2.000 | 4.588 | 1.946 | 4.640 | 2.010 | 4.828 | 2.044 | .296 | .828 | N.D | |

* N.D (No Differences)

Table (3) Continued

| Items | (1) Bank A N= 121 | | (2) Bank B N=98 | | (3) Bank C N=64 | | (4) Bank D N=49 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| **11.** Other considerations frequently take precedence over the goal of improving the quality of external customer service. | 4.101 | 2.082 | 4.450 | 1.884 | 4.945 | 1.821 | 4.795 | 1.986 | 2.879 | .036 | 3,4>1 | 0.05 |
| Management Effectiveness (overall) | 4.745 | 1.346 | 4.509 | 1.356 | 4.989 | 1.301 | 4.911 | 1.357 | 2.190 | .089 | N.D | |
| **Working Atmospherics** | | | | | | | | | | | | |
| **12.** The working environment within the bank is comfortable. | 4.561 | 1.650 | 4.552 | 1.705 | 5.071 | 1.289 | 4.196 | 1.692 | 2.897 | .035 | 3>1,2,4 | 0.1 |
| **13.** I am satisfied with the supervision which I receive within the bank. | 4.622 | 1.659 | 4.857 | 1.762 | 5.359 | 1.239 | 5.201 | 1.224 | 3.422 | .018 | 3>2,1; 4>1 | 0.1 |
| **14.** I personally have sufficient authority and discretion to provide a high level of service quality to external customers. | 4.137 | 1.892 | 4.256 | 2.067 | 4.437 | 2.022 | 4.152 | 1.957 | .330 | .804 | N.D | |
| Working Atmospherics (overall) | 4.440 | 1.393 | 4.555 | 1.511 | 4.956 | 1.097 | 4.516 | 1.244 | 1.997 | .114 | N.D | |
| **Employees Service Vision** | | | | | | | | | | | | |
| **15.** I feel personally responsible for creating a good impression of the bank to external customers. | 5.999 | 1.005 | 5.999 | 1.245 | 5.937 | 1.052 | 6.000 | 1.080 | .054 | .984 | N.D | |
| **16.** My most important objective is to satisfy the needs of customers. | 6.412 | .654 | 6.408 | .978 | 6.250 | .690 | 6.489 | .767 | .932 | .425 | N.D | |
| **17.** I feel that it is my responsibility to help colleagues within my department. | 6.387 | .683 | 6.107 | 1.188 | 6.300 | .748 | 6.061 | 1.125 | 2.088 | .102 | N.D | |
| Employees Service Vision (overall) | 6.266 | .656 | 6.171 | .975 | 6.162 | .544 | 6.183 | .736 | .345 | .793 | N.D | |
| **Communication** | | | | | | | | | | | | |
| **18.** The bank regularly seeks information from staff about how to improve the quality of external customer service. | 4.867 | 1.583 | 4.512 | 1.945 | 5.187 | 1.717 | 4.469 | 1.969 | 2.480 | .061 | N.D | |
| **19.** The bank encourages staff to make suggestions for improving the quality of external customer service. | 5.295 | 1.688 | 4.834 | 1.767 | 5.609 | 1.609 | 5.310 | 1.635 | 3.286 | .021 | 3>2 | 0.05 |
| **20.** The bank uses staff suggestions to improve the quality of external customer service. | 4.926 | 1.736 | 4.562 | 1.662 | 5.389 | 1.549 | 5.183 | 1.728 | 3.929 | .009 | 3,4>2 | 0.05 |

Table (3) Continued

| Items | (1) Bank A N= 121 | | (2) Bank B N=98 | | (3) Bank C N=64 | | (4) Bank D N=49 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| **21.** The bank rewards staff who make good suggestions for improving the quality of external customer service. | 4.671 | 1.745 | 4.444 | 1.707 | 5.371 | 1.658 | 5.040 | 1.695 | 4.632 | .003 | 3>1,2; 4>2 | 0.05 |
| **22.** Senior management within the bank regularly communicate to employees the importance of providing a high level of service quality to external customers. | 5.724 | 1.329 | 5.909 | 1.264 | 5.859 | 1.152 | 5.485 | 1.671 | 1.311 | .271 | N.D | |
| **23.** Bank staff regularly make suggestions to managers/supervisors about how to improve the quality of external customer service. | 4.734 | 1.714 | 4.169 | 1.738 | 4.750 | 1.613 | 4.408 | 1.706 | 2.637 | .050 | 3,1>2 | 0.1 |
| **24.** The objective of delivering a high level of service quality to external customers is clearly communicated to all employees and departments. | 5.258 | 1.568 | 5.381 | 1.527 | 5.609 | 1.387 | 5.244 | 1.521 | .824 | .481 | N.D | |
| **25.** Changes in work methods (for example, the introduction of new technology to provide a speedier service) made to improve the quality of external customer service are clearly communicated to all employees and departments. | 5.367 | 1.481 | 5.347 | 1.563 | 5.859 | 1.401 | 5.510 | 1.459 | 1.886 | .132 | N.D | |
| Communication (overall) | 5.105 | 1.249 | 4.895 | 1.214 | 5.454 | 1.198 | 5.081 | 1.399 | 2.798 | .040 | 3>1,4,2 | 0.1 |
| **Technology** | | | | | | | | | | | | |
| **26.** Bank technology helps me to provide an error free service to external customers. | 4.867 | 1.842 | 5.000 | 1.648 | 5.234 | 1.550 | 4.979 | 1.587 | .620 | .603 | N.D | |
| **27.** Bank technology helps me to provide a fast service to external customers. | 5.209 | 1.611 | 5.236 | 1.706 | 5.406 | 1.466 | 5.387 | 1.525 | .296 | .828 | N.D | |
| **28.** Bank technology provides me with easy-to-access information on extenral customers. | 5.395 | 1.589 | 5.275 | 1.637 | 5.677 | 1.307 | 5.265 | 1.468 | 1.074 | .360 | N.D | |
| **29.** Bank technology has given me more time to talk to external customers and discuss their needs. | 4.998 | 1.711 | 4.892 | 1.750 | 4.921 | 1.845 | 4.979 | 1.492 | .079 | .971 | N.D | |
| Technology (overall) | 5.117 | 1.525 | 5.101 | 1.514 | 5.310 | 1.260 | 5.153 | 1.381 | .320 | .811 | N.D | |

Table (3) Continued

| Items | (1) Bank A N= 121 | | (2) Bank B N=98 | | (3) Bank C N=64 | | (4) Bank D N=49 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| **Job Fit** **30.** In recruiting employees, the bank attempts to ensure that staff have good communication skills. | 4.744 | 1.682 | 4.867 | 1.779 | 5.312 | 1.510 | 4.816 | 1.603 | 1.624 | .184 | N.D | |
| **31.** When I was recruited by the bank, I was assessed in terms of my teamwork skills. | 4.352 | 1.877 | 4.743 | 1.831 | 5.058 | 1.632 | 5.158 | 1.345 | 3.260 | .022 | 4,3>1 | 0.05 |
| **32.** Staff within my department work as individuals rather than in teams. | 5.367 | 1.731 | 4.991 | 1.873 | 5.312 | 1.689 | 5.265 | 1.692 | .957 | .413 | N.D | |
| **33.** Colleagues within my department regularly help each other to provide a high level of service quality to external customers. | 5.459 | 1.650 | 5.241 | 1.558 | 5.640 | 1.213 | 5.346 | 1.465 | 1.052 | .370 | N.D | |
| **34.** The performance appraisal systems within the bank include co-operation and team-based performance indicators. | 5.217 | 1.408 | 4.877 | 1.734 | 5.203 | 1.682 | 5.250 | 1.215 | 1.242 | .295 | N.D | |
| **35.** The bank rewards me when I provide a high level of service quality to external customers. | 4.342 | 1.973 | 4.620 | 1.879 | 4.765 | 1.925 | 4.460 | 1.802 | .751 | .522 | N.D | |
| **36.** My supervisor usually praises my performance when I provide a high level of service quality to external customers. | 5.020 | 1.592 | 5.124 | 1.710 | 5.453 | 1.468 | 5.020 | 1.520 | 1.089 | .354 | N.D | |
| **37.** The performance appraisal systems and reward mechanisms within the bank depend upon specific performance standards which include customer care indicators. | 4.469 | 1.954 | 4.823 | 1.878 | 5.421 | 1.551 | 4.706 | 1.644 | 3.646 | .013 | 3>2,4,1 | 0.05 |
| **38.** Management motivates me to do my best. | 4.857 | 1.782 | 5.009 | 1.705 | 5.296 | 1.639 | 5.122 | 1.628 | .907 | .438 | N.D | |
| **39.** The performance appraisal systems within the bank do not motivate me to deliver a high level of service quality to external customers. | 4.469 | 1.884 | 4.064 | 2.169 | 4.709 | 1.995 | 4.579 | 1.891 | 1.783 | .150 | N.D | |
| Job Fit (overall) | 4.830 | 1.207 | 4.836 | 1.262 | 5.217 | 1.131 | 4.972 | 1.035 | 1.744 | .158 | N.D | |

Table (3) Continued

| Items | (1) Bank A N= 121 | | (2) Bank B N=98 | | (3) Bank C N=64 | | (4) Bank D N=49 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| **Training** | | | | | | | | | | | | |
| **40.** Training programmes within the bank should place more emphasis on the importance of providing a high level of service quality to external customers. | 5.989 | 1.126 | 5.908 | 1.316 | 5.437 | 1.798 | 6.142 | .816 | 3.316 | .020 | 4,1,2>3 | 0.05 |
| **41.** The bank should place more emphasis in bank training on how to improve my communication skills. | 5.857 | 1.166 | 5.809 | 1.213 | 5.229 | 1.830 | 5.795 | 1.224 | 3.408 | .018 | 1,2,4>3 | 0.05 |
| **42.** I would like to receive more bank training on how to improve my teamwork skills. | 5.832 | 1.282 | 5.768 | 1.153 | 5.125 | 1.722 | 5.367 | 1.424 | 4.681 | .003 | 1,2>4,3 | 0.1 |
| **43.** The bank should place more emphasis in bank training on how to improve my information technology skills. | 5.979 | 1.323 | 6.140 | .887 | 5.265 | 1.729 | 5.510 | 1.709 | 7.234 | .000 | 2,1>4,3 | 0.05 |
| Training (overall) | 5.914 | .997 | 5.906 | .800 | 5.264 | 1.638 | 5.704 | .993 | 5.840 | .001 | 1,2,4>3 | 0.05 |
| **Job Satisfaction** | | | | | | | | | | | | |
| **44.** I am satisfied with my job. | 5.898 | 1.144 | 5.644 | 1.250 | 5.812 | 1.125 | 5.489 | 1.672 | 1.429 | .234 | N.D | |
| **45.** Overall the benefits I receive from the bank such as medical insurance, vacation, etc, are good. | 5.813 | .816 | 5.727 | 1.242 | 5.843 | 1.171 | 5.530 | 1.243 | .899 | .442 | N.D | |
| **46.** I have a strong desire to remain in the bank. | 6.020 | 1.157 | 5.790 | 1.322 | 5.718 | 1.350 | 5.836 | 1.476 | .856 | .464 | N.D | |
| **47.** I regard my work in the bank as an imoprtant of my life. | 6.445 | .639 | 6.160 | 1.169 | 5.890 | 1.358 | 6.428 | .736 | 4.567 | .004 | 1,4>3 | 0.05 |
| Job satisfaction (overall) | 6.044 | .717 | 5.830 | .944 | 5.816 | .862 | 5.821 | .961 | 1.471 | .222 | N.D | |

Table (4) ANOVA by Branch Location: Internal Service Quality Items

| Items | Location 1 N= 87 | | Location 2 N= 101 | | Location 3 N= 76 | | Location 4 N=68 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| **Management Support** **1.** Improving the level of service quality to our external customers is one of the major goals of our bank. | 6.172 | 1.080 | 6.123 | .972 | 6.213 | 1.268 | 6.544 | .741 | 2.514 | .058 | N.D | |
| **2.** My closest supervisor emphasises the importance of delivering a high level of service quality to external customers. | 6.209 | .836 | 5.991 | 1.115 | 6.106 | 1.206 | 6.147 | 1.237 | .640 | .590 | N.D | |
| **3.** The bank is committed to providing a high level of service quality to external customers. | 5.758 | .987 | 5.722 | 1.297 | 5.826 | 1.204 | 6.073 | .997 | 1.441 | .231 | N.D | |
| **4.** Departments within the bank have formal systems for setting and monitoring performance against service quality goals. | 5.356 | 1.389 | 5.333 | 1.491 | 5.618 | 1.432 | 5.455 | 1.587 | .634 | .593 | N.D | |
| **5.** The bank regards improving the levels of co-operation between different departments within the bank as an important goal. | 5.742 | 1.301 | 5.287 | 1.469 | 5.593 | 1.345 | 5.516 | 1.468 | 1.712 | .164 | N.D | |
| **6.** Management does not motivate me to provide a high level of service quality to external customers. | 5.622 | 1.735 | 5.229 | 1.951 | 5.190 | 2.133 | 5.778 | 1.724 | 1.840 | .140 | N.D | |
| **7.** My own performance within the bank is measured against specific service quality goals. | 5.257 | 1.597 | 4.965 | 1.595 | 4.842 | 1.689 | 4.926 | 1.903 | 1.052 | .370 | N.D | |
| Management Support (overall) | 5.719 | .958 | 5.534 | .974 | 5.627 | .996 | 5.777 | .959 | .970 | .407 | N.D | |
| **Management Effectiveness** **8.** Time pressures usually prevent me from providing a high level of service quality to external customers. | 4.642 | 2.037 | 4.111 | 1.779 | 4.928 | 1.656 | 5.340 | 1.979 | 5.937 | .001 | 4>1,2; 1>2 | 0.1 |
| **9.** I sometimes feel confused about what management expects from me when dealing with external customers. | 5.426 | 1.711 | 4.977 | 1.366 | 4.908 | 1.782 | 4.573 | 1.994 | 3.628 | .013 | 1>2,3,4 | 0.1 |
| **10.** Management has far more important issues to address than helping me to provide a high level of service quality to external customers. | 4.798 | 1.948 | 4.397 | 1.980 | 4.476 | 1.974 | 4.750 | 2.047 | .861 | .461 | N.D | |

Table (4) Continued

| Items | Location 1 N= 87 | | Location 2 N= 101 | | Location 3 N= 76 | | Location 4 N=68 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| **11.** Other considerations frequently take precedence over the goal of improving the quality of external customer service. | 4.980 | 2.006 | 3.965 | 1.842 | 4.302 | 1.858 | 4.661 | 2.045 | 4.719 | .003 | 1>3,2; 4>2 | 0.05 |
| Management Effectiveness (overall) | 5.033 | 1.302 | 4.670 | 1.236 | 4.582 | 1.370 | 4.524 | 1.494 | 2.621 | .051 | N.D | |
| **Working Atmospherics** **12.** The working environment within the bank is comfortable. | 4.794 | 1.633 | 4.563 | 1.463 | 4.286 | 1.660 | 4.720 | 1.794 | 1.560 | .199 | N.D | |
| **13.** I am satisfied with the supervision which I receive within the bank. | 5.287 | 1.597 | 4.563 | 1.321 | 4.668 | 1.676 | 5.189 | 1.704 | 4.698 | .003 | 1,4>3,2 | 0.05 |
| **14.** I personally have sufficient authority and discretion to provide a high level of service quality to external customers. | 4.289 | 1.867 | 4.051 | 2.011 | 4.305 | 2.052 | 4.338 | 2.048 | .363 | .780 | N.D | |
| Working Atmospherics (overall) | 4.790 | 1.342 | 4.392 | 1.175 | 4.420 | 1.535 | 4.749 | 1.457 | 2.027 | .110 | N.D | |
| **Employees Service Vision** **15.** I feel personally responsible for creating a good impression of the bank to external customers. | 5.953 | 1.033 | 6.000 | .979 | 6.039 | 1.204 | 5.955 | 1.297 | .104 | .958 | N.D | |
| **16.** My most important objective is to satisfy the needs of customers. | 6.395 | .669 | 6.386 | .662 | 6.373 | .990 | 6.411 | .950 | .028 | .994 | N.D | |
| **17.** I feel that it is my responsibility to help colleagues within my department. | 6.390 | .704 | 6.269 | .732 | 6.039 | 1.248 | 6.132 | 1.208 | 2.033 | .109 | N.D | |
| Employees Service Vision (overall) | 6.246 | .672 | 6.218 | .525 | 6.150 | .941 | 6.166 | 1.006 | .263 | .852 | N.D | |
| **Communication** **18.** The bank regularly seeks information from staff about how to improve the quality of external customer service. | 4.920 | 1.600 | 4.793 | 1.803 | 4.447 | 1.921 | 4.735 | 1.974 | 1.015 | .386 | N.D | |
| **19.** The bank encourages staff to make suggestions for improving the quality of external customer service. | 5.554 | 1.699 | 5.252 | 1.621 | 4.857 | 1.726 | 4.941 | 1.769 | 3.051 | .029 | 1>4,3 | 0.05 |
| **20.** The bank uses staff suggestions to improve the quality of external customer service. | 5.306 | 1.758 | 4.893 | 1.567 | 4.578 | 1.805 | 4.764 | 1.594 | 3.021 | .030 | 1>4,3 | 0.1 |

Table (4) Continued

| Items | Location 1 N= 87 | | Location 2 N= 101 | | Location 3 N= 76 | | Location 4 N=68 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| **21.** The bank rewards staff who make good suggestions for improving the quality of external customer service. | 5.275 | 1.742 | 4.583 | 1.650 | 4.605 | 1.673 | 4.482 | 1.798 | 4.151 | .007 | 1>3,2,4 | 0.05 |
| **22.** Senior management within the bank regularly communicate to employees the importance of providing a high level of service quality to external customers. | 5.720 | 1.356 | 5.701 | 1.371 | 5.789 | 1.417 | 5.970 | 1.145 | .630 | .596 | N.D | |
| **23.** Bank staff regularly make suggestions to managers/supervisors about how to improve the quality of external customer service. | 4.712 | 1.731 | 4.623 | 1.592 | 4.032 | 1.728 | 4.485 | 1.799 | 2.525 | .058 | N.D | |
| **24.** The objective of delivering a high level of service quality to external customers is clearly communicated to all employees and departments. | 5.396 | 1.552 | 5.234 | 1.456 | 5.439 | 1.551 | 5.422 | 1.516 | .323 | .809 | N.D | |
| **25.** Changes in work methods (for example, the introduction of new technology to provide a speedier service) made to improve the quality of external customer service are clearly communicated to all employees and departments. | 5.683 | 1.455 | 5.367 | 1.420 | 5.421 | 1.577 | 5.367 | 1.582 | .945 | .419 | N.D | |
| Communication (overall) | 5.320 | 1.232 | 5.067 | 1.262 | 4.896 | 1.277 | 5.021 | 1.255 | 1.710 | .165 | N.D | |
| **Technology**<br>**26.** Bank technology helps me to provide an error free service to external customers. | 5.128 | 1.860 | 4.804 | 1.514 | 4.947 | 1.623 | 5.132 | 1.735 | .754 | .520 | N.D | |
| **27.** Bank technology helps me to provide a fast service to external customers. | 5.396 | 1.612 | 5.167 | 1.414 | 5.236 | 1.640 | 5.317 | 1.821 | .347 | .791 | N.D | |
| **28.** Bank technology provides me with easy-to-access information on extenral customers. | 5.479 | 1.550 | 5.422 | 1.374 | 5.320 | 1.498 | 5.279 | 1.810 | .291 | .832 | N.D | |
| **29.** Bank technology has given me more time to talk to external customers and discuss their needs. | 4.940 | 1.693 | 4.910 | 1.685 | 4.842 | 1.657 | 5.102 | 1.870 | .293 | .831 | N.D | |
| Technology (overall) | 5.236 | 1.514 | 5.076 | 1.243 | 5.086 | 1.438 | 5.207 | 1.666 | .242 | .867 | N.D | |

Table (4) Continued

| Items | Location 1 N= 87 | | Location 2 N= 101 | | Location 3 N= 76 | | Location 4 N=68 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| **Job Fit**<br>**30.** In recruiting employees, the bank attempts to ensure that staff have good communication skills. | 5.089 | 1.692 | 4.747 | 1.504 | 4.828 | 1.784 | 4.941 | 1.802 | .719 | .541 | N.D | |
| **31.** When I was recruited by the bank, I was assessed in terms of my teamwork skills. | 4.948 | 1.855 | 4.304 | 1.602 | 4.937 | 1.688 | 4.816 | 1.884 | 2.633 | .050 | 1,3,4>2 | 0.1 |
| **32.** Staff within my department work as individuals rather than in teams. | 5.436 | 1.675 | 5.237 | 1.709 | 5.184 | 1.771 | 4.882 | 1.958 | 1.267 | .286 | N.D | |
| **33.** Colleagues within my department regularly help each other to provide a high level of service quality to external customers. | 5.448 | 1.647 | 5.445 | 1.360 | 5.268 | 1.517 | 5.408 | 1.573 | .250 | .861 | N.D | |
| **34.** The performance appraisal systems within the bank include co-operation and team-based performance indicators. | 5.198 | 1.437 | 5.191 | 1.467 | 4.830 | 1.578 | 5.119 | 1.832 | .983 | .401 | N.D | |
| **35.** The bank rewards me when I provide a high level of service quality to external customers. | 4.683 | 1.951 | 4.236 | 1.859 | 4.488 | 1.892 | 4.787 | 1.905 | 1.335 | .263 | N.D | |
| **36.** My supervisor usually praises my performance when I provide a high level of service quality to external customers. | 5.306 | 1.599 | 4.977 | 1.447 | 4.934 | 1.715 | 5.338 | 1.689 | 1.432 | .233 | N.D | |
| **37.** The performance appraisal systems and reward mechanisms within the bank depend upon specific performance standards which include customer care indicators. | 5.174 | 1.944 | 4.413 | 1.584 | 4.484 | 1.879 | 5.173 | 1.836 | 4.521 | .004 | 1,4>3,2 | 0.05 |
| **38.** Management motivates me to do my best. | 5.336 | 1.825 | 4.748 | 1.582 | 4.948 | 1.688 | 5.059 | 1.700 | 1.964 | .119 | N.D | |
| **39.** The performance appraisal systems within the bank do not motivate me to deliver a high level of service quality to external customers. | 4.651 | 1.866 | 4.459 | 1.914 | 4.228 | 2.206 | 4.064 | 2.136 | 1.348 | .259 | N.D | |
| Job Fit (overall) | 5.106 | 1.187 | 4.797 | 1.099 | 4.813 | 1.183 | 4.959 | 1.333 | 1.353 | .257 | N.D | |

Table (4) Continued

| Items | Location 1 N= 87 | | Location 2 N= 101 | | Location 3 N= 76 | | Location 4 N=68 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| **Training** | | | | | | | | | | | | |
| **40.** Training programmes within the bank should place more emphasis on the importance of providing a high level of service quality to external customers. | 5.712 | 1.083 | 5.988 | 1.538 | 5.710 | 1.403 | 6.159 | 1.141 | 2.168 | .092 | N.D | |
| **41.** The bank should place more emphasis in bank training on how to improve my communication skills. | 5.442 | 1.132 | 5.862 | 1.633 | 5.605 | 1.443 | 6.029 | .945 | 3.134 | .026 | 4>3,1; 2>1 | 0.05 |
| **42.** I would like to receive more bank training on how to improve my teamwork skills. | 5.227 | 1.196 | 5.846 | 1.624 | 5.671 | 1.340 | 5.779 | 1.130 | 3.930 | .009 | 2,4,3>1 | 0.05 |
| **43.** The bank should place more emphasis in bank training on how to improve my information technology skills. | 5.306 | 1.306 | 5.965 | 1.787 | 6.118 | .893 | 6.117 | .985 | 7.613 | .000 | 3,4,2>1 | 0.05 |
| Training (overall) | 5.422 | 1.445 | 5.915 | .992 | 5.776 | .895 | 6.021 | .863 | 5.093 | .002 | 4,2,3>1 | 0.05 |
| **Job Satisfaction** | | | | | | | | | | | | |
| **44.** I am satisfied with my job. | 5.839 | 1.189 | 5.732 | 1.279 | 5.500 | 1.465 | 5.838 | 1.114 | 1.208 | .307 | N.D | |
| **45.** Overall the benefits I receive from the bank such as medical insurance, vacation, etc, are good. | 5.824 | .795 | 5.703 | 1.253 | 5.628 | 1.197 | 5.841 | 1.174 | .638 | .591 | N.D | |
| **46.** I have a strong desire to remain in the bank. | 5.988 | 1.195 | 5.871 | 1.293 | 5.578 | 1.444 | 5.951 | 1.274 | 1.574 | .196 | N.D | |
| **47.** I regard my work in the bank as an imoprtant of my life. | 6.421 | .653 | 6.138 | 1.183 | 6.161 | 1.096 | 6.209 | 1.153 | 1.362 | .254 | N.D | |
| Job satisfaction (overall) | 6.018 | .733 | 5.861 | .868 | 5.717 | .974 | 5.960 | .902 | 1.824 | .143 | N.D | |

Table (5) ANOVA by Branch Size: Internal Service Quality Items

| Items | (1) Small N= 68 | | (2) Medium N= 110 | | (3) Large N=154 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | S.D | Mean | S.D | Mean | S.D | Value | Sig. | Results | Sig. |
| **Management Support** | | | | | | | | | | |
| **1.** Improving the level of service quality to our external customers is one of the major goals of our bank. | 6.073 | 1.069 | 6.268 | 1.010 | 6.300 | 1.054 | 1.161 | .314 | N.D | |
| **2.** My closest supervisor emphasises the importance of delivering a high level of service quality to external customers. | 5.911 | 1.289 | 6.121 | 1.029 | 6.202 | 1.037 | 1.672 | .190 | N.D | |
| **3.** The bank is committed to providing a high level of service quality to external customers. | 5.794 | 1.100 | 5.871 | 1.197 | 5.811 | 1.130 | .123 | .884 | N.D | |
| **4.** Departments within the bank have formal systems for setting and monitoring performance against service quality goals. | 5.705 | 1.210 | 5.327 | 1.631 | 5.383 | 1.438 | 1.558 | .212 | N.D | |
| **5.** The bank regards improving the levels of co-operation between different departments within the bank as an important goal. | 5.529 | 1.251 | 5.501 | 1.383 | 5.577 | 1.472 | .099 | .906 | N.D | |
| **6.** Management does not motivate me to provide a high level of service quality to external customers. | 5.631 | 1.809 | 5.185 | 1.949 | 5.564 | 1.884 | 1.664 | .191 | N.D | |
| **7.** My own performance within the bank is measured against specific service quality goals. | 5.470 | 1.470 | 5.055 | 1.618 | 4.792 | 1.784 | 3.929 | .021 | 1>2,3 | 0.1 |
| Management Support (overall) | 5.730 | .946 | 5.618 | .963 | 5.661 | .994 | .279 | .757 | N.D | |
| **Management Effectiveness** | | | | | | | | | | |
| **8.** Time pressures usually prevent me from providing a high level of service quality to external customers. | 4.653 | 1.872 | 4.780 | 1.898 | 4.887 | 1.908 | .371 | .690 | N.D | |
| **9.** I sometimes feel confused about what management expects from me when dealing with external customers. | 5.015 | 1.652 | 4.900 | 1.713 | 5.097 | 1.751 | .425 | .654 | N.D | |
| **10.** Management has far more important issues to address than helping me to provide a high level of service quality to external customers. | 4.694 | 1.939 | 4.378 | 1.976 | 4.737 | 2.005 | 1.133 | .323 | N.D | |
| **11.** Other considerations frequently take precedence over the goal of improving the quality of external customer service. | 4.617 | 1.810 | 4.545 | 1.967 | 4.402 | 2.035 | .337 | .714 | N.D | |
| Management Effectiveness (overall) | 4.745 | 1.324 | 4.650 | 1.354 | 4.781 | 1.365 | .303 | .739 | N.D | |
| **Working Atmospherics** | | | | | | | | | | |
| **12.** The working environment within the bank is comfortable. | 4.717 | 1.625 | 4.854 | 1.531 | 4.371 | 1.675 | 3.074 | .048 | 2>3 | 0.05 |
| **13.** I am satisfied with the supervision which I receive within the bank. | 5.000 | 1.414 | 5.043 | 1.516 | 4.830 | 1.706 | .649 | .523 | N.D | |
| **14.** I personally have sufficient authority and discretion to provide a high level of service quality to external customers. | 4.294 | 1.924 | 4.254 | 1.932 | 4.207 | 2.062 | .048 | .953 | N.D | |

Table (5) Continued

| Items | (1) Small N= 68 | | (2) Medium N= 110 | | (3) Large N=154 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | S.D | Mean | S.D | Mean | S.D | Value | Sig. | Results | Sig. |
| Working Atmospherics (overall) | 4.670 | 1.167 | 4.717 | 1.310 | 4.469 | 1.492 | 1.184 | .303 | N.D | |
| **Employees Service Vision** | | | | | | | | | | |
| **15.** I feel personally responsible for creating a good impression of the bank to external customers. | 5.867 | .991 | 5.954 | 1.136 | 6.064 | 1.147 | .813 | .444 | N.D | |
| **16.** My most important objective is to satisfy the needs of customers. | 6.382 | .713 | 6.321 | .866 | 6.444 | .807 | .738 | .479 | N.D | |
| **17.** I feel that it is my responsibility to help colleagues within my department. | 6.250 | .798 | 6.156 | .910 | 6.253 | 1.094 | .351 | .704 | N.D | |
| Employees Service Vision (overall) | 6.166 | .645 | 6.144 | .806 | 6.254 | .815 | .711 | .492 | N.D | |
| **Communication** | | | | | | | | | | |
| **18.** The bank regularly seeks information from staff about how to improve the quality of external customer service. | 5.073 | 1.519 | 4.854 | 1.811 | 4.513 | 1.920 | 2.589 | .077 | N.D | |
| **19.** The bank encourages staff to make suggestions for improving the quality of external customer service. | 5.455 | 1.439 | 5.345 | 1.627 | 4.962 | 1.857 | 2.660 | .071 | N.D | |
| **20.** The bank uses staff suggestions to improve the quality of external customer service. | 5.188 | 1.632 | 5.118 | 1.612 | 4.661 | 1.753 | 3.448 | .033 | 1,2>3 | 0.1 |
| **21.** The bank rewards staff who make good suggestions for improving the quality of external customer service. | 5.081 | 1.443 | 4.890 | 1.704 | 4.563 | 1.853 | 2.473 | .086 | N.D | |
| **22.** Senior management within the bank regularly communicate to employees the importance of providing a high level of service quality to external customers. | 5.926 | .997 | 5.761 | 1.452 | 5.733 | 1.376 | .511 | .600 | N.D | |
| **23.** Bank staff regularly make suggestions to managers/supervisors about how to improve the quality of external customer service. | 4.573 | 1.669 | 4.686 | 1.640 | 4.298 | 1.779 | 1.762 | .173 | N.D | |
| **24.** The objective of delivering a high level of service quality to external customers is clearly communicated to all employees and departments. | 5.455 | 1.450 | 5.468 | 1.376 | 5.259 | 1.628 | .749 | .474 | N.D | |
| **25.** Changes in work methods (for example, the introduction of new technology to provide a speedier service) made to improve the quality of external customer service are clearly communicated to all employees and departments. | 5.500 | 1.310 | 5.481 | 1.542 | 5.461 | 1.555 | .017 | .983 | N.D | |
| Communication (overall) | 5.282 | 1.105 | 5.200 | 1.273 | 4.931 | 1.303 | 2.449 | .088 | N.D | |
| **Technology** | | | | | | | | | | |
| **26.** Bank technology helps me to provide an error free service to external customers. | 5.073 | 1.642 | 4.818 | 1.808 | 5.104 | 1.597 | 1.005 | .367 | N.D | |
| **27.** Bank technology helps me to provide a fast service to external customers. | 5.313 | 1.437 | 5.148 | 1.669 | 5.367 | 1.627 | .613 | .542 | N.D | |
| **28.** Bank technology provides me with easy-to-access information on extenral customers. | 5.334 | 1.407 | 5.427 | 1.499 | 5.381 | 1.632 | .077 | .926 | N.D | |

Table (5) Continued

| Items | (1) Small N= 68 | | (2) Medium N= 110 | | (3) Large N=154 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | S.D | Mean | S.D | Mean | S.D | Value | Sig. | Results | Sig. |
| **29.** Bank technology has given me more time to talk to external customers and discuss their needs. | 5.013 | 1.578 | 4.790 | 1.751 | 5.018 | 1.750 | .638 | .529 | N.D | |
| Technology (overall) | 5.183 | 1.346 | 5.046 | 1.495 | 5.217 | 1.463 | .468 | .627 | N.D | |
| **Job Fit** | | | | | | | | | | |
| **30.** In recruiting employees, the bank attempts to ensure that staff have good communication skills. | 5.176 | 1.535 | 5.000 | 1.631 | 4.727 | 1.764 | 1.933 | .146 | N.D | |
| **31.** When I was recruited by the bank, I was assessed in terms of my teamwork skills. | 5.069 | 1.642 | 4.727 | 1.763 | 4.625 | 1.806 | 1.520 | .220 | N.D | |
| 32. Staff within my department work as individuals rather than in teams. | 4.955 | 1.679 | 5.372 | 1.619 | 5.194 | 1.906 | 1.170 | .312 | N.D | |
| **33.** Colleagues within my department regularly help each other to provide a high level of service quality to external customers. | 5.308 | 1.374 | 5.392 | 1.566 | 5.441 | 1.542 | .181 | .834 | N.D | |
| **34.** The performance appraisal systems within the bank include co-operation and team-based performance indicators. | 5.076 | 1.363 | 5.120 | 1.684 | 5.086 | 1.571 | .022 | .978 | N.D | |
| **35.** The bank rewards me when I provide a high level of service quality to external customers. | 4.810 | 1.753 | 4.841 | 1.719 | 4.211 | 2.044 | 4.448 | .012 | 2,1>3 | 0.05 |
| **36.** My supervisor usually praises my performance when I provide a high level of service quality to external customers. | 4.955 | 1.587 | 5.372 | 1.426 | 5.058 | 1.719 | 1.812 | .165 | N.D | |
| **37.** The performance appraisal systems and reward mechanisms within the bank depend upon specific performance standards which include customer care indicators. | 4.985 | 1.460 | 4.976 | 1.886 | 4.628 | 1.929 | 1.524 | .219 | N.D | |
| **38.** Management motivates me to do my best. | 5.177 | 1.620 | 5.000 | 1.786 | 5.000 | 1.688 | .290 | .748 | N.D | |
| **39.** The performance appraisal systems within the bank do not motivate me to deliver a high level of service quality to external customers. | 4.505 | 1.957 | 4.394 | 2.072 | 4.323 | 2.024 | .193 | .824 | N.D | |
| Job Fit (overall) | 5.002 | 1.099 | 5.019 | 1.119 | 4.829 | 1.282 | .979 | .377 | N.D | |
| **Training** | | | | | | | | | | |
| **40.** Training programmes within the bank should place more emphasis on the importance of providing a high level of service quality to external customers. | 6.000 | .992 | 5.654 | 1.535 | 5.979 | 1.285 | 2.313 | .101 | N.D | |
| **41.** The bank should place more emphasis in bank training on how to improve my communication skills. | 5.617 | 1.349 | 5.545 | 1.450 | 5.868 | 1.281 | 2.024 | .134 | N.D | |
| **42.** I would like to receive more bank training on how to improve my teamwork skills. | 5.647 | 1.075 | 5.532 | 1.365 | 5.636 | 1.507 | .221 | .802 | N.D | |
| **43.** The bank should place more emphasis in bank training on how to improve my information technology skills. | 5.926 | 1.097 | 5.572 | 1.547 | 5.974 | 1.352 | 2.940 | .054 | N.D | |
| Training (overall) | 5.797 | .852 | 5.576 | 1.215 | 5.864 | 1.130 | 2.227 | .109 | N.D | |

Table (5) Continued

| Items | (1) Small N= 68 | | (2) Medium N= 110 | | (3) Large N=154 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | S.D | Mean | S.D | Mean | S.D | Value | Sig. | Results | Sig. |
| **Job Satisfaction** | | | | | | | | | | |
| **44.** I am satisfied with my job. | 5.661 | 1.288 | 5.700 | 1.337 | 5.779 | 1.222 | .242 | .785 | N.D | |
| **45.** Overall the benefits I receive from the bank such as medical insurance, vacation, etc, are good. | 5.705 | 1.159 | 5.672 | 1.339 | 5.816 | .910 | .586 | .557 | N.D | |
| **46.** I have a strong desire to remain in the bank. | 5.794 | 1.216 | 5.881 | 1.297 | 5.855 | 1.354 | .096 | .909 | N.D | |
| **47.** I regard my work in the bank as an imoprtant of my life. | 6.209 | .890 | 6.095 | 1.230 | 6.095 | 1.230 | 1.807 | .166 | N.D | |
| Job satisfaction (overall) | 5.842 | .872 | 5.837 | .928 | 5.947 | .830 | .639 | .529 | N.D | |

Table (6) ANOVA by Staff Experience in the Bank: Internal Service Quality Items

| Items | (1) Less than 10 years N= 87 | | (2) 10-20 years N= 109 | | (3) More than 20 years N= 136 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | S.D | Mean | S.D | Mean | S.D | Value | Sig. | Results | Sig. |
| **Management Support** | | | | | | | | | | |
| **1.** Improving the level of service quality to our external customers is one of the major goals of our bank. | 5.984 | 1.240 | 6.133 | 1.048 | 6.388 | .941 | 4.293 | .014 | 3>2,1 | 0.1 |
| **2.** My closest supervisor emphasises the importance of delivering a high level of service quality to external customers. | 5.720 | 1.303 | 5.931 | 1.257 | 6.346 | .847 | 9.942 | .000 | 3>2,1 | 0.05 |
| **3.** The bank is committed to providing a high level of service quality to external customers. | 5.328 | 1.334 | 5.738 | 1.139 | 6.049 | 1.010 | 10.285 | .000 | 3>2>1 | 0.1 |
| **4.** Departments within the bank have formal systems for setting and monitoring performance against service quality goals. | 4.906 | 1.668 | 5.386 | 1.465 | 5.638 | 1.344 | 6.135 | .002 | 3,2>1 | 0.05 |
| **5.** The bank regards improving the levels of co-operation between different departments within the bank as an important goal. | 5.000 | 1.458 | 5.324 | 1.572 | 5.842 | 1.198 | 10.640 | .000 | 3>2,1 | 0.05 |
| **6.** Management does not motivate me to provide a high level of service quality to external customers. | 5.210 | 1.878 | 5.617 | 1.708 | 5.458 | 1.986 | .857 | .425 | N.D | |
| **7.** My own performance within the bank is measured against specific service quality goals. | 4.562 | 1.842 | 4.772 | 1.733 | 5.300 | 1.553 | 5.969 | .003 | 3>2,1 | 0.05 |
| Management Support (overall) | 5.244 | 1.065 | 5.557 | 1.011 | 5.860 | .862 | 10.756 | .000 | 3>2>1 | 0.05 |
| **Management Effectiveness** | | | | | | | | | | |
| **8.** Time pressures usually prevent me from providing a high level of service quality to external customers. | 4.125 | 1.872 | 4.856 | 1.775 | 5.019 | 1.911 | 5.449 | .005 | 3,2>1 | 0.05 |
| **9.** I sometimes feel confused about what management expects from me when dealing with external customers. | 4.547 | 1.632 | 4.739 | 1.853 | 5.316 | 1.622 | 6.503 | .002 | 3>2,1 | 0.05 |
| **10.** Management has far more important issues to address than helping me to provide a high level of service quality to external customers. | 4.097 | 1.750 | 4.488 | 1.971 | 4.851 | 2.036 | 3.695 | .026 | 3>1 | 0.05 |
| **11.** Other considerations frequently take precedence over the goal of improving the quality of external customer service. | 4.288 | 1.818 | 4.329 | 1.932 | 4.647 | 2.026 | 1.205 | .301 | N.D | |
| Management Effectiveness (overall) | 4.264 | 1.216 | 4.603 | 1.352 | 4.958 | 1.350 | 7.007 | .001 | 3>2>1 | 0.1 |
| **Working Atmospherics** | | | | | | | | | | |
| **12.** The working environment within the bank is comfortable. | 4.056 | 1.723 | 4.609 | 1.621 | 4.793 | 1.562 | 4.950 | .008 | 3,2>1 | 0.05 |
| **13.** I am satisfied with the supervision which I receive within the bank. | 4.545 | 1.632 | 4.897 | 1.597 | 5.093 | 1.548 | 2.878 | .058 | N.D | |
| **14.** I personally have sufficient authority and discretion to provide a high level of service quality to external customers. | 3.500 | 1.910 | 4.423 | 1.969 | 4.415 | 1.970 | 5.671 | .004 | 2,3>1 | 0.05 |
| Working Atmospherics (overall) | 4.034 | 1.376 | 4.643 | 1.331 | 4.767 | 1.346 | 7.066 | .001 | 3,2>1 | 0.05 |

Table (6) Continued

| Items | (1) Less than 10 years N= 87 | | (2) 10-20 years N= 109 | | (3) More than 20 years N= 136 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | S.D | Mean | S.D | Mean | S.D | Value | Sig. | Results | Sig. |
| **Employees Service Vision** | | | | | | | | | | |
| **15.** I feel personally responsible for creating a good impression of the bank to external customers. | 5.827 | 1.241 | 5.897 | 1.061 | 6.088 | 1.084 | 1.697 | .185 | N.D | |
| **16.** My most important objective is to satisfy the needs of customers. | 6.109 | 1.070 | 6.420 | .769 | 6.476 | .694 | 5.066 | .007 | 3,2>1 | 0.05 |
| **17.** I feel that it is my responsibility to help colleagues within my department. | 5.956 | 1.227 | 6.318 | .977 | 6.266 | .862 | 3.003 | .051 | N.D | |
| Employees Service Vision (overall) | 5.964 | .981 | 6.212 | .746 | 6.277 | .699 | 3.876 | .022 | 3,2>1 | 0.05 |
| **Communication** | | | | | | | | | | |
| **18.** The bank regularly seeks information from staff about how to improve the quality of external customer service. | 4.078 | 1.904 | 4.613 | 1.865 | 5.038 | 1.699 | 7.144 | .001 | 3,2>1 | 0.05 |
| **19.** The bank encourages staff to make suggestions for improving the quality of external customer service. | 4.484 | 1.902 | 4.965 | 1.751 | 5.551 | 1.525 | 10.786 | .000 | 3>2>1 | 0.05 |
| **20.** The bank uses staff suggestions to improve the quality of external customer service. | 4.343 | 1.720 | 4.726 | 1.746 | 5.220 | 1.601 | 7.375 | .001 | 3>2,1 | 0.05 |
| **21.** The bank rewards staff who make good suggestions for improving the quality of external customer service. | 4.293 | 1.795 | 4.715 | 1.660 | 4.980 | 1.722 | 3.847 | .022 | 3,2>1 | 0.1 |
| **22.** Senior management within the bank regularly communicate to employees the importance of providing a high level of service quality to external customers. | 5.390 | 1.465 | 5.852 | 1.088 | 5.887 | 1.373 | 3.497 | .031 | 3,2>1 | 0.05 |
| **23.** Bank staff regularly make suggestions to managers/supervisors about how to improve the quality of external customer service. | 3.875 | 1.786 | 4.522 | 1.735 | 4.680 | 1.639 | 5.371 | .005 | 3,2>1 | 0.05 |
| **24.** The objective of delivering a high level of service quality to external customers is clearly communicated to all employees and departments. | 4.964 | 1.629 | 5.299 | 1.583 | 5.546 | 1.407 | 3.682 | .026 | 3>1 | 0.05 |
| **25.** Changes in work methods (for example, the introduction of new technology to provide a speedier service) made to improve the quality of external customer service are clearly communicated to all employees and departments. | 4.828 | 1.786 | 5.500 | 1.381 | 5.694 | 1.382 | 8.234 | .000 | 3,2>1 | 0.05 |
| Communication (overall) | 4.532 | 1.363 | 5.024 | 1.268 | 5.325 | 1.155 | 10.029 | .000 | 3>2>1 | 0.1 |
| **Technology** | | | | | | | | | | |
| **26.** Bank technology helps me to provide an error free service to external customers. | 4.437 | 1.901 | 4.795 | 1.716 | 5.305 | 1.510 | 7.509 | .001 | 3>2,1 | 0.05 |
| **27.** Bank technology helps me to provide a fast service to external customers. | 4.520 | 1.878 | 5.170 | 1.577 | 5.610 | 1.406 | 11.959 | .000 | 3>2>1 | 0.1 |
| **28.** Bank technology provides me with easy-to-access information on extenral customers. | 4.818 | 1.781 | 5.261 | 1.664 | 5.650 | 1.316 | 7.578 | .001 | 3>2>1 | 0.1 |

Table (6) Continued

| Items | (1) Less than 10 years N= 87 | | (2) 10-20 years N= 109 | | (3) More than 20 years N= 136 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | S.D | Mean | S.D | Mean | S.D | Value | Sig. | Results | Sig. |
| **29.** Bank technology has given me more time to talk to external customers and discuss their needs. | 4.342 | 1.937 | 4.863 | 1.762 | 5.193 | 1.554 | 6.114 | .002 | 3,2>1 | 0.05 |
| Technology (overall) | 4.529 | 1.718 | 5.022 | 1.435 | 5.440 | 1.268 | 10.369 | .000 | 3>2>1 | 0.05 |
| **Job Fit** | | | | | | | | | | |
| **30.** In recruiting employees, the bank attempts to ensure that staff have good communication skills. | 4.218 | 1.803 | 4.818 | 1.608 | 5.200 | 1.601 | 8.599 | .000 | 3,2>1 | 0.05 |
| **31.** When I was recruited by the bank, I was assessed in terms of my teamwork skills. | 4.125 | 2.004 | 4.679 | 1.650 | 5.006 | 1.673 | 6.194 | .002 | 3,2>1 | 0.05 |
| **32.** Staff within my department work as individuals rather than in teams. | 5.006 | 1.673 | 5.045 | 1.825 | 5.500 | 1.625 | 6.905 | .001 | 3>2>1 | 0.1 |
| **33.** Colleagues within my department regularly help each other to provide a high level of service quality to external customers. | 4.734 | 1.596 | 5.186 | 1.557 | 5.737 | 1.366 | 12.328 | .000 | 3>2>1 | 0.05 |
| **34.** The performance appraisal systems within the bank include co-operation and team-based performance indicators. | 4.703 | 1.787 | 4.944 | 1.549 | 5.309 | 1.460 | 4.173 | .016 | 3>1 | 0.05 |
| **35.** The bank rewards me when I provide a high level of service quality to external customers. | 3.720 | 1.896 | 4.602 | 1.803 | 4.806 | 1.881 | 8.072 | .000 | 3,2>1 | 0.05 |
| **36.** My supervisor usually praises my performance when I provide a high level of service quality to external customers. | 4.906 | 1.668 | 5.045 | 1.589 | 5.272 | 1.585 | 1.446 | .237 | N.D | |
| **37.** The performance appraisal systems and reward mechanisms within the bank depend upon specific performance standards which include customer care indicators. | 4.187 | 1.876 | 4.715 | 1.800 | 5.090 | 1.780 | 6.098 | .003 | 3,2>1 | 0.05 |
| **38.** Management motivates me to do my best. | 4.719 | 1.666 | 4.807 | 1.868 | 5.261 | 1.607 | 3.519 | .031 | 3>2,1 | 0.1 |
| **39.** The performance appraisal systems within the bank do not motivate me to deliver a high level of service quality to external customers. | 4.109 | 1.968 | 4.136 | 2.040 | 4.603 | 2.016 | 2.324 | .100 | N.D | |
| Job Fit (overall) | 4.401 | 1.209 | 4.798 | 1.238 | 5.178 | 1.098 | 11.368 | .000 | 3>2>1 | 0.05 |
| **Training** | | | | | | | | | | |
| **40.** Training programmes within the bank should place more emphasis on the importance of providing a high level of service quality to external customers. | 5.718 | 1.315 | 5.975 | 1.372 | 5.883 | 1.312 | .699 | .498 | N.D | |
| **41.** The bank should place more emphasis in bank training on how to improve my communication skills. | 5.703 | 1.204 | 5.659 | 1.312 | 5.737 | 1.435 | .098 | .906 | N.D | |
| **42.** I would like to receive more bank training on how to improve my teamwork skills. | 5.671 | 1.196 | 5.386 | 1.571 | 5.686 | 1.333 | 1.502 | .224 | N.D | |
| **43.** The bank should place more emphasis in bank training on how to improve my information technology skills. | 5.968 | 1.167 | 5.829 | 1.432 | 5.783 | 1.431 | .423 | .655 | N.D | |
| Training (overall) | 5.765 | 1.046 | 5.712 | 1.224 | 5.772 | 1.085 | .088 | .915 | N.D | |

Table (6) Continued

| Items | (1) Less than 10 years N= 87 | | (2) 10-20 years N= 109 | | (3) More than 20 years N= 136 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | S.D | Mean | S.D | Mean | S.D | Value | Sig. | Results | Sig. |
| **Job Satisfaction** | | | | | | | | | | |
| **44.** I am satisfied with my job. | 5.484 | 1.259 | 5.488 | 1.356 | 5.933 | 1.203 | 5.206 | .006 | 3>2,1 | 0.05 |
| **45.** Overall the benefits I receive from the bank such as medical insurance, vacation, etc, are good. | 5.652 | 1.170 | 5.610 | 1.197 | 5.845 | 1.054 | 1.590 | .205 | N.D | |
| **46.** I have a strong desire to remain in the bank. | 5.542 | 1.343 | 5.806 | 1.453 | 5.983 | 1.198 | 2.797 | .062 | N.D | |
| **47.** I regard my work in the bank as an imoprtant of my life. | 5.960 | 1.188 | 6.195 | 1.037 | 6.347 | .975 | 3.363 | .036 | 3>1 | 0.05 |
| Job satisfaction (overall) | 5.659 | .908 | 5.775 | .936 | 6.027 | .802 | 5.362 | .005 | 3>2,1 | 0.05 |

Table (7) ANOVA by Staff Experience in their Current Positions: Internal Service Quality Items

| Items | (1) Less than 5 years N= 133 | | (2) 5-10 years N= 91 | | (3) More than 10 years N= 103 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | S.D | Mean | S.D | Mean | S.D | Value | Sig. | Results | Sig. |
| **Management Support** | | | | | | | | | | |
| **1.** Improving the level of service quality to our external customers is one of the major goals of our bank. | 6.225 | 1.029 | 6.181 | 1.207 | 6.364 | .876 | .660 | .517 | N.D | |
| **2.** My closest supervisor emphasises the importance of delivering a high level of service quality to external customers. | 6.086 | 1.098 | 6.045 | 1.104 | 6.237 | 1.093 | .680 | .507 | N.D | |
| **3.** The bank is committed to providing a high level of service quality to external customers. | 5.780 | 1.183 | 5.703 | 1.224 | 6.011 | .911 | 1.574 | .209 | N.D | |
| **4.** Departments within the bank have formal systems for setting and monitoring performance against service quality goals. | 5.372 | 1.482 | 5.461 | 1.572 | 5.486 | 1.310 | .196 | .822 | N.D | |
| **5.** The bank regards improving the levels of co-operation between different departments within the bank as an important goal. | 5.500 | 1.398 | 5.500 | 1.522 | 5.647 | 1.265 | .308 | .735 | N.D | |
| **6.** Management does not motivate me to provide a high level of service quality to external customers. | 5.490 | 1.803 | 5.285 | 1.979 | 5.498 | 2.040 | .387 | .679 | N.D | |
| **7.** My own performance within the bank is measured against specific service quality goals. | 4.933 | 1.727 | 5.066 | 1.672 | 5.055 | 1.634 | .236 | .790 | N.D | |
| Management Support (overall) | 5.626 | .955 | 5.606 | 1.092 | 5.757 | .858 | .574 | .564 | N.D | |
| **Management Effectiveness** | | | | | | | | | | |
| **8.** Time pressures usually prevent me from providing a high level of service quality to external customers. | 4.730 | 1.906 | 4.949 | 1.873 | 4.702 | 1.930 | .475 | .622 | N.D | |
| **9.** I sometimes feel confused about what management expects from me when dealing with external customers. | 5.079 | 1.657 | 5.055 | 1.708 | 4.806 | 1.881 | .670 | .512 | N.D | |
| **10.** Management has far more important issues to address than helping me to provide a high level of service quality to external customers. | 4.816 | 1.962 | 4.303 | 2.046 | 4.430 | 1.941 | 2.251 | .107 | N.D | |
| **11.** Other considerations frequently take precedence over the goal of improving the quality of external customer service. | 4.557 | 1.923 | 4.571 | 1.895 | 4.117 | 2.125 | 1.444 | .238 | N.D | |
| Management Effectiveness (overall) | 4.796 | 1.347 | 4.719 | 1.405 | 4.514 | 1.292 | 1.088 | .338 | N.D | |
| **Working Atmospherics** | | | | | | | | | | |
| **12.** The working environment within the bank is comfortable. | 4.545 | 1.585 | 4.622 | 1.643 | 4.680 | 1.750 | .186 | .830 | N.D | |
| **13.** I am satisfied with the supervision which I receive within the bank. | 5.072 | 1.545 | 4.921 | 1.499 | 4.624 | 1.779 | 2.002 | .137 | N.D | |
| **14.** I personally have sufficient authority and discretion to provide a high level of service quality to external customers. | 4.259 | 2.032 | 4.219 | 2.004 | 4.211 | 1.920 | .019 | .981 | N.D | |
| Working Atmospherics (overall) | 4.625 | 1.405 | 4.587 | 1.315 | 4.505 | 1.408 | .189 | .827 | N.D | |

Table (7) Continued

| Items | (1) Less than 5 years N= 133 | | (2) 5-10 years N= 91 | | (3) More than 10 years N= 103 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | S.D | Mean | S.D | Mean | S.D | Value | Sig. | Results | Sig. |
| **Employees Service Vision** | | | | | | | | | | |
| **15.** I feel personally responsible for creating a good impression of the bank to external customers. | 5.993 | 1.121 | 5.901 | 1.183 | 6.083 | 1.031 | .537 | .585 | N.D | |
| **16.** My most important objective is to satisfy the needs of customers. | 6.307 | .895 | 6.494 | .603 | 6.436 | .834 | 1.725 | .180 | N.D | |
| **17.** I feel that it is my responsibility to help colleagues within my department. | 6.208 | .981 | 6.219 | 1.041 | 6.250 | .930 | .044 | .957 | N.D | |
| Employees Service Vision (overall) | 6.169 | .813 | 6.205 | .709 | 6.256 | .813 | .307 | .736 | N.D | |
| **Communication** | | | | | | | | | | |
| **18.** The bank regularly seeks information from staff about how to improve the quality of external customer service. | 4.615 | 1.884 | 4.780 | 1.793 | 4.916 | 1.725 | .731 | .482 | N.D | |
| **19.** The bank encourages staff to make suggestions for improving the quality of external customer service. | 5.147 | 1.698 | 5.197 | 1.727 | 5.208 | 1.775 | .042 | .959 | N.D | |
| **20.** The bank uses staff suggestions to improve the quality of external customer service. | 4.878 | 1.690 | 4.922 | 1.765 | 4.927 | 1.664 | .030 | .970 | N.D | |
| **21.** The bank rewards staff who make good suggestions for improving the quality of external customer service. | 4.791 | 1.724 | 4.709 | 1.739 | 4.736 | 1.791 | .071 | .932 | N.D | |
| **22.** Senior management within the bank regularly communicate to employees the importance of providing a high level of service quality to external customers. | 5.687 | 1.416 | 5.747 | 1.457 | 6.013 | .926 | 1.518 | .221 | N.D | |
| **23.** Bank staff regularly make suggestions to managers/supervisors about how to improve the quality of external customer service. | 4.378 | 1.702 | 4.576 | 1.770 | 4.583 | 1.717 | .559 | .573 | N.D | |
| **24.** The objective of delivering a high level of service quality to external customers is clearly communicated to all employees and departments. | 5.333 | 1.502 | 5.304 | 1.601 | 5.472 | 1.462 | .279 | .757 | N.D | |
| **25.** Changes in work methods (for example, the introduction of new technology to provide a speedier service) made to improve the quality of external customer service are clearly communicated to all employees and departments. | 5.390 | 1.576 | 5.417 | 1.571 | 5.708 | 1.238 | 1.184 | .307 | N.D | |
| Communication (overall) | 5.027 | 1.249 | 5.082 | 1.407 | 5.195 | 1.109 | .440 | .644 | N.D | |
| **Technology** | | | | | | | | | | |
| **26.** Bank technology helps me to provide an error free service to external customers. | 4.926 | 1.682 | 4.780 | 1.836 | 5.388 | 1.429 | 2.869 | .058 | N.D | |
| **27.** Bank technology helps me to provide a fast service to external customers. | 5.209 | 1.603 | 5.146 | 1.780 | 5.563 | 1.370 | 1.588 | .206 | N.D | |
| **28.** Bank technology provides me with easy-to-access information on extenral customers. | 5.318 | 1.483 | 5.235 | 1.764 | 5.680 | 1.361 | 1.900 | .151 | N.D | |

Table (7) Continued

| Items | (1) Less than 5 years N= 133 | | (2) 5-10 years N= 91 | | (3) More than 10 years N= 103 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | S.D | Mean | S.D | Mean | S.D | Value | Sig. | Results | Sig. |
| **29.** Bank technology has given me more time to talk to external customers and discuss their needs. | 4.883 | 1.663 | 4.757 | 1.916 | 5.263 | 1.574 | 1.872 | .156 | N.D | |
| Technology (overall) | 5.084 | 1.422 | 4.979 | 1.642 | 5.474 | 1.219 | 2.599 | .076 | N.D | |
| **Job Fit** | | | | | | | | | | |
| **30.** In recruiting employees, the bank attempts to ensure that staff have good communication skills. | 4.829 | 1.767 | 4.868 | 1.654 | 5.055 | 1.528 | .461 | .631 | N.D | |
| **31.** When I was recruited by the bank, I was assessed in terms of my teamwork skills. | 4.588 | 1.849 | 4.873 | 1.724 | 4.878 | 1.623 | 1.081 | .341 | N.D | |
| **32.** Staff within my department work as individuals rather than in teams. | 5.280 | 1.732 | 5.197 | 1.720 | 5.013 | 1.946 | .562 | .570 | N.D | |
| **33.** Colleagues within my department regularly help each other to provide a high level of service quality to external customers. | 5.414 | 1.448 | 5.389 | 1.554 | 5.316 | 1.649 | .104 | .901 | N.D | |
| **34.** The performance appraisal systems within the bank include co-operation and team-based performance indicators. | 4.953 | 1.631 | 5.036 | 1.516 | 5.390 | 1.448 | 1.992 | .138 | N.D | |
| **35.** The bank rewards me when I provide a high level of service quality to external customers. | 4.567 | 1.869 | 4.143 | 2.007 | 4.902 | 1.801 | 3.315 | .038 | 3>2 | 0.05 |
| **36.** My supervisor usually praises my performance when I provide a high level of service quality to external customers. | 5.170 | 1.584 | 5.142 | 1.588 | 5.069 | 1.722 | .098 | .906 | N.D | |
| **37.** The performance appraisal systems and reward mechanisms within the bank depend upon specific performance standards which include customer care indicators. | 4.686 | 1.848 | 4.666 | 1.920 | 5.263 | 1.652 | 2.872 | .058 | N.D | |
| **38.** Management motivates me to do my best. | 5.024 | 1.676 | 4.923 | 1.881 | 5.154 | 1.589 | .363 | .696 | N.D | |
| **39.** The performance appraisal systems within the bank do not motivate me to deliver a high level of service quality to external customers. | 4.620 | 1.987 | 4.048 | 2.076 | 4.158 | 1.997 | 2.822 | .061 | N.D | |
| Job Fit (overall) | 4.913 | 1.168 | 4.828 | 1.281 | 5.020 | 1.155 | .513 | .599 | N.D | |
| **Training** | | | | | | | | | | |
| **40.** Training programmes within the bank should place more emphasis on the importance of providing a high level of service quality to external customers. | 5.658 | 1.483 | 6.042 | 1.163 | 6.152 | 1.096 | 4.521 | .012 | 3,2>1 | 0.05 |
| **41.** The bank should place more emphasis in bank training on how to improve my communication skills. | 5.614 | 1.321 | 5.725 | 1.498 | 5.944 | 1.243 | 1.485 | .228 | N.D | |
| **42.** I would like to receive more bank training on how to improve my teamwork skills. | 5.530 | 1.424 | 5.593 | 1.324 | 5.819 | 1.314 | 1.118 | .328 | N.D | |
| **43.** The bank should place more emphasis in bank training on how to improve my information technology skills. | 5.780 | 1.329 | 5.791 | 1.494 | 6.041 | 1.315 | .986 | .374 | N.D | |
| Training (overall) | 5.645 | 1.148 | 5.788 | 1.097 | 5.989 | 1.037 | 2.433 | .089 | N.D | |

Table (7) Continued

| Items | (1) Less than 5 years N= 133 | | (2) 5-10 years N= 91 | | (3) More than 10 years N= 103 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | S.D | Mean | S.D | Mean | S.D | Value | Sig. | Results | Sig. |
| **Job Satisfaction** | | | | | | | | | | |
| **44.** I am satisfied with my job. | 5.676 | 1.243 | 5.747 | 1.321 | 5.805 | 1.328 | .271 | .763 | N.D | |
| **45.** Overall the benefits I receive from the bank such as medical insurance, vacation, etc, are good. | 5.774 | 1.120 | 5.747 | 1.147 | 5.690 | 1.108 | .138 | .871 | N.D | |
| **46.** I have a strong desire to remain in the bank. | 5.803 | 1.295 | 5.846 | 1.381 | 5.958 | 1.272 | .349 | .706 | N.D | |
| **47.** I regard my work in the bank as an imoprtant of my life. | 6.263 | .945 | 6.202 | 1.156 | 6.187 | 1.142 | .174 | .840 | N.D | |
| Job satisfaction (overall) | 5.879 | .859 | 5.885 | .902 | 5.910 | .895 | .031 | .969 | N.D | |

Table (8) ANOVA by Staff Annual Income: Internal Service Quality Items

| Items | (1) 7000 LE or less N= 89 | | (2) 7001-11000 LE N= 113 | | (3) More than 11000 LE N= 116 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | S.D | Mean | S.D | Mean | S.D | Value | Sig. | Results | Sig. |
| **Management Support** | | | | | | | | | | |
| **1.** Improving the level of service quality to our external customers is one of the major goals of our bank. | 5.968 | 1.344 | 6.187 | .965 | 6.414 | .888 | 4.678 | .010 | 3>1 | 0.05 |
| **2.** My closest supervisor emphasises the importance of delivering a high level of service quality to external customers. | 5.954 | 1.290 | 5.979 | 1.123 | 6.229 | 1.008 | 2.207 | .112 | N.D | |
| **3.** The bank is committed to providing a high level of service quality to external customers. | 5.609 | 1.203 | 5.687 | 1.145 | 5.981 | 1.079 | 3.404 | .034 | 3>2,1 | 0.1 |
| **4.** Departments within the bank have formal systems for setting and monitoring performance against service quality goals. | 5.171 | 1.714 | 5.583 | 1.358 | 5.411 | 1.419 | 1.514 | .222 | N.D | |
| **5.** The bank regards improving the levels of co-operation between different departments within the bank as an important goal. | 5.071 | 1.690 | 5.625 | 1.299 | 5.655 | 1.318 | 4.328 | .014 | 3,2>1 | 0.05 |
| **6.** Management does not motivate me to provide a high level of service quality to external customers. | 5.069 | 2.023 | 5.354 | 1.840 | 5.688 | 1.842 | 2.702 | .069 | N.D | |
| **7.** My own performance within the bank is measured against specific service quality goals. | 4.750 | 1.745 | 5.166 | 1.696 | 5.006 | 1.679 | 1.158 | .316 | N.D | |
| Management Support (overall) | 5.370 | 1.058 | 5.654 | .963 | 5.769 | .923 | 3.902 | .021 | 3,2>1 | 0.05 |
| **Management Effectiveness** | | | | | | | | | | |
| **8.** Time pressures usually prevent me from providing a high level of service quality to external customers. | 4.947 | 1.785 | 4.623 | 1.969 | 4.876 | 1.889 | .731 | .482 | N.D | |
| **9.** I sometimes feel confused about what management expects from me when dealing with external customers. | 4.969 | 1.736 | 4.854 | 1.735 | 5.101 | 1.719 | .624 | .536 | N.D | |
| **10.** Management has far more important issues to address than helping me to provide a high level of service quality to external customers. | 4.212 | 2.025 | 4.435 | 1.959 | 4.892 | 1.947 | 3.309 | .038 | 3>1 | 0.05 |
| **11.** Other considerations frequently take precedence over the goal of improving the quality of external customer service. | 3.914 | 2.129 | 4.687 | 1.858 | 4.657 | 1.934 | 3.828 | .023 | 2,3>1 | 0.05 |
| Management Effectiveness (overall) | 4.510 | 1.405 | 4.650 | 1.390 | 4.882 | 1.312 | 1.993 | .138 | N.D | |
| **Working Atmospherics** | | | | | | | | | | |
| **12.** The working environment within the bank is comfortable. | 4.265 | 1.711 | 4.741 | 1.486 | 4.676 | 1.639 | 1.918 | .149 | N.D | |
| 13. I am satisfied with the supervision which I receive within the bank. | 4.484 | 1.652 | 5.020 | 1.414 | 5.068 | 1.636 | 3.323 | .037 | 3,2>1 | 0.05 |
| **14.** I personally have sufficient authority and discretion to provide a high level of service quality to external customers. | 3.800 | 2.117 | 4.325 | 1.826 | 4.401 | 1.986 | 2.208 | .112 | N.D | |
| Working Atmospherics (overall) | 4.183 | 1.401 | 4.695 | 1.233 | 4.715 | 1.402 | 3.843 | .022 | 3,2>1 | 0.05 |
| **Employees Service Vision** | | | | | | | | | | |
| **15.** I feel personally responsible for creating a good impression of the bank to external customers. | 5.906 | 1.305 | 6.052 | 1.089 | 6.018 | 1.006 | .360 | .698 | N.D | |

Table (8) Continued

| Items | (1) 7000 LE or less N= 89 | | (2) 7001-11000 LE N= 113 | | (3) More than 11000 LE N= 116 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | S.D | Mean | S.D | Mean | S.D | Value | Sig. | Results | Sig. |
| **16.** My most important objective is to satisfy the needs of customers. | 6.265 | 1.057 | 6.393 | .728 | 6.436 | .760 | .993 | .371 | N.D | |
| **17.** I feel that it is my responsibility to help colleagues within my department. | 6.203 | 1.026 | 6.189 | 1.029 | 6.259 | .868 | .186 | .831 | N.D | |
| Employees Service Vision (overall) | 6.125 | 1.022 | 6.211 | .694 | 6.238 | .720 | .479 | .620 | N.D | |
| **Communication** | | | | | | | | | | |
| **18.** The bank regularly seeks information from staff about how to improve the quality of external customer service. | 4.250 | 2.108 | 4.802 | 1.774 | 4.873 | 1.703 | 2.815 | .061 | N.D | |
| **19.** The bank encourages staff to make suggestions for improving the quality of external customer service. | 4.796 | 1.985 | 5.114 | 1.709 | 5.405 | 1.531 | 3.124 | .045 | 3>1 | 0.05 |
| **20.** The bank uses staff suggestions to improve the quality of external customer service. | 4.716 | 1.846 | 4.875 | 1.655 | 5.018 | 1.664 | .754 | .471 | N.D | |
| **21.** The bank rewards staff who make good suggestions for improving the quality of external customer service. | 4.406 | 1.832 | 4.729 | 1.791 | 4.995 | 1.620 | 2.791 | .063 | N.D | |
| **22.** Senior management within the bank regularly communicate to employees the importance of providing a high level of service quality to external customers. | 5.468 | 1.563 | 5.820 | 1.256 | 5.873 | 1.310 | 2.124 | .121 | N.D | |
| **23.** Bank staff regularly make suggestions to managers/supervisors about how to improve the quality of external customer service. | 4.140 | 1.592 | 4.588 | 1.797 | 4.544 | 1.687 | 1.576 | .208 | N.D | |
| **24.** The objective of delivering a high level of service quality to external customers is clearly communicated to all employees and departments. | 5.031 | 1.563 | 5.455 | 1.484 | 5.422 | 1.497 | 1.849 | .159 | N.D | |
| **25.** Changes in work methods (for example, the introduction of new technology to provide a speedier service) made to improve the quality of external customer service are clearly communicated to all employees and departments. | 5.234 | 1.797 | 5.572 | 1.419 | 5.544 | 1.366 | 1.215 | .298 | N.D | |
| Communication (overall) | 4.755 | 1.393 | 5.119 | 1.303 | 5.209 | 1.158 | 3.027 | .050 | 3,2>1 | 0.05 |
| **Technology** | | | | | | | | | | |
| **26.** Bank technology helps me to provide an error free service to external customers. | 4.765 | 1.908 | 4.781 | 1.736 | 5.221 | 1.508 | 2.861 | .059 | N.D | |
| **27.** Bank technology helps me to provide a fast service to external customers. | 5.082 | 1.730 | 5.086 | 1.633 | 5.484 | 1.508 | 2.505 | .083 | N.D | |
| **28.** Bank technology provides me with easy-to-access information on extenral customers. | 5.037 | 1.782 | 5.322 | 1.476 | 5.507 | 1.469 | 2.159 | .117 | N.D | |
| **29.** Bank technology has given me more time to talk to external customers and discuss their needs. | 4.765 | 1.891 | 4.853 | 1.698 | 5.024 | 1.654 | .624 | .536 | N.D | |
| Technology (overall) | 4.912 | 1.648 | 5.010 | 1.434 | 5.309 | 1.353 | 2.274 | .105 | N.D | |

Table (8) Continued

| Items | (1) 7000 LE or less N= 89 | | (2) 7001-11000 LE N= 113 | | (3) More than 11000 LE N= 116 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | S.D | Mean | S.D | Mean | S.D | Value | Sig. | Results | Sig. |
| **Job Fit** | | | | | | | | | | |
| **30.** In recruiting employees, the bank attempts to ensure that staff have good communication skills. | 4.187 | 1.842 | 4.989 | 1.572 | 5.132 | 1.588 | 7.797 | .000 | 3,2>1 | 0.05 |
| **31.** When I was recruited by the bank, I was assessed in terms of my teamwork skills. | 4.296 | 1.989 | 4.747 | 1.685 | 4.914 | 1.684 | 2.839 | .060 | N.D | |
| **32.** Staff within my department work as individuals rather than in teams. | 4.984 | 1.972 | 5.187 | 1.675 | 5.379 | 1.684 | 1.240 | .291 | N.D | |
| **33.** Colleagues within my department regularly help each other to provide a high level of service quality to external customers. | 4.875 | 1.906 | 5.416 | 1.419 | 5.564 | 1.340 | 4.895 | .008 | 3,2>1 | 0.05 |
| **34.** The performance appraisal systems within the bank include co-operation and team-based performance indicators. | 4.907 | 1.687 | 5.063 | 1.574 | 5.174 | 1.506 | .678 | .508 | N.D | |
| **35.** The bank rewards me when I provide a high level of service quality to external customers. | 3.593 | 2.029 | 4.829 | 1.719 | 4.762 | 1.837 | 10.766 | .000 | 2,3>1 | 0.05 |
| **36.** My supervisor usually praises my performance when I provide a high level of service quality to external customers. | 4.656 | 1.711 | 5.322 | 1.387 | 5.227 | 1.646 | 3.853 | .022 | 2,3>1 | 0.05 |
| **37.** The performance appraisal systems and reward mechanisms within the bank depend upon specific performance standards which include customer care indicators. | 4.328 | 2.016 | 4.916 | 1.769 | 5.015 | 1.768 | 3.345 | .037 | 2,3>1 | 0.05 |
| **38.** Management motivates me to do my best. | 4.578 | 1.824 | 5.240 | 1.513 | 5.146 | 1.692 | 3.436 | .033 | 2,3>1 | 0.05 |
| **39.** The performance appraisal systems within the bank do not motivate me to deliver a high level of service quality to external customers. | 4.093 | 2.143 | 4.449 | 1.900 | 4.474 | 2.055 | .862 | .423 | N.D | |
| Job Fit (overall) | 4.450 | 1.329 | 5.016 | 1.087 | 5.079 | 1.148 | 6.940 | .001 | 3,2>1 | 0.05 |
| **Training** | | | | | | | | | | |
| **40.** Training programmes within the bank should place more emphasis on the importance of providing a high level of service quality to external customers. | 6.000 | 1.154 | 5.708 | 1.428 | 5.904 | 1.367 | 1.038 | .355 | N.D | |
| **41.** The bank should place more emphasis in bank training on how to improve my communication skills. | 5.921 | 1.172 | 5.569 | 1.366 | 5.689 | 1.458 | 1.263 | .284 | N.D | |
| **42.** I would like to receive more bank training on how to improve my teamwork skills. | 5.750 | 1.447 | 5.458 | 1.337 | 5.607 | 1.404 | .863 | .423 | N.D | |
| **43.** The bank should place more emphasis in bank training on how to improve my information technology skills. | 5.984 | 1.290 | 5.687 | 1.530 | 5.829 | 1.374 | .865 | .422 | N.D | |
| Training (overall) | 5.914 | 1.003 | 5.606 | 1.184 | 5.757 | 1.144 | 1.452 | .236 | N.D | |

Table (8) Continued

| Items | (1) 7000 LE or less N= 89 | | (2) 7001-11000 LE N= 113 | | (3) More than 11000 LE N= 116 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | S.D | Mean | S.D | Mean | S.D | Value | Sig. | Results | Sig. |
| **Job Satisfaction** | | | | | | | | | | |
| **44.** I am satisfied with my job. | 5.531 | 1.490 | 5.760 | 1.176 | 5.778 | 1.254 | .903 | .406 | N.D | |
| **45.** Overall the benefits I receive from the bank such as medical insurance, vacation, etc, are good. | 5.718 | 1.201 | 5.716 | 1.092 | 5.772 | 1.067 | .099 | .906 | N.D | |
| **46.** I have a strong desire to remain in the bank. | 5.734 | 1.482 | 5.697 | 1.249 | 5.991 | 1.249 | 1.852 | .159 | N.D | |
| **47.** I regard my work in the bank as an imoprtant of my life. | 6.159 | .912 | 6.150 | 1.104 | 6.344 | .988 | 1.412 | .245 | N.D | |
| Job satisfaction (overall) | 5.786 | .990 | 5.831 | .856 | 5.971 | .812 | 1.392 | .250 | N.D | |

Table (9) ANOVA by Staff Education Level: Internal Service Quality Items

| Items | (1) Less than University Education N= 99 | | (2) University Education N= 147 | | (3) Postgraduate Education N= 82 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | S.D | Mean | S.D | Mean | S.D | Value | Sig. | Results | Sig. |
| **Management Support** | | | | | | | | | | |
| **1.** Improving the level of service quality to our external customers is one of the major goals of our bank. | 6.184 | .954 | 6.242 | 1.049 | 6.280 | 1.096 | .102 | .903 | N.D | |
| **2.** My closest supervisor emphasises the importance of delivering a high level of service quality to external customers. | 6.082 | 1.216 | 6.174 | .945 | 5.894 | 1.448 | 1.666 | .191 | N.D | |
| **3.** The bank is committed to providing a high level of service quality to external customers. | 5.894 | 1.060 | 5.799 | 1.157 | 5.876 | 1.179 | .192 | .825 | N.D | |
| **4.** Departments within the bank have formal systems for setting and monitoring performance against service quality goals. | 5.631 | 1.441 | 5.448 | 1.385 | 5.307 | 1.648 | .609 | .545 | N.D | |
| **5.** The bank regards improving the levels of co-operation between different departments within the bank as an important goal. | 5.619 | 1.193 | 5.560 | 1.377 | 5.377 | 1.586 | .514 | .598 | N.D | |
| **6.** Management does not motivate me to provide a high level of service quality to external customers. | 4.971 | 1.877 | 5.503 | 1.901 | 5.630 | 1.807 | 1.611 | .201 | N.D | |
| **7.** My own performance within the bank is measured against specific service quality goals. | 5.316 | 1.377 | 5.049 | 1.642 | 4.769 | 1.934 | 1.352 | .260 | N.D | |
| Management Support (overall) | 5.671 | .852 | 5.682 | .936 | 5.591 | 1.158 | .224 | .800 | N.D | |
| **Management Effectiveness** | | | | | | | | | | |
| **8.** Time pressures usually prevent me from providing a high level of service quality to external customers. | 4.994 | 1.845 | 4.813 | 1.893 | 4.676 | 1.929 | .341 | .711 | N.D | |
| **9.** I sometimes feel confused about what management expects from me when dealing with external customers. | 4.868 | 1.758 | 5.076 | 1.657 | 4.938 | 1.853 | .342 | .711 | N.D | |
| **10.** Management has far more important issues to address than helping me to provide a high level of service quality to external customers. | 4.647 | 2.158 | 4.494 | 2.002 | 4.984 | 1.798 | 1.551 | .214 | N.D | |
| **11.** Other considerations frequently take precedence over the goal of improving the quality of external customer service. | 4.157 | 2.083 | 4.559 | 1.986 | 4.492 | 1.827 | .680 | .507 | N.D | |
| Management Effectiveness (overall) | 4.667 | 1.467 | 4.735 | 1.348 | 4.773 | 1.311 | .073 | .929 | N.D | |
| **Working Atmospherics** | | | | | | | | | | |
| **12.** The working environment within the bank is comfortable. | 4.505 | 1.568 | 4.592 | 1.668 | 4.640 | 1.574 | .081 | .922 | N.D | |
| **13.** I am satisfied with the supervision which I receive within the bank. | 5.105 | 1.371 | 4.891 | 1.613 | 4.907 | 1.636 | .294 | .745 | N.D | |
| **14.** I personally have sufficient authority and discretion to provide a high level of service quality to external customers. | 4.039 | 1.823 | 4.224 | 2.038 | 4.384 | 1.917 | .371 | .691 | N.D | |
| Working Atmospherics (overall) | 4.549 | 1.075 | 4.569 | 1.429 | 4.644 | 1.359 | .085 | .918 | N.D | |
| **Employees Service Vision** | | | | | | | | | | |
| **15.** I feel personally responsible for creating a good impression of the bank to external customers. | 5.420 | 1.265 | 6.048 | 1.044 | 6.153 | 1.003 | 6.542 | .002 | 3,2>1 | 0.05 |

Table (9) Continued

| Items | (1) Less than University Education N= 99 | | (2) University Education N= 147 | | (3) Postgraduate Education N= 82 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | S.D | Mean | S.D | Mean | S.D | Value | Sig. | Results | Sig. |
| **16.** My most important objective is to satisfy the needs of customers. | 6.457 | .597 | 6.366 | .818 | 6.507 | .589 | .990 | .373 | N.D | |
| **17.** I feel that it is my responsibility to help colleagues within my department. | 6.236 | .786 | 6.178 | 1.010 | 6.400 | .724 | 1.407 | .246 | N.D | |
| Employees Service Vision (overall) | 6.038 | .577 | 6.197 | .765 | 6.353 | .650 | 2.376 | .095 | N.D | |
| **Communication** **18.** The bank regularly seeks information from staff about how to improve the quality of external customer service. | 5.394 | 1.405 | 4.582 | 1.914 | 4.938 | 1.609 | 3.748 | .025 | 1>2 | 0.05 |
| **19.** The bank encourages staff to make suggestions for improving the quality of external customer service. | 5.842 | 1.174 | 5.048 | 1.788 | 5.323 | 1.630 | 3.775 | .024 | 1>3,2 | 0.1 |
| **20.** The bank uses staff suggestions to improve the quality of external customer service. | 5.392 | 1.367 | 4.843 | 1.728 | 4.968 | 1.722 | 1.733 | .178 | N.D | |
| **21.** The bank rewards staff who make good suggestions for improving the quality of external customer service. | 5.119 | 1.361 | 4.767 | 1.752 | 4.707 | 1.868 | .775 | .462 | N.D | |
| **22.** Senior management within the bank regularly communicate to employees the importance of providing a high level of service quality to external customers. | 6.026 | .944 | 5.807 | 1.296 | 5.553 | 1.639 | 1.621 | .199 | N.D | |
| **23.** Bank staff regularly make suggestions to managers/supervisors about how to improve the quality of external customer service. | 4.868 | 1.509 | 4.491 | 1.732 | 4.276 | 1.763 | 1.427 | .241 | N.D | |
| **24.** The objective of delivering a high level of service quality to external customers is clearly communicated to all employees and departments. | 5.552 | 1.446 | 5.397 | 1.440 | 5.153 | 1.796 | .971 | .380 | N.D | |
| **25.** Changes in work methods (for example, the introduction of new technology to provide a speedier service) made to improve the quality of external customer service are clearly communicated to all employees and departments. | 5.657 | 1.258 | 5.453 | 1.526 | 5.415 | 1.580 | .351 | .704 | N.D | |
| Communication (overall) | 5.481 | .952 | 5.049 | 1.271 | 5.042 | 1.375 | 1.993 | .138 | N.D | |
| **Technology** | | | | | | | | | | |
| **26.** Bank technology helps me to provide an error free service to external customers. | 5.236 | 1.792 | 4.964 | 1.660 | 4.938 | 1.703 | .464 | .629 | N.D | |
| **27.** Bank technology provides me with easy-to-access information on extenral customers. | 5.315 | 1.741 | 5.375 | 1.517 | 5.415 | 1.540 | .050 | .952 | N.D | |
| **28.** Bank technology has given me more time to talk to external customers and discuss their needs. | 4.921 | 1.991 | 4.843 | 1.715 | 5.214 | 1.536 | 1.177 | .309 | N.D | |
| Technology (overall) | 5.210 | 1.726 | 5.115 | 1.427 | 5.192 | 1.371 | .120 | .887 | N.D | |

Table (9) Continued

| Items | (1) Less than University Education N= 99 | | (2) University Education N= 147 | | (3) Postgraduate Education N= 82 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | S.D | Mean | S.D | Mean | S.D | Value | Sig. | Results | Sig. |
| **Job Fit** | | | | | | | | | | |
| **29.** In recruiting employees, the bank attempts to ensure that staff have good communication skills. | 5.052 | 1.659 | 4.813 | 1.719 | 5.138 | 1.560 | 1.106 | .332 | N.D | |
| **30.** When I was recruited by the bank, I was assessed in terms of my teamwork skills. | 5.197 | 1.476 | 4.674 | 1.793 | 4.688 | 1.819 | 1.458 | .234 | N.D | |
| **31.** Staff within my department work as individuals rather than in teams. | 5.000 | 1.739 | 5.351 | 1.694 | 4.738 | 1.994 | 3.293 | .038 | 2>3 | 0.1 |
| **32.** Colleagues within my department regularly help each other to provide a high level of service quality to external customers. | 5.668 | 1.377 | 5.375 | 1.494 | 5.267 | 1.670 | .860 | .424 | N.D | |
| **33.** The performance appraisal systems within the bank include co-operation and team-based performance indicators. | 5.449 | 1.082 | 5.024 | 1.610 | 5.109 | 1.678 | 1.192 | .305 | N.D | |
| **34.** The bank rewards me when I provide a high level of service quality to external customers. | 5.026 | 1.747 | 4.473 | 1.931 | 4.454 | 1.911 | 1.434 | .240 | N.D | |
| 35. My supervisor usually praises my performance when I provide a high level of service quality to external customers. | 5.184 | 1.430 | 5.186 | 1.606 | 4.923 | 1.734 | .693 | .501 | N.D | |
| **36.** The performance appraisal systems and reward mechanisms within the bank depend upon specific performance standards which include customer care indicators. | 5.311 | 1.455 | 4.802 | 1.836 | 4.600 | 1.990 | 1.850 | .159 | N.D | |
| **37.** Management motivates me to do my best. | 5.210 | 1.833 | 5.062 | 1.686 | 4.831 | 1.737 | .685 | .505 | N.D | |
| **38.** The performance appraisal systems within the bank do not motivate me to deliver a high level of service quality to external customers. | 4.109 | 1.938 | 4.361 | 2.048 | 4.630 | 1.996 | .845 | .430 | N.D | |
| Job Fit (overall) | 5.121 | 1.022 | 4.912 | 1.208 | 4.838 | 1.261 | .688 | .503 | N.D | |
| **Training** | | | | | | | | | | |
| **39.** Training programmes within the bank should place more emphasis on the importance of providing a high level of service quality to external customers. | 5.763 | 1.403 | 5.808 | 1.364 | 6.184 | 1.157 | 2.176 | .115 | N.D | |
| **40.** The bank should place more emphasis in bank training on how to improve my communication skills. | 5.842 | .789 | 5.604 | 1.463 | 6.010 | 1.231 | 2.452 | .088 | N.D | |
| **41.** I would like to receive more bank training on how to improve my teamwork skills. | 5.763 | 1.217 | 5.491 | 1.476 | 5.892 | 1.091 | 2.417 | .091 | N.D | |
| **42.** The bank should place more emphasis in bank training on how to improve my information technology skills. | 5.763 | 1.344 | 5.786 | 1.451 | 6.030 | 1.172 | .833 | .436 | N.D | |
| Training (overall) | 5.782 | .844 | 5.672 | 1.188 | 6.029 | .974 | 2.601 | .076 | N.D | |

Table (9) Continued

| Items | (1) Less than University Education N= 99 | | (2) University Education N= 147 | | (3) Postgraduate Education N= 82 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | S.D | Mean | S.D | Mean | S.D | Value | Sig. | Results | Sig. |
| **Job Satisfaction** | | | | | | | | | | |
| **43.** I am satisfied with my job. | 5.894 | 1.203 | 5.768 | 1.235 | 5.476 | 1.437 | 1.702 | .184 | N.D | |
| **44.** Overall the benefits I receive from the bank such as medical insurance, vacation, etc, are good. | 5.736 | 1.369 | 5.783 | 1.084 | 5.623 | 1.081 | .518 | .596 | N.D | |
| **45.** I have a strong desire to remain in the bank. | 6.078 | 1.281 | 5.874 | 1.243 | 5.661 | 1.492 | 1.307 | .272 | N.D | |
| **46.** I regard my work in the bank as an imoprtant of my life. | 6.526 | .603 | 6.208 | 1.086 | 6.126 | 1.097 | 1.893 | .152 | N.D | |
| Job satisfaction (overall) | 6.059 | .754 | 5.908 | .856 | 5.722 | .983 | 1.971 | .141 | N.D | |

Table (10) ANOVA by Staff Job Position: Internal Service quality Items

| Items | (1) Managers N= 63 | | (2) Supervisors N= 154 | | (3) Front line staff N= 109 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | S.D | Mean | S.D | Mean | S.D | Value | Sig. | Results | Sig. |
| **Management Support** | | | | | | | | | | |
| **1.** Improving the level of service quality to our external customers is one of the major goals of our bank. | 6.523 | .692 | 6.196 | 1.102 | 6.151 | 1.104 | 2.891 | .057 | N.D | |
| **2.** My closest supervisor emphasises the importance of delivering a high level of service quality to external customers. | 6.509 | .617 | 6.131 | 1.118 | 5.863 | 1.213 | 7.236 | .001 | 1>2,3 | 0.05 |
| **3.** The bank is committed to providing a high level of service quality to external customers. | 6.206 | .882 | 5.863 | 1.160 | 5.548 | 1.205 | 6.951 | .001 | 1>2,3 | 0.05 |
| **4.** Departments within the bank have formal systems for setting and monitoring performance against service quality goals. | 5.714 | 1.197 | 5.389 | 1.531 | 5.275 | 1.502 | 1.839 | .161 | N.D | |
| **5.** The bank regards improving the levels of co-operation between different departments within the bank as an important goal. | 6.103 | .937 | 5.546 | 1.450 | 5.188 | 1.454 | 8.946 | .000 | 1>2>3 | 0.1 |
| **6.** Management does not motivate me to provide a high level of service quality to external customers. | 5.873 | 1.755 | 5.311 | 1.957 | 5.397 | 1.844 | 2.051 | .130 | N.D | |
| **7.** My own performance within the bank is measured against specific service quality goals. | 5.524 | 1.435 | 5.026 | 1.733 | 4.651 | 1.690 | 5.524 | .004 | 1>2,3 | 0.05 |
| Management Support (overall) | 6.065 | .714 | 5.637 | 1.011 | 5.439 | .983 | 8.667 | .000 | 1>2,3 | 0.05 |
| **Management Effectiveness** | | | | | | | | | | |
| **8.** Time pressures usually prevent me from providing a high level of service quality to external customers. | 5.282 | 1.699 | 4.800 | 1.916 | 4.502 | 1.931 | 3.429 | .034 | 1>2,3 | 0.1 |
| **9.** I sometimes feel confused about what management expects from me when dealing with external customers. | 5.571 | 1.562 | 5.039 | 1.729 | 4.624 | 1.709 | 6.319 | .002 | 1>2>3 | 0.1 |
| **10.** Management has far more important issues to address than helping me to provide a high level of service quality to external customers. | 5.603 | 1.699 | 4.439 | 2.031 | 4.258 | 1.911 | 10.729 | .000 | 1>2,3 | 0.05 |
| **11.** Other considerations frequently take precedence over the goal of improving the quality of external customer service. | 5.563 | 1.637 | 4.243 | 1.947 | 4.229 | 1.955 | 12.453 | .000 | 1>2,3 | 0.05 |
| Management Effectiveness (overall) | 5.505 | 1.199 | 4.630 | 1.331 | 4.403 | 1.304 | 15.128 | .000 | 1>2,3 | 0.05 |
| **Working Atmospherics** | | | | | | | | | | |
| **12.** The working environment within the bank is comfortable. | 5.184 | 1.231 | 4.537 | 1.624 | 4.308 | 1.745 | 6.117 | .002 | 1>2,3 | 0.05 |
| **13.** I am satisfied with the supervision which I receive within the bank. | 5.523 | 1.119 | 4.862 | 1.676 | 4.660 | 1.628 | 6.275 | .002 | 1>2,3 | 0.05 |
| **14.** I personally have sufficient authority and discretion to provide a high level of service quality to external customers. | 4.908 | 1.764 | 4.301 | 1.993 | 3.763 | 1.986 | 7.039 | .001 | 1>2>3 | 0.1 |
| Working Atmospherics (overall) | 5.205 | 1.100 | 4.567 | 1.351 | 4.244 | 1.426 | 10.401 | .000 | 1>2>3 | 0.1 |
| **Employees Service Vision** | | | | | | | | | | |
| **15.** I feel personally responsible for creating a good impression of the bank to external customers. | 6.190 | .981 | 5.941 | 1.144 | 5.917 | 1.147 | 1.383 | .252 | N.D | |

Table (10) Continued

| Items | (1) Managers N= 63 | | (2) Supervisors N= 154 | | (3) Front line staff N= 109 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | S.D | Mean | S.D | Mean | S.D | Value | Sig. | Results | Sig. |
| **16.** My most important objective is to satisfy the needs of customers. | 6.301 | .977 | 6.411 | .671 | 6.388 | .890 | .413 | .662 | N.D | |
| **17.** I feel that it is my responsibility to help colleagues within my department. | 6.095 | 1.027 | 6.318 | .876 | 6.130 | 1.089 | 1.724 | .180 | N.D | |
| Employees Service Vision (overall) | 6.195 | .905 | 6.223 | .672 | 6.145 | .854 | .318 | .728 | N.D | |
| **Communication** | | | | | | | | | | |
| **18.** The bank regularly seeks information from staff about how to improve the quality of external customer service. | 5.073 | 1.519 | 4.854 | 1.811 | 4.513 | 1.920 | 2.589 | .077 | N.D | |
| **19.** The bank encourages staff to make suggestions for improving the quality of external customer service. | 5.455 | 1.439 | 5.345 | 1.627 | 4.962 | 1.857 | 2.660 | .071 | N.D | |
| **20.** The bank uses staff suggestions to improve the quality of external customer service. | 5.188 | 1.632 | 5.118 | 1.612 | 4.661 | 1.753 | 3.448 | .033 | 1>2,3 | 0.05 |
| **21.** The bank rewards staff who make good suggestions for improving the quality of external customer service. | 5.777 | 1.099 | 4.646 | 1.758 | 4.364 | 1.797 | 15.166 | .000 | 1>2,3 | 0.05 |
| **22.** Senior management within the bank regularly communicate to employees the importance of providing a high level of service quality to external customers. | 6.015 | 1.349 | 5.777 | 1.324 | 5.633 | 1.337 | 1.645 | .195 | N.D | |
| **23.** Bank staff regularly make suggestions to managers/supervisors about how to improve the quality of external customer service. | 4.944 | 1.420 | 4.467 | 1.782 | 4.211 | 1.764 | 3.660 | .027 | 1>2,3 | 0.1 |
| **24.** The objective of delivering a high level of service quality to external customers is clearly communicated to all employees and departments. | 5.688 | 1.116 | 5.361 | 1.619 | 5.177 | 1.550 | 2.279 | .104 | N.D | |
| **25.** Changes in work methods (for example, the introduction of new technology to provide a speedier service) made to improve the quality of external customer service are clearly communicated to all employees and departments. | 5.968 | 1.177 | 5.500 | 1.474 | 5.156 | 1.650 | 6.008 | .003 | 1>2,3 | 0.05 |
| Communication (overall) | 5.700 | .914 | 5.067 | 1.252 | 4.750 | 1.325 | 12.114 | .000 | 1>2>3 | 0.1 |
| **Technology** | | | | | | | | | | |
| **26.** Bank technology helps me to provide an error free service to external customers. | 5.492 | 1.134 | 5.000 | 1.715 | 4.688 | 1.854 | 4.630 | .010 | 1>2,3 | 0.05 |
| **27.** Bank technology helps me to provide a fast service to external customers. | 5.809 | .997 | 5.304 | 1.604 | 4.910 | 1.813 | 6.488 | .002 | 1>2>3 | 0.1 |
| **28.** Bank technology provides me with easy-to-access information on extenral customers. | 5.901 | .834 | 5.268 | 1.617 | 5.242 | 1.688 | 4.536 | .011 | 1>2,3 | 0.05 |
| **29.** Bank technology has given me more time to talk to external customers and discuss their needs. | 5.618 | 1.054 | 4.823 | 1.741 | 4.697 | 1.912 | 6.521 | .002 | 1>2,3 | 0.05 |
| Technology (overall) | 5.705 | .803 | 5.099 | 1.482 | 4.884 | 1.620 | 6.730 | .001 | 1>2,3 | 0.05 |

Table (10) Continued

| Items | (1) Managers N= 63 | | (2) Supervisors N= 154 | | (3) Front line staff N= 109 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | S.D | Mean | S.D | Mean | S.D | Value | Sig. | Results | Sig. |
| **Job Fit** | | | | | | | | | | |
| **30.** In recruiting employees, the bank attempts to ensure that staff have good communication skills. | 5.555 | 1.201 | 4.941 | 1.689 | 4.431 | 1.771 | 9.573 | .000 | 1>2>3 | 0.05 |
| **31.** When I was recruited by the bank, I was assessed in terms of my teamwork skills. | 5.138 | 1.585 | 4.870 | 1.700 | 4.325 | 1.884 | 5.154 | .006 | 1,2>3 | 0.05 |
| **32.** Staff within my department work as individuals rather than in teams. | 5.428 | 1.710 | 5.461 | 1.661 | 4.733 | 1.864 | 6.173 | .002 | 2,1>3 | 0.05 |
| **33.** Colleagues within my department regularly help each other to provide a high level of service quality to external customers. | 5.815 | 1.056 | 5.550 | 1.503 | 4.880 | 1.637 | 10.002 | .000 | 1,2>3 | 0.05 |
| **34.** The performance appraisal systems within the bank include co-operation and team-based performance indicators. | 5.402 | 1.418 | 5.092 | 1.518 | 4.909 | 1.697 | 1.993 | .138 | N.D | |
| 35. The bank rewards me when I provide a high level of service quality to external customers. | 5.428 | 1.477 | 4.445 | 1.901 | 4.151 | 1.971 | 9.840 | .000 | 1>2,3 | 0.05 |
| **36.** My supervisor usually praises my performance when I provide a high level of service quality to external customers. | 5.793 | .953 | 5.000 | 1.730 | 4.945 | 1.660 | 6.777 | .001 | 1>2,3 | 0.05 |
| **37.** The performance appraisal systems and reward mechanisms within the bank depend upon specific performance standards which include customer care indicators. | 5.660 | 1.221 | 4.731 | 1.919 | 4.440 | 1.877 | 9.567 | .000 | 1>2,3 | 0.05 |
| **38.** Management motivates me to do my best. | 5.634 | 1.383 | 4.942 | 1.708 | 4.799 | 1.814 | 5.268 | .006 | 1>2,3 | 0.05 |
| **39.** The performance appraisal systems within the bank do not motivate me to deliver a high level of service quality to external customers. | 5.266 | 1.788 | 4.173 | 2.057 | 4.110 | 1.987 | 8.106 | .000 | 1>2,3 | 0.05 |
| Job Fit (overall) | 5.512 | .834 | 4.920 | 1.185 | 4.572 | 1.255 | 13.303 | .000 | 1>2>3 | 0.05 |
| **Training** | | | | | | | | | | |
| **40.** Training programmes within the bank should place more emphasis on the importance of providing a high level of service quality to external customers. | 5.476 | 1.564 | 5.967 | 1.325 | 5.962 | 1.178 | 3.443 | .033 | 2,3>1 | 0.05 |
| **41.** The bank should place more emphasis in bank training on how to improve my communication skills. | 5.471 | 1.583 | 5.740 | 1.404 | 5.834 | 1.150 | 1.450 | .236 | N.D | |
| **42.** I would like to receive more bank training on how to improve my teamwork skills. | 5.333 | 1.470 | 5.629 | 1.455 | 5.743 | 1.220 | 1.779 | .170 | N.D | |
| **43.** The bank should place more emphasis in bank training on how to improve my information technology skills. | 5.333 | 1.636 | 5.798 | 1.465 | 6.174 | .989 | 7.694 | .001 | 3>2>1 | 0.1 |
| Training (overall) | 5.403 | 1.296 | 5.784 | 1.163 | 5.928 | .894 | 4.543 | .011 | 3,2>1 | 0.05 |
| **Job Satisfaction** | | | | | | | | | | |
| **44.** I am satisfied with my job. | 5.984 | .991 | 5.740 | 1.317 | 5.559 | 1.357 | 2.227 | .110 | N.D | |
| **45.** Overall the benefits I receive from the bank such as medical insurance, vacation, etc, are good. | 6.027 | .595 | 5.623 | 1.276 | 5.752 | 1.090 | 2.959 | .053 | N.D | |

Table (10) Continued

| Items | (1) Managers N= 63 | | (2) Supervisors N= 154 | | (3) Front line staff N= 109 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | S.D | Mean | S.D | Mean | S.D | Value | Sig. | Results | Sig. |
| **46.** I have a strong desire to remain in the bank. | 6.206 | .969 | 5.759 | 1.323 | 5.767 | 1.411 | 2.978 | .052 | N.D | |
| **47.** I regard my work in the bank as an imoprtant of my life. | 6.337 | .966 | 6.253 | .932 | 6.127 | 1.230 | .885 | .414 | N.D | |
| Job satisfaction (overall) | 6.138 | .655 | 5.844 | .879 | 5.801 | .946 | 3.386 | .033 | 1>2,3 | 0.05 |

Table (11) ANOVA by Four Banks: External Service Quality Items

| Items | (1) Bank A N= 121 | | (2) Bank B N=98 | | (3) Bank C N=64 | | (4) Bank D N=49 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| **Trust** **1.** Branch staff instil trust and confidence in customers. | 5.640 | 1.141 | 5.758 | 1.053 | 5.875 | 1.000 | 5.795 | .935 | .687 | .561 | N.D* | |
| **2.** Branch staff are able to answer customer questions. | 5.459 | 1.211 | 5.558 | 1.294 | 5.593 | 1.108 | 5.530 | 1.226 | .188 | .904 | N.D | |
| **3.** Branch staff give positive advice to customers when they have a problem. | 5.755 | .985 | 5.816 | 1.087 | 6.044 | .744 | 5.693 | 1.064 | 1.479 | .220 | N.D | |
| **4.** Branch staff understand the needs of customers. | 5.711 | .873 | 5.692 | 1.091 | 5.703 | .920 | 5.571 | 1.080 | .242 | .867 | N.D | |
| **5.** Branch staff are sympathetic and reassuring to customers. | 5.669 | .971 | 5.475 | 1.448 | 5.718 | 1.015 | 5.428 | 1.274 | .996 | .395 | N.D | |
| **6.** Branch staff resolve customers' complaints quickly. | 5.443 | 1.284 | 5.553 | 1.339 | 5.750 | 1.023 | 5.173 | 1.599 | 1.914 | .127 | N.D | |
| **7.** Branch staff keep external customers fully informed about new services. | 5.449 | 1.285 | 5.384 | 1.425 | 5.468 | 1.344 | 5.027 | 1.535 | 1.211 | .306 | N.D | |
| **8.** Branch staff are willing to help customers. | 5.673 | 1.182 | 5.655 | 1.220 | 5.781 | .881 | 5.489 | 1.192 | .603 | .613 | N.D | |
| **9.** Branch staff are well dressed and appear neat and tidy. | 5.377 | 1.231 | 5.611 | 1.272 | 5.671 | 1.127 | 5.173 | 1.519 | 2.066 | .105 | N.D | |
| **10.** The branch handles and keeps the customers' financial affairs accurately. | 5.649 | 1.193 | 5.725 | 1.343 | 5.713 | 1.252 | 5.558 | 1.366 | .227 | .877 | N.D | |
| Trust (overall) | 5.582 | .809 | 5.623 | .851 | 5.732 | .677 | 5.444 | 1.016 | 1.139 | .333 | N.D | |
| **Interface** **11.** Branch staff are not able to provide customers with individual attention. | 5.418 | 1.428 | 5.405 | 1.589 | 5.531 | 1.542 | 5.428 | 1.670 | .102 | .959 | N.D | |
| **12.** Branch staff do not have the customers' best interests at heart. | 5.469 | 1.444 | 5.636 | 1.595 | 5.421 | 1.611 | 5.489 | 1.582 | .353 | .787 | N.D | |
| **13.** Bank brochures and leaflets are not informative. | 4.218 | 1.771 | 4.590 | 1.758 | 4.607 | 1.767 | 4.387 | 1.717 | 1.014 | .387 | N.D | |
| **14.** Branch staff find it difficult to give a prompt service to customers. | 4.803 | 1.684 | 4.686 | 1.770 | 5.031 | 1.745 | 4.632 | 1.878 | .673 | .569 | N.D | |
| **15.** Branch staff work as individuals rather than as part of a team in providing a high level of service quality to customers. | 4.476 | 1.833 | 4.499 | 1.802 | 5.046 | 1.557 | 5.142 | 1.594 | 2.988 | .031 | 4,3>2,1 | 0.1 |

* N.D (No Differences)

Table (11) Continued

| Items | (1) Bank A N= 121 | | (2) Bank B N=98 | | (3) Bank C N=64 | | (4) Bank D N=49 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| **16.** Bank customers' statements are complicated and not easy to understand. | 5.744 | 1.212 | 5.789 | 1.349 | 5.567 | 1.497 | 5.217 | 1.696 | 2.194 | .089 | N.D | |
| Interface (overall) | 5.022 | 1.131 | 5.101 | 1.140 | 5.201 | 1.205 | 5.049 | 1.210 | .331 | .803 | N.D | |
| **Reliability** **17.** Branch staff find it difficult to keep promises made to customers because of other demands on their time. | 4.775 | 1.627 | 4.509 | 1.932 | 5.213 | 1.609 | 5.224 | 1.503 | 3.330 | .020 | 4,3>2 | 0.05 |
| **18.** High workloads make it difficult for branch staff to perform an error-free service to customers. | 4.755 | 1.747 | 4.177 | 1.916 | 4.632 | 1.730 | 4.612 | 1.656 | 2.140 | .095 | N.D | |
| **19.** Branch opening hours are not convenient for customers. | 5.336 | 1.635 | 5.420 | 1.678 | 5.781 | 1.430 | 5.488 | 1.631 | 1.058 | .367 | N.D | |
| Reliability (overall) | 4.955 | 1.219 | 4.702 | 1.449 | 5.209 | 1.342 | 5.108 | 1.168 | 2.444 | .064 | N.D | |
| **Tangible** **20.** The branch has up-to-date technology. | 4.231 | 1.343 | 4.604 | 1.162 | 4.869 | 1.321 | 4.244 | 1.185 | 4.315 | .005 | 3,2>4,1 | 0.1 |
| **21.** Bank brochures, leaflets and statements, etc, are not visually appealing. | 3.961 | 1.861 | 4.545 | 1.851 | 4.523 | 2.037 | 3.836 | 1.806 | 2.986 | .031 | 2,3>1,4 | 0.1 |
| **22.** The customer waiting area in the branch is comfortable. | 4.494 | 1.794 | 4.300 | 2.030 | 4.843 | 1.720 | 4.151 | 1.860 | 1.618 | .185 | N.D | |
| Tangible (overall) | 4.229 | 1.426 | 4.483 | 1.247 | 4.745 | 1.483 | 4.077 | 1.265 | 2.998 | .031 | 3>1,4; 2>4 | 0.1 |
| **External Service Quality (overall)** | 5.159 | .795 | 5.199 | .853 | 5.381 | .841 | 5.104 | .829 | 1.296 | .276 | N.D | |

Table (12) ANOVA by Branch Location: External Service quality Items

| Items | Location 1 N= 87 | | Location 2 N= 101 | | Location 3 N= 76 | | Location 4 N=68 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| **Trust** | | | | | | | | | | | | |
| **1.** Branch staff instil trust and confidence in customers. | 5.861 | 1.173 | 5.617 | .959 | 5.664 | 1.061 | 5.856 | 1.005 | 1.236 | .297 | N.D | |
| **2.** Branch staff are able to answer customer questions. | 5.554 | 1.228 | 5.461 | 1.170 | 5.482 | 1.377 | 5.640 | 1.115 | .319 | .812 | N.D | |
| **3.** Branch staff give positive advice to customers when they have a problem. | 5.938 | 1.011 | 5.657 | .846 | 5.758 | 1.114 | 5.923 | 1.041 | 1.505 | .213 | N.D | |
| **4.** Branch staff understand the needs of customers. | 5.732 | .881 | 5.683 | .937 | 5.574 | 1.133 | 5.736 | 1.054 | .433 | .730 | N.D | |
| **5.** Branch staff are sympathetic and reassuring to customers. | 5.638 | 1.010 | 5.526 | 1.084 | 5.623 | 1.351 | 5.464 | 1.479 | .359 | .783 | N.D | |
| **6.** Branch staff resolve customers' complaints quickly. | 5.419 | 1.333 | 5.421 | 1.219 | 5.549 | 1.534 | 5.632 | 1.180 | .473 | .701 | N.D | |
| **7.** Branch staff keep external customers fully informed about new services. | 5.459 | 1.265 | 5.111 | 1.403 | 5.346 | 1.585 | 5.564 | 1.260 | 1.459 | .226 | N.D | |
| 8. Branch staff are willing to help customers. | 5.701 | 1.046 | 5.350 | 1.054 | 5.703 | 1.332 | 5.892 | 1.121 | 2.913 | .035 | 4,3,1>2 | 0.1 |
| **9.** Branch staff are well dressed and appear neat and tidy. | 5.539 | 1.232 | 5.322 | 1.211 | 5.390 | 1.453 | 5.727 | 1.216 | 1.448 | .229 | N.D | |
| **10.** The branch handles and keeps the customers' financial affairs accurately. | 5.662 | 1.197 | 5.469 | 1.249 | 5.653 | 1.505 | 5.956 | 1.134 | 1.763 | .154 | N.D | |
| Trust (overall) | 5.645 | .811 | 5.465 | .799 | 5.586 | .927 | 5.739 | .801 | 1.490 | .217 | N.D | |
| **Interface** | | | | | | | | | | | | |
| **11.** Branch staff are not able to provide customers with individual attention. | 5.505 | 1.457 | 5.390 | 1.553 | 5.302 | 1.641 | 5.544 | 1.530 | .392 | .759 | N.D | |
| **12.** Branch staff do not have the customers' best interests at heart. | 5.455 | 1.452 | 5.436 | 1.603 | 5.658 | 1.508 | 5.588 | 1.650 | .386 | .763 | N.D | |
| 13. Bank brochures and leaflets are not informative. | 4.588 | 1.764 | 4.131 | 1.709 | 4.387 | 1.817 | 4.742 | 1.722 | 1.830 | .141 | N.D | |
| **14.** Branch staff find it difficult to give a prompt service to customers. | 4.970 | 1.668 | 4.767 | 1.768 | 4.539 | 1.784 | 4.779 | 1.810 | .873 | .455 | N.D | |
| **15.** Branch staff work as individuals rather than as part of a team in providing a high level of service quality to customers. | 5.069 | 1.821 | 4.467 | 1.576 | 4.732 | 1.651 | 4.377 | 1.946 | 2.819 | .039 | 1>2,4 | 0.05 |

Table (12) Continued

| Items | Location 1 N= 87 | | Location 2 N= 101 | | Location 3 N= 76 | | Location 4 N=68 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | S.D. | M | S.D. | M | S.D. | M | S.D. | Value | Sig. | Results | Sig. |
| **16.** Bank customers' statements are complicated and not easy to understand. | 5.816 | 1.156 | 5.389 | 1.586 | 5.600 | 1.429 | 5.876 | 1.340 | 2.211 | .087 | N.D | |
| Interface (overall) | 5.163 | 1.127 | 5.001 | 1.196 | 5.036 | 1.147 | 5.151 | 1.162 | .417 | .741 | N.D | |
| **Reliability** **17.** Branch staff find it difficult to keep promises made to customers because of other demands on their time. | 5.263 | 1.605 | 4.804 | 1.529 | 4.432 | 1.892 | 4.659 | 1.928 | 3.718 | .012 | 1>2,4,3 | 0.1 |
| **18.** High workloads make it difficult for branch staff to perform an error-free service to customers. | 4.770 | 1.750 | 4.688 | 1.653 | 4.125 | 1.959 | 4.294 | 1.851 | 2.436 | .065 | N.D | |
| **19.** Branch opening hours are not convenient for customers. | 5.682 | 1.600 | 5.401 | 1.433 | 5.677 | 1.567 | 5.034 | 1.857 | 2.743 | .043 | 1,3>4 | 0.05 |
| Reliability (overall) | 5.238 | 1.234 | 4.992 | 1.249 | 4.744 | 1.390 | 4.662 | 1.449 | 3.017 | .030 | 1>3,4 | 0.05 |
| **Tangible** **20.** The branch has up-to-date technology. | 4.645 | 1.313 | 4.186 | 1.328 | 4.248 | 1.205 | 4.918 | 1.053 | 5.811 | .001 | 4,1>3,2 | 0.05 |
| **21.** Bank brochures, leaflets and statements, etc, are not visually appealing. | 4.322 | 1.832 | 3.945 | 1.963 | 4.270 | 1.920 | 4.581 | 1.853 | 1.482 | .219 | N.D | |
| **22.** The customer waiting area in the branch is comfortable. | 4.545 | 1.776 | 3.769 | 1.774 | 4.499 | 2.020 | 4.968 | 1.851 | 5.317 | .001 | 4,1,3>2 | 0.05 |
| Tangible (overall) | 4.488 | 1.396 | 4.075 | 1.477 | 4.246 | 1.252 | 4.823 | 1.155 | 4.247 | .006 | 4>3,2; 1>2 | 0.1 |
| **External Service Quality (overall)** | 5.296 | .794 | 5.163 | .827 | 5.056 | .884 | 5.307 | .812 | 1.642 | .180 | N.D | |

Table (13) ANOVA by Branch Size: External Service quality Items

| Items | (1) Small N= 68 | | (2) Medium N= 110 | | (3) Large N=154 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | S.D. | Mean | S.D. | Mean | S.D. | Value | Sig. | Results | Sig. |
| **Trust** | | | | | | | | | | |
| **1.** Branch staff instil trust and confidence in customers. | 5.705 | 1.093 | 5.822 | 1.030 | 5.720 | 1.054 | .380 | .684 | N.D | |
| **2.** Branch staff are able to answer customer questions. | 5.551 | 1.200 | 5.472 | 1.332 | 5.565 | 1.152 | .195 | .823 | N.D | |
| **3.** Branch staff give positive advice to customers when they have a problem. | 5.735 | 1.059 | 5.871 | 1.023 | 5.830 | .955 | .392 | .676 | N.D | |
| **4.** Branch staff understand the needs of customers. | 5.524 | .967 | 5.742 | 1.044 | 5.708 | .967 | 1.109 | .331 | N.D | |
| **5.** Branch staff are sympathetic and reassuring to customers. | 5.632 | 1.035 | 5.654 | 1.229 | 5.488 | 1.283 | .702 | .496 | N.D | |
| **6.** Branch staff resolve customers' complaints quickly. | 5.529 | 1.215 | 5.572 | 1.349 | 5.441 | 1.341 | .334 | .716 | N.D | |
| **7.** Branch staff keep external customers fully informed about new services. | 5.373 | 1.313 | 5.443 | 1.473 | 5.310 | 1.363 | .294 | .745 | N.D | |
| **8.** Branch staff are willing to help customers. | 5.406 | 1.282 | 5.672 | 1.173 | 5.764 | 1.046 | 2.324 | .100 | N.D | |
| **9.** Branch staff are well dressed and appear neat and tidy. | 5.720 | .878 | 5.459 | 1.344 | 5.409 | 1.373 | 1.449 | .236 | N.D | |
| **10.** The branch handles and keeps the customers' financial affairs accurately. | 5.539 | 1.414 | 5.575 | 1.356 | 5.807 | 1.157 | 1.535 | .217 | N.D | |
| Trust (overall) | 5.572 | .763 | 5.628 | .884 | 5.604 | .836 | .097 | .908 | N.D | |
| **Interface** | | | | | | | | | | |
| **11.** Branch staff are not able to provide customers with individual attention. | 5.073 | 1.614 | 5.281 | 1.614 | 5.707 | 1.409 | 4.944 | .008 | 3>2,1 | 0.05 |
| **12.** Branch staff do not have the customers' best interests at heart. | 5.390 | 1.485 | 5.504 | 1.651 | 5.597 | 1.506 | .434 | .648 | N.D | |
| **13.** Bank brochures and leaflets are not informative. | 4.506 | 1.605 | 4.431 | 1.715 | 4.447 | 1.860 | .040 | .960 | N.D | |
| **14.** Branch staff find it difficult to give a prompt service to customers. | 4.617 | 1.657 | 4.718 | 1.802 | 4.894 | 1.764 | .687 | .504 | N.D | |
| **15.** Branch staff work as individuals rather than as part of a team in providing a high level of service quality to customers. | 4.539 | 1.605 | 4.860 | 1.742 | 4.640 | 1.824 | .831 | .436 | N.D | |
| **16.** Bank customers' statements are complicated and not easy to understand. | 5.426 | 1.548 | 5.710 | 1.397 | 5.703 | 1.342 | 1.075 | .343 | N.D | |
| Interface (overall) | 4.925 | 1.115 | 5.084 | 1.188 | 5.165 | 1.152 | 1.012 | .365 | N.D | |
| **Reliability** | | | | | | | | | | |
| **17.** Branch staff find it difficult to keep promises made to customers because of other demands on their time. | 4.338 | 1.733 | 4.878 | 1.711 | 5.010 | 1.741 | 3.631 | .028 | 3,2>1 | 0.05 |
| **18.** High workloads make it difficult for branch staff to perform an error-free service to customers. | 4.250 | 1.879 | 4.477 | 1.795 | 4.626 | 1.777 | 1.041 | .354 | N.D | |
| **19.** Branch opening hours are not convenient for customers. | 5.234 | 1.628 | 5.612 | 1.564 | 5.483 | 1.640 | 1.157 | .316 | N.D | |
| Reliability (overall) | 4.607 | 1.325 | 4.989 | 1.344 | 5.040 | 1.314 | 2.647 | .072 | N.D | |
| **Tangible** | | | | | | | | | | |
| **20.** The branch has up-to-date technology. | 4.539 | 1.220 | 4.416 | 1.260 | 4.525 | 1.306 | .296 | .744 | N.D | |
| **21.** Bank brochures, leaflets and statements, etc, are not visually appealing. | 4.558 | 1.773 | 4.221 | 1.886 | 4.165 | 1.965 | 1.051 | .351 | N.D | |
| **22.** The customer waiting area in the branch is comfortable. | 4.602 | 1.796 | 4.379 | 1.992 | 4.412 | 1.852 | .326 | .722 | N.D | |
| Tangible (overall) | 4.567 | 1.273 | 4.339 | 1.342 | 4.367 | 1.420 | .661 | .517 | N.D | |
| **External Service Quality (overall)** | 5.127 | .805 | 5.217 | .829 | 5.23 | .848 | .434 | .649 | N.D | |

Table (14) ANOVA by Staff Experience in the Bank: External Service quality Items

| Items | (1) Less than 10 years N= 87 | | (2) 10-20 years N= 109 | | (3) More than 20 years N= 136 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | S.D. | Mean | S.D. | Mean | S.D. | Value | Sig. | Results | Sig. |
| **Trust** | | | | | | | | | | |
| **1.** Branch staff instil trust and confidence in customers. | 5.371 | 1.044 | 5.500 | 1.114 | 6.009 | .955 | 12.981 | .000 | 3>2,1 | 0.05 |
| **2.** Branch staff are able to answer customer questions. | 5.414 | 1.229 | 5.347 | 1.285 | 5.664 | 1.176 | 2.377 | .094 | N.D | |
| **3.** Branch staff give positive advice to customers when they have a problem. | 5.716 | 1.060 | 5.613 | 1.178 | 5.965 | .851 | 4.223 | .015 | 3>1,2 | 0.1 |
| **4.** Branch staff understand the needs of customers. | 5.599 | .983 | 5.568 | 1.142 | 5.766 | .914 | 1.459 | .234 | N.D | |
| **5.** Branch staff are sympathetic and reassuring to customers. | 5.171 | 1.453 | 5.392 | 1.253 | 5.803 | 1.052 | 7.974 | .000 | 3>2,1 | 0.05 |
| **6.** Branch staff resolve customers' complaints quickly. | 4.953 | 1.335 | 5.397 | 1.335 | 5.750 | 1.240 | 9.489 | .000 | 3>2>1 | 0.1 |
| **7.** Branch staff keep external customers fully informed about new services. | 5.083 | 1.418 | 5.224 | 1.526 | 5.537 | 1.286 | 3.194 | .042 | 3>1 | 0.05 |
| **8.** Branch staff are willing to help customers. | 5.218 | 1.374 | 5.609 | 1.168 | 5.842 | .996 | 7.400 | .001 | 3,2>1 | 0.05 |
| **9.** Branch staff are well dressed and appear neat and tidy. | 5.163 | 1.275 | 5.477 | 1.277 | 5.611 | 1.269 | 2.919 | .055 | N.D | |
| **10.** The branch handles and keeps the customers' financial affairs accurately. | 5.328 | 1.444 | 5.773 | 1.086 | 5.752 | 1.295 | 2.952 | .054 | N.D | |
| Trust (overall) | 5.302 | .790 | 5.490 | .910 | 5.770 | .776 | 8.956 | .000 | 3>2,1 | 0.05 |
| **Interface** | | | | | | | | | | |
| **11.** Branch staff are not able to provide customers with individual attention. | 4.890 | 1.594 | 5.204 | 1.525 | 5.744 | 1.461 | 9.028 | .000 | 3>2,1 | 0.05 |
| **12.** Branch staff do not have the customers' best interests at heart. | 5.140 | 1.551 | 5.363 | 1.555 | 5.739 | 1.517 | 4.249 | .015 | 3>1 | 0.05 |
| **13.** Bank brochures and leaflets are not informative. | 4.241 | 1.498 | 4.431 | 1.861 | 4.540 | 1.793 | .693 | .501 | N.D | |
| **14.** Branch staff find it difficult to give a prompt service to customers. | 4.109 | 1.624 | 4.545 | 1.767 | 5.132 | 1.712 | 9.556 | .000 | 3>2>1 | 0.1 |
| **15.** Branch staff work as individuals rather than as part of a team in providing a high level of service quality to customers. | 4.042 | 1.565 | 4.333 | 1.841 | 5.100 | 1.671 | 11.827 | .000 | 3>2,1 | 0.05 |
| **16.** Bank customers' statements are complicated and not easy to understand. | 5.514 | 1.399 | 5.514 | 1.460 | 5.762 | 1.377 | 1.283 | .279 | N.D | |
| Interface (overall) | 4.656 | 1.033 | 4.899 | 1.256 | 5.33 | 1.089 | 10.321 | .000 | 3>2,1 | 0.05 |
| **Reliability** | | | | | | | | | | |
| **17.** Branch staff find it difficult to keep promises made to customers because of other demands on their time. | 4.291 | 1.777 | 4.681 | 1.752 | 5.092 | 1.683 | 5.558 | .004 | 3>1 | 0.05 |
| **18.** High workloads make it difficult for branch staff to perform an error-free service to customers. | 4.179 | 1.732 | 4.409 | 1.744 | 4.658 | 1.849 | 1.822 | .163 | N.D | |
| **19.** Branch opening hours are not convenient for customers. | 5.186 | 1.822 | 5.606 | 1.405 | 5.513 | 1.627 | 1.367 | .256 | N.D | |
| Reliability (overall) | 4.552 | 1.412 | 4.899 | 1.307 | 5.088 | 1.295 | 3.918 | .021 | 3,2>1 | 0.1 |
| **Tangible** | | | | | | | | | | |
| **20.** The branch has up-to-date technology. | 4.109 | 1.221 | 4.444 | 1.270 | 4.651 | 1.265 | 4.472 | .012 | 3,2>1 | 0.1 |
| **21.** Bank brochures, leaflets and statements, etc, are not visually appealing. | 3.769 | 1.833 | 4.196 | 1.922 | 4.474 | 1.890 | 3.362 | .036 | 3>1 | 0.05 |
| **22.** The customer waiting area in the branch is comfortable. | 4.225 | 1.821 | 4.516 | 1.799 | 4.479 | 1.952 | .524 | .593 | N.D | |
| Tangible (overall) | 4.034 | 1.268 | 4.385 | 1.370 | 4.535 | 1.377 | 3.222 | .041 | 3,2>1 | 0.1 |
| **External Service Quality (overall)** | 4.851 | .747 | 5.097 | .910 | 5.390 | .771 | 11.702 | .000 | 3>2>1 | 0.05 |

Table (15) ANOVA by Staff Experience in their Current Positions: External Service quality Items

| Items | (1) Less than 5 years N= 133 | | (2) 5-10 years N= 91 | | (3) More than 10 years N= 103 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | S.D. | Mean | S.D. | Mean | S.D. | Value | Sig. | Results | Sig. |
| **Trust** | | | | | | | | | | |
| **1.** Branch staff instil trust and confidence in customers. | 5.661 | 1.119 | 5.785 | .960 | 5.854 | 1.011 | .962 | .383 | N.D | |
| **2.** Branch staff are able to answer customer questions. | 5.591 | 1.236 | 5.395 | 1.255 | 5.493 | 1.149 | .769 | .465 | N.D | |
| **3.** Branch staff give positive advice to customers when they have a problem. | 5.821 | 1.032 | 5.725 | 1.011 | 5.902 | .906 | .645 | .525 | N.D | |
| **4.** Branch staff understand the needs of customers. | 5.774 | .965 | 5.644 | 1.003 | 5.453 | 1.018 | 2.671 | .071 | N.D | |
| **5.** Branch staff are sympathetic and reassuring to customers. | 5.561 | 1.239 | 5.505 | 1.223 | 5.654 | 1.197 | .301 | .740 | N.D | |
| **6.** Branch staff resolve customers' complaints quickly. | 5.393 | 1.397 | 5.483 | 1.232 | 5.715 | 1.235 | 1.492 | .226 | N.D | |
| **7.** Branch staff keep external customers fully informed about new services. | 5.356 | 1.450 | 5.208 | 1.502 | 5.532 | 1.085 | 1.087 | .338 | N.D | |
| **8.** Branch staff are willing to help customers. | 5.573 | 1.263 | 5.531 | 1.221 | 5.972 | .604 | 3.751 | .025 | 3>1,2 | 0.05 |
| **9.** Branch staff are well dressed and appear neat and tidy. | 5.573 | 1.181 | 5.346 | 1.359 | 5.472 | 1.423 | .915 | .402 | N.D | |
| **10.** The branch handles and keeps the customers' financial affairs accurately. | 5.776 | 1.149 | 5.432 | 1.527 | 5.732 | 1.251 | 2.198 | .113 | N.D | |
| Trust (overall) | 5.608 | .844 | 5.505 | .940 | 5.678 | .663 | .893 | .410 | N.D | |
| **Interface** | | | | | | | | | | |
| **11.** Branch staff are not able to provide customers with individual attention. | 5.439 | 1.543 | 5.362 | 1.574 | 5.486 | 1.547 | .135 | .874 | N.D | |
| **12.** Branch staff do not have the customers' best interests at heart. | 5.564 | 1.523 | 5.335 | 1.556 | 5.597 | 1.624 | .786 | .457 | N.D | |
| **13.** Bank brochures and leaflets are not informative. | 4.533 | 1.752 | 4.366 | 1.681 | 4.388 | 1.910 | .324 | .723 | N.D | |
| **14.** Branch staff find it difficult to give a prompt service to customers. | 4.725 | 1.834 | 4.854 | 1.602 | 4.777 | 1.785 | .157 | .854 | N.D | |
| **15.** Branch staff work as individuals rather than as part of a team in providing a high level of service quality to customers. | 4.682 | 1.697 | 4.721 | 1.732 | 4.630 | 1.958 | .054 | .947 | N.D | |
| **16.** Bank customers' statements are complicated and not easy to understand. | 5.619 | 1.422 | 5.567 | 1.458 | 5.768 | 1.334 | .433 | .649 | N.D | |
| Interface (overall) | 5.094 | 1.142 | 5.034 | 1.165 | 5.108 | 1.219 | .101 | .904 | N.D | |
| **Reliability** | | | | | | | | | | |
| **17.** Branch staff find it difficult to keep promises made to customers because of other demands on their time. | 4.764 | 1.787 | 4.879 | 1.705 | 4.861 | 1.754 | .154 | .858 | N.D | |
| **18.** High workloads make it difficult for branch staff to perform an error-free service to customers. | 4.481 | 1.837 | 4.703 | 1.668 | 4.222 | 1.893 | 1.429 | .241 | N.D | |
| **19.** Branch opening hours are not convenient for customers. | 5.423 | 1.678 | 5.509 | 1.473 | 5.471 | 1.676 | .086 | .918 | N.D | |
| Reliability (overall) | 4.889 | 1.357 | 5.030 | 1.314 | 4.851 | 1.328 | .446 | .640 | N.D | |
| **Tangible** | | | | | | | | | | |
| **20.** The branch has up-to-date technology. | 4.425 | 1.249 | 4.454 | 1.397 | 4.726 | 1.154 | 1.482 | .229 | N.D | |
| **21.** Bank brochures, leaflets and statements, etc, are not visually appealing. | 4.236 | 1.920 | 4.302 | 1.870 | 4.299 | 1.959 | .046 | .955 | N.D | |
| **22.** The customer waiting area in the branch is comfortable. | 4.285 | 1.880 | 4.384 | 1.942 | 4.908 | 1.783 | 2.839 | .060 | N.D | |
| Tangible (overall) | 4.315 | 1.378 | 4.380 | 1.446 | 4.644 | 1.229 | 1.473 | .231 | N.D | |
| **External Service Quality (overall)** | 5.193 | .831 | 5.159 | .906 | 5.269 | .750 | .359 | .698 | N.D | |

Table (16) ANOVA by Staff Annual Income: External Service quality Items

| Items | (1) 7000 LE or less N=89 | | (2) 7001-11000 LE N= 113 | | (3) More than 11000 LE N= 116 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | S.D. | Mean | S.D. | Mean | S.D. | Value | Sig. | Results | Sig. |
| **Trust** | | | | | | | | | | |
| **1.** Branch staff instil trust and confidence in customers. | 5.418 | 1.204 | 5.744 | .950 | 5.868 | 1.026 | 4.253 | .015 | 3,2>1 | 0.05 |
| **2.** Branch staff are able to answer customer questions. | 5.242 | 1.377 | 5.604 | 1.209 | 5.579 | 1.140 | 2.096 | .125 | N.D | |
| **3.** Branch staff give positive advice to customers when they have a problem. | 5.497 | 1.125 | 5.873 | .931 | 5.905 | .976 | 4.073 | .018 | 3,2>1 | 0.05 |
| **4.** Branch staff understand the needs of customers. | 5.490 | .972 | 5.673 | .945 | 5.730 | 1.036 | 1.326 | .267 | N.D | |
| **5.** Branch staff are sympathetic and reassuring to customers. | 5.227 | 1.442 | 5.635 | 1.087 | 5.661 | 1.176 | 3.161 | .044 | 3,2>1 | 0.05 |
| **6.** Branch staff resolve customers' complaints quickly. | 4.812 | 1.660 | 5.474 | 1.203 | 5.756 | 1.146 | 12.346 | .000 | 3,2>1 | 0.05 |
| **7.** Branch staff keep external customers fully informed about new services. | 5.062 | 1.467 | 5.326 | 1.475 | 5.498 | 1.304 | 2.272 | .105 | N.D | |
| **8.** Branch staff are willing to help customers. | 5.260 | 1.414 | 5.656 | 1.150 | 5.808 | .971 | 5.380 | .005 | 3,2>1 | 0.05 |
| **9.** Branch staff are well dressed and appear neat and tidy. | 5.226 | 1.537 | 5.625 | 1.018 | 5.556 | 1.237 | 2.183 | .114 | N.D | |
| **10.** The branch handles and keeps the customers' financial affairs accurately. | 5.386 | 1.460 | 5.812 | 1.046 | 5.795 | 1.186 | 3.043 | .049 | 2,3>1 | 0.05 |
| Trust (overall) | 5.262 | .993 | 5.642 | .781 | 5.716 | .771 | 7.070 | .001 | 3,2>1 | 0.05 |
| **Interface** | | | | | | | | | | |
| **11.** Branch staff are not able to provide customers with individual attention. | 5.078 | 1.556 | 5.395 | 1.612 | 5.639 | 1.463 | 3.165 | .044 | 3>1 | 0.05 |
| **12.** Branch staff do not have the customers' best interests at heart. | 5.203 | 1.701 | 5.505 | 1.493 | 5.674 | 1.511 | 2.131 | .120 | N.D | |
| **13.** Bank brochures and leaflets are not informative. | 4.054 | 1.821 | 4.541 | 1.697 | 4.609 | 1.746 | 2.398 | .093 | N.D | |
| **14.** Branch staff find it difficult to give a prompt service to customers. | 4.515 | 1.718 | 4.645 | 1.823 | 5.011 | 1.670 | 2.431 | .090 | N.D | |
| **15.** Branch staff work as individuals rather than as part of a team in providing a high level of service quality to customers. | 4.260 | 1.817 | 4.572 | 1.757 | 4.928 | 1.697 | 3.646 | .027 | 3>1 | 0.05 |
| **16.** Bank customers' statements are complicated and not easy to understand. | 5.217 | 1.523 | 5.687 | 1.353 | 5.839 | 1.336 | 4.623 | .010 | 3,2>1 | 0.05 |
| Interface (overall) | 4.721 | 1.109 | 5.058 | 1.178 | 5.283 | 1.133 | 5.618 | .004 | 3,2>1 | 0.05 |
| **Reliability** | | | | | | | | | | |
| **17.** Branch staff find it difficult to keep promises made to customers because of other demands on their time. | 4.890 | 1.663 | 4.517 | 1.752 | 4.978 | 1.754 | 2.175 | .115 | N.D | |
| **18.** High workloads make it difficult for branch staff to perform an error-free service to customers. | 4.351 | 1.827 | 4.453 | 1.805 | 4.569 | 1.802 | .361 | .698 | N.D | |
| **19.** Branch opening hours are not convenient for customers. | 5.351 | 1.765 | 5.296 | 1.757 | 5.651 | 1.415 | 1.748 | .176 | N.D | |
| Reliability (overall) | 4.864 | 1.337 | 4.755 | 1.395 | 5.066 | 1.308 | 1.708 | .183 | N.D | |
| **Tangible** | | | | | | | | | | |
| **20.** The branch has up-to-date technology. | 4.140 | 1.253 | 4.428 | 1.343 | 4.693 | 1.225 | 4.578 | .011 | 3>1 | 0.05 |
| **21.** Bank brochures, leaflets and statements, etc, are not visually appealing. | 3.801 | 1.986 | 4.127 | 1.742 | 4.616 | 1.916 | 4.887 | .008 | 3>2,1 | 0.1 |
| **22.** The customer waiting area in the branch is comfortable. | 4.216 | 1.870 | 4.541 | 1.852 | 4.457 | 1.936 | .586 | .557 | N.D | |
| Tangible (overall) | 4.052 | 1.330 | 4.366 | 1.379 | 4.589 | 1.361 | 3.622 | .028 | 3>1 | 0.05 |
| **External Service Quality (overall)** | 4.895 | .769 | 5.188 | .845 | 5.355 | .824 | 7.230 | .001 | 3,2>1 | 0.05 |

Table (17) ANOVA by Staff Education Level: External Service quality Items

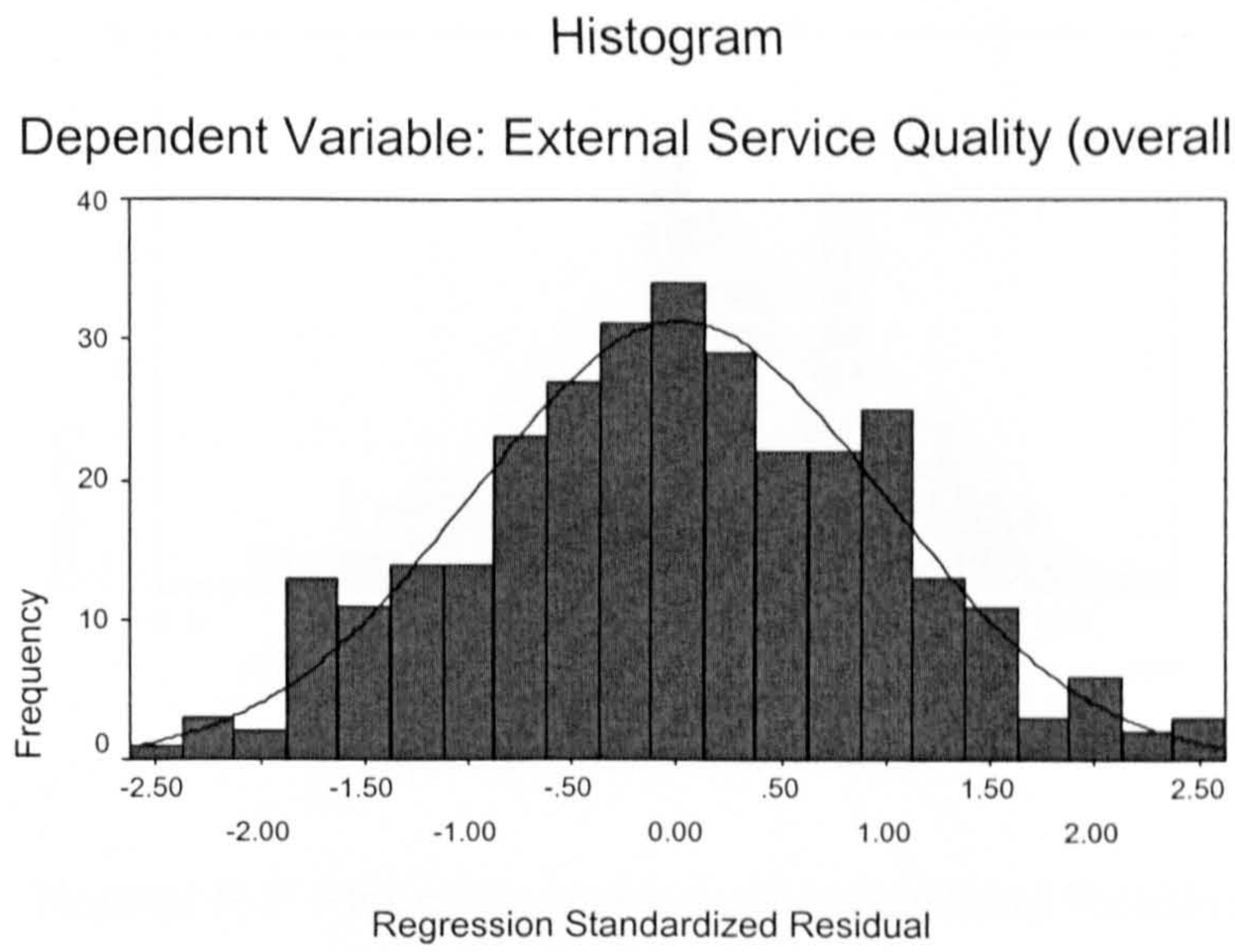
| Items | (1) Less than University Education N= 99 | | (2) University Education N= 147 | | (3)Postgraduate Education N= 82 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | S.D. | Mean | S.D. | Mean | S.D. | Value | Sig. | Results | Sig. |
| **Trust** | | | | | | | | | | |
| **1.** Branch staff instil trust and confidence in customers. | 5.861 | .963 | 5.758 | 1.026 | 5.600 | 1.183 | .866 | .422 | N.D | |
| **2.** Branch staff are able to answer customer questions. | 5.657 | 1.236 | 5.580 | 1.141 | 5.230 | 1.444 | 2.353 | .097 | N.D | |
| **3.** Branch staff give positive advice to customers when they have a problem. | 5.736 | 1.082 | 5.869 | .938 | 5.661 | 1.135 | 1.222 | .296 | N.D | |
| **4.** Branch staff understand the needs of customers. | 5.631 | .913 | 5.730 | .869 | 5.476 | 1.359 | 1.689 | .186 | N.D | |
| **5.** Branch staff are sympathetic and reassuring to customers. | 5.473 | 1.179 | 5.587 | 1.242 | 5.600 | 1.101 | .159 | .853 | N.D | |
| **6.** Branch staff resolve customers' complaints quickly. | 5.342 | 1.361 | 5.506 | 1.290 | 5.492 | 1.382 | .255 | .775 | N.D | |
| **7.** Branch staff keep external customers fully informed about new services. | 5.394 | 1.405 | 5.390 | 1.363 | 5.200 | 1.481 | .491 | .613 | N.D | |
| **8.** Branch staff are willing to help customers. | 5.657 | 1.145 | 5.645 | 1.193 | 5.676 | 1.001 | .019 | .982 | N.D | |
| **9.** Branch staff are well dressed and appear neat and tidy. | 5.644 | 1.319 | 5.515 | 1.216 | 5.276 | 1.452 | 1.220 | .297 | N.D | |
| **10.** The branch handles and keeps the customers' financial affairs accurately. | 5.606 | 1.190 | 5.641 | 1.293 | 5.785 | 1.324 | .359 | .699 | N.D | |
| Trust (overall) | 5.600 | .914 | 5.622 | .787 | 5.500 | .948 | .543 | .582 | N.D | |
| **Interface** | | | | | | | | | | |
| **11.** Branch staff are not able to provide customers with individual attention. | 4.684 | 1.890 | 5.564 | 1.459 | 5.369 | 1.505 | 5.476 | .005 | 2,3>1 | 0.05 |
| **12.** Branch staff do not have the customers' best interests at heart. | 5.145 | 1.848 | 5.575 | 1.495 | 5.492 | 1.552 | 1.257 | .286 | N.D | |
| **13.** Bank brochures and leaflets are not informative. | 4.234 | 1.818 | 4.433 | 1.771 | 4.668 | 1.677 | .795 | .452 | N.D | |
| **14.** Branch staff find it difficult to give a prompt service to customers. | 4.657 | 1.935 | 4.746 | 1.755 | 4.904 | 1.674 | .285 | .752 | N.D | |
| **15.** Branch staff work as individuals rather than as part of a team in providing a high level of service quality to customers. | 4.491 | 1.718 | 4.780 | 1.747 | 4.456 | 1.793 | 1.117 | .329 | N.D | |
| **16.** Bank customers' statements are complicated and not easy to understand. | 5.411 | 1.762 | 5.632 | 1.392 | 5.794 | 1.227 | .892 | .411 | N.D | |
| Interface (overall) | 4.770 | 1.275 | 5.122 | 1.130 | 5.114 | 1.177 | 1.534 | .217 | N.D | |
| **Reliability** | | | | | | | | | | |
| **17.** Branch staff find it difficult to keep promises made to customers because of other demands on their time. | 4.578 | 1.825 | 4.814 | 1.749 | 4.984 | 1.690 | .651 | .522 | N.D | |
| **18.** High workloads make it difficult for branch staff to perform an error-free service to customers. | 4.473 | 1.885 | 4.435 | 1.785 | 4.723 | 1.798 | .647 | .524 | N.D | |
| **19.** Branch opening hours are not convenient for customers. | 5.289 | 1.753 | 5.630 | 1.511 | 5.123 | 1.745 | 2.908 | .056 | N.D | |
| Reliability (overall) | 4.780 | 1.533 | 4.960 | 1.257 | 4.943 | 1.440 | .298 | .743 | N.D | |
| **Tangible** | | | | | | | | | | |
| **20.** The branch has up-to-date technology. | 4.596 | 1.082 | 4.440 | 1.269 | 4.605 | 1.419 | .563 | .570 | N.D | |
| **21.** Bank brochures, leaflets and statements, etc, are not visually appealing. | 4.263 | 1.940 | 4.248 | 1.902 | 4.369 | 1.933 | .102 | .903 | N.D | |
| **22.** The customer waiting area in the branch is comfortable. | 4.631 | 1.880 | 4.409 | 1.845 | 4.430 | 2.030 | .225 | .798 | N.D | |
| Tangible (overall) | 4.497 | 1.154 | 4.366 | 1.338 | 4.468 | 1.599 | .243 | .784 | N.D | |
| **External Service Quality (overall)** | 5.112 | .848 | 5.224 | .784 | 5.178 | .983 | .328 | .720 | N.D | |

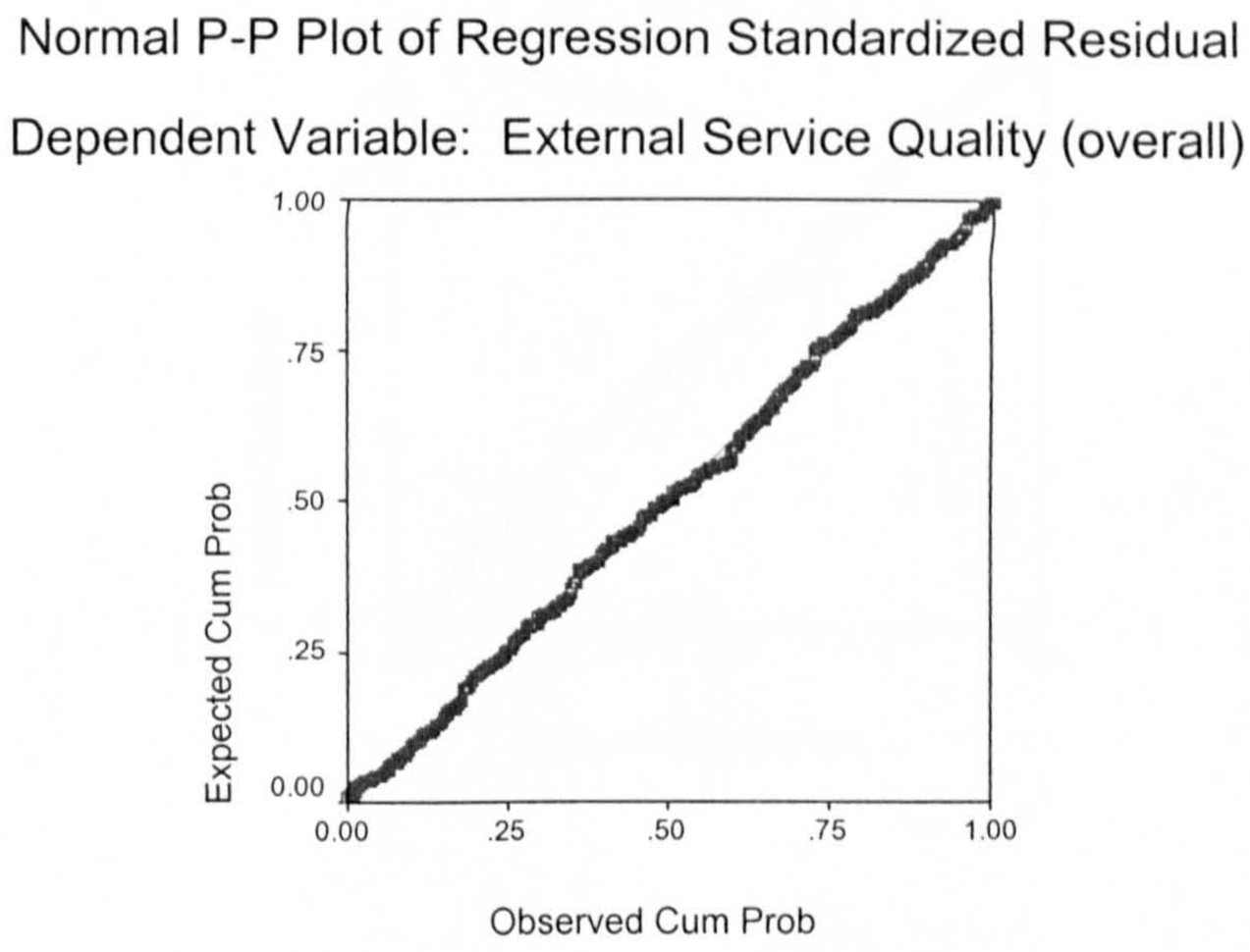
Table (18) ANOVA by Staff Job Position: External Service quality Items

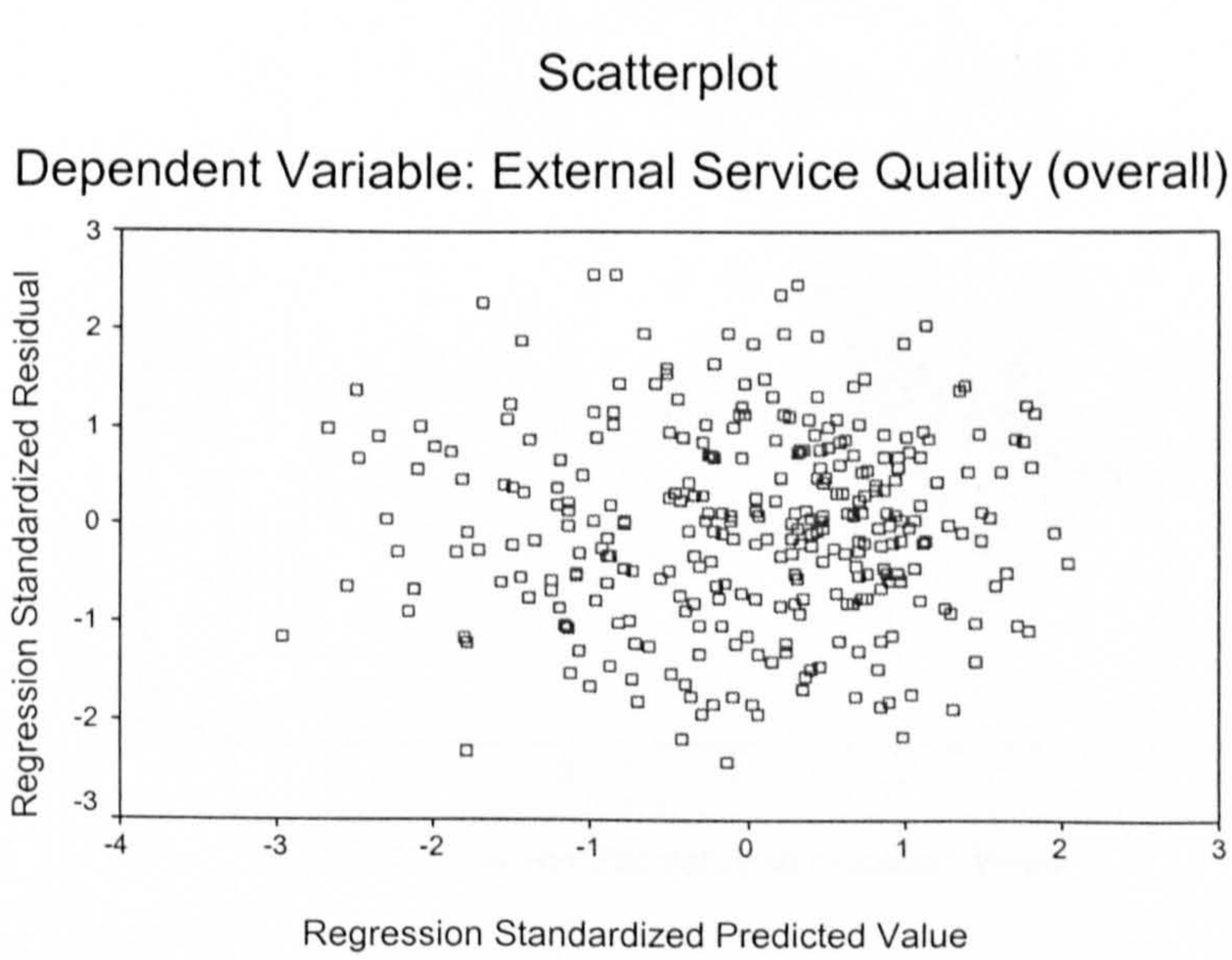
| Items | (1) Managers N= 63 | | (2) Supervisors N= 154 | | (3) Front line staff N= 109 | | F | | Duncan Test | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | S.D. | Mean | S.D. | Mean | S.D. | Value | Sig. | Results | Sig. |
| **Trust** | | | | | | | | | | |
| **1.** Branch staff instil trust and confidence in customers. | 6.138 | .760 | 5.722 | 1.149 | 5.536 | .994 | 6.826 | .001 | 1>2,3 | 0.05 |
| **2.** Branch staff are able to answer customer questions. | 5.666 | 1.107 | 5.552 | 1.256 | 5.390 | 1.223 | 1.130 | .324 | N.D | |
| **3.** Branch staff give positive advice to customers when they have a problem. | 5.965 | .879 | 5.792 | 1.026 | 5.741 | 1.021 | 1.044 | .353 | N.D | |
| **4.** Branch staff understand the needs of customers. | 5.756 | .892 | 5.612 | 1.078 | 5.691 | .917 | .521 | .594 | N.D | |
| **5.** Branch staff are sympathetic and reassuring to customers. | 5.873 | .991 | 5.627 | 1.125 | 5.298 | 1.422 | 4.877 | .008 | 1,2>3 | 0.1 |
| **6.** Branch staff resolve customers' complaints quickly. | 5.769 | 1.142 | 5.542 | 1.381 | 5.247 | 1.297 | 3.421 | .034 | 1>3 | 0.05 |
| **7.** Branch staff keep external customers fully informed about new services. | 5.551 | 1.115 | 5.327 | 1.476 | 5.263 | 1.409 | .890 | .412 | N.D | |
| **8.** Branch staff are willing to help customers. | 5.730 | 1.035 | 5.742 | 1.081 | 5.458 | 1.280 | 2.178 | .115 | N.D | |
| **9.** Branch staff are well dressed and appear neat and tidy. | 5.714 | 1.113 | 5.512 | 1.313 | 5.316 | 1.331 | 1.981 | .140 | N.D | |
| **10.** The branch handles and keeps the customers' financial affairs accurately. | 5.979 | 1.115 | 5.550 | 1.315 | 5.642 | 1.320 | 2.528 | .081 | N.D | |
| Trust (overall) | 5.814 | .710 | 5.598 | .901 | 5.458 | .781 | 3.690 | .026 | 1>2,3 | 0.1 |
| **Interface** | | | | | | | | | | |
| **11.** Branch staff are not able to provide customers with individual attention. | 5.825 | 1.409 | 5.513 | 1.543 | 5.082 | 1.558 | 5.184 | .006 | 1,2>3 | 0.1 |
| **12.** Branch staff do not have the customers' best interests at heart. | 5.952 | 1.262 | 5.513 | 1.542 | 5.256 | 1.657 | 4.106 | .017 | 1>2,3 | 0.05 |
| **13.** Bank brochures and leaflets are not informative. | 5.039 | 1.622 | 4.376 | 1.777 | 4.178 | 1.747 | 5.075 | .007 | 1>2,3 | 0.05 |
| **14.** Branch staff find it difficult to give a prompt service to customers. | 5.444 | 1.511 | 4.842 | 1.753 | 4.220 | 1.739 | 10.721 | .000 | 1>2>3 | 0.05 |
| **15.** Branch staff work as individuals rather than as part of a team in providing a high level of service quality to customers. | 5.174 | 1.641 | 4.954 | 1.634 | 4.019 | 1.793 | 13.055 | .000 | 1,2>3 | 0.05 |
| **16.** Bank customers' statements are complicated and not easy to understand. | 6.100 | 1.020 | 5.499 | 1.453 | 5.571 | 1.472 | 4.385 | .013 | 1>3,2 | 0.05 |
| Interface (overall) | 5.589 | 1.022 | 5.116 | 1.109 | 4.721 | 1.168 | 12.319 | .000 | 1>2>3 | 0.05 |
| **Reliability** | | | | | | | | | | |
| **17.** Branch staff find it difficult to keep promises made to customers because of other demands on their time. | 5.470 | 1.503 | 4.785 | 1.711 | 4.464 | 1.848 | 6.851 | .001 | 1>2,3 | 0.05 |
| **18.** High workloads make it difficult for branch staff to perform an error-free service to customers. | 5.127 | 1.601 | 4.350 | 1.865 | 4.302 | 1.754 | 5.104 | .007 | 1>2,3 | 0.05 |
| **19.** Branch opening hours are not convenient for customers. | 5.912 | 1.249 | 5.226 | 1.679 | 5.508 | 1.673 | 4.187 | .016 | 1>3,2 | 0.1 |
| Reliability (overall) | 5.503 | 1.153 | 4.787 | 1.334 | 4.758 | 1.350 | 7.894 | .000 | 1>2,3 | 0.05 |
| **Tangible** | | | | | | | | | | |
| **20.** The branch has up-to-date technology. | 5.060 | 1.015 | 4.445 | 1.280 | 4.213 | 1.306 | 9.422 | .000 | 1>2,3 | 0.05 |
| **21.** Bank brochures, leaflets and statements, etc, are not visually appealing. | 4.965 | 1.653 | 4.326 | 1.949 | 3.741 | 1.845 | 8.848 | .000 | 1>2>3 | 0.05 |
| **22.** The customer waiting area in the branch is comfortable. | 4.816 | 1.709 | 4.207 | 1.984 | 4.531 | 1.827 | 2.565 | .079 | N.D | |
| Tangible (overall) | 4.947 | 1.178 | 4.326 | 1.382 | 4.162 | 1.370 | 7.184 | .001 | 1>2,3 | 0.05 |
| **External Service Quality (overall)** | 5.592 | .762 | 5.182 | .822 | 4.985 | .798 | 11.443 | .000 | 1>2>3 | 0.1 |

# Appendix C
# The Residual plots for the Regression Models

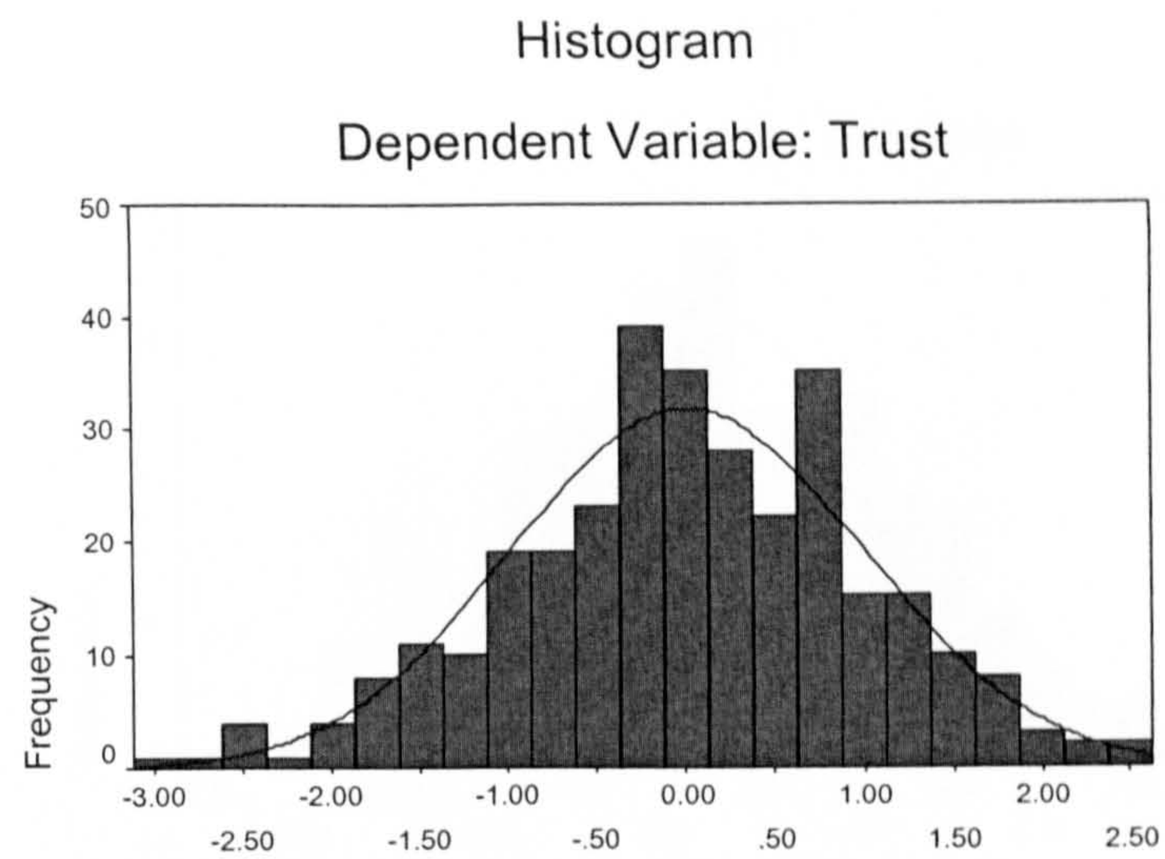
**Model. 1: The relationship between the internal service quality dimensions and the external service quality overall**

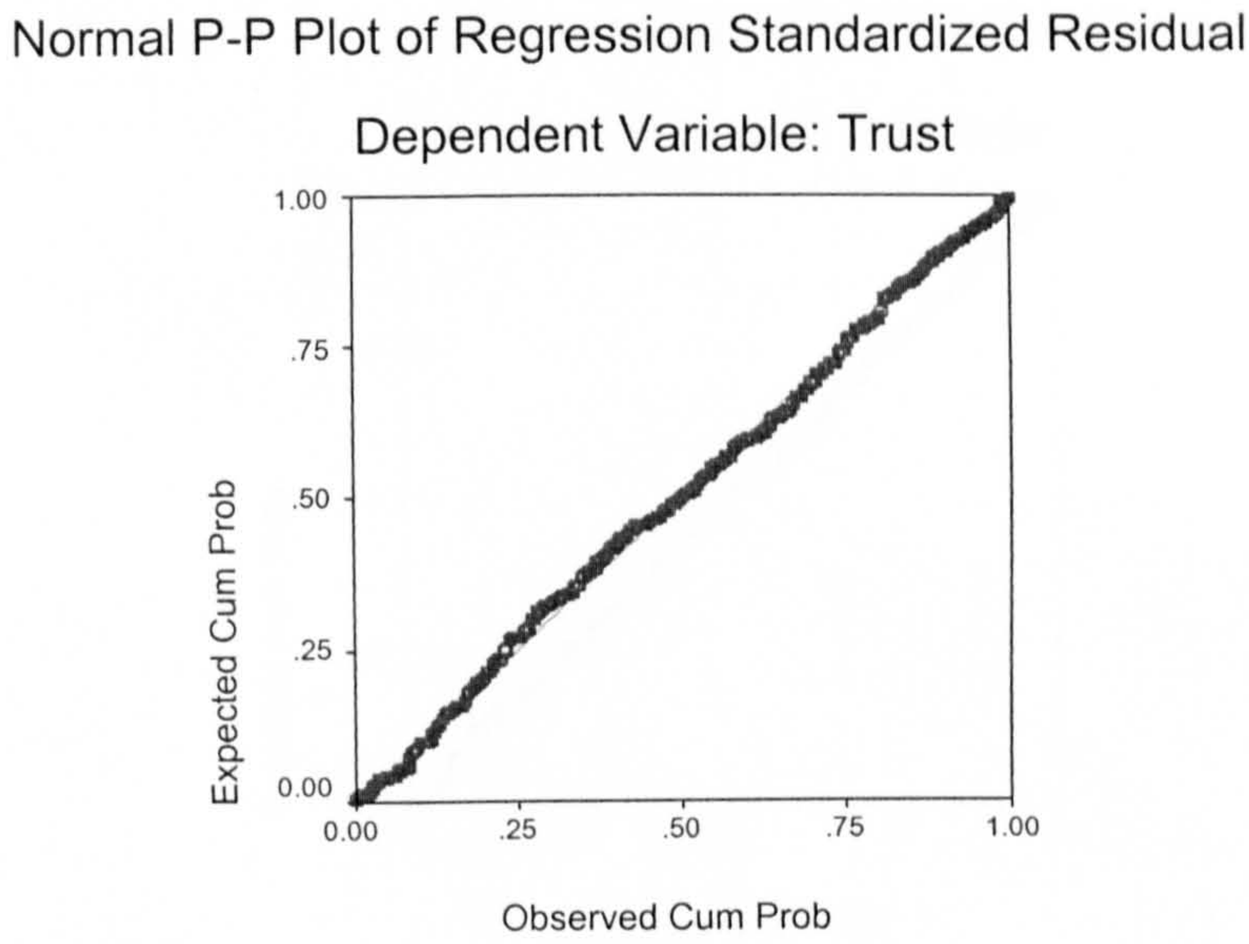


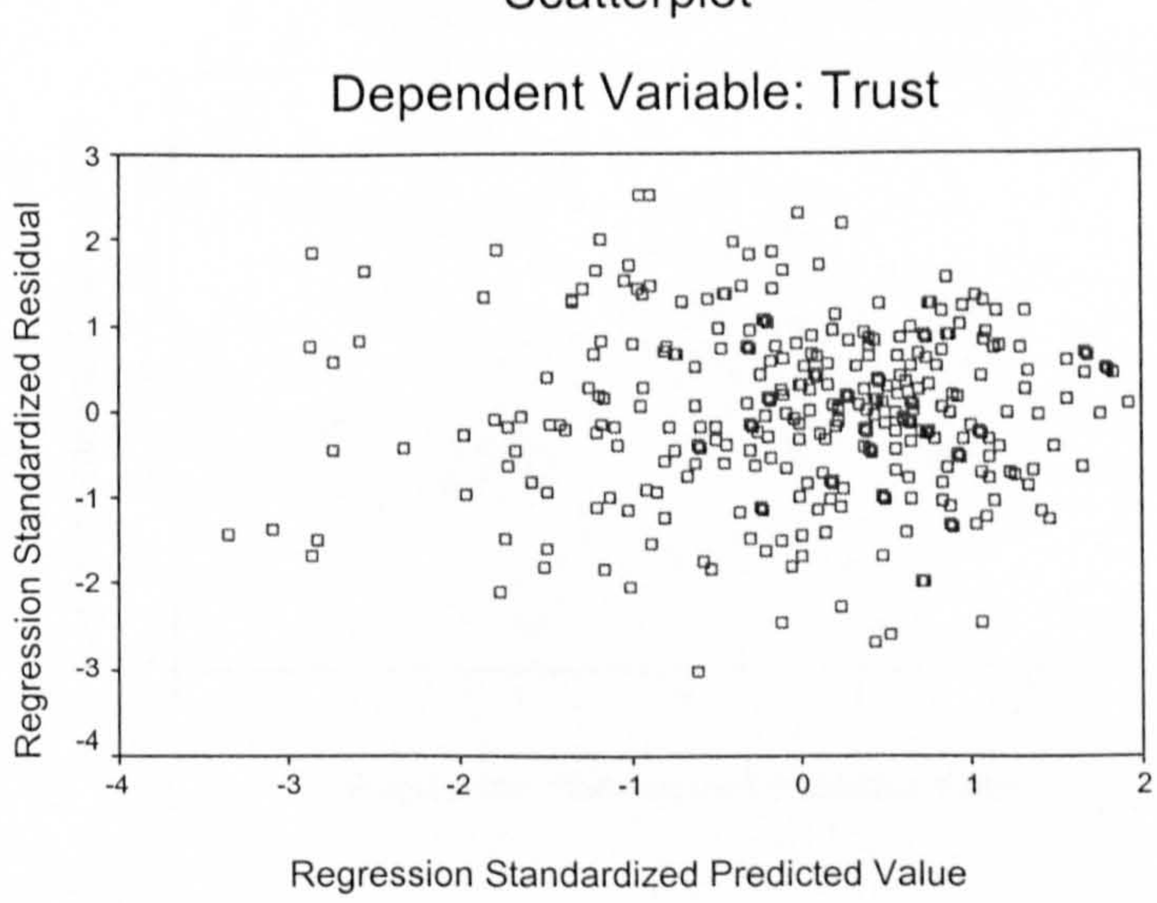



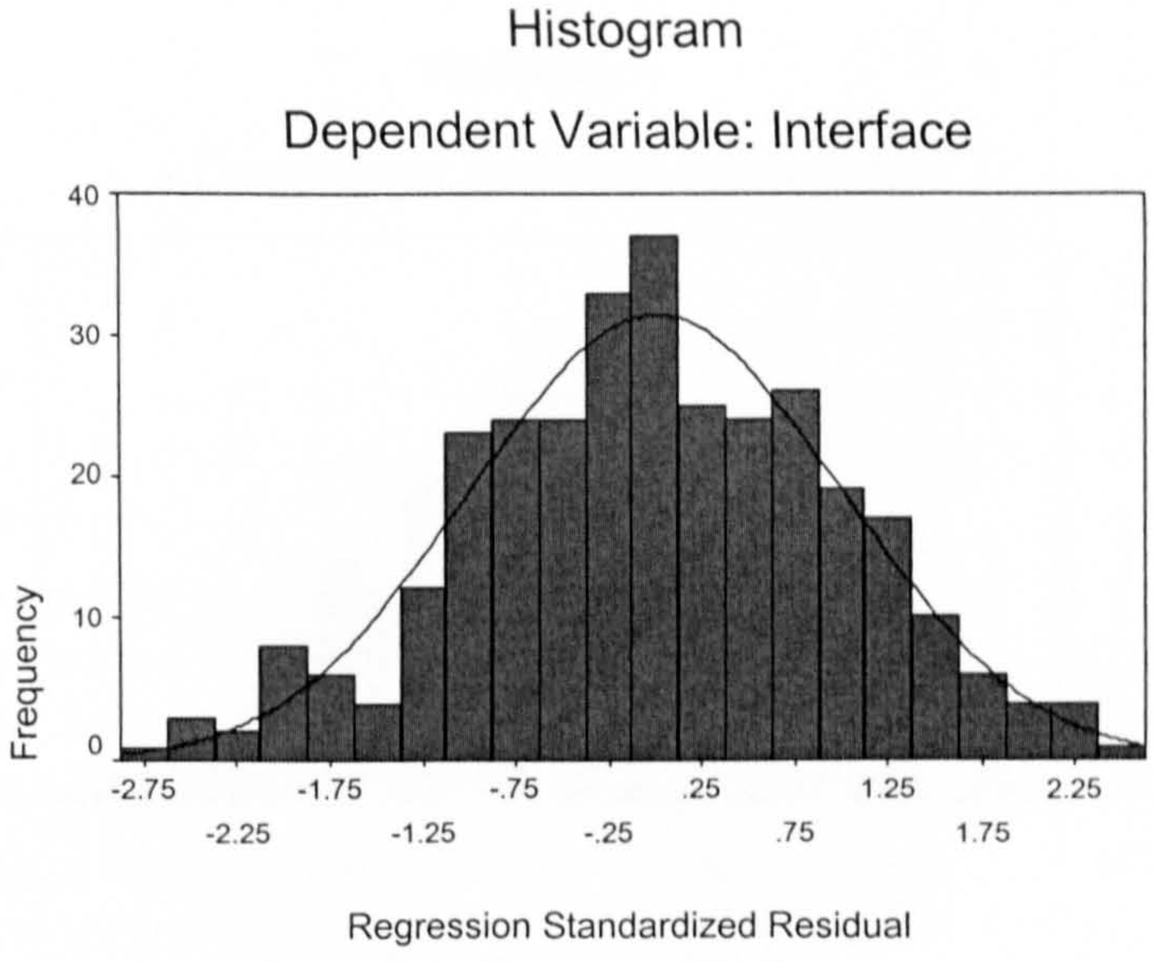
**Model. 2: The relationship between the internal service quality dimensions and trust**

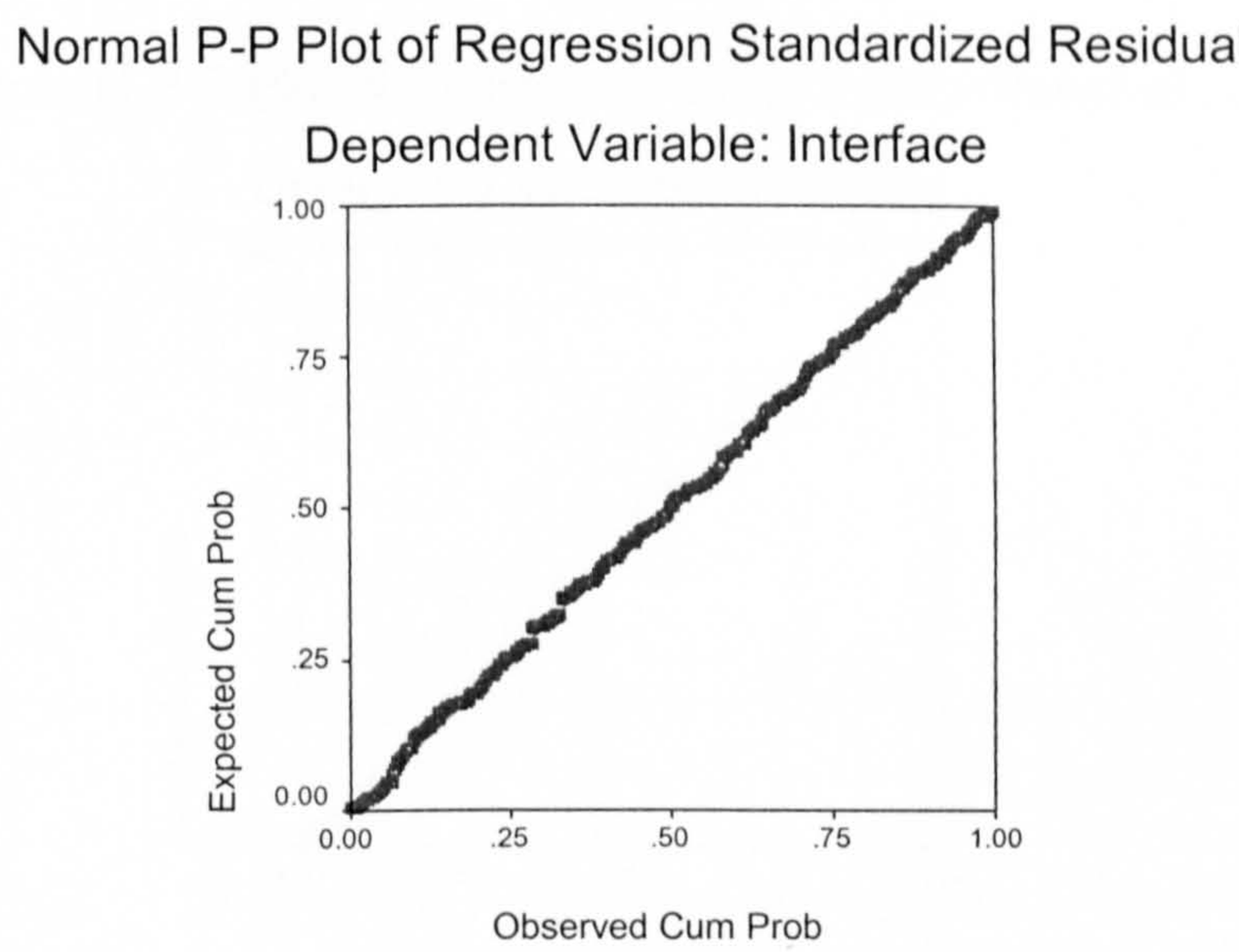


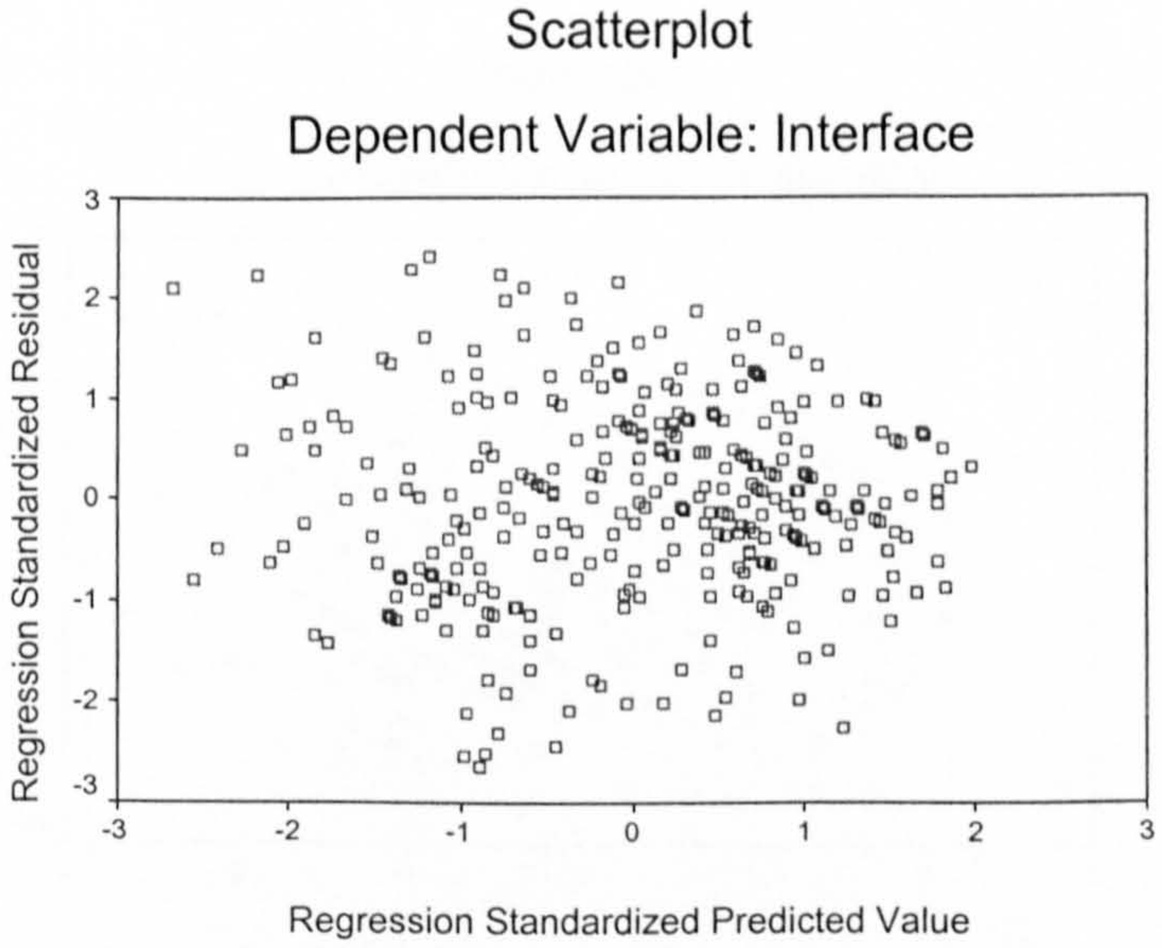



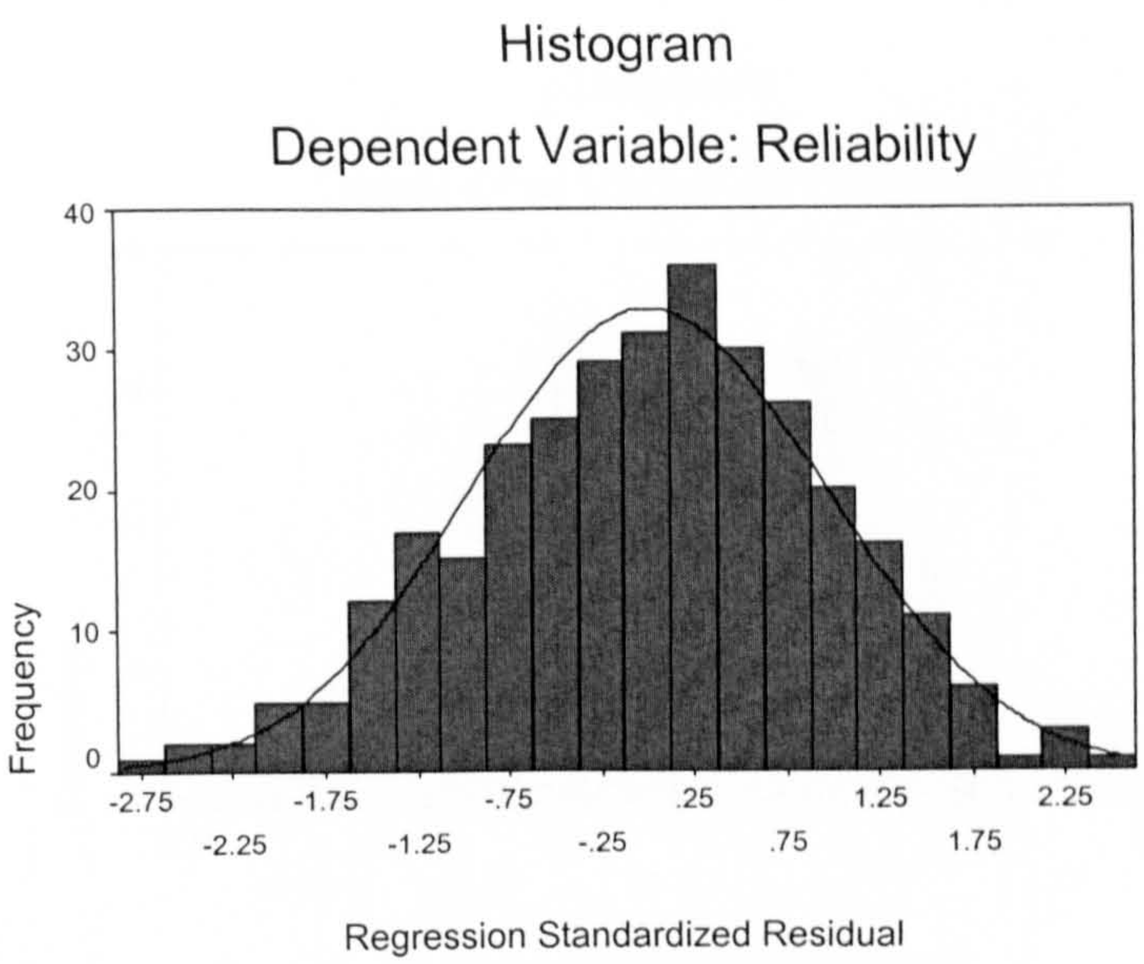
**Model. 3: The relationship between the internal service quality dimensions and interface**

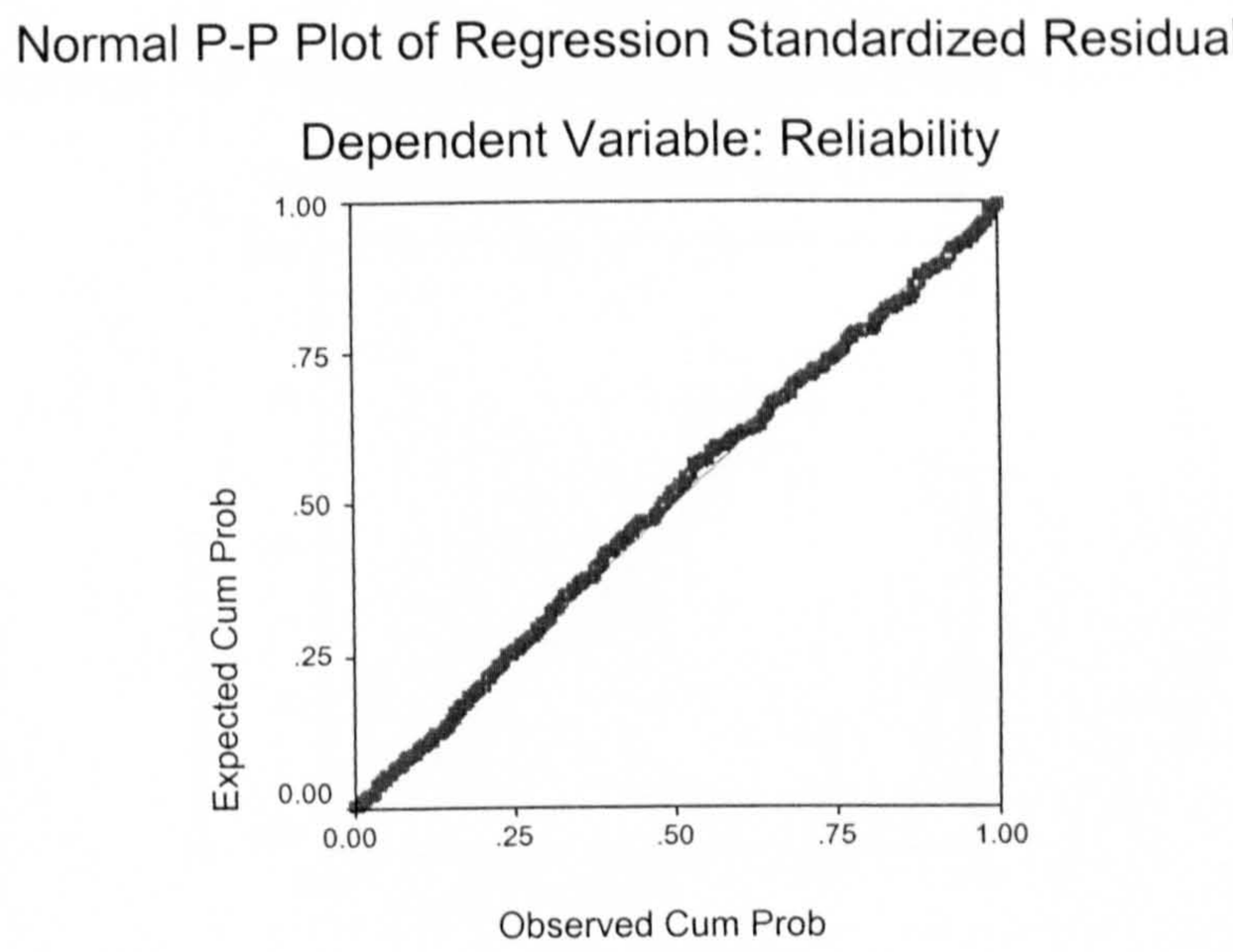


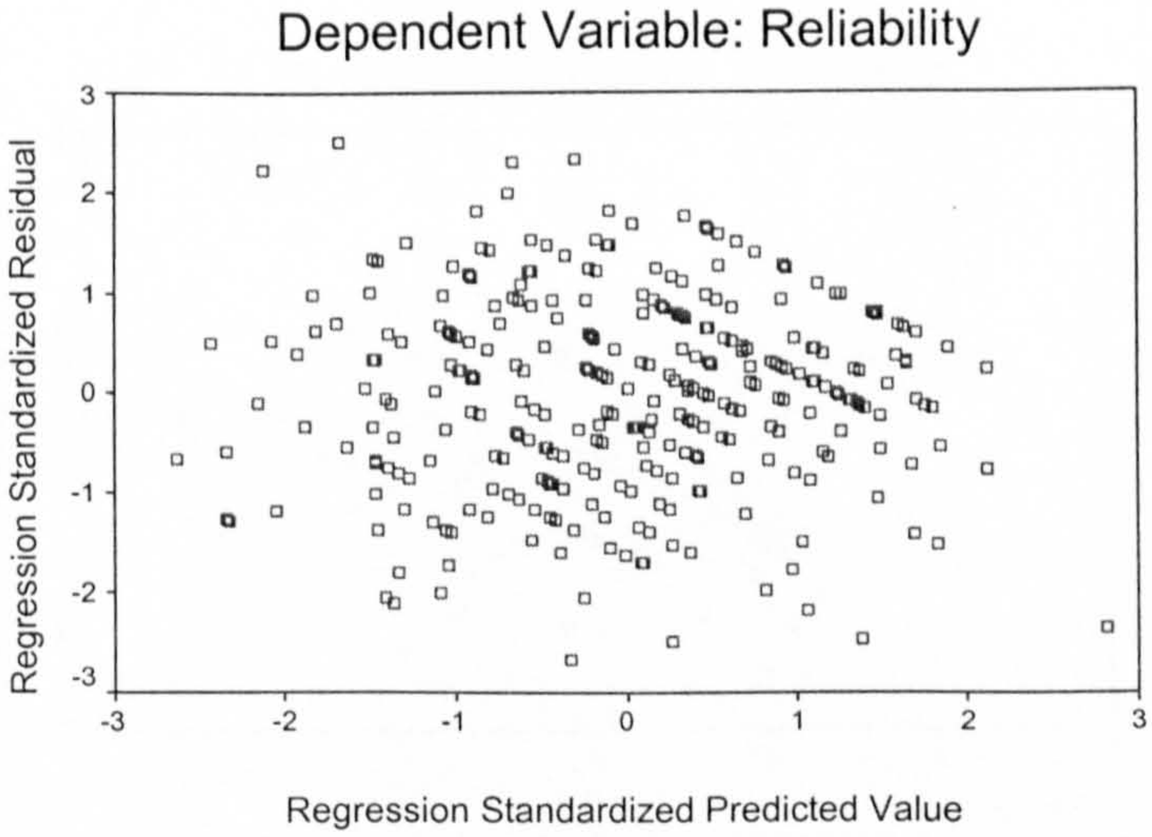



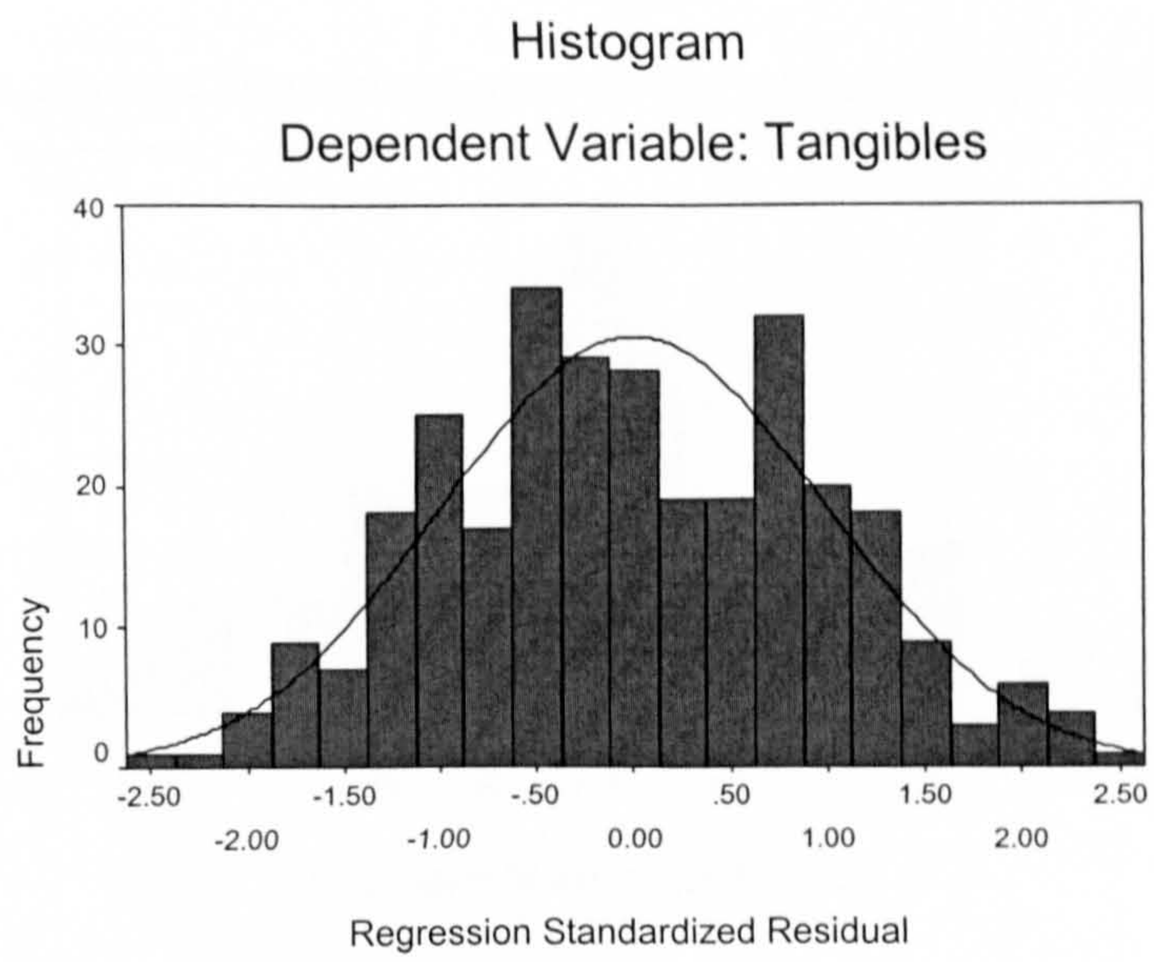
**Model. 4: The relationship between the internal service quality dimensions and reliability**

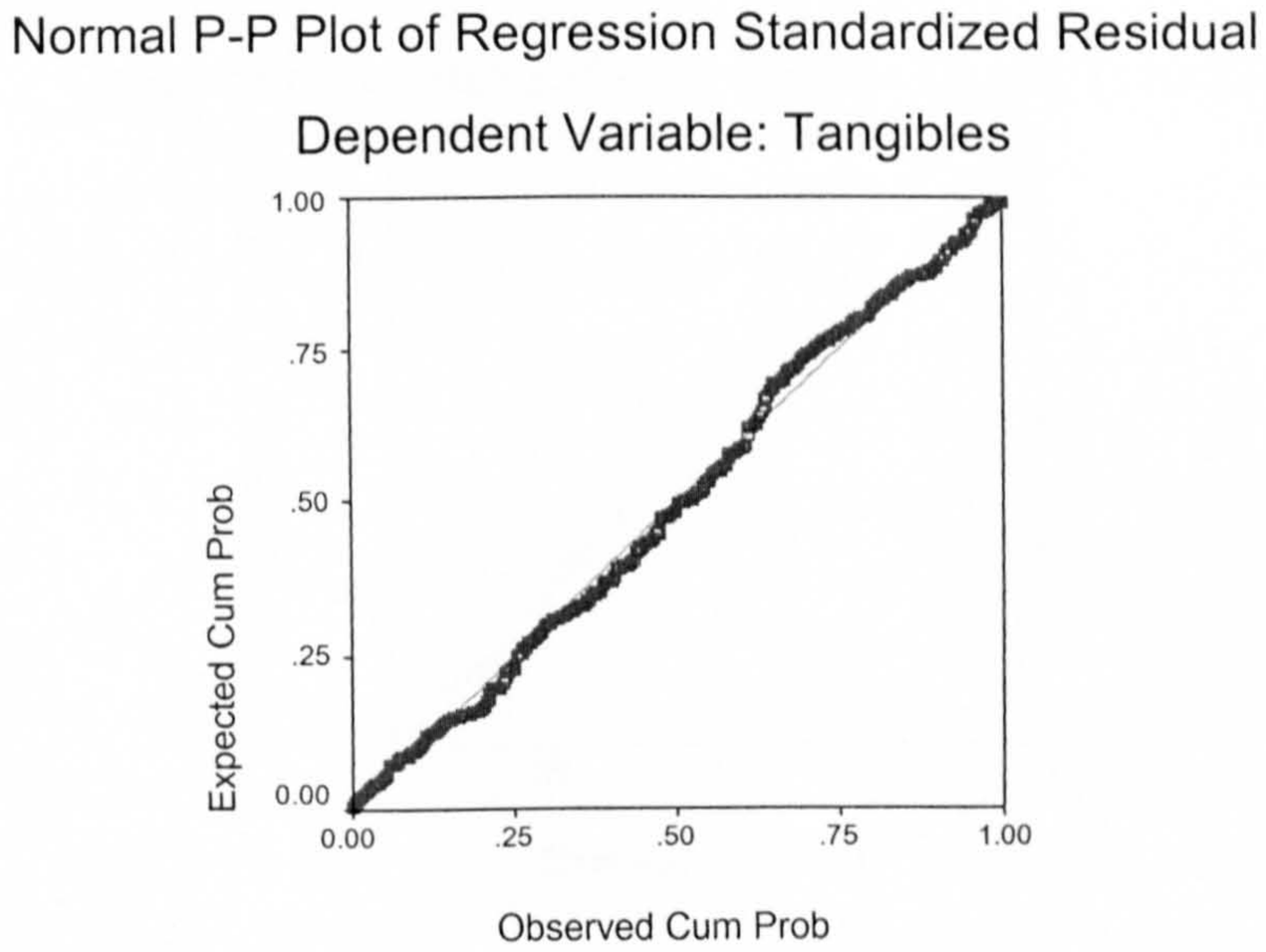


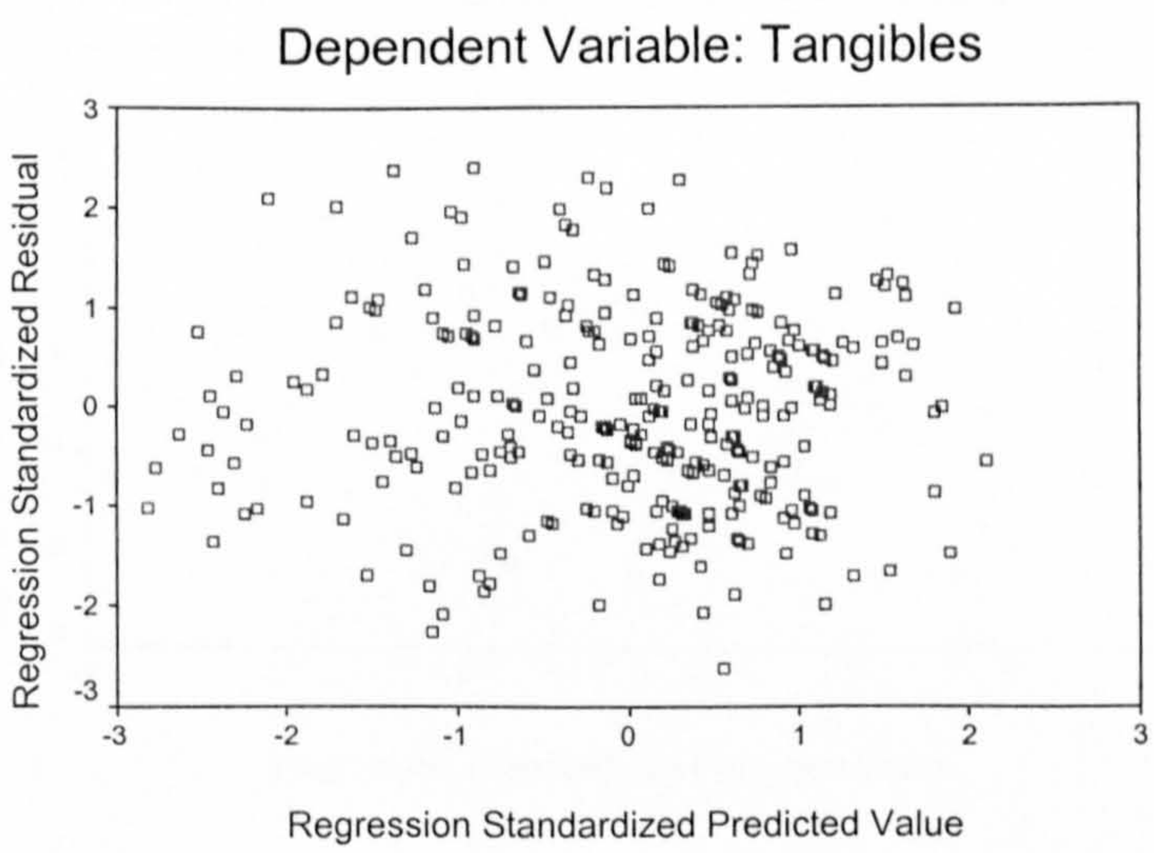



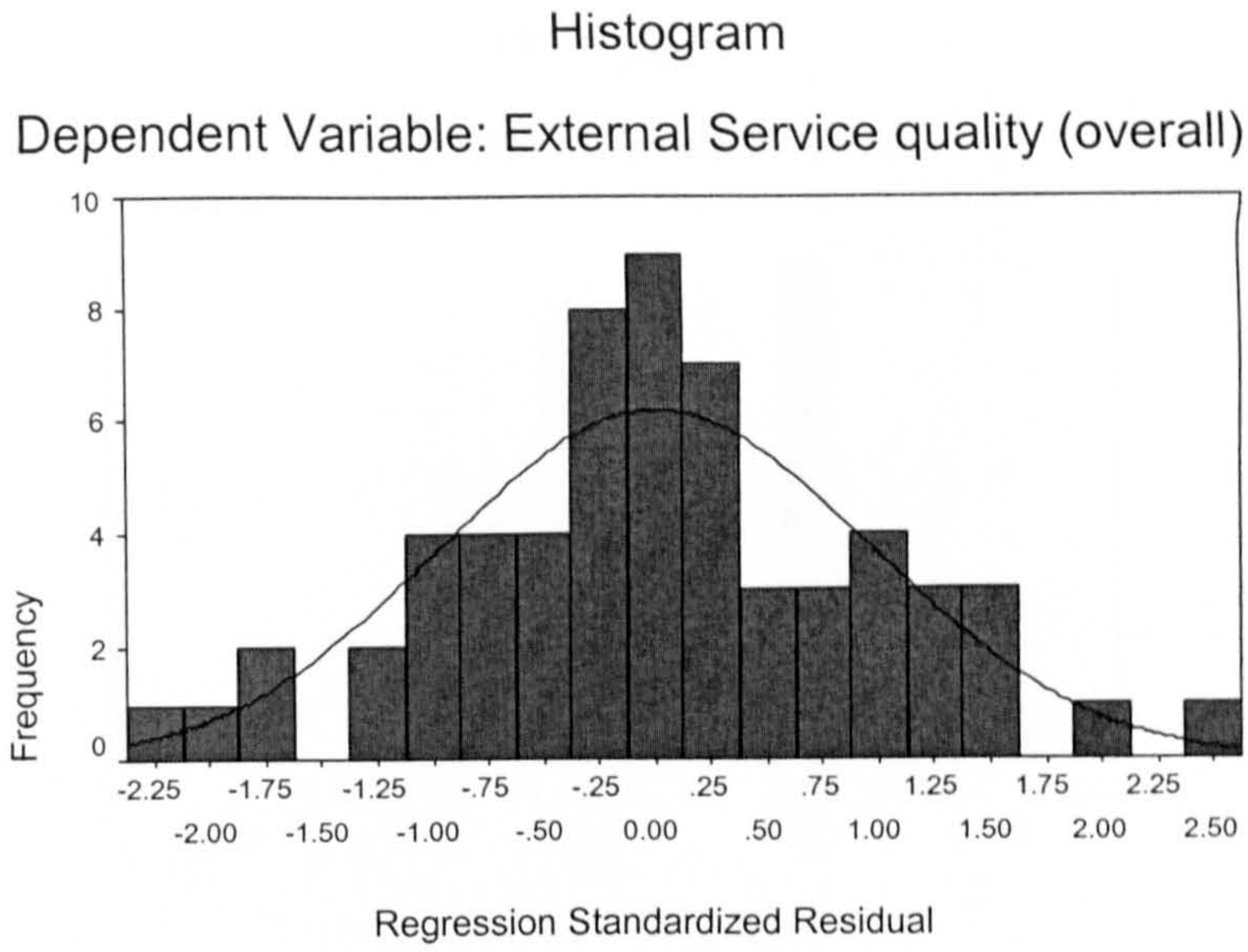
**Model. 5: The relationship between the internal service quality dimensions and tangibles**

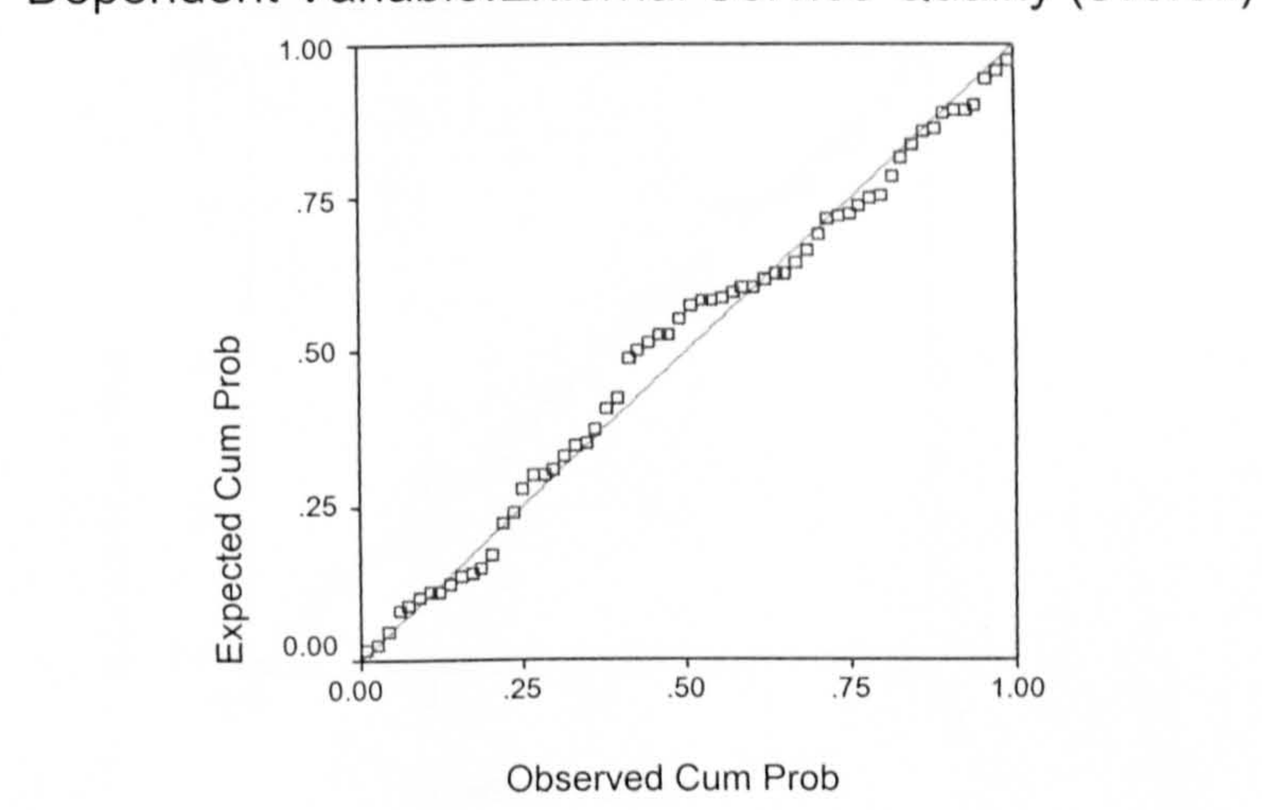


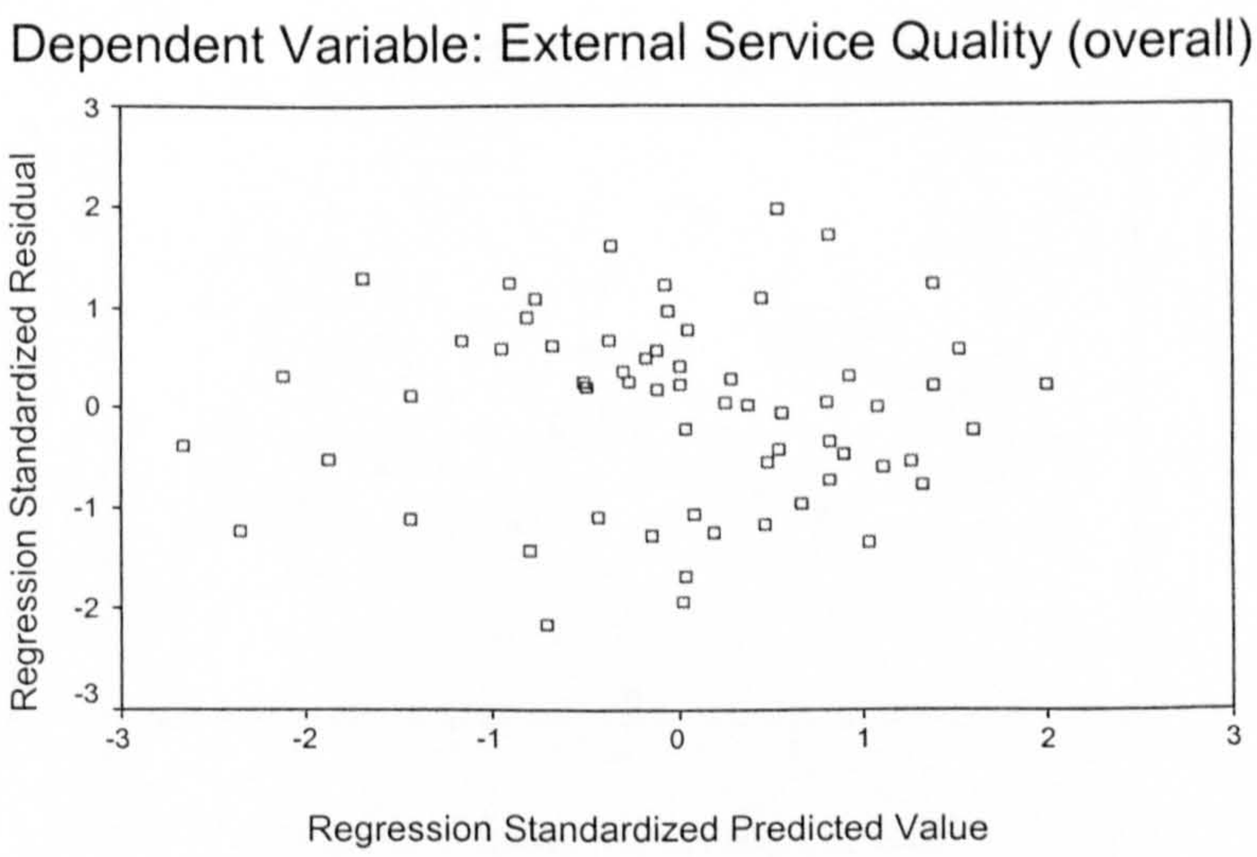



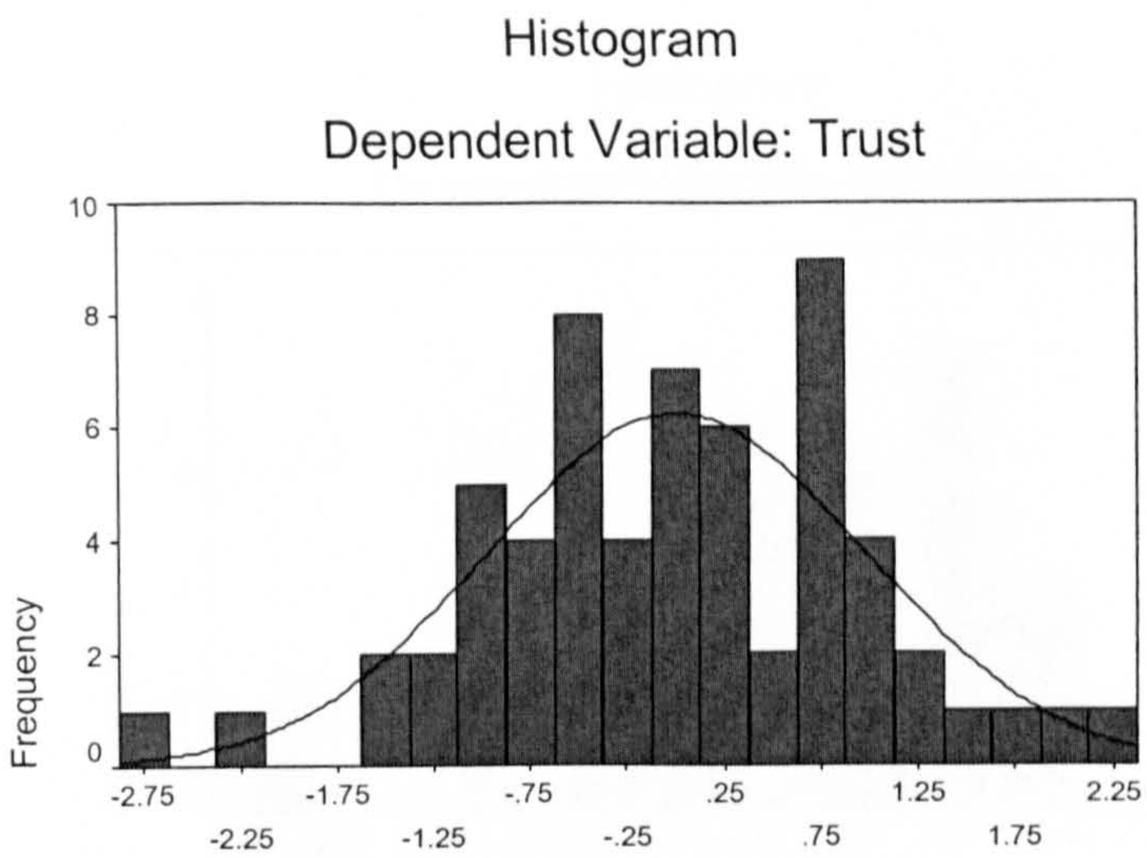



**The relationship between the internal service quality dimensions and the external service quality overall based on branch managers level**

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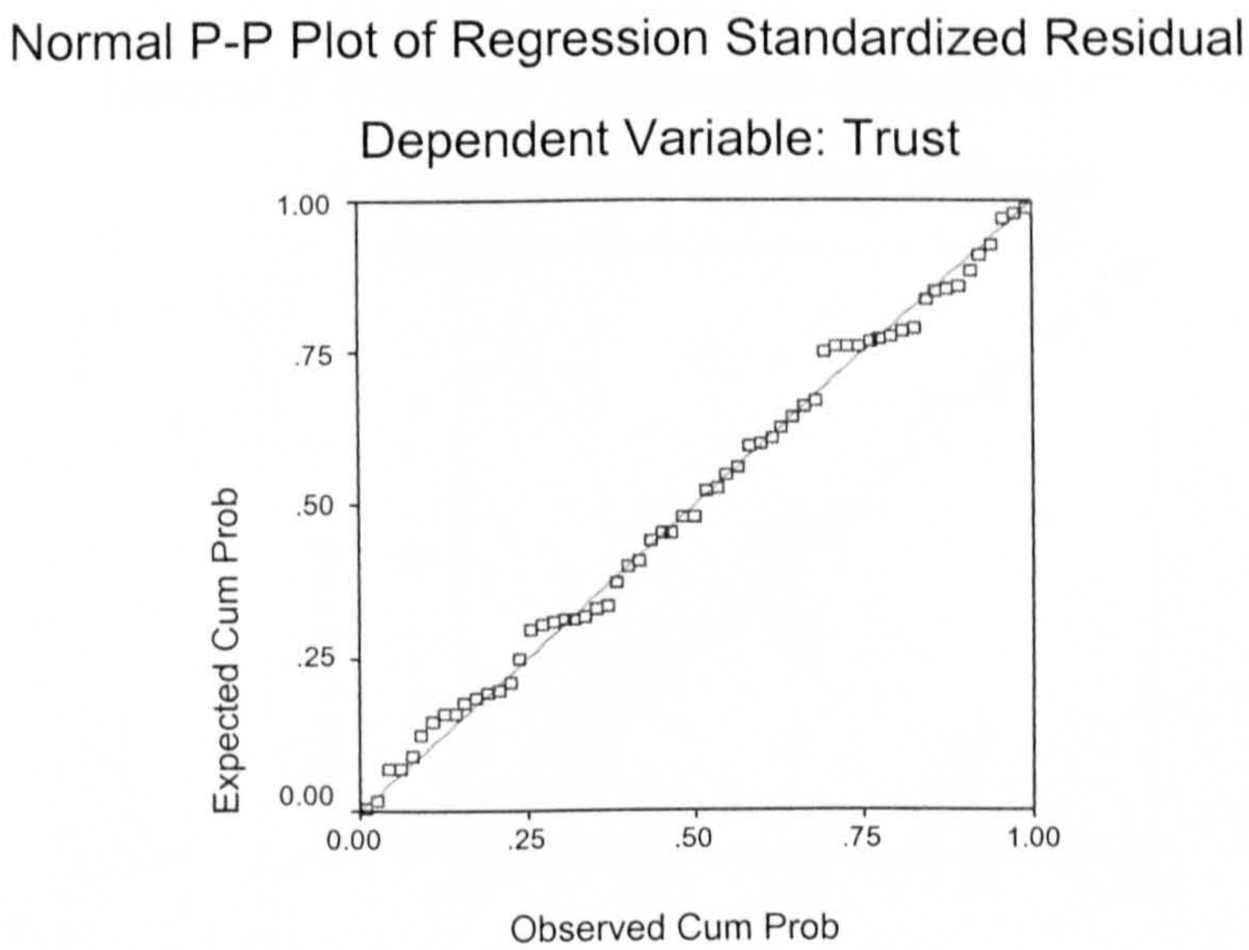
6
4
2
0
-2.75
-2.25
-1.75
-1.25
-.75
-.25
.25
.75
1.25
1.75
2.25
Regression Standardized Residual


Normal P-P Plot of Regression Standardized Residual
Dependent Variable: Trust
Expected Cum Prob
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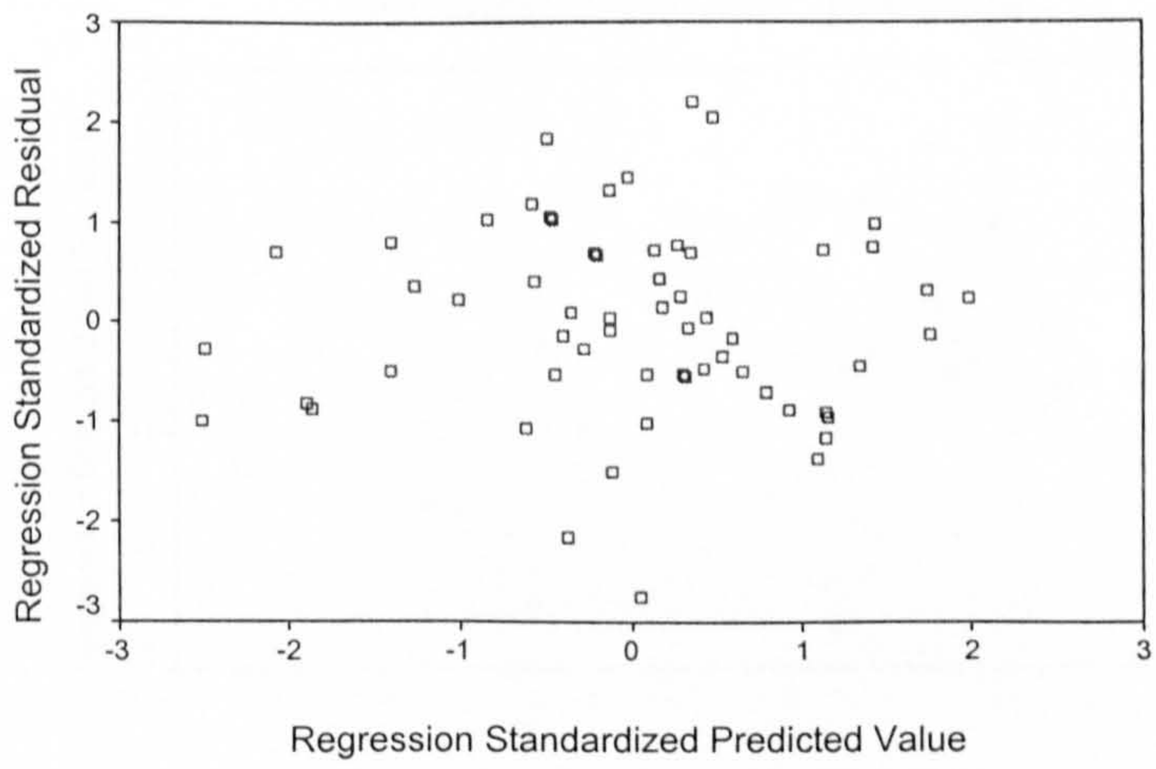
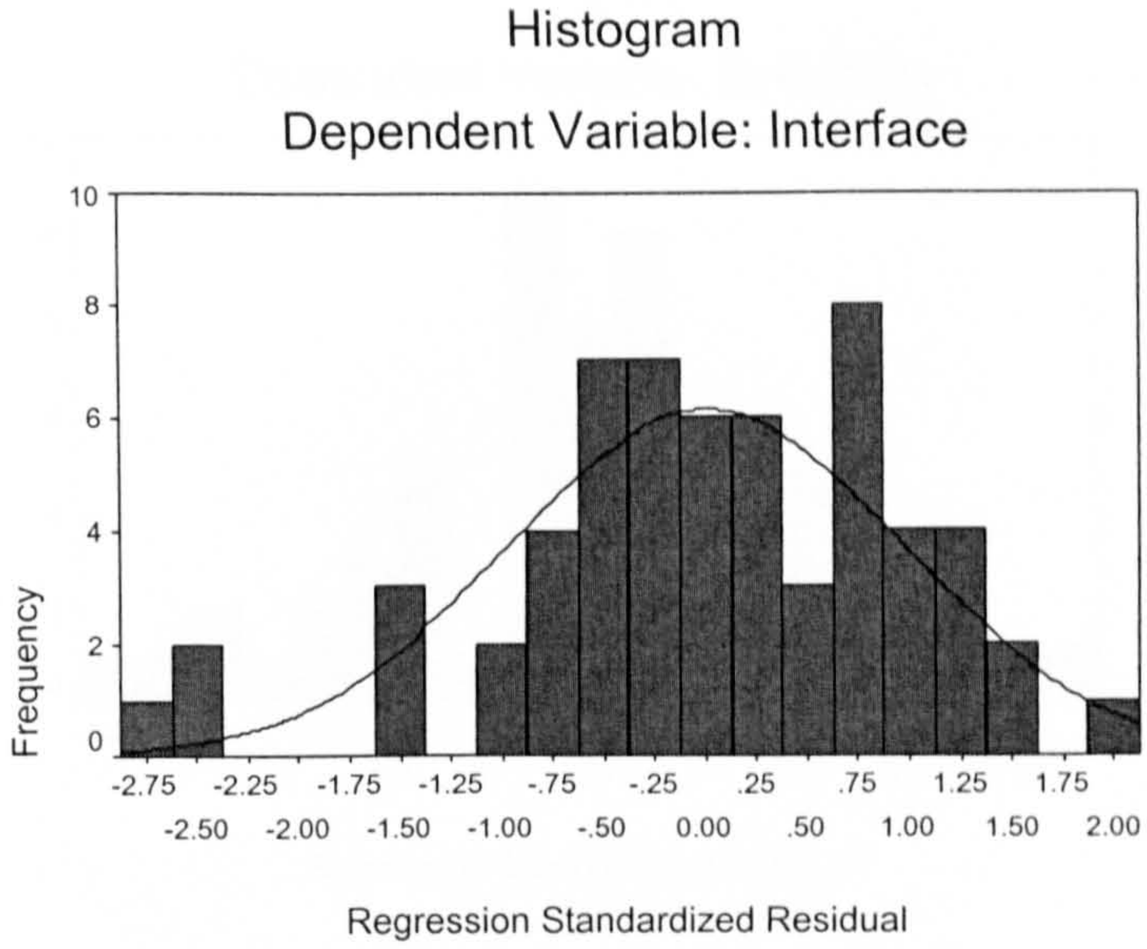
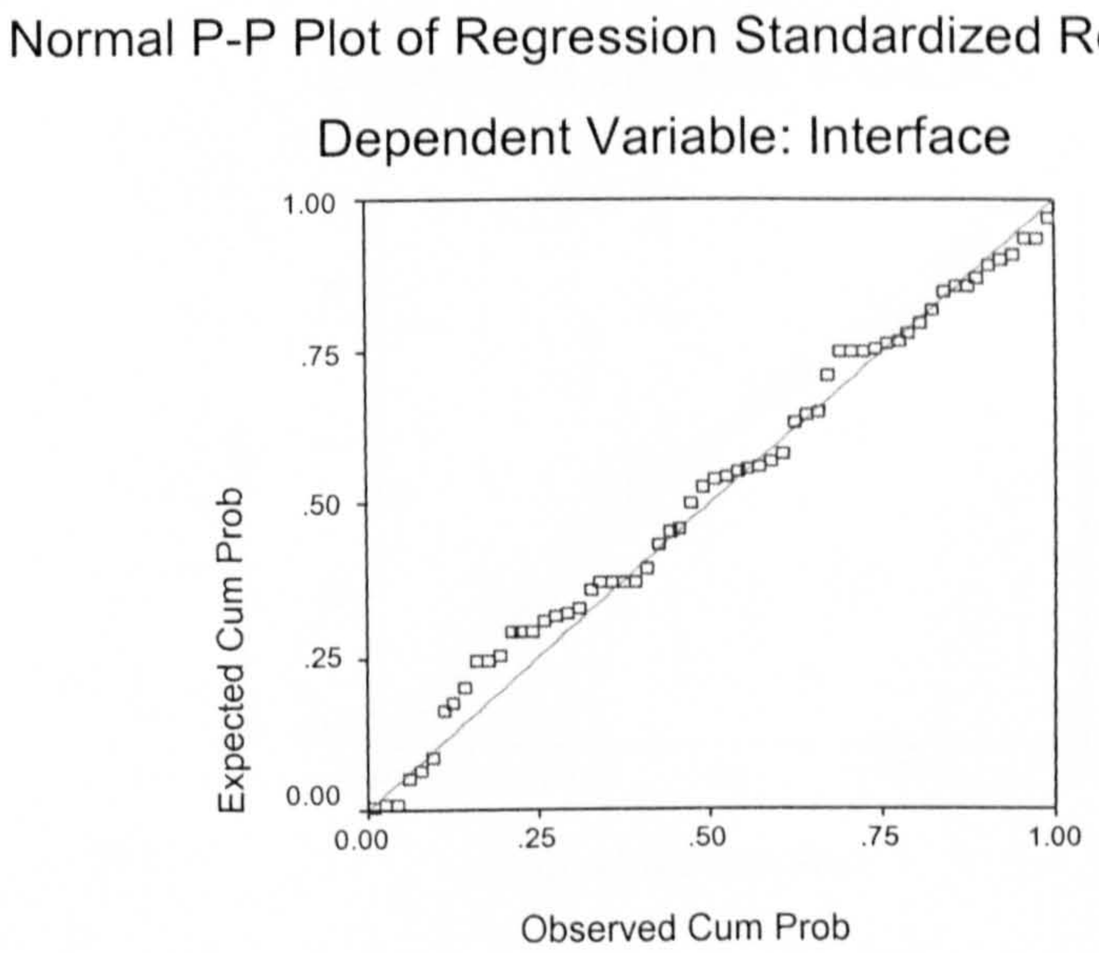
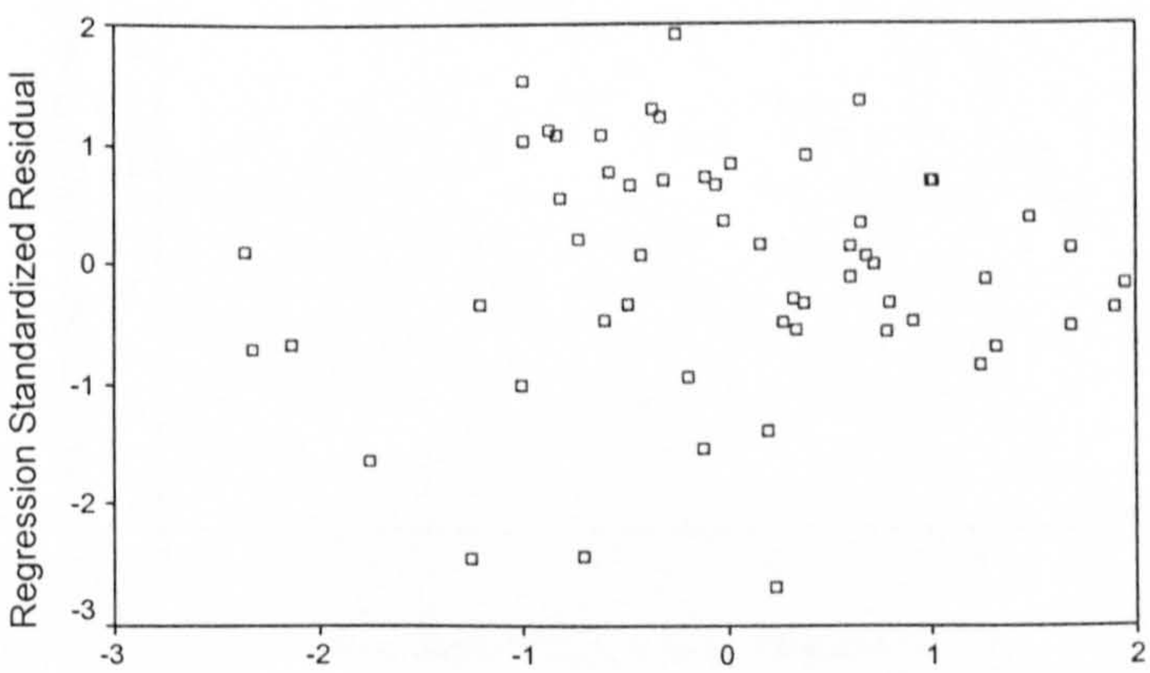
.75
.50
.25
0.00
0.00
.25
.50
.75
1.00
Observed Cum Prob

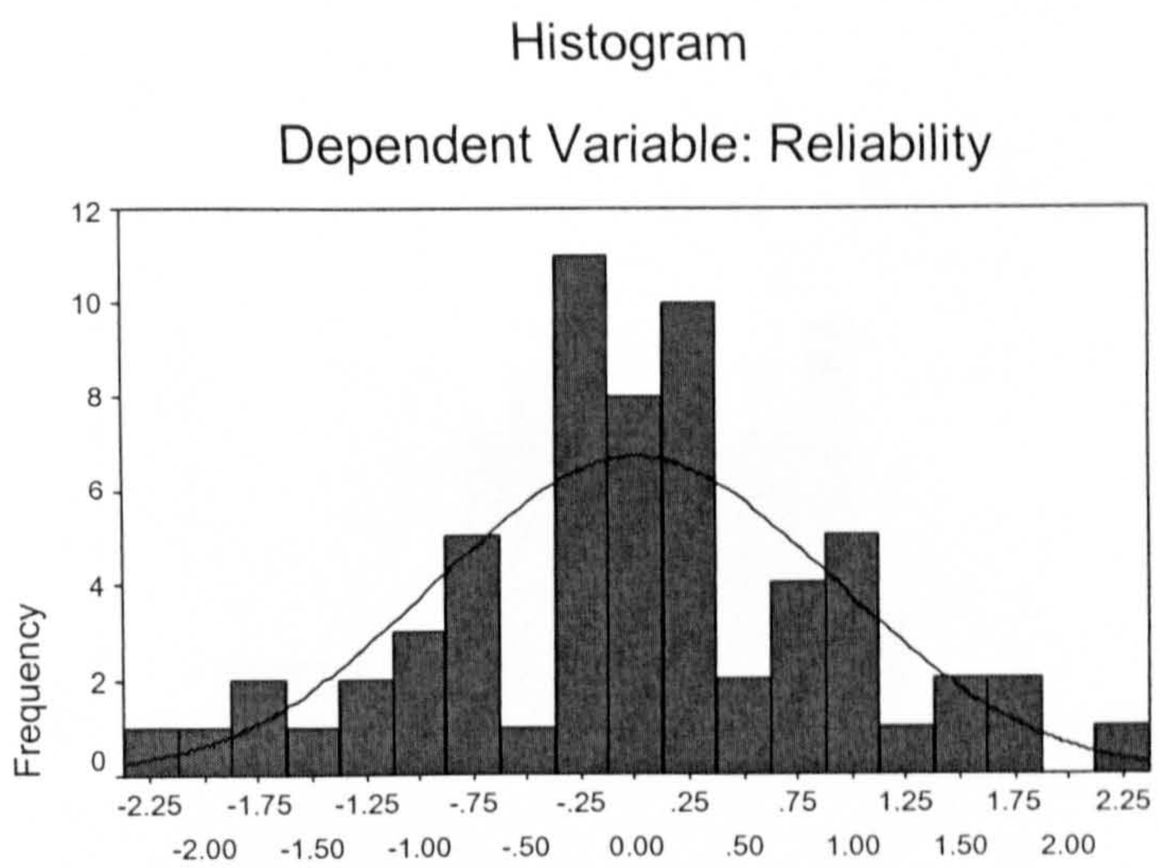

Scatterplot
Dependent Variable: Trust
Regression Standardized Residual
3
2
1
0
-1
-2
-3
-3
-2
-1
0
1
2
3
Regression Standardized Predicted Value

**The relationship between the internal service quality dimensions and interface based on branch managers level**

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Dependent Variable: Reliability
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10
8
6
4
2
0
-2.25
-1.75
-1.25
-.75
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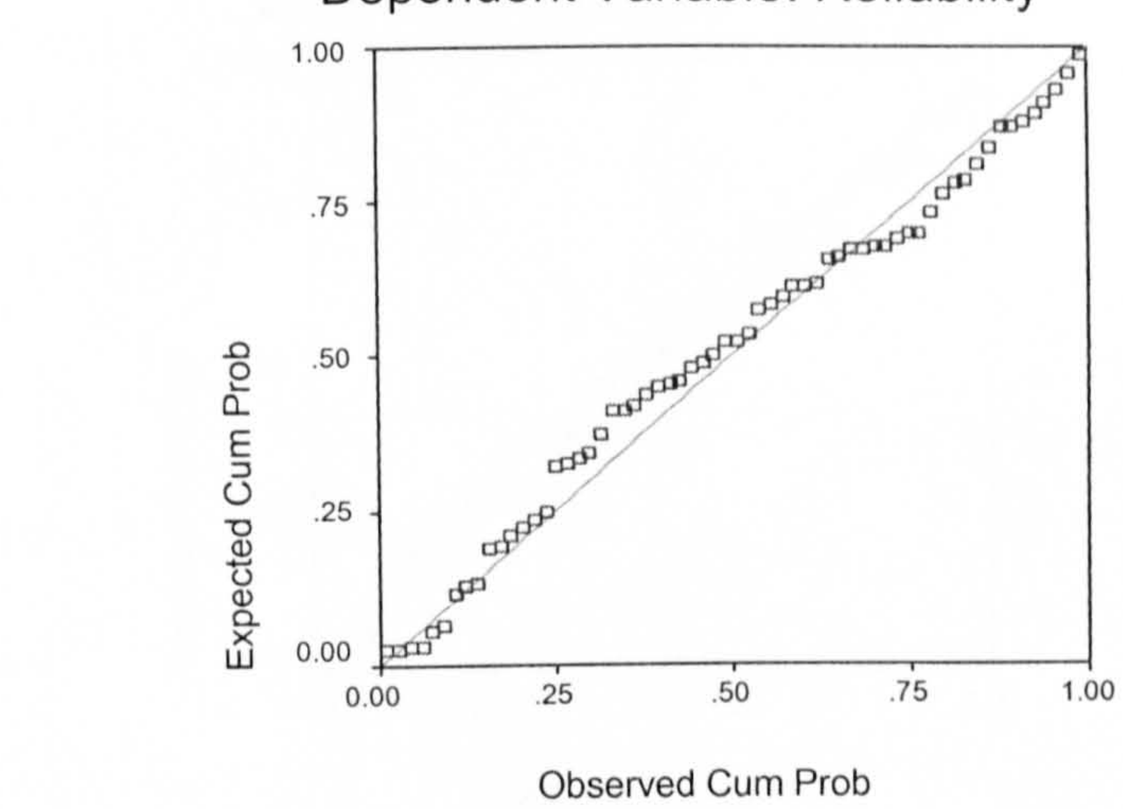
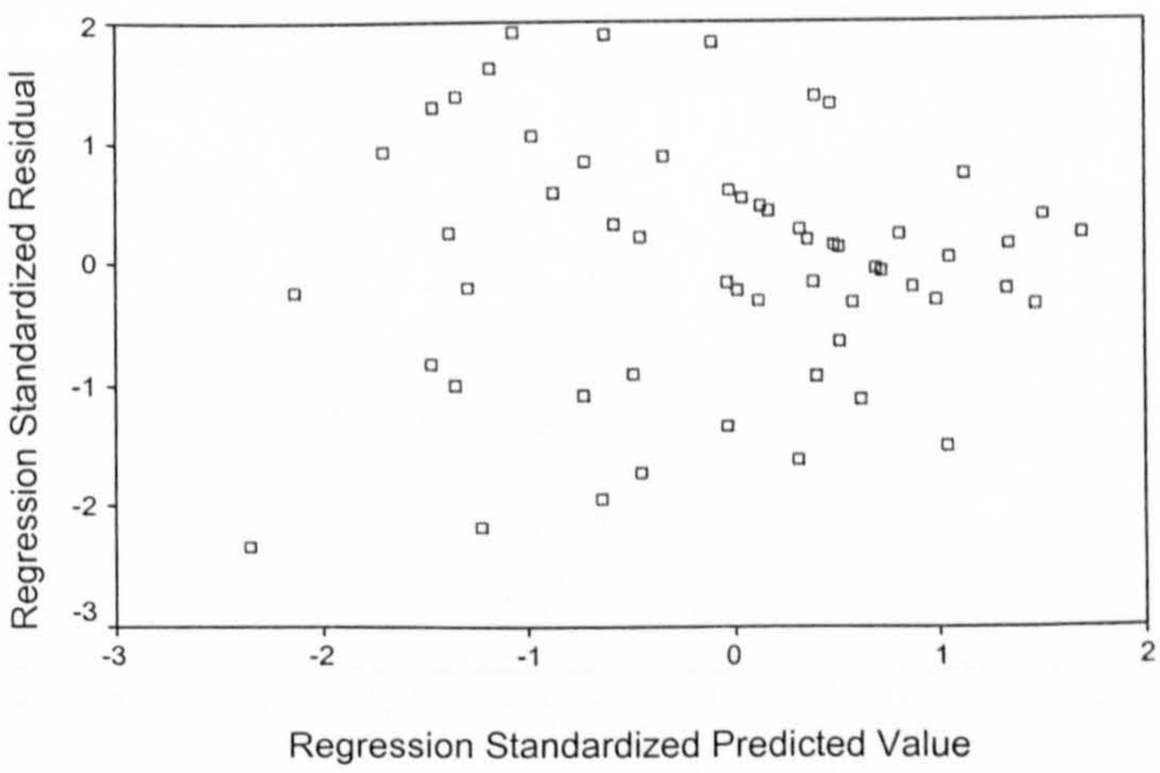
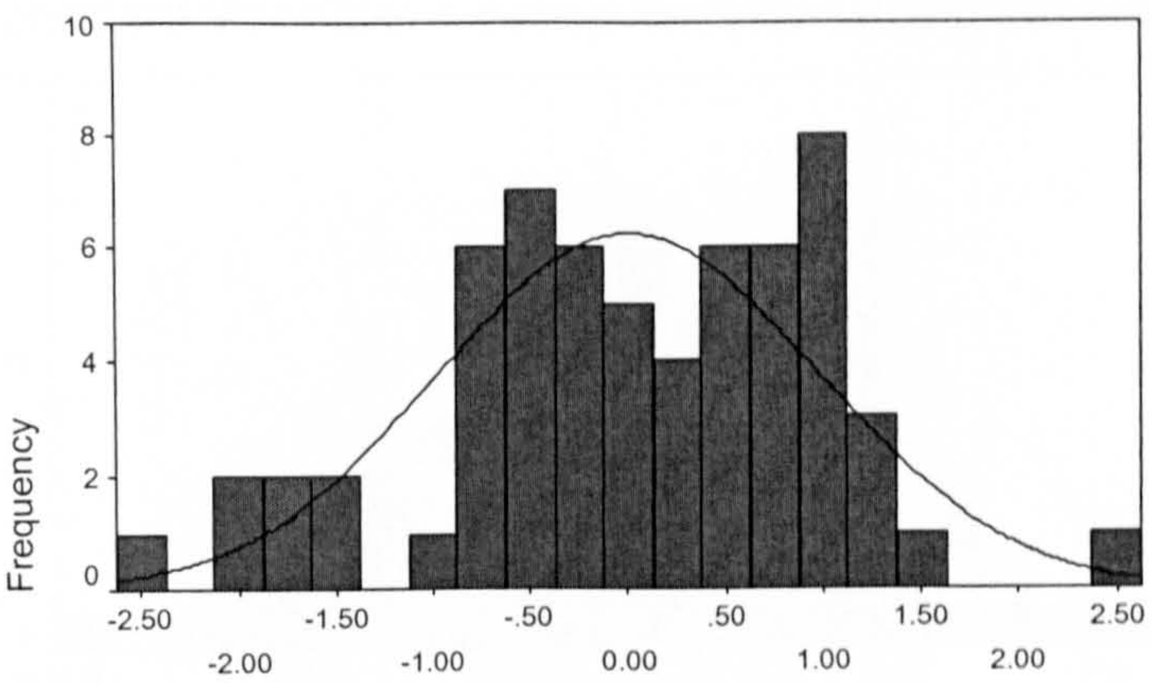
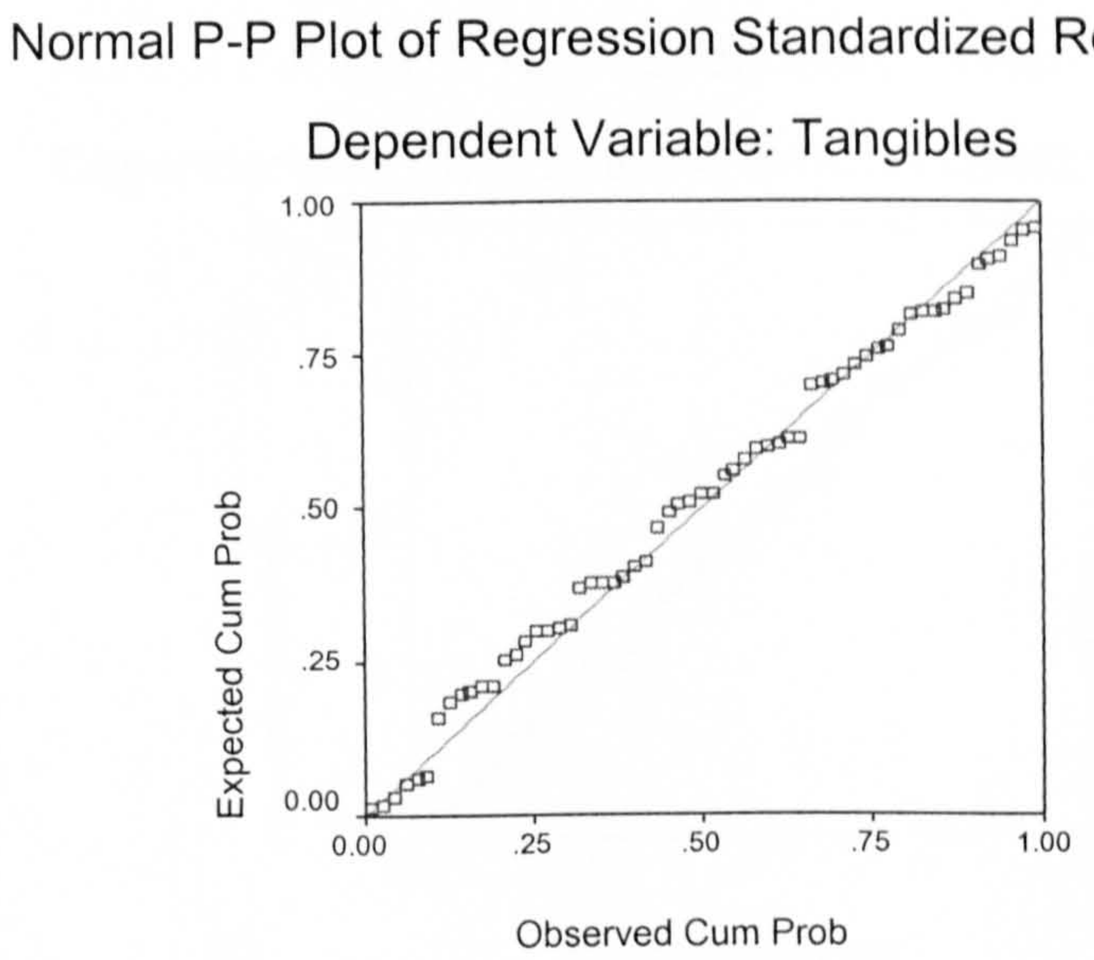
.25
.75
1.25
1.75
2.25
-2.00
-1.50
-1.00
-.50
0.00
.50
1.00
1.50
2.00
Regression Standardized Residual

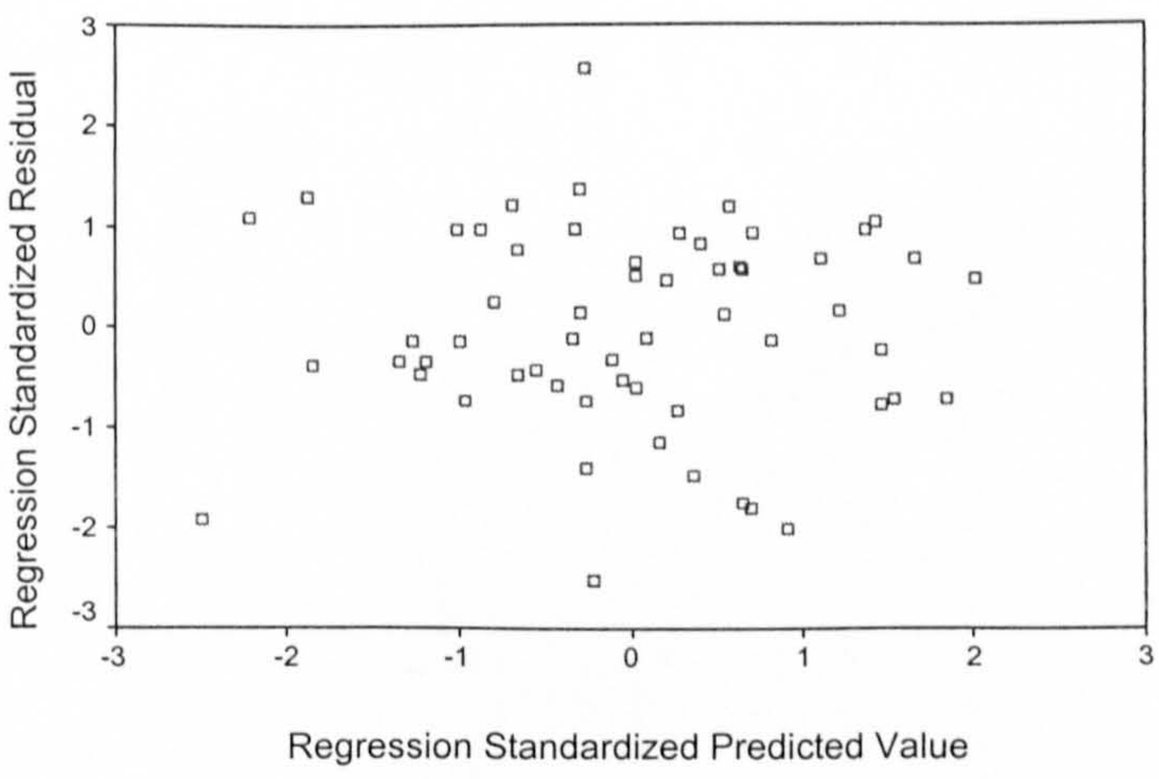

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: Reliability
Expected Cum Prob
1.00
.75
.50
.25
0.00
0.00
.25
.50
.75
1.00
Observed Cum Prob


Scatterplot
Dependent Variable: Reliability
Regression Standardized Residual
2
1
0
-1
-2
-3
-3
-2
-1
0
1
2
Regression Standardized Predicted Value

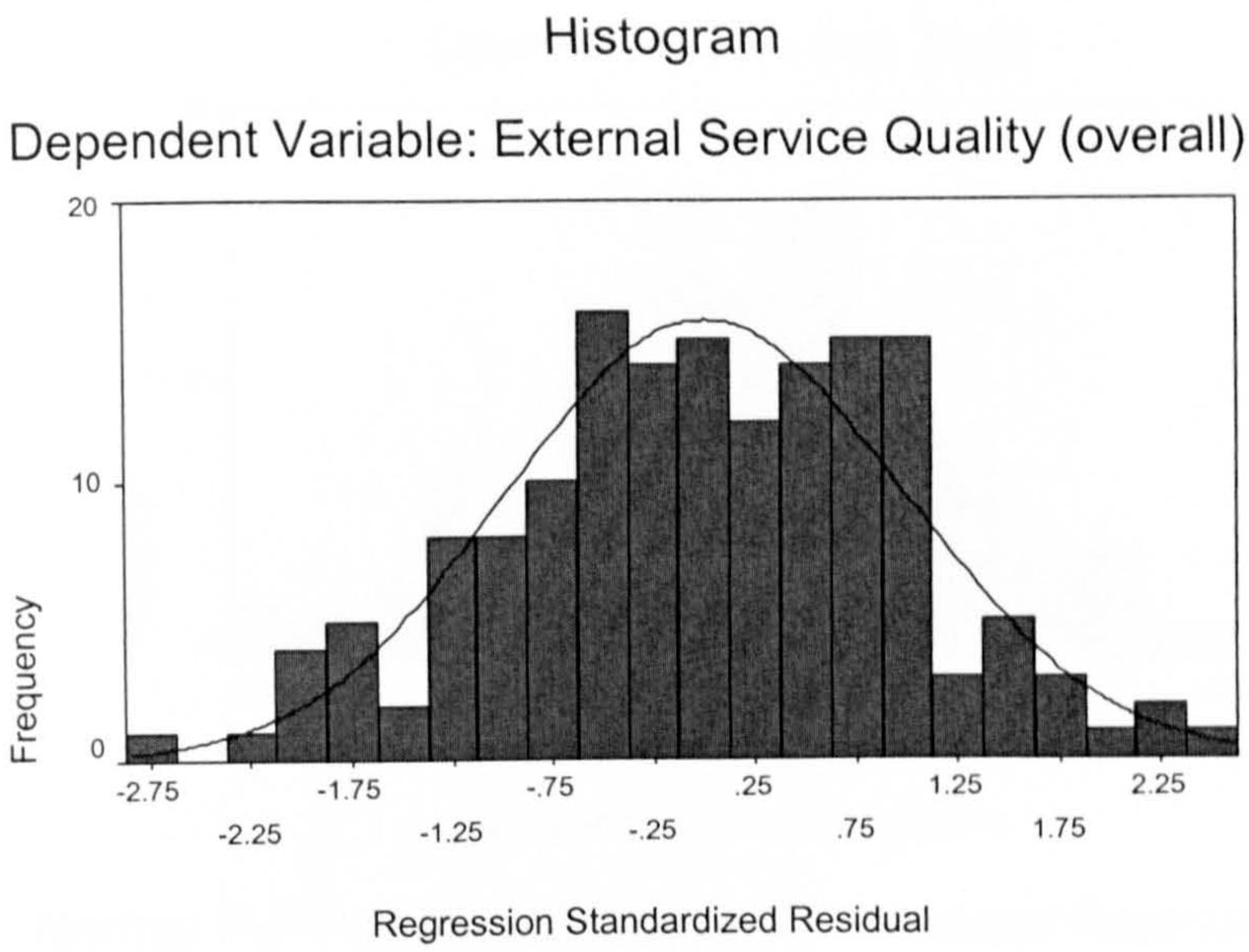
**The relationship between the internal service quality dimensions and tangibles based on branch managers level**

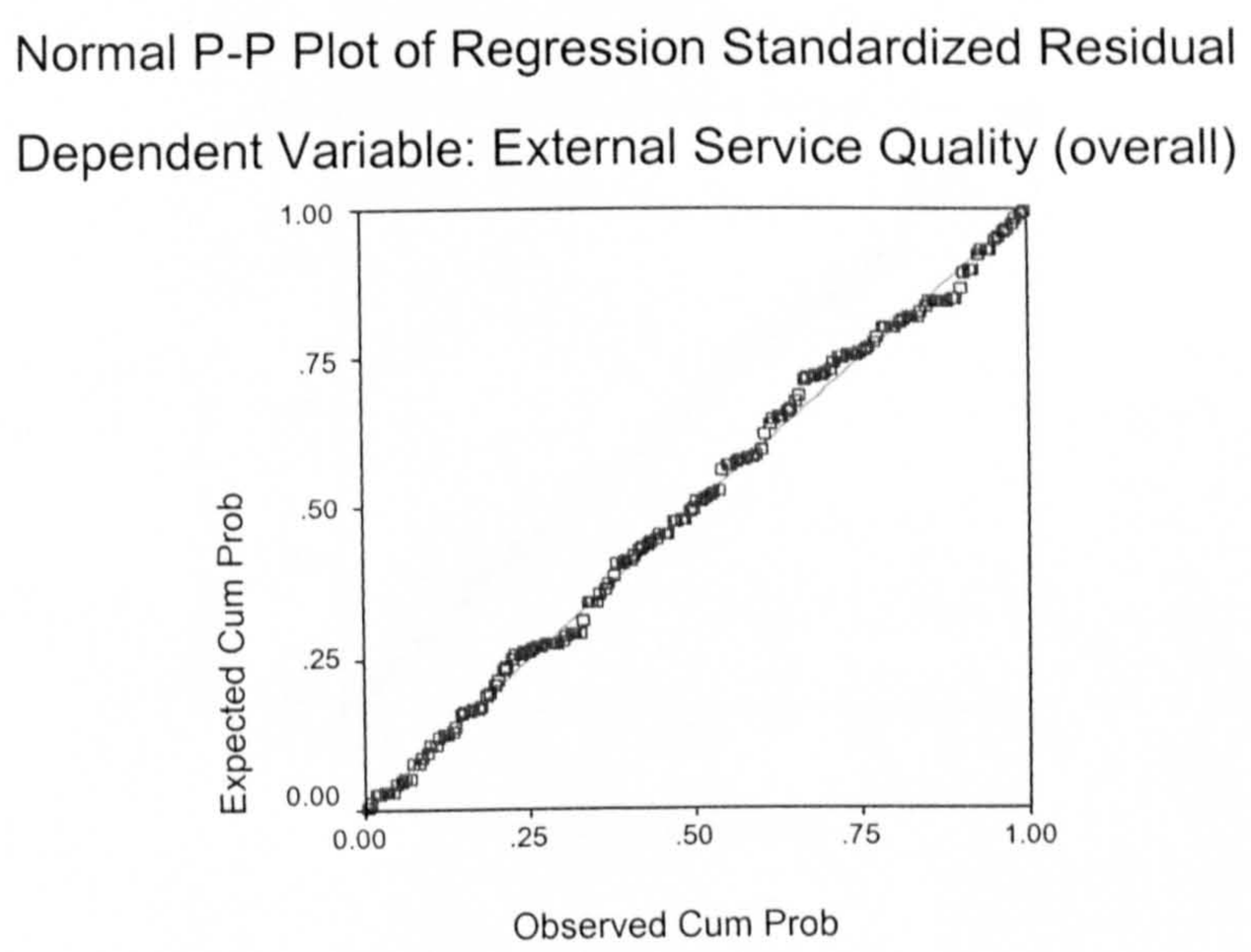


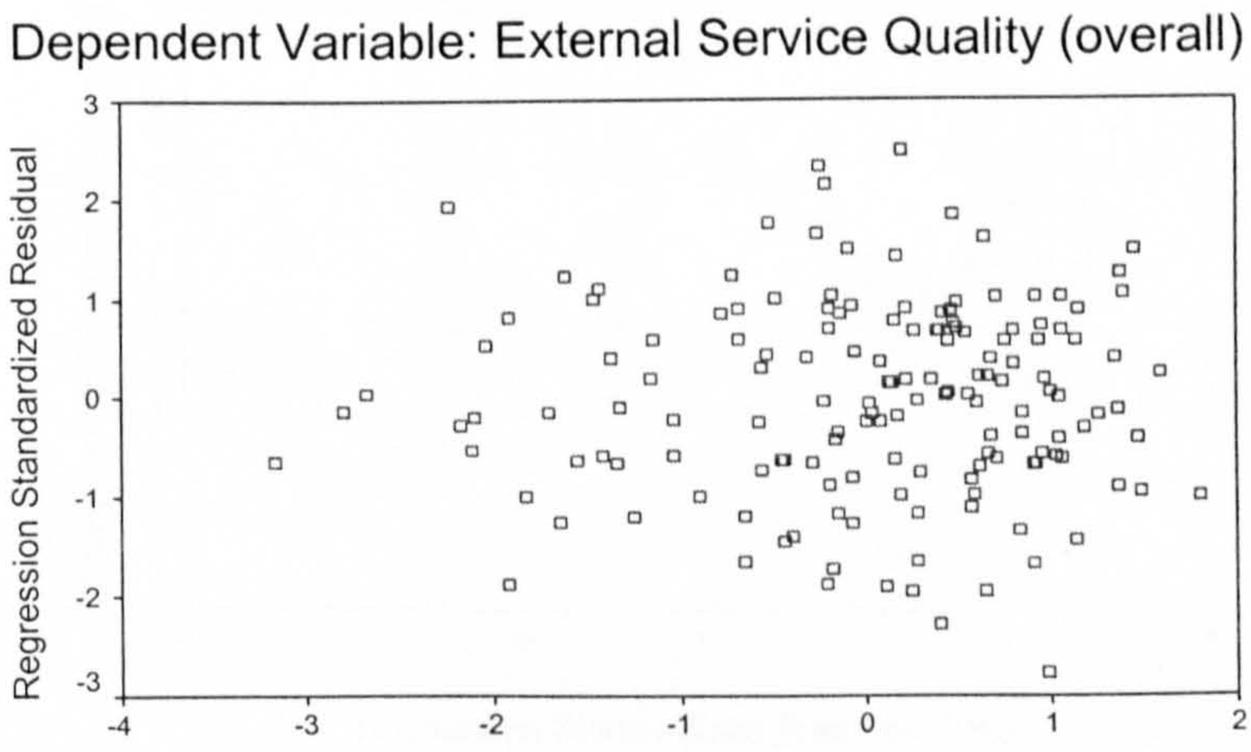



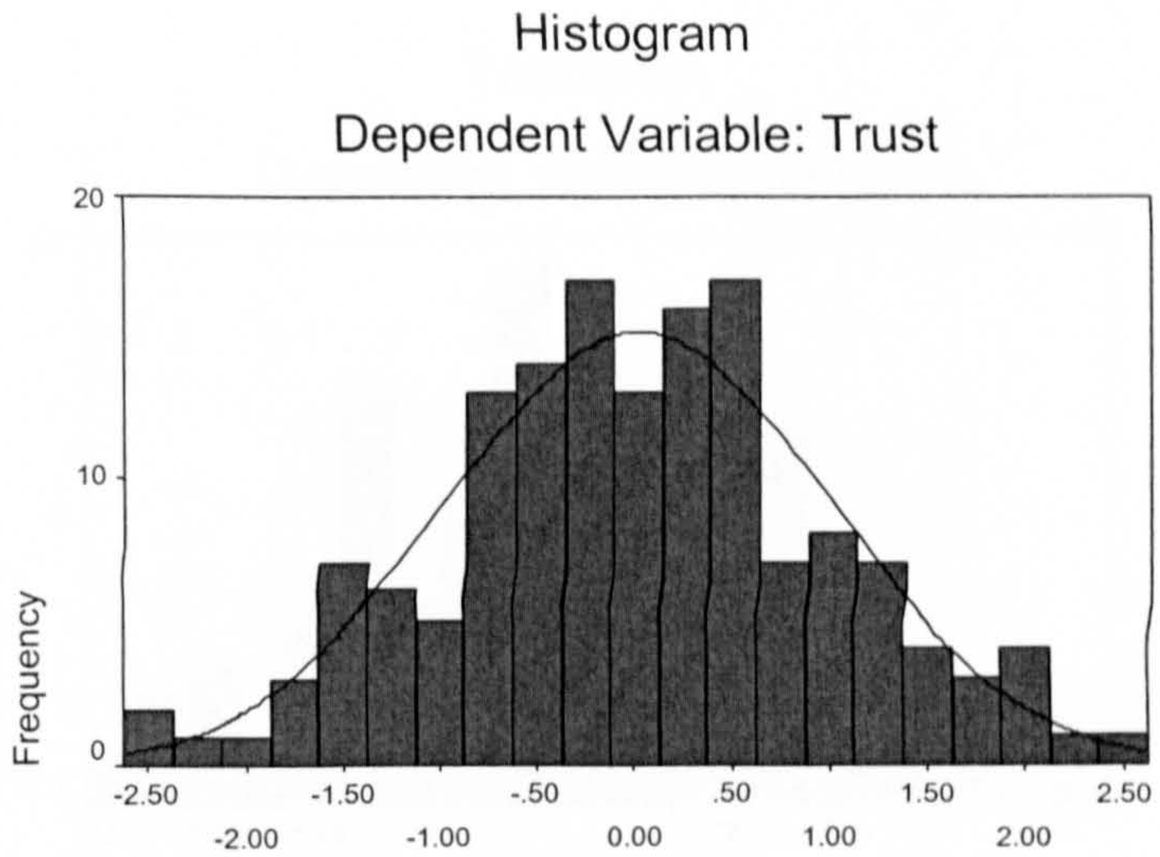
**The relationship between the internal service quality dimensions and the external service quality overall based on supervisors level**

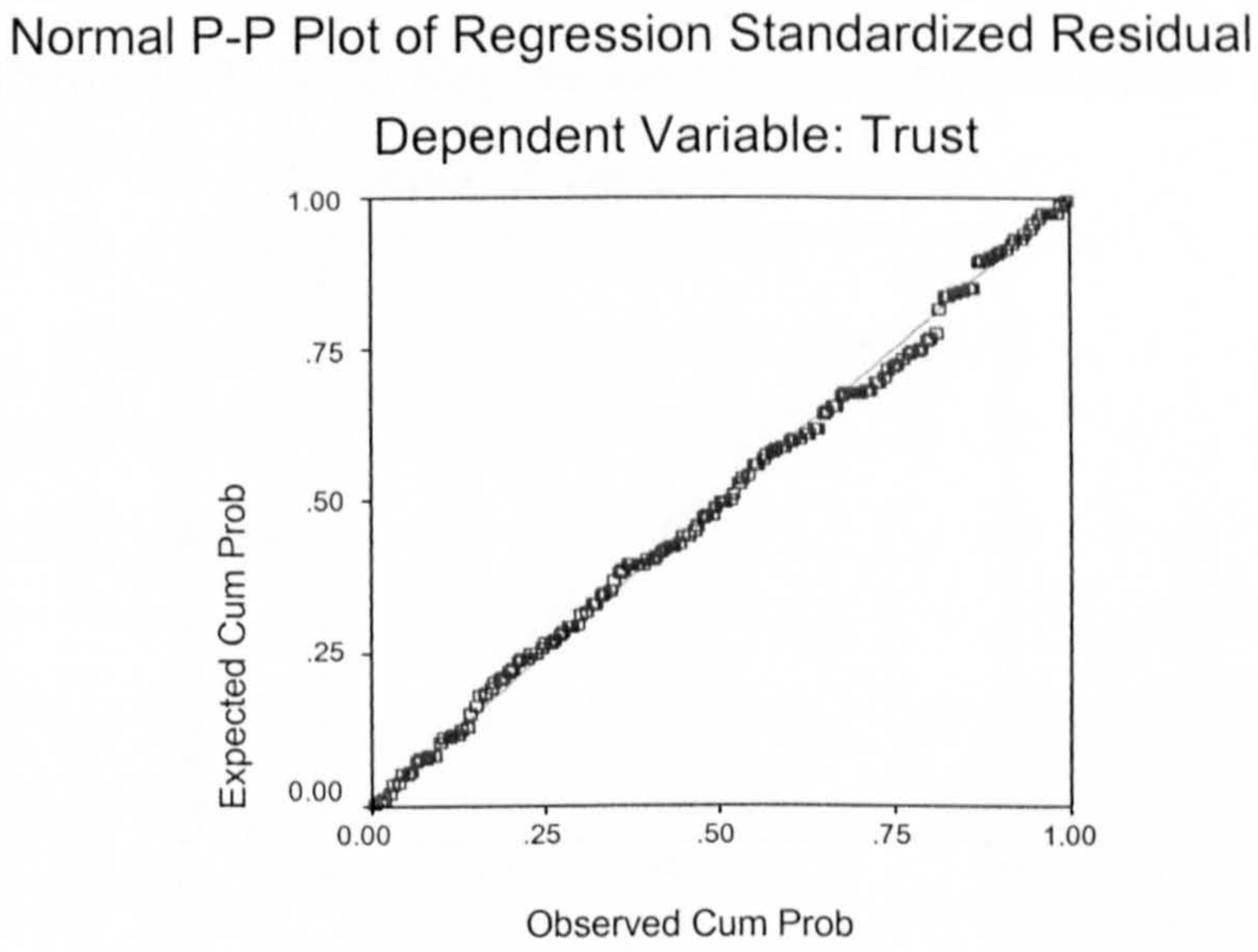


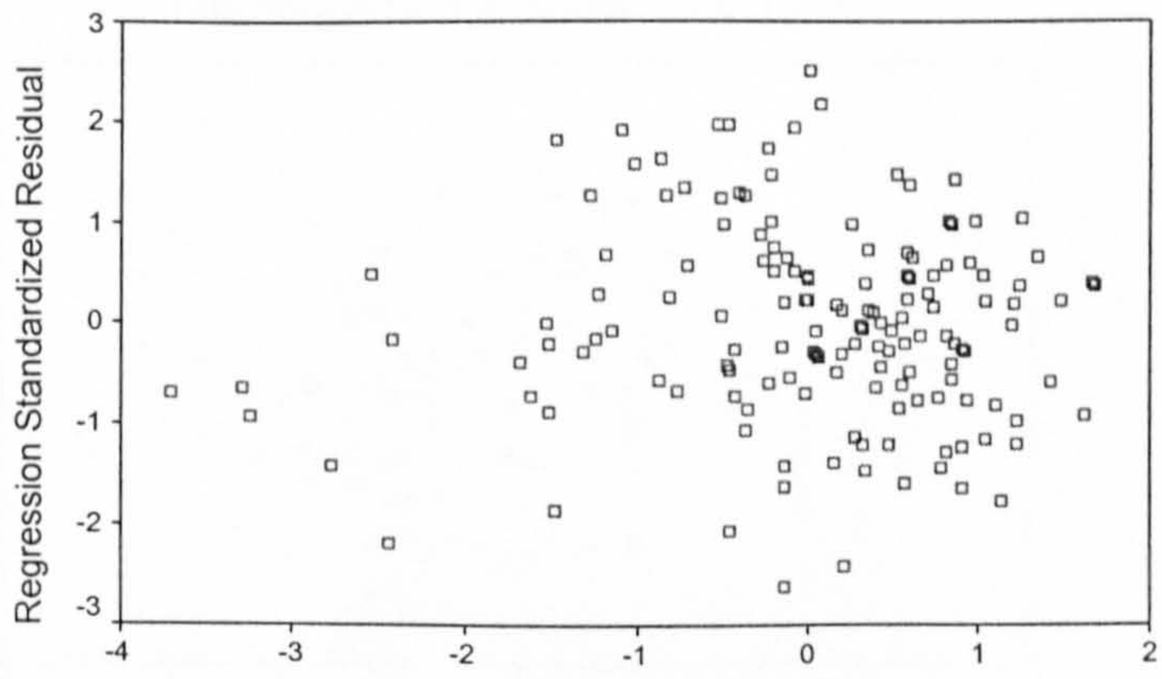



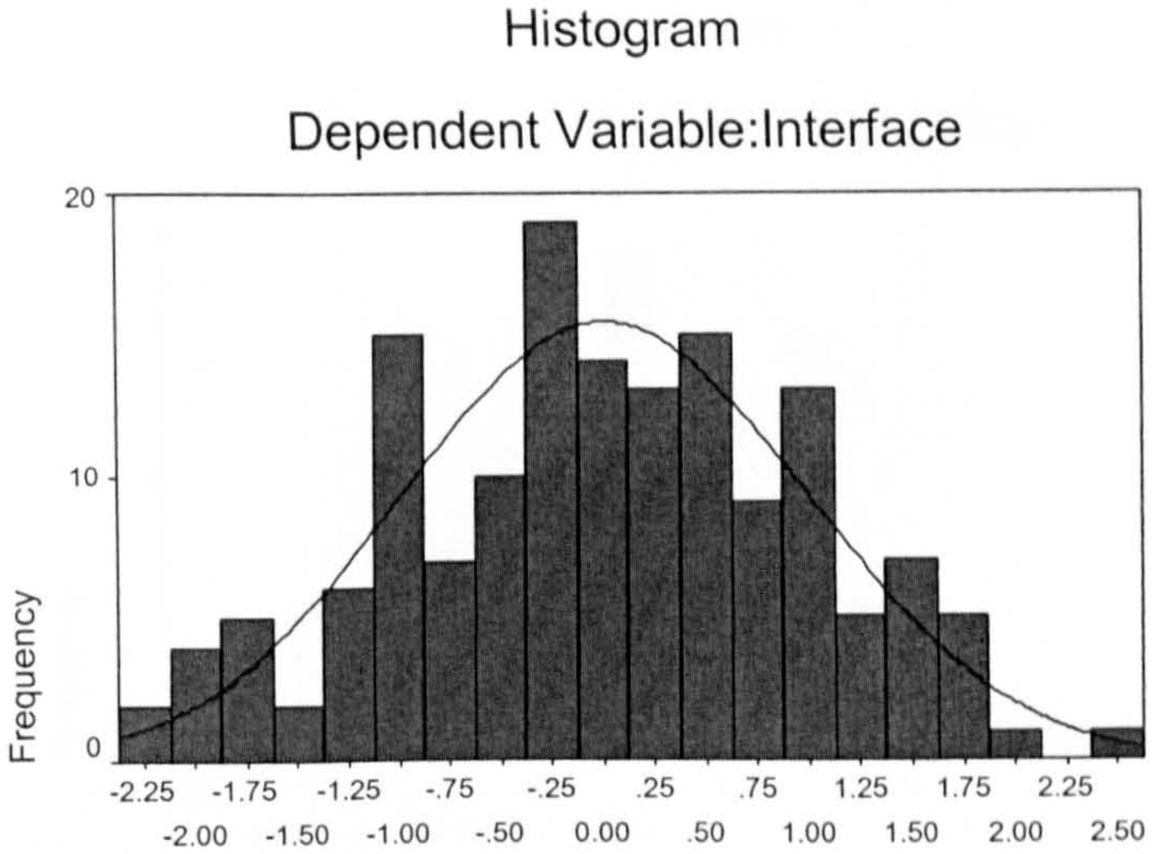
**The relationship between the internal service quality dimensions and trust based on supervisors level.**

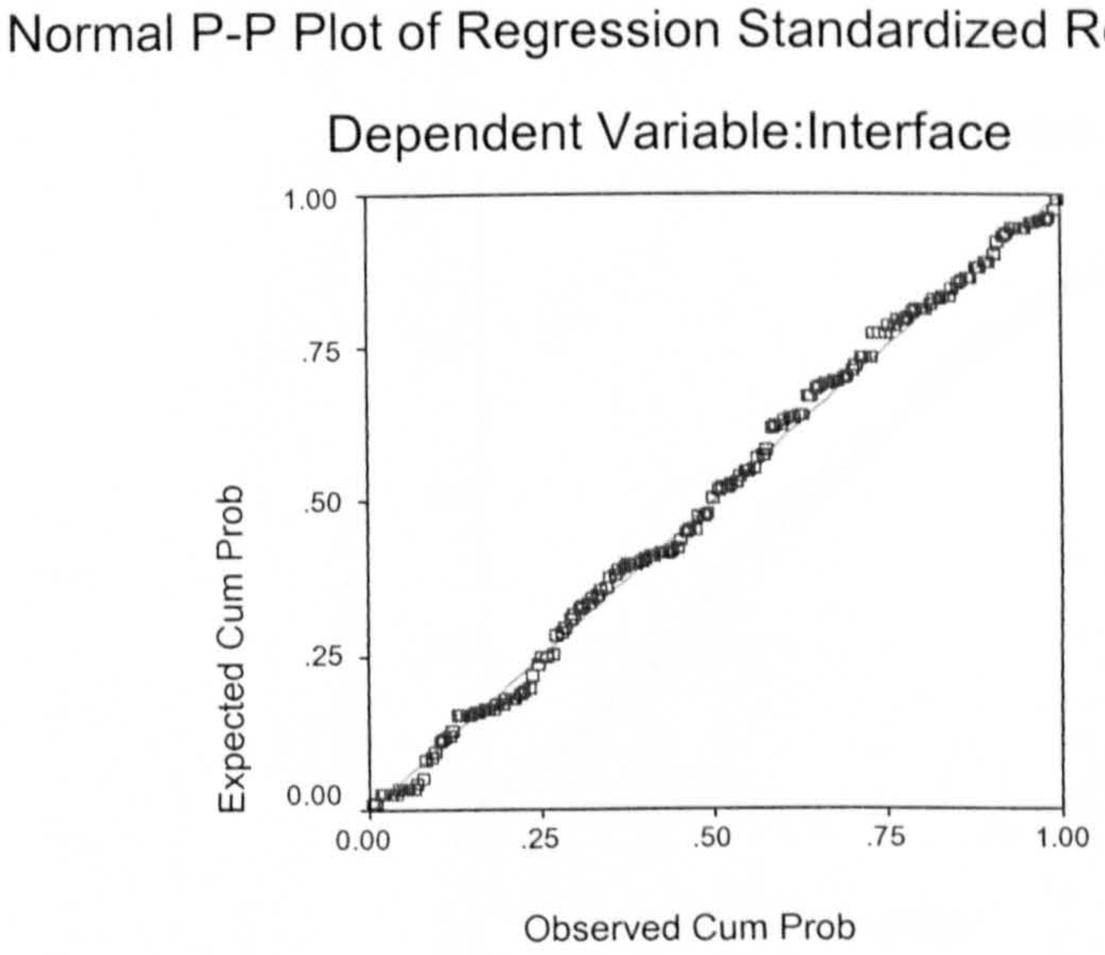


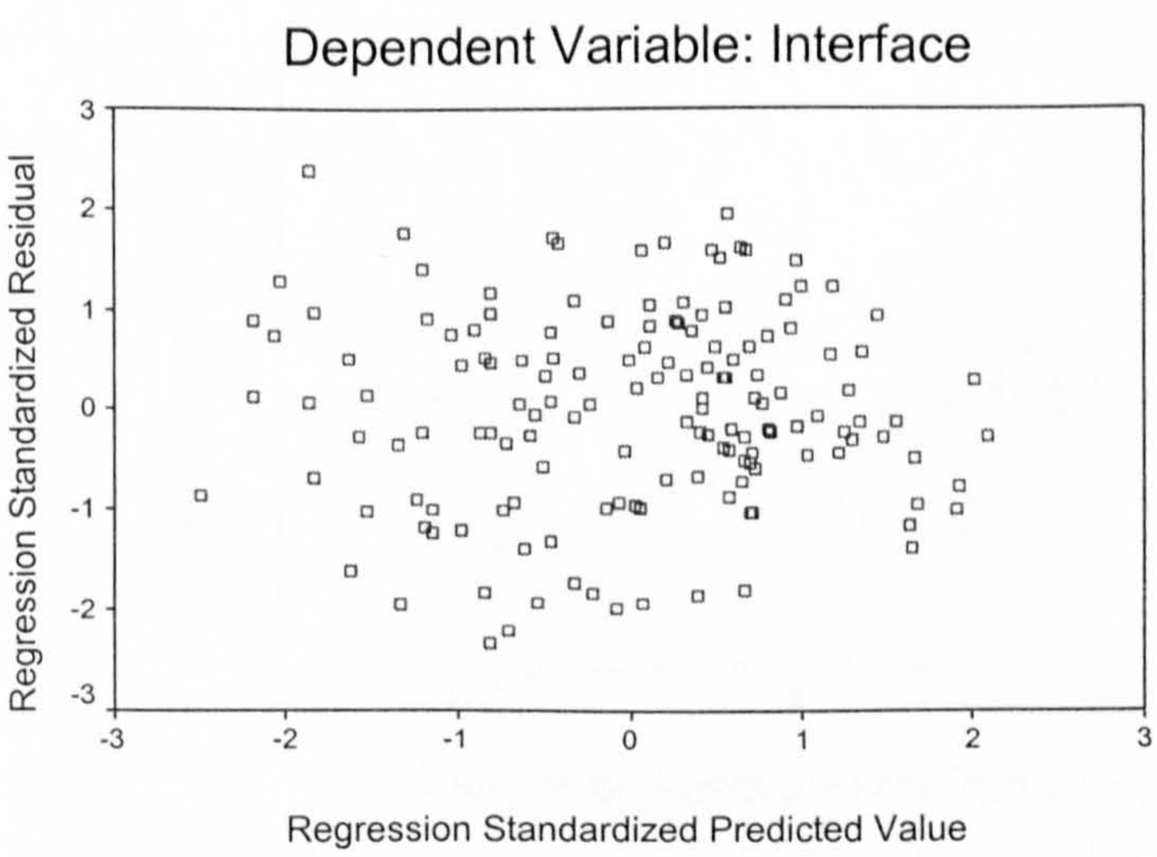



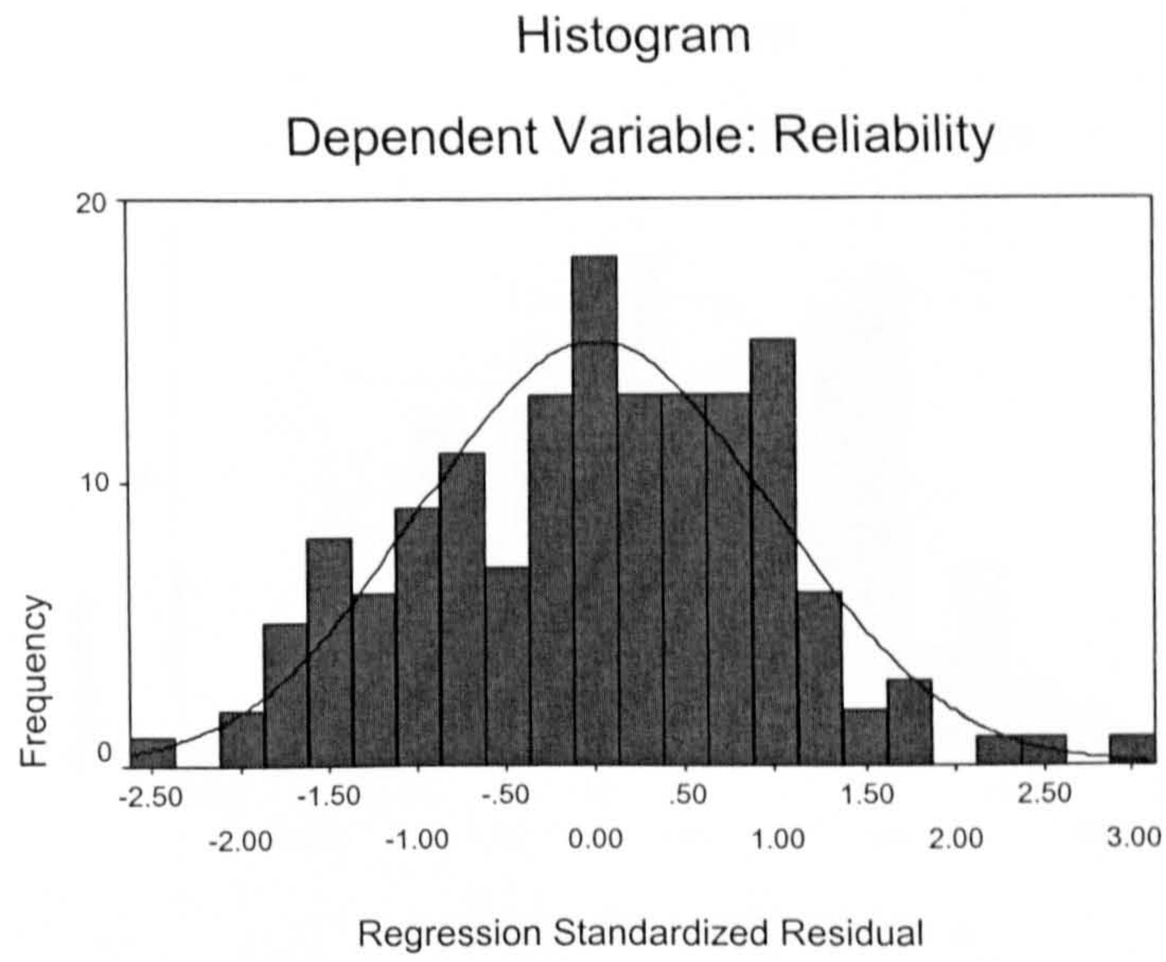
**The relationship between the internal service quality dimensions and interface based on supervisors level.**

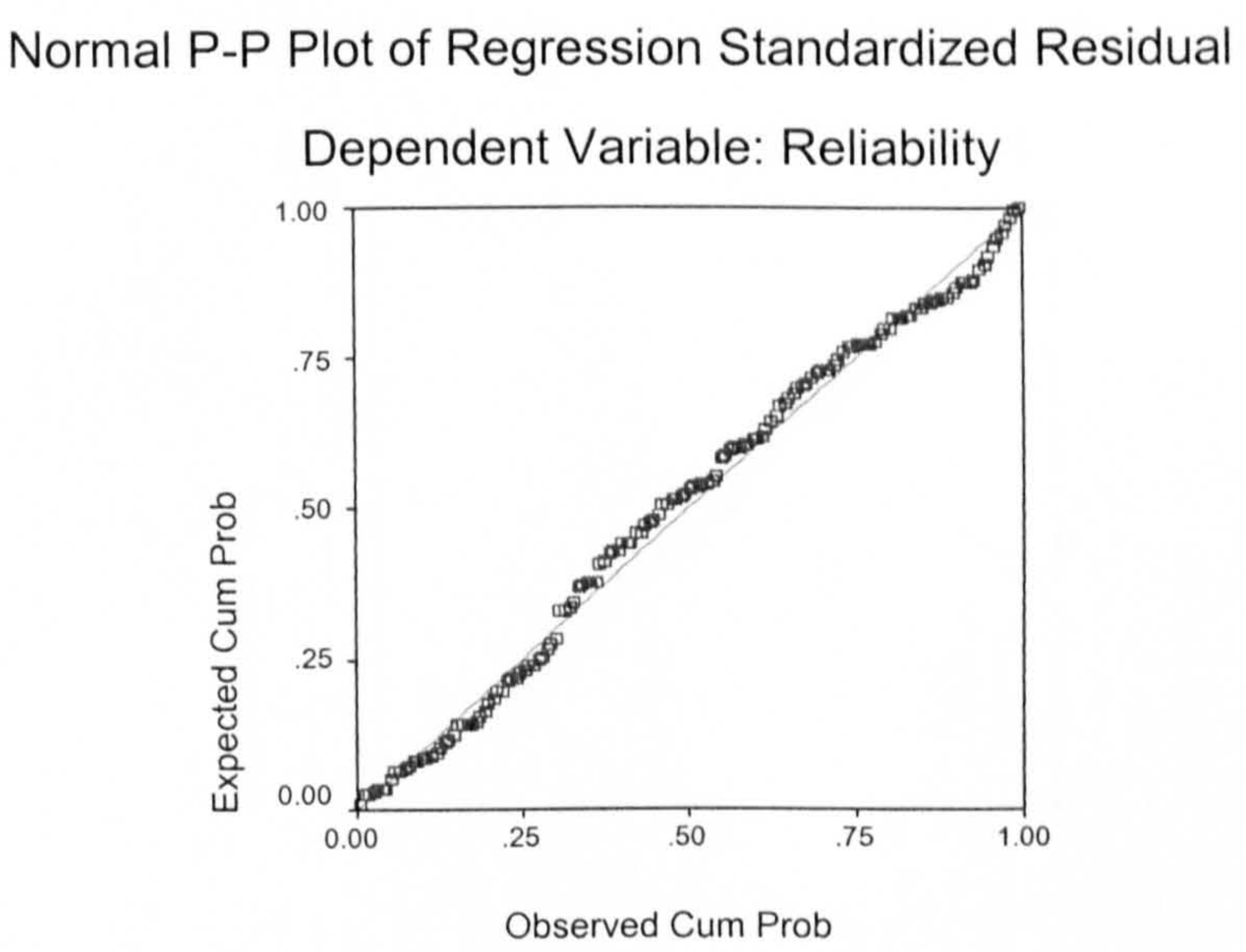


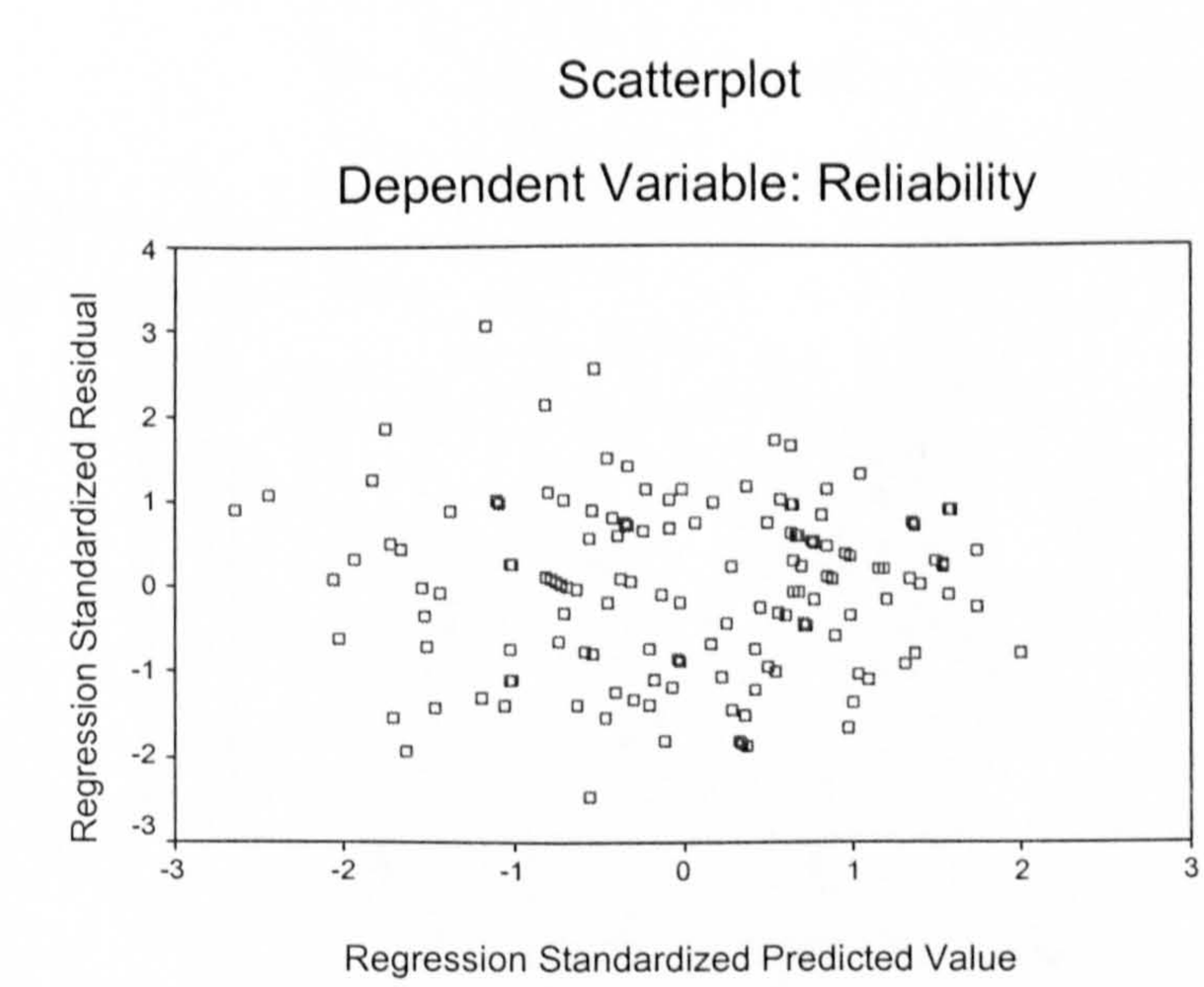



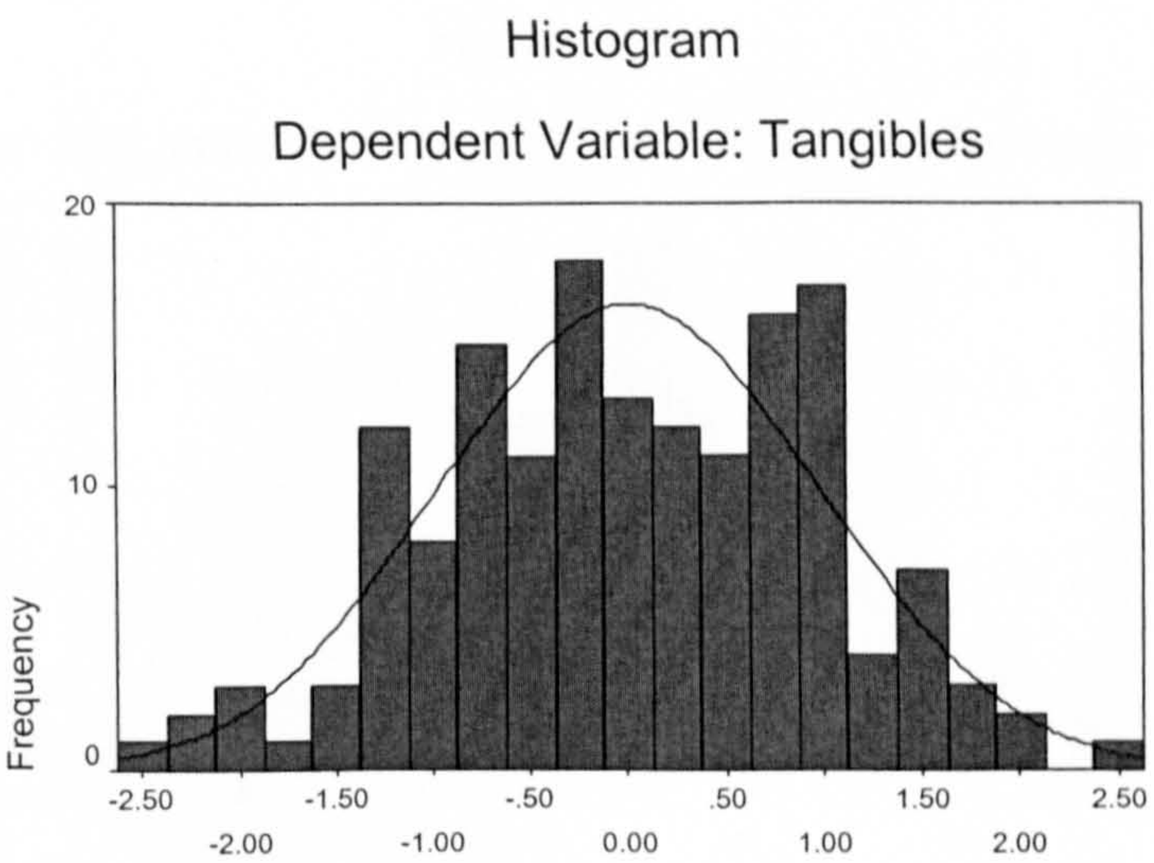
**The relationship between the internal service quality dimensions and reliability based on supervisors level**

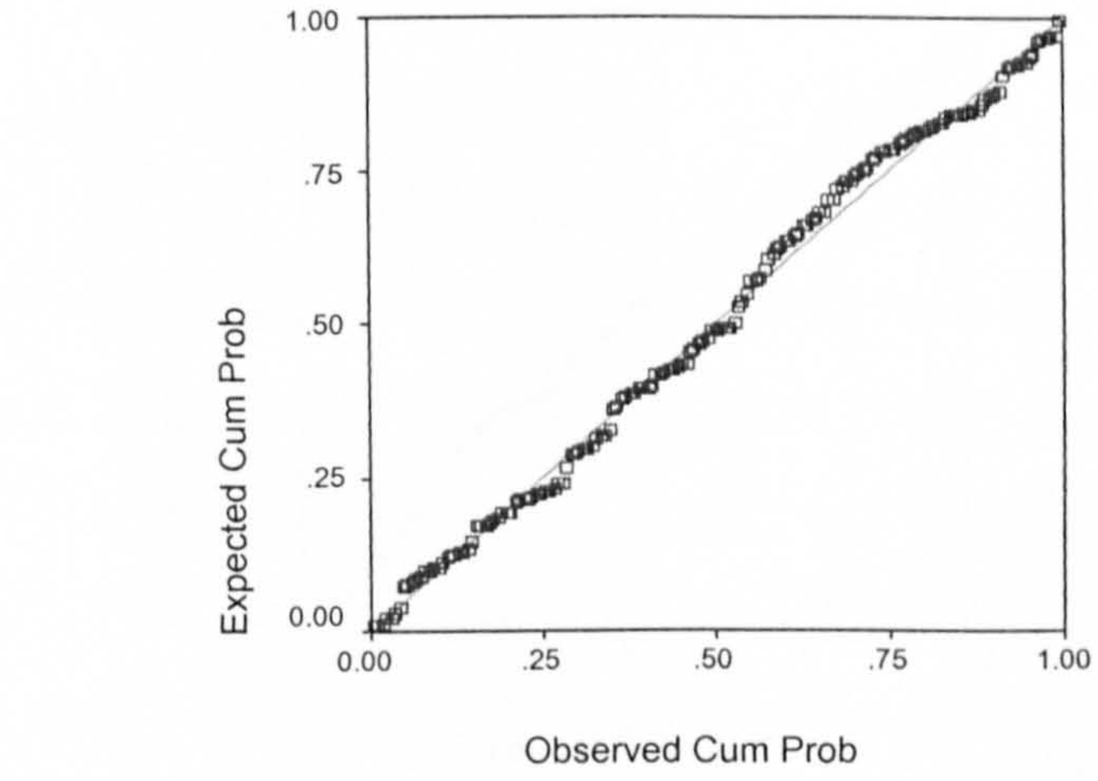


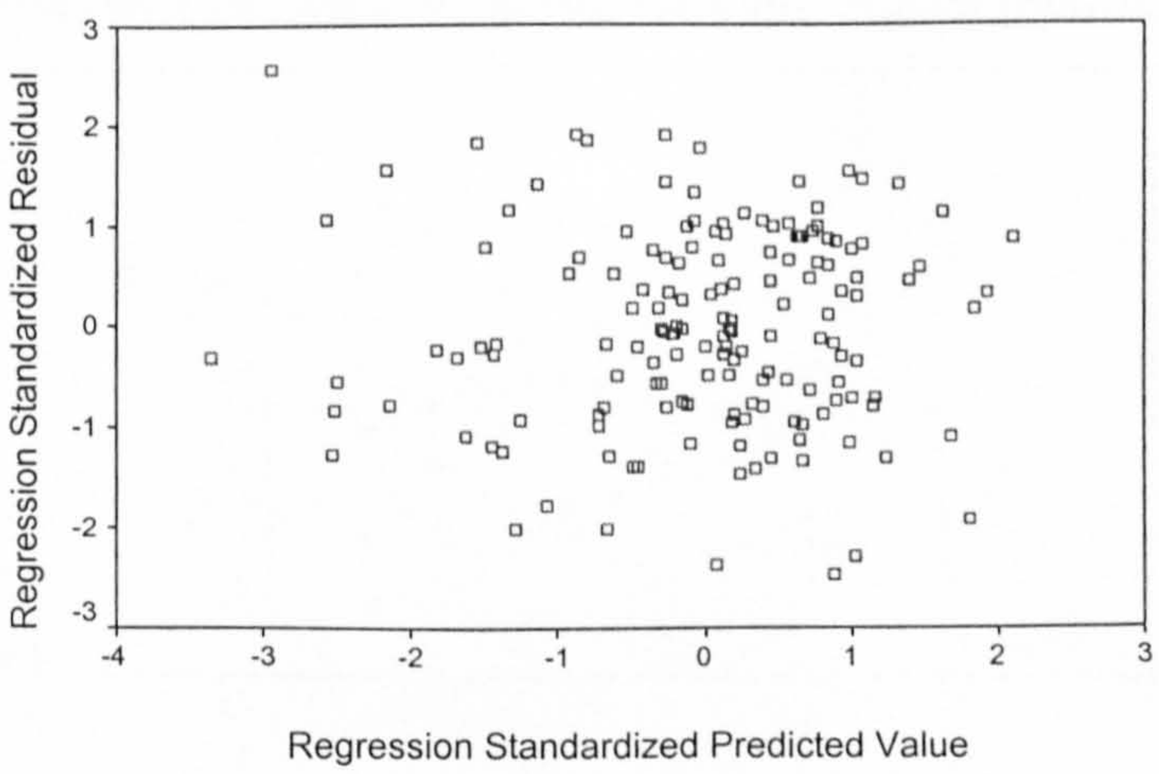



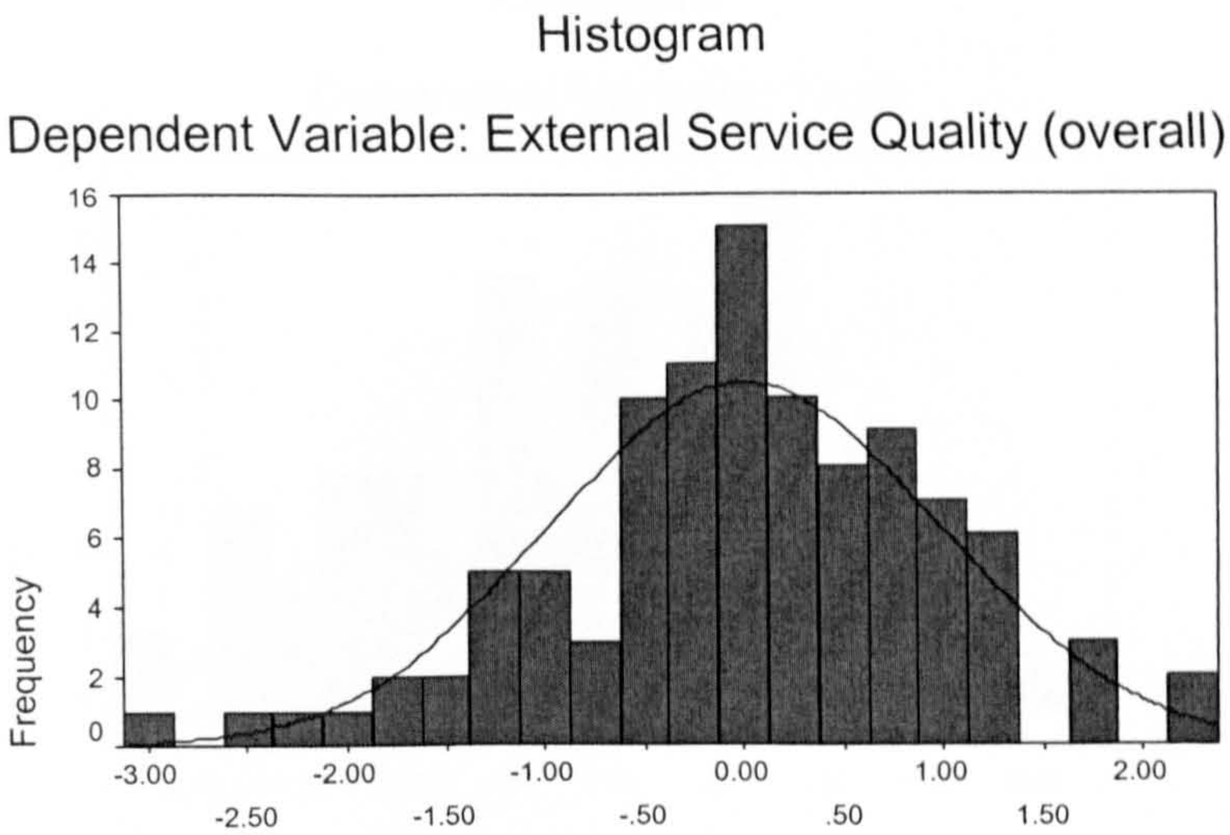
**The relationship between the internal service quality dimensions and tangibles based on supervisors level**

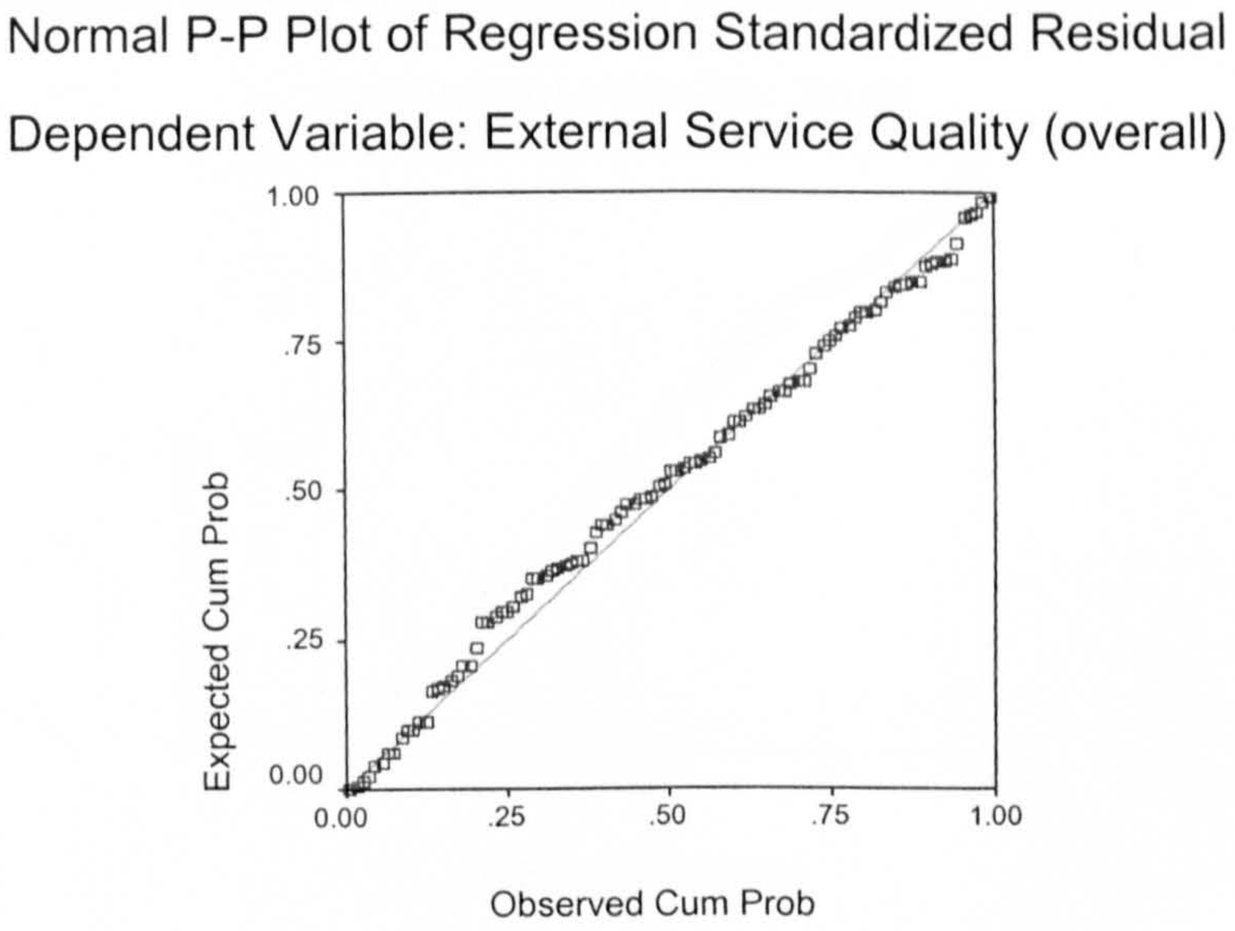


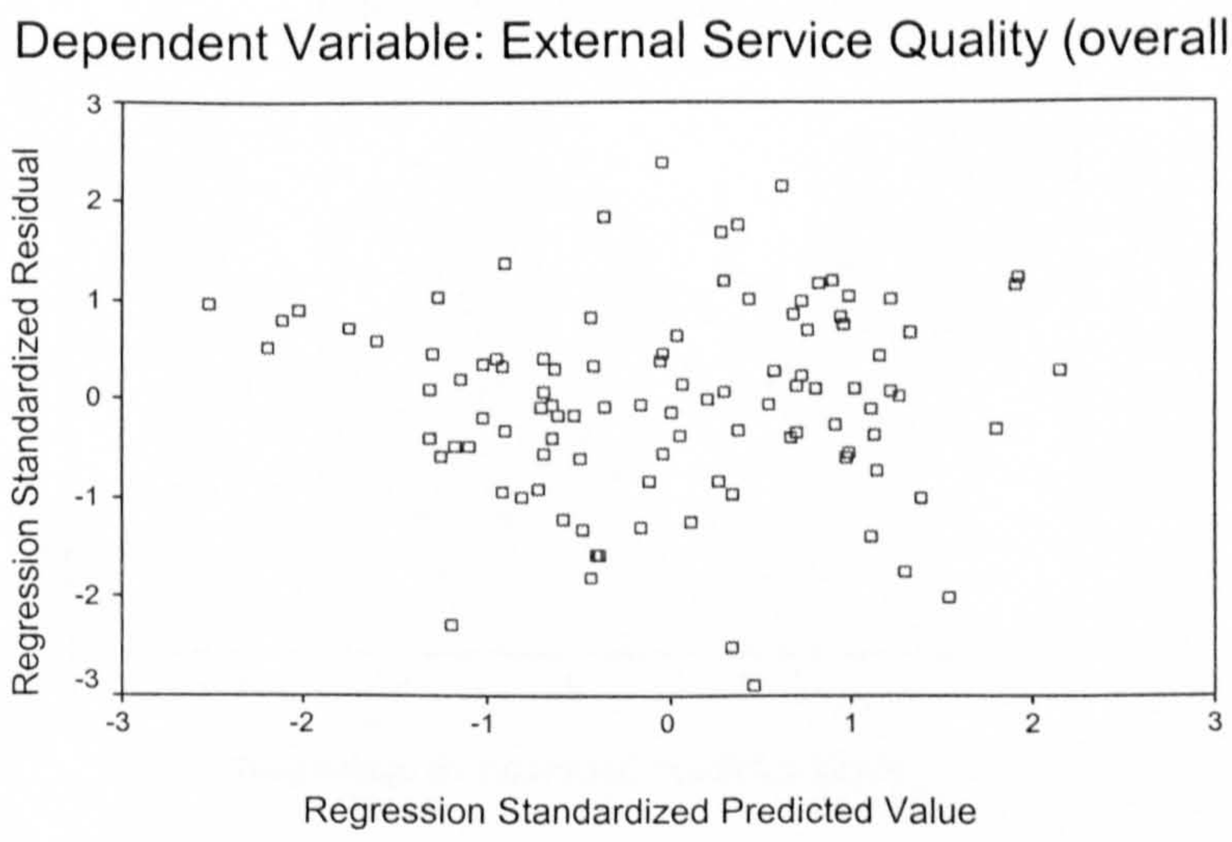



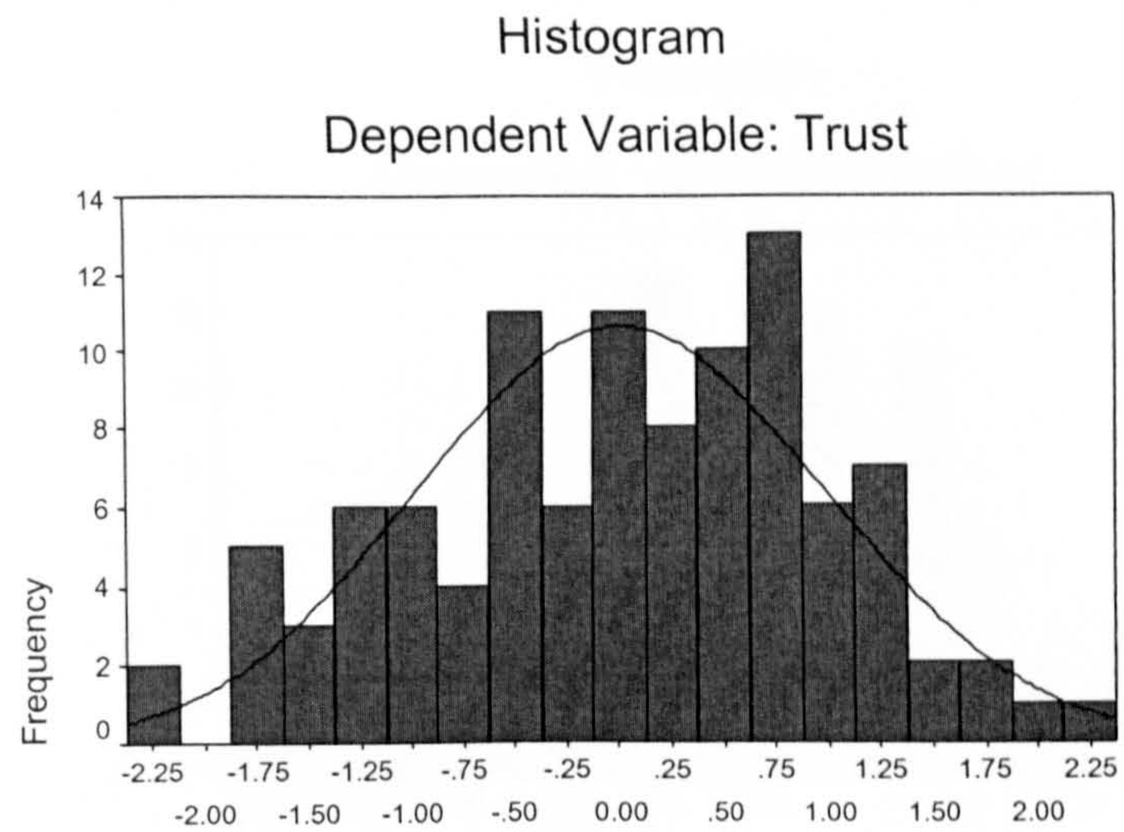
**The relationship between the internal service quality dimensions and the external service quality overall based on front line staff level**

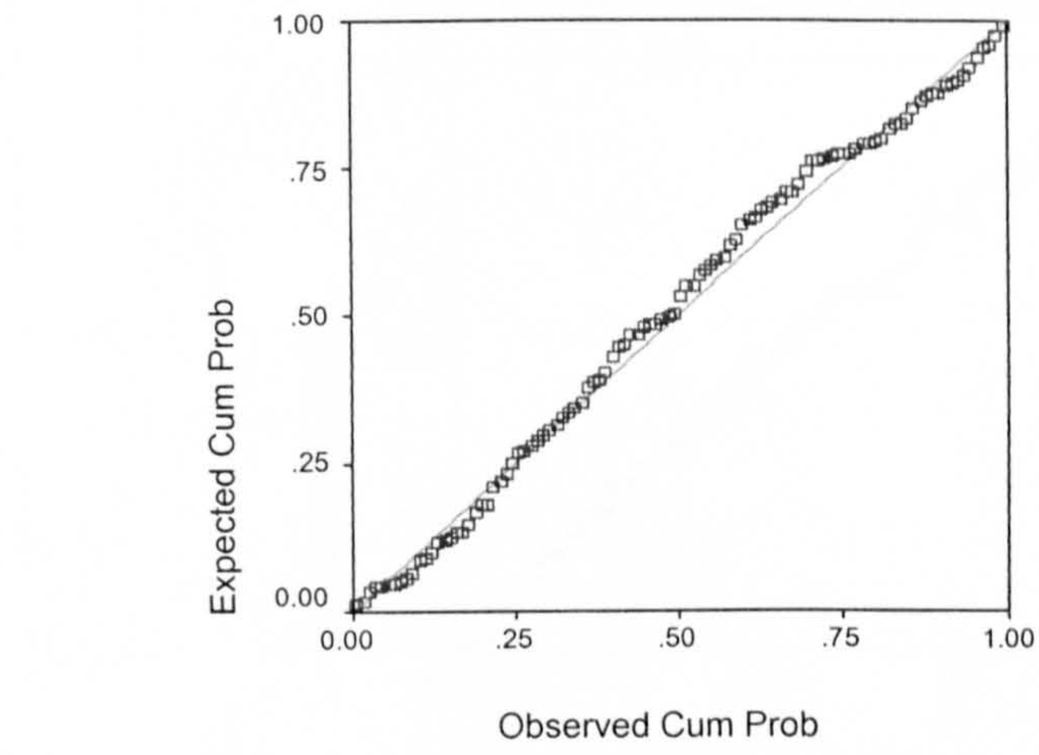


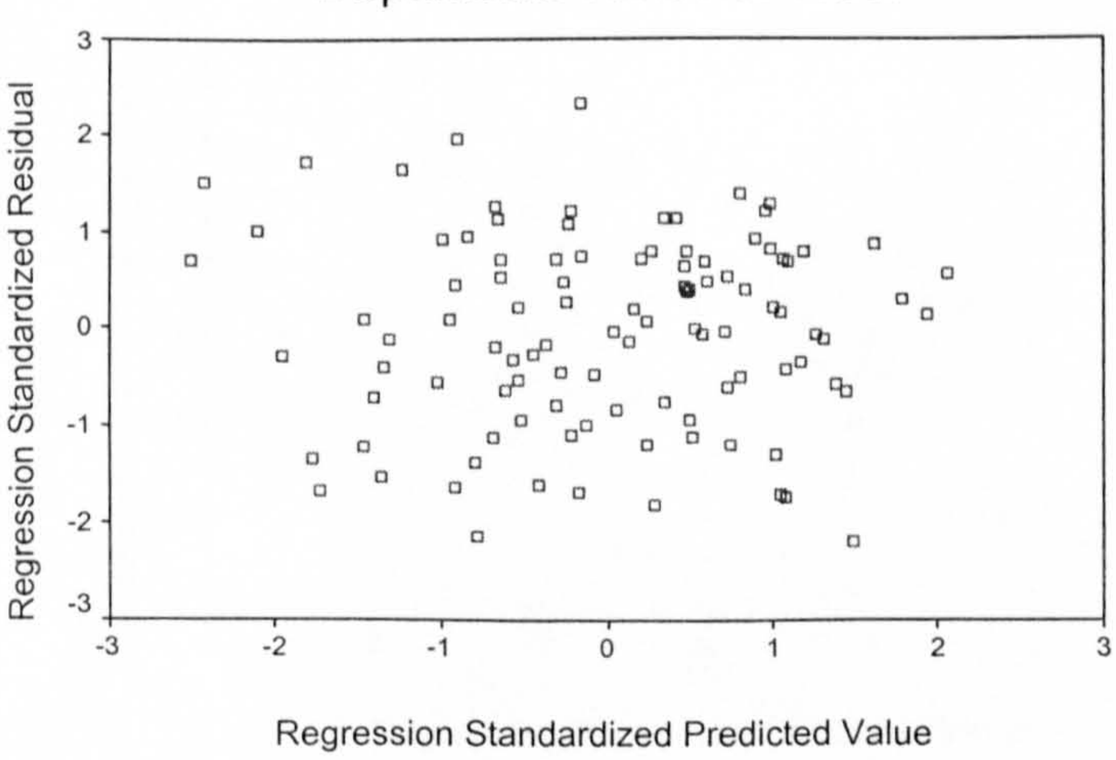



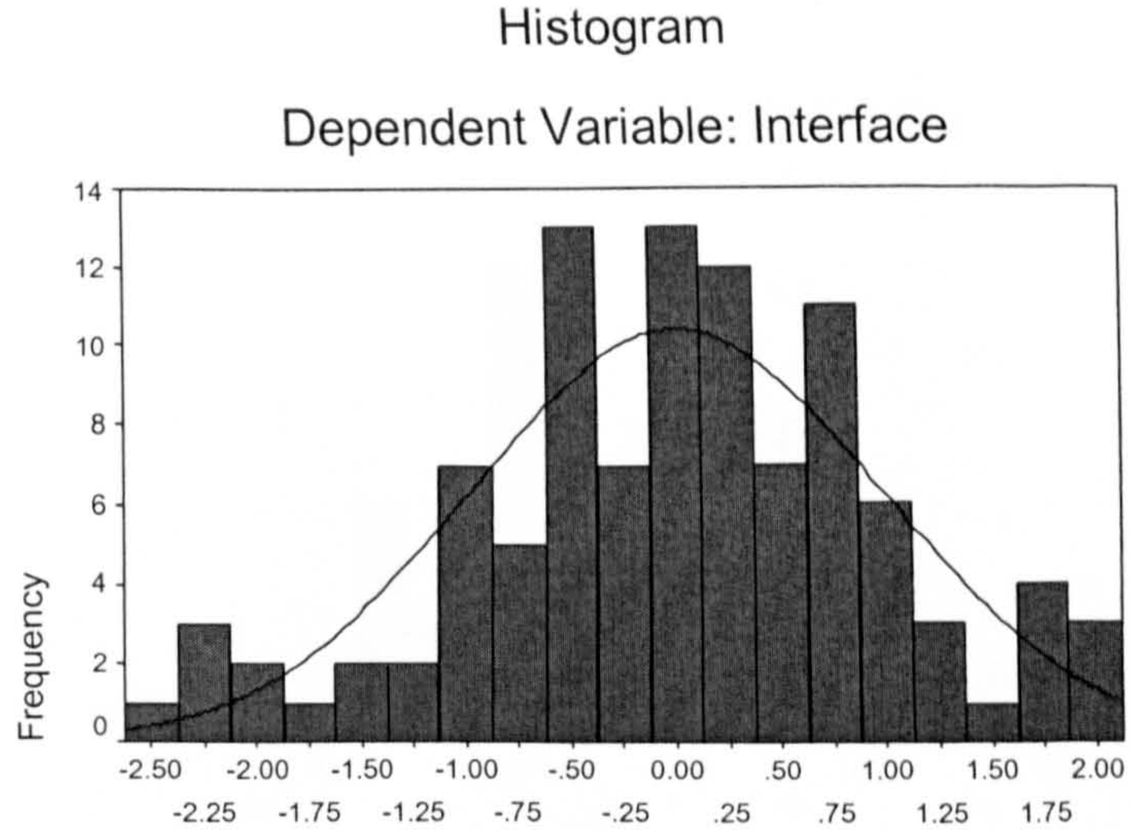
**The relationship between the internal service quality dimensions and trust based on front line staff level**

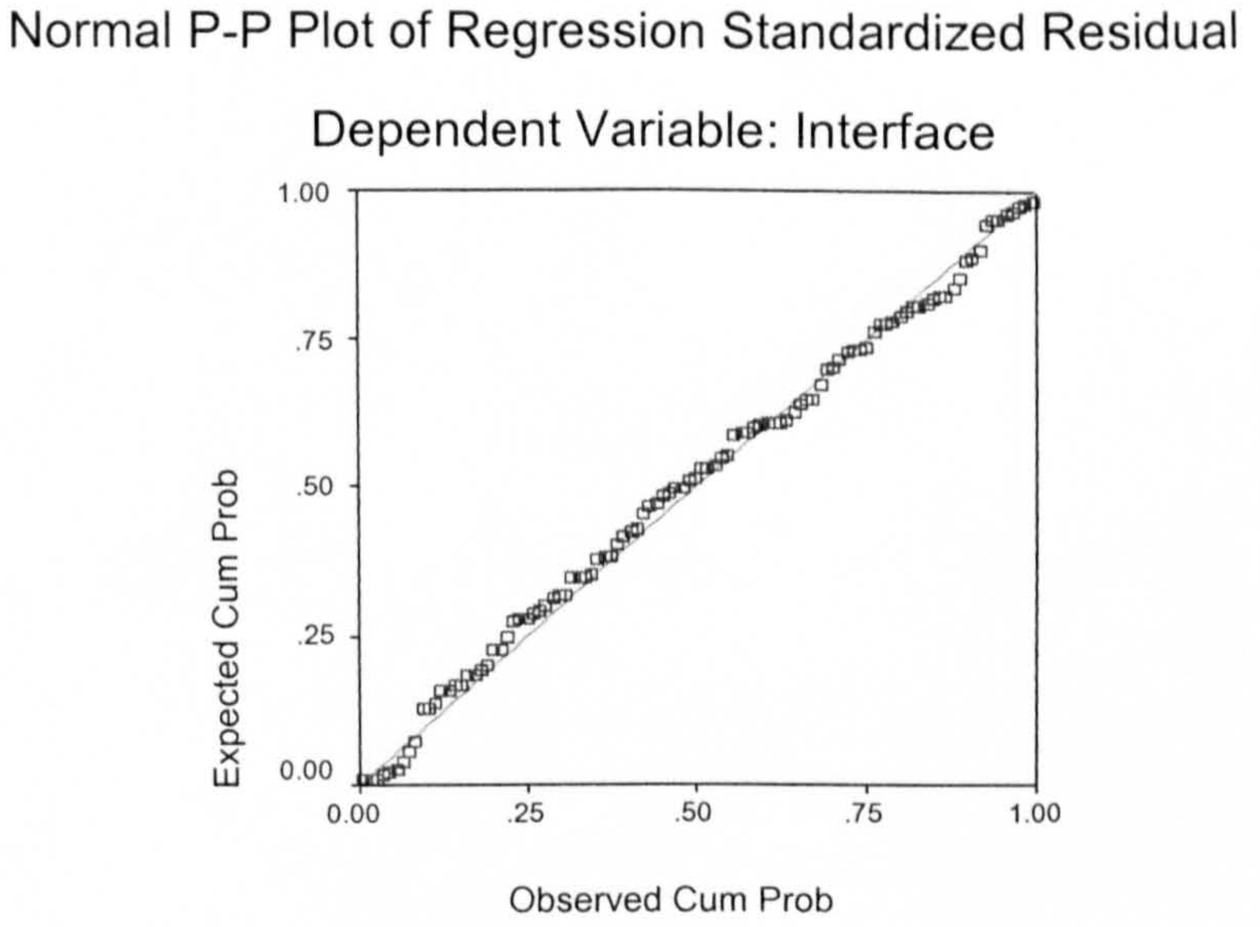


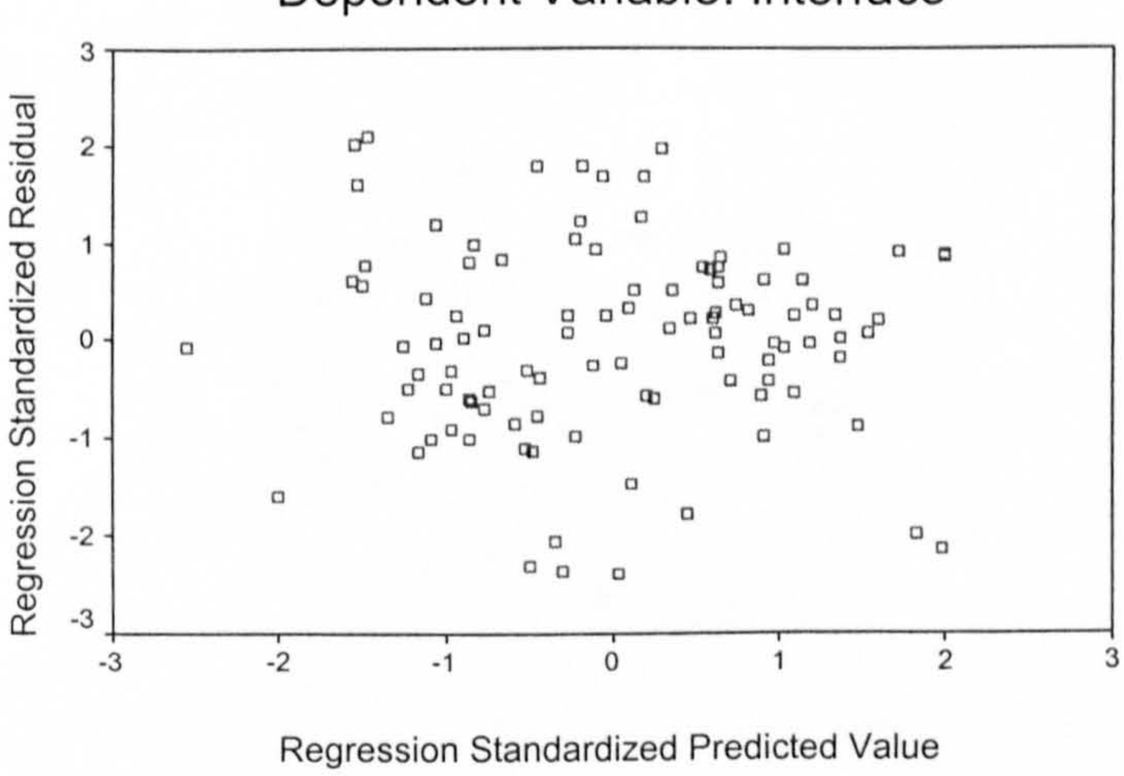



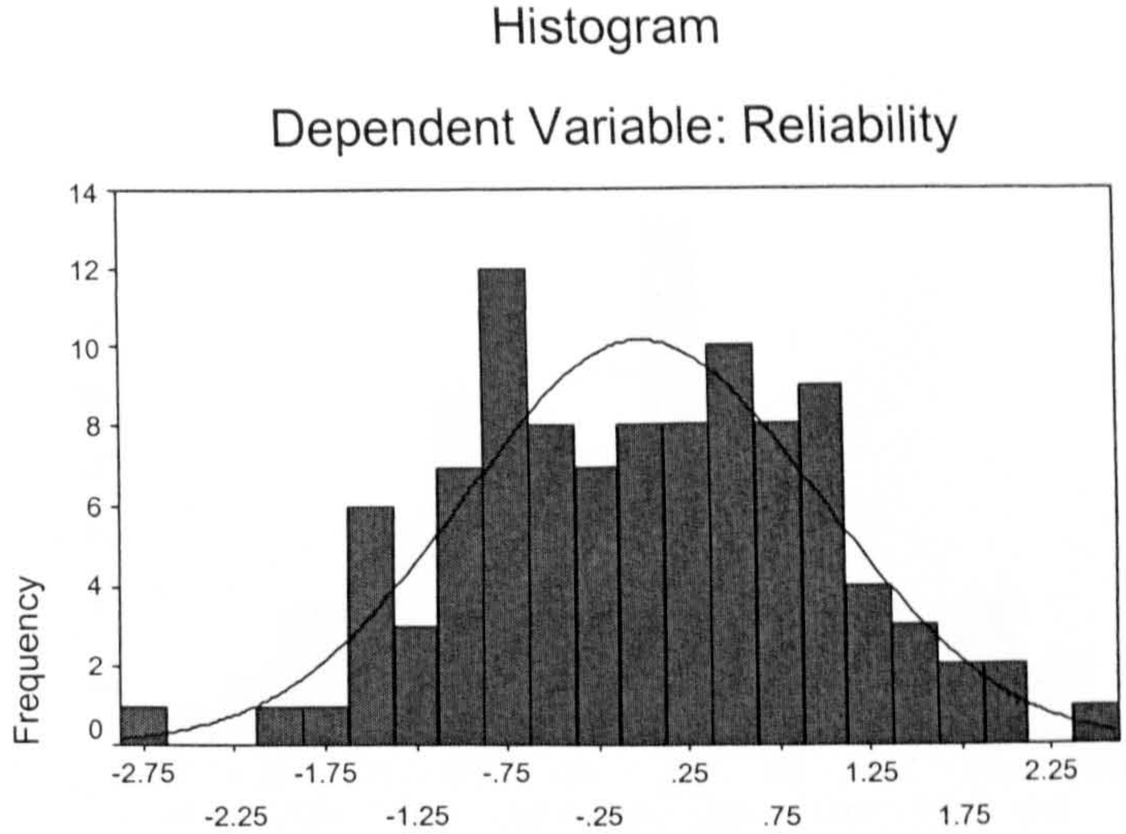
**The relationship between the internal service quality dimensions and interface based on front line staff level**

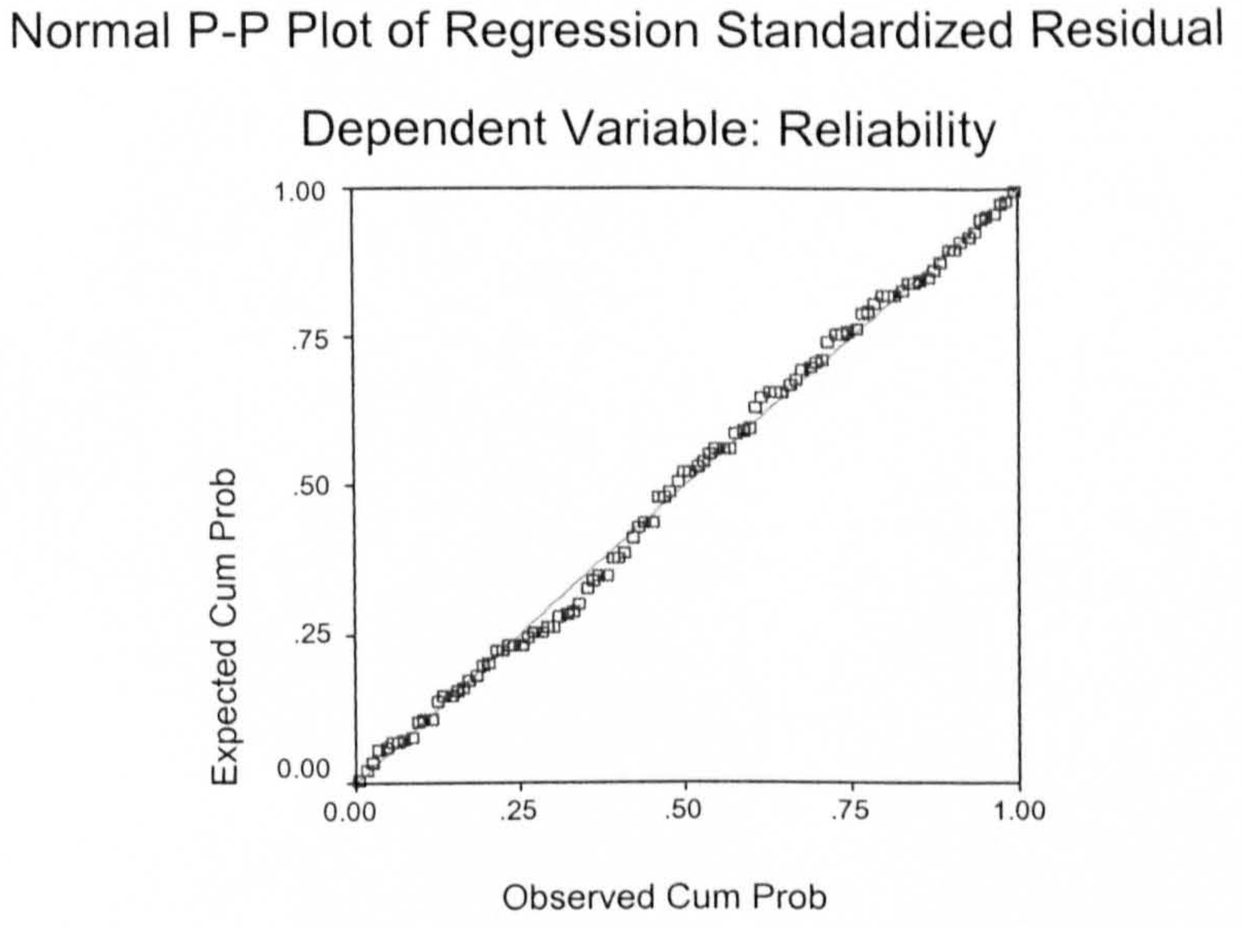


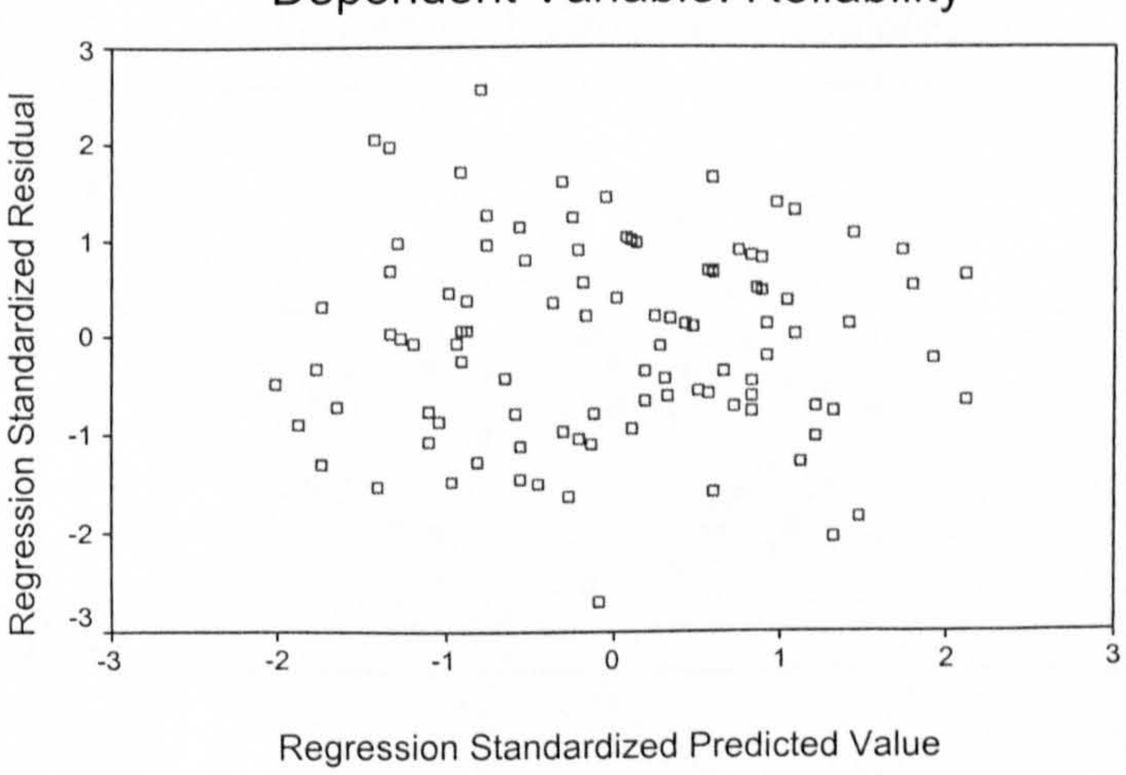



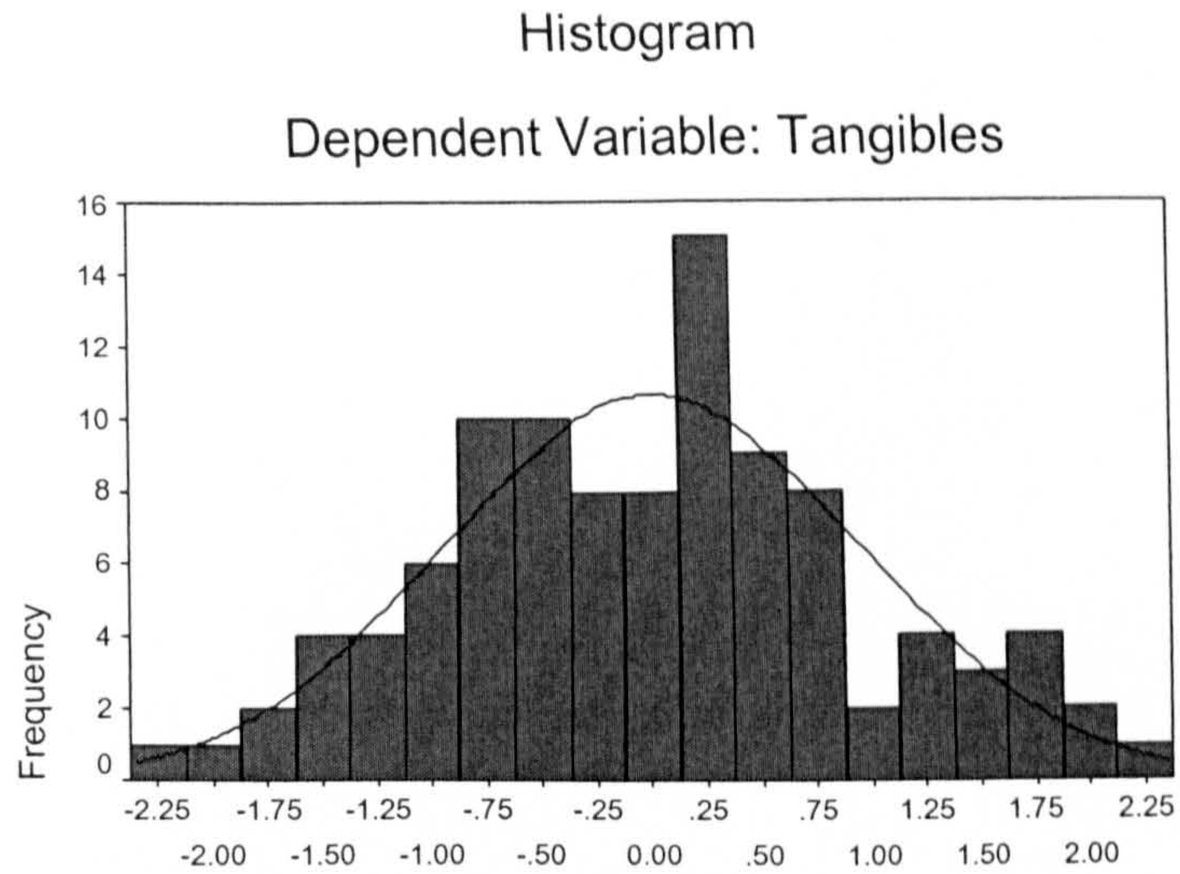



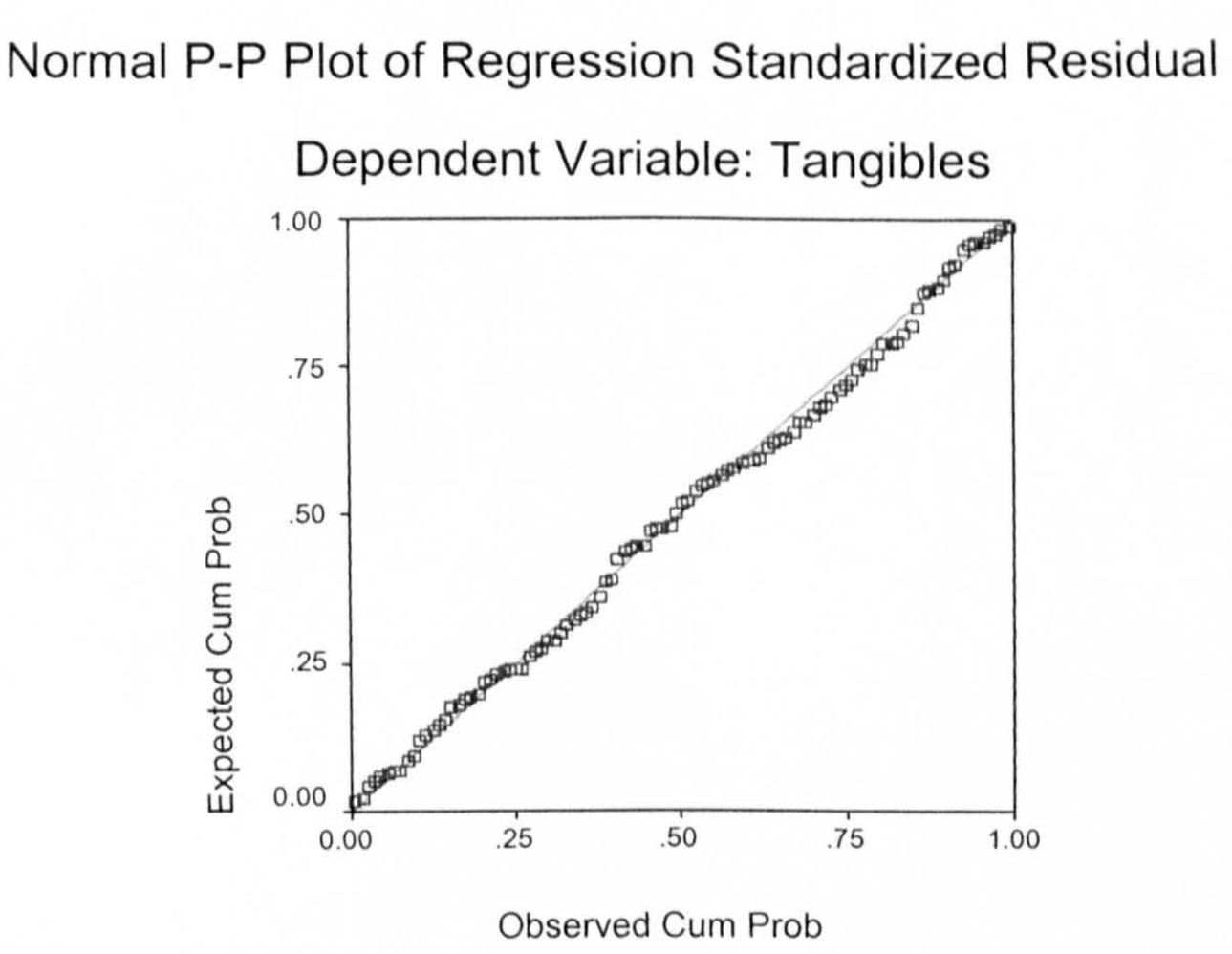
**The relationship between the internal service quality dimensions and reliability based on front line staff level**

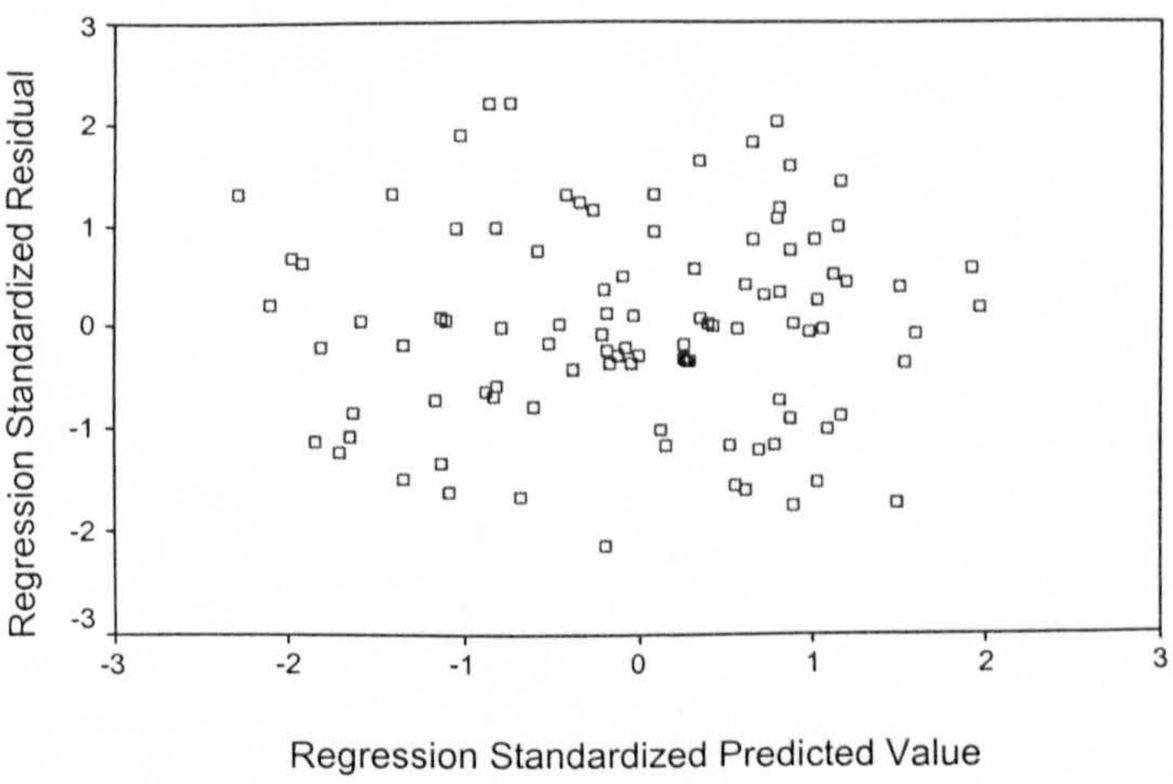



Histogram
Dependent Variable: Tangibles
Frequency
16
14
12
10
8
6
4
2
0
-2.25
-1.75
-1.25
-.75
-.25
.25
.75
1.25
1.75
2.25
-2.00
-1.50
-1.00
-.50
0.00
.50
1.00
1.50
2.00
Regression Standardized Residual


Normal P-P Plot of Regression Standardized Residual
Dependent Variable: Tangibles
Expected Cum Prob
1.00
.75
.50
.25
0.00
0.00
.25
.50
.75
1.00
Observed Cum Prob


Scatterplot
Dependent Variable: Tangibles
Regression Standardized Residual
3
2
1
0
-1
-2
-3
-3
-2
-1
0
1
2
3
Regression Standardized Predicted Value