FACTORS AFFECTING SMEs'

POWER PROCUREMENT SATISFACTION

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Kobilerin Elektrik Tedarik Memnuniyetini Etkileyen Faktörler

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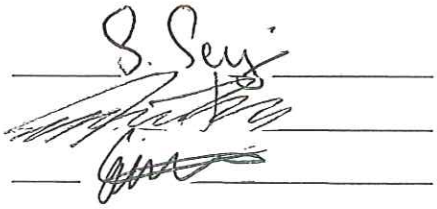

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Dedicated to my dear family and my love Kübra

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ABSTRACT

FACTORS AFFECTING SMEs' POWER PROCUREMENT SATISFACTION

The primary objective of this thesis is to examine factors affecting the power procurement satisfaction of small and medium-sized enterprises in Marmara region of Turkey. The study also investigates the relationship between SMEs' satisfaction level and SMEs' loyalty with the independent variables of annual sales, the number of employees, risk aversion and type of industry.

Until recent years, Turkey's power sector was dominated by a state-owned utility, TEK (Turkish Electricity Institution). However, there has been a proliferation of power supplier companies in Turkey following the gradual deregulation attempts in the Turkish Power Utility Sector. One of the main reasons of the increase in the number of power supplier companies is that eligible customer limit has been decreased from 9GWs/year to 4.000 kWh/year during the period between 2001 and 2015 by EMRA. EPK (Turkish Electricity Market Law) has enabled private sector investors to participate market operations such as power generation, distribution and wholesale/retail under the condition that they acquire the required licence. As a result, the level of competition, which never existed before, has started to rise enormously in all areas of Turkish Power Sector.

This study aims to contribute to the understanding of the developments in Turkish Power Industry, to understand the significance of service quality, to explore the critical dimensions of service quality, to test the relationship between service quality and customer satisfaction, to measure the relationship between customer satisfaction and customer loyalty. The empirical study is comprised of 45 questionnaires, which were derived from six different measurement scales.

ÖZET

KOBİLERİN ELEKTRİK TEDARİK MEMNUNİYETİNİ ETKİLEYEN FAKTÖRLER

Bu tezin temel amacı Marmara bölgesinde yer alan küçük orta boy işletmelerin elektrik tedarik memnuniyetini etkileyen faktörleri incelemektir. Bu çalışma ayrıca yıllık ciro, çalışan sayısı, riskten kaçınma ve sektör tipi değişkenleriyle birlikte kobilerin memnuniyet düzeyiyle bağlılık dereceleri aralarındaki ilişkiyi araştırır.

Son yıllara kadar Türkiye elektrik sektörüne devlet mülkiyetinde olan Türkiye Elektrik Kurumu tarafından yön verilmekteydi. Ancak, Türk elektrik sektöründeki kademeli serbestleşme girişimlerinden sonra bu sektördeki tedarikçiler hızlı bir şekilde çoğalmaya başladı. Elektrik tedarik şirketlerinin sayısındaki artışın temel nedenlerinden biri Enerji Piyasası Düzenleme Kurumu'nun serbest tüketici limitini 2001 ile 2015 yılları arasında senelik 9GW'tan 4.000 kWh'a düşürmesidir. Türkiye elektrik piyasası kanunu özel sektör yatırımcılarına ilgili lisansları almaları koşuluyla üretim, dağıtım, toptan/perakende satış gibi piyasa operasyonlarına katılma hakkı tanımıştır. Sonuç olarak Türkiye elektrik sektörünün tüm alanlarında daha önce var olmayan rekabet seviyesi ciddi bir şekilde yükselmeye başladı.

Bu çalışma Türkiye elektrik sektöründeki gelişmeleri ve servis kalitesinin önemini anlamaya, servis kalitesinin önemli boyutlarını araştırmaya, servis kalitesi ve müşteri memnuniyeti arasındaki ilişkiyi test etmeye, müşteri memnuniyeti ve müşteri sadakati arasındaki ilişkiyi ölçmeye katkı sağlamayı amaçlamaktadır. Ampirik çalışma 6 farklı ölçüm skalasından elde edilen 45 sorudan oluşmaktadır.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1. INTRODUCTION

This chapter introduces the reader to the research background, research problem, research purpose and study outline.

1.1. RESEARCH BACKGROUND

There has been a variety of change in the transition period from the era of mass production to that of alternatives. The focus during the period between 1850s and late 1920s was gearing up manufacturing skills in order to expand production, since it was an era when demand is greater than supply. Consumers felt happy when they could get any kind of product or service regardless of its distinctive features or quality. From the 1930s to the mid 1950s the focus became selling more of what the business was able to produce. Hence, the orientation shifted from producing to selling. Finally, in order to differentiate what they offer companies started to adopt marketing orientation in the mid 1950s. The focus was no longer the products manufactured or service offered, but the needs of consumers who use the product or service. In today's competitive business world, the ultimate aim of all marketing activities is to acquire and retain customers who contribute to the profitability of a company.

Business organizations are now striving to understand their customers so that they can build a long-term profitable relationship with them [1]. Although keeping customers for a long period requires much effort, it is six times cheaper to retain existing customers than to acquire new customers in today's business environment [2]. As a result, entrepreneurs who would like to establish a profitable and sustainable business have become more responsive to acquiring and retaining profitable customers via understanding their needs, wants and expectations.

One of the most significant factors that determines the success of any business is the degree to which the quality of its product or service meets and exceeds customer expectation from the use of a particular product or service. Due to the fact that customers were perceived as someone who did not know what they want, quality was determined and interpreted from business owners' perspective with little consideration of what customers really want and

expect before the era of marketing. Nowadays, customers' interpretation of product or service quality can be seen as the foremost step before making a decision about launching a product or service. Having a large variety of alternatives and more developed and accessible information tools, customers have gained much power in the buyer-seller relationship. Becoming more rational and powerful, customers have become maximizers of their utility by selecting goods and services that offer high quality with less price.

While the quality of a product is something hard to measure, it has become even harder to evaluate when the topic is service quality. When purchasing goods the consumer can have a lot of tangible cues to judge quality such as package, style, color etc. However, when purchasing a service, tangible cues are usually limited to the service provider's facilities, personnel and equipment [3]. Furthermore, when a service provider has knowledge about how the service will be evaluated by the consumer, it has become possible to influence these evaluations in the desired direction [4].

Even though there is not a universal consensus on how service quality can be determined and measured, its key role in determining customer satisfaction has been widely accepted not only by marketing academia but also by marketing practitioners. Therefore, developing an understanding on the customers' evaluation system of service quality is significant. Consumers can evaluate the quality of goods and services with a classification system that includes three categories; search properties, experience properties and credence properties. Search properties are features that consumers give careful consideration before making a purchase. They are tangibles that consumers can see, touch or feel. Experience properties are post-purchase attributes that can be assessed either after purchase or during consumption. Finally, credence properties are characteristics that few consumers have sufficient knowledge and skill to evaluate whether the given service is necessary or is performed properly. When considering this classification, power utility services can be put under the category of the experience types, since customers generally do not have the required expertise, skill and knowledge to make evaluations [3].

Another significant factors that determines the long-term survival and success of any business is the degree to which the company achieves customer loyalty. Due to technological advancements, customers have become more powerful in terms of product, service or brand knowledge. With the aim of maximizing their own utility and profit, they have begun to look not only for alternative products or services but also for brands that offer the similar product

or service with less cost. In an environment where customers consistently evaluate all alternatives, it becomes harder to establish true customer loyalty for any firm. Those who succeed to create a certain level of customer loyalty are more likely to make sufficient amount of profit for survival and further development. According to a research, net present value increase in profit that results from a 5% increase in customer retention varies between 25 and 95% over 14 industries [2-5]. Also, others put forward that the relative cost of customer retention is considerably less than that of acquisition [6]. How customer loyalty can be achieved is a commonly asked question not only by marketing academia but also by business owners who are well aware of the importance and advantages of customer retention. It can be argued that there can be numerous variables contributing to customer loyalty. However, customer satisfaction can be shown as one of the most significant factors paving the way to reach customer loyalty. It can be expected that if a customer is satisfied with a firm, service or product, then a greater level of customer loyalty can be attained. Customer satisfaction is positively related to customer loyalty and organizational profits [7]. Nevertheless, although loyal customers are those who are typically well satisfied, satisfaction may not universally translate into loyalty. In fact, satisfaction is a necessary step in loyalty formation but becomes less important as loyalty begins to set through other mechanisms [8].

1.2. RESEARCH PROBLEM

"A research problem is a statement about an area of concern, a condition to be improved upon, a difficulty to be eliminated, or a troubling question that exists in scholarly literature, in theory, or in practice that points to the need for meaningful understanding and deliberate investigation." [9].

In general, a problem statement blueprints the basic facts of the problem, explain why the problem matters, and identify a solution as quickly and directly as possible. It can be argued that all researches are formulated with the existence of a problem.

There has been a proliferation of power utility service companies in Turkey following the gradual deregulation attempts in the Turkish Electric Utility Sector. Eligible customer limit has been decreased from 9GWs/year to 4.000 kWh/year during the period between 2001 and 2015 by EMRA. Foreseeing the potential profit with the enlargement of the market, many companies have started to take a role in electricity business such as generation,

distribution and wholesale/retail. Those who hold electricity wholesale-retail sales license generally focused on small and medium sized enterprises due to the two main reasons. First, electricity consumption per person is about 3.200 kWh/year in Turkey (it is lower than eligible customer limit) [10]. Hence, a large proportion of household cannot be evaluated under the category of eligible customers. Second, the majority of electricity generating companies target big industrial firms and it is nearly impossible for electricity wholesale-retail firms to win price competition against them. As the number of companies that offer electric utility service has increased, the concept of "competition" has begun to be spelled in the Turkish Electric Retail Industry. The number of licensed wholesale companies increased from 41 to 172 during the period between 2009 and 2014, which has brought consumer centric strategies to be implemented in the industry [10-12]. As a result, especially customers who have experience of buying electricity from a private electricity supplier begin to evaluate electricity providers based on their perceived service quality. Due to the fact that service quality criteria of service providers might be different from those of customers, it is significant to understand the customer perception and expectation of quality in terms of electric utility service. Hence, it is important to correctly measure and research the service quality factors and their relationship with customer satisfaction. In addition this study will also examine the relationship between customer satisfaction and customer loyalty with some independent variables including type of industry, company size and risk aversion. All in all the research problems are formulated as:

- What is the relationship between service quality factors and SMEs' power procurement satisfaction?
- What is the relationship between SMEs' power procurement satisfaction and SMEs' loyalty?
- What is the influence of company size, type of industry and risk aversion on the relationship between SMEs' power procurement satisfaction and SMEs' loyalty?

1.3. RESEARCH PURPOSE

A statement of research purpose basically explains what the aim of the study is, what hypothesis will be tested and what kind of literature will be used. By determining research purpose the stage of the rest of research plan is formulated systematically.

With the existence of a variety of suppliers who offer similar products and services, a majority of companies have abandoned the notion that customers have to rely on them. In contrast to production era of marketing, customer satisfaction has begun to be the core focus of every company in recent years. One of the most significant factors to ensure customer satisfaction is product/service quality. In today's competitive business world, any firm that aims long-term survival and prosperity must be keen on to improve customers' perceived product or service quality (the only exception might be some government regulated monopolies). Before deregulation attempts for Turkish electricity business started, the concepts of customer satisfaction and service quality were something beyond imagination of almost every individual in Turkey. An ordinary person, a small business enterprise or a factory owner could not evaluate his/her satisfaction level or perceived service quality, since electricity was seen as a necessity service that is given only by TEAŞ. If you experience long outages, there was no option except waiting for the problem to be fixed by TEAŞ. If you experience any other technical problem, it might last a week or more for TEAŞ to fix the problem. If your electricity bill does not arrive at all, your persistent complaints might not be solved in a short time period by TEAŞ. There are a lot of these kinds of "If" sentences, but customers did not have any available supplier other than TEAŞ. Eventually, as a result of liberalization attempts, Turkish electricity market has started to be competitive during the last fourteen years. More and more companies started to take a role in power market either by generating, distributing or wholesaling electricity. While some started to establish or buy power plants and generate electricity, others prefer to be a wholesaler, retailer or distributor. Hence, service quality, customer satisfaction and customer loyalty have become essential factors for Turkish electricity procurement companies that have a desire to be a strong market player in the long-run.

In this research, factors affecting SMEs' power procurement satisfaction will be examined. Also, this study will also explore the relationship between customer satisfaction and customer loyalty with some independent variables: type of industry, company size and risk aversion. Being in line with the research purpose, questions of

- "What is customer satisfaction?",
- "What is a service?",
- "What is a service quality?"
- "What is customer loyalty?"

- "What is risk aversion?"

will be studied with the help of existing marketing literature.

1.4. STUDY OUTLINE

The study is presented in seven chapters (Figure 1.1). Chapter one is the introductory chapter that covers the research background, research problem, research purpose and study outline.

Chapter two is review of relevant literature that includes customer satisfaction, customer satisfaction in Turkey's Electricity Industry, service, service quality, customer satisfaction and service quality, customer loyalty, customer loyalty and customer satisfaction, risk aversion overview of the Turkish Electricity Sector.

Chapter three presents the methodology of the study. It is comprised of research design, population, sample selection, data collection, questionnaire design, and development of theoretical framework for analysis, main research constructs and dimensions.

Chapter four covers the data analysis and discussion.

Chapter five is the conclusion of the research.

Chapter six is the managerial implications of the research.

Finally, chapter seven is about future research opportunities related with this thesis.

Figure 1.1. Structure of thesis.

2. LITERATURE REVIEW

The aim of this section is to present literatures relevant to this research and to provide a theoretical framework. The chapter consists of a review of definitions and some models of customer satisfaction, service, service quality, customer loyalty and risk aversion. The relationship among service quality, customer satisfaction and customer loyalty, which leads to the conceptual frame work of the study, will also be analyzed. Finally, Turkish electricity market reform, market structure, Turkish electricity wholesale/retail market and regulatory structure of Turkish electricity market will be reviewed.

2.1. CUSTOMER SATISFACTION

In today's challenging business world, any company that has a dream for establishing a sustainable business should develop a careful understanding of what is expected of the company from customer side and the degree to which the company is above this expectation.

Due to the fact that the expectation of customer is further used as a reference point against which performance is judged, it could be asserted that knowing what the customer expects is the first and probably most significant step in delivering a product or service. Consequently, before analyzing customer satisfaction, it would be convenient to start with the concepts of expectation and satisfaction. Oxford Dictionary defines expectation as ''a strong belief that something will happen or be the case''. Customer expectation was defined as a customer's belief about a product before using it [13].

According to Cambridge Dictionary satisfaction is defined as ''the act of fulfilling a need or wish''. Similarly, Oxford Dictionary's definition of satisfaction is ''fulfilment of one's wishes, expectations, or needs''. In addition, satisfaction as a person's feelings of pleasure, excitement, delight or disappointment which results from comparing a product's perceived performance to his or her expectations [14]. Similarly, customer satisfaction is expressed as an evaluation process that compares consumption experience with what it was supposed to be [15].

When interpreting these short but meaningful explanations of satisfaction and expectation in the scope of marketing, it can be asserted that those who provide a product or a service that perfectly and persistently satisfies the needs, wants and expectations of a customer can be more likely to have a competitive advantage of having life-time, loyal customers.

Another customer satisfaction definition is ‘‘the buyer’s cognitive state of being adequately or inadequately rewarded for the sacrifices he has undergone’’ [16]. Thus, it can be asserted that it is unlikely for those, who value their sacrifices more than their reward, to show repurchase behavior in future.

Customers buy a product or service with pre-purchase expectations about anticipated performance and once the product or service is used, outcomes are compared against expectations. When there is a difference between expectation and outcome, disconfirmation occurs. When product or service performance exceeds expectation positive disconfirmation occurs. Also, if a firm achieves to provide customer satisfaction, a positive and emotional long-term relationship can be built with its customers. As a result, whenever a person recognizes any need for a particular product, he/she unconsciously and simultaneously search for the brand that is associated with this particular need [17]. Not surprisingly, it costs almost five times more to gain a new customer as it does to keep an existing customer [18]. Moreover, increasing customer satisfaction plays a key role in a company’s market share, which leads to improved profit, corporate image and long-term survival [2]. Furthermore, some studies have viewed the impact of customer satisfaction on repeat purchase, loyalty and retention and they stated that satisfied customers are most likely to share their experiences with other people with regards to about five to six people [19].

Additionally, satisfaction influences repurchase intentions whereas dissatisfaction is seen as a primary reason for customer defection or discontinuation of purchase [20]. Also, dissatisfied customers can choose to discontinue purchasing the goods or services and engage in negative word of mouth [21].

The Kano model of customer satisfaction classifies product attributes based on how they are perceived by customers and their effect on customer satisfaction. According to the model, there are three types of product attributes that fulfill customer satisfaction to a different degree:

1) basic or expected attributes,

2) performance or spoken attributes and

3) surprise and delight attributes [22].

A competitive product meets basic expected attributes, maximizes performance attributes, and includes as many "excitement" attributes as financially feasible. In the model, the customer strives to move away from having unfulfilled requirements and being dissatisfied.

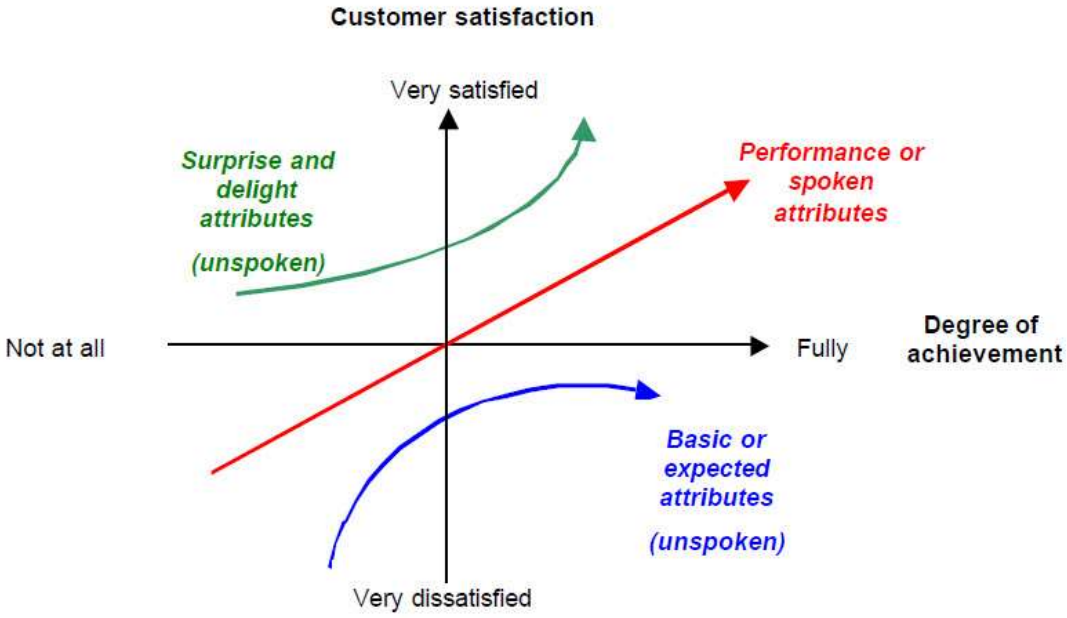

Figure 2.1. Kano model [22].

The performance or spoken attributes (the central line of the model) are those expressed by customers when asked what they want from the product. Depending on the level of their fulfillment by the product, consumers become either satisfied or dissatisfied. The basic or expected attributes (lower curve in the model) are basic attributes, which customers take for granted. While the presence of these attributes is not taken into account, their absence is very dissatisfying. The surprise and delight attributes (upper curve in the model) lay beyond customer's expectations. If they are available customers are exited, but their absence does not create dissatisfaction, since customers do not expect them.

A successful combination of expected and exciting attributes provides a company with an opportunity to achieve competitive advantage. A successful company does not correctly identify the basic requirements but also performance and delight attributes and use them to raise customer satisfaction.

Since a lot of researches have been carried out on the concept of customer satisfaction, many definitions have been formulated as to what customer satisfaction stands for. However, for the purpose of this paper while defining satisfaction, we refer to the SMEs' satisfaction with the electricity service provided by utility companies.

2.1.1. Customer Satisfaction in Turkey's Power Industry

There is nearly no empirical evidence on the state of customer satisfaction in the electricity industry in Turkey. Data on customer satisfaction regarding the service quality in the electricity industry is very crucial issue to look into because the industry regulators need to be empirically informed regarding how consumers generally feel about the service quality of the power procurement companies operating in the electricity industry. However, not many studies so far have been conducted to empirically support the claim that customers are satisfied or not with service delivery of electricity in Turkey. As EMRA has been gradually reducing the eligibility threshold to allow that privately produced power can be sold in the free market, more individuals have received the right of choosing their own electricity supplier. According to the last law, which was enacted at the beginning of 2015, customers with more than 4.000 kWh annual electricity consumption are allowed to have direct access to wholesale/retail market and procure their electricity via bilateral contracts with their suppliers under free market condition. However, 4.000 kWh annual electricity consumption can be rarely seen among households [12]. In order to measure general electricity procurement satisfaction level in Turkey, together with factors affecting it, the research should be done on a group whose members can benefit from the current annual electricity consumption threshold of the new law. Hence, in our study SMEs' power procurement satisfaction will be analyzed.

2.2. SERVICE

Although there is not a single universal consensus on the definition of service among marketing academia, most common approach in defining services is the comparison of differences between services and physical products.

Services have five unique characteristics when compared to products. These characteristics include: intangibility, inseparability, variability, perishability and ownership [23].

Intangibility of a service means that services do not have tangible properties which can be examined and detected by customers before using the service. Customers cannot see, touch, or feel properties of the service before making a purchase. This intangibility, i.e. the lack of physical evidence makes it difficult for the customers to evaluate competing services in advance [23,24].

Inseparability means that a service cannot be separated from its means of production. A service is typically produced and consumed simultaneously. Producers and consumers must normally interact in the way that the service can be produced and the consumers must be present during the entire production process [25]. A service is described as an activity resulting in an outcome in a partly simultaneous production and consumption process [26]. This definition also gives support to the fact that service production/provision and consumption are simultaneous activities.

Because of the variability, services are difficult to be standardized. The variability depends on the customers as they always are part of the service production and the outcome. For a service delivery there is no possibility for pre-delivery inspection and rejection, i.e. quality control in order to ensure consistent standards for the service. Also the employees of the same company may provide services that are quite different from each others [23,24].

Perishability of a service put forward that services cannot be stored, but are consumed during the production process. The life span of a service is generally very short and if service providers are not able to estimate the demand of a service accurately, they have to face unnecessary costs because of unused service employees and facilities [23,24].

A service has no ownership, which is also related with the intangibility and perishability of a service. When purchasing goods, customers generally acquire the

ownership of the goods. However, when a service is performed, no ownership is transferred from the seller to the buyer. In the service production, the buyer merely acquires a right to a service process, e.g. for the use of a car parking lot [23].

The above discussions have illustrated some of the numerous characteristics of service. It could be deduced from the review that service is intangible, time based, and individualized.

2.3. SERVICE QUALITY

Even though there is not any consensus on the definition of service quality, various scholars and researchers have tried to identify the nature and elements of it. Service quality can be viewed as one of the most frequently studied topics in the service marketing literature especially in terms of the issue of quality measurement.

One of the earliest and most influential service quality models was introduced by Grönroos. In order to develop service marketing models, one needs to have a model of service quality that offers a clear understanding of how the quality of a service is perceived and evaluated by customers. In his service quality model, perceived service quality of a customer is a function of expected service, perceived service and image. Expected service can be interpreted as what a customer expects from a particular kind of service before he/she gets it. Perceived service on the other hand can be seen as something directly related with acquired service itself. Due to the fact that a positive or negative image of a service firm has an influence on a customer's evaluation of the service he/she get, it is reasonable to suggest that image can be a variable of perceived service quality of a customer. A favorable and well-known image is one of the most valuable assets for any firm, since image of the firm has a severe impact on customer perception in many respects. If a service provider manages to establish a positive image in the minds of customers, it is less likely for customers to exaggerate minor mistakes. On the other hand, if a service provider has a negative image reputation, the result of any minor mistake is likely to be magnified by customers. Therefore, it can be asserted that image of the company has a huge impact on the evaluation of its services by customers. When analyzing the image quality, the technical quality and functional quality are the two fundamental categories. While technical quality dimension is a concept related with ''what a customer receives as a result of his interaction with a service

firm’’, functional quality dimension answers the question of ‘‘how a customer gets functional outcome or quality’’ [27].

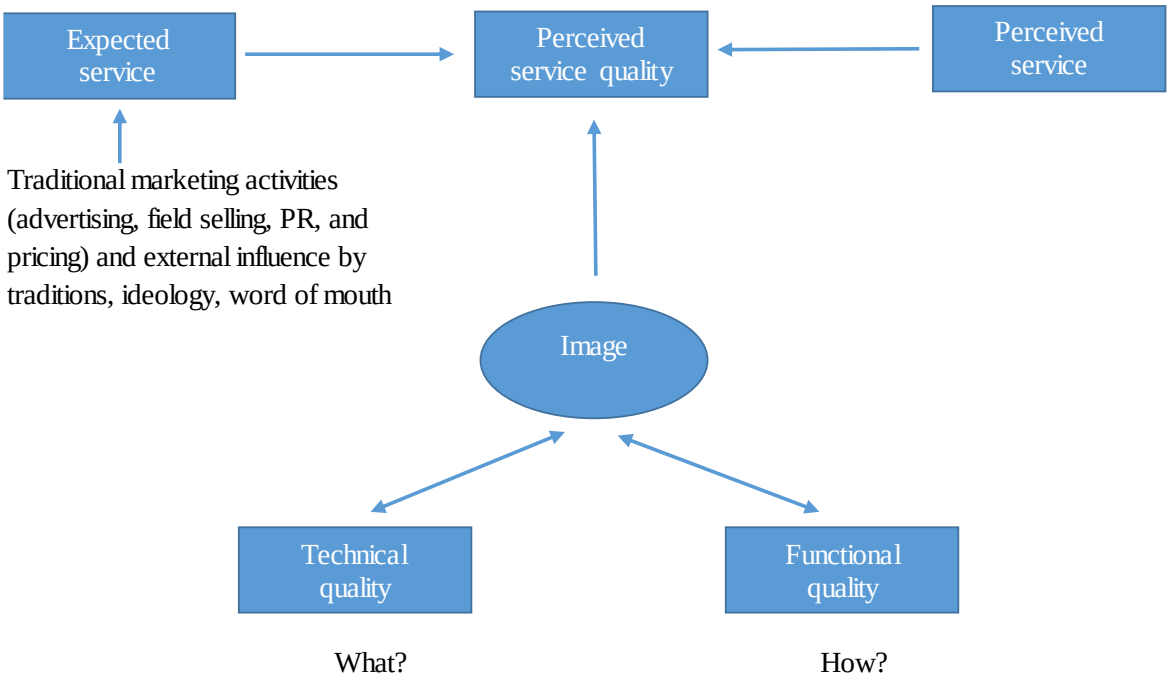

Figure 2.2 Grönroos model of service quality [27].

While there have been a lot of efforts to explain service quality, there has not been a general agreement on the measurement of quality in service sector. However, the majority of service quality researches have used SERVQUAL methodology in order to measure service quality [3]. SERVQUAL is founded on the view that the customer assessment of service quality is conceptualized as a gap between what the customer expects and their evaluations of the performance of a service provider [28]. Research of Parasuraman, Zeithaml and Berry revealed that the criteria used by consumers in assessing service quality fit 10 dimensions. These dimensions were tangibles, reliability, responsiveness, competence, courtesy, credibility, security, access, communication and understanding the customer. These ten dimensions and their descriptions served as a basic structure of the SERVQUAL scale:

- Tangibles: Appearance of the company`s facilities, equipments, staff and communication tools.
- Reliability: The company`s capability to provide the promised service in an exact and reliable manner.
- Responsiveness: The company`s propensity to assist the clients and provide immediate services.
- Competence: The information, knowledge, expertise required to provide the service.
- Courtesy: Friendliness, respect, attentiveness, politeness.
- Credibility: Honorability, honesty.
- Security: No risk, no doubt.
- Access: Availability, easy access, contact.
- Communication: Informing the client in an understandable manner.
- Understanding the customer: Efforts made in order to understand clients [3].

After realizing that there is a very strong statistical correlation between several factors, the model is reconstructed by reducing the original ten dimensions to five fundamental ones: tangibles, reliability, responsiveness, assurance/promise and empathy. The definitions of the two newly added dimensions are as follow:

- Assurance/Promise: The information, knowledge, politeness of the employee`s of the company and their capability to convey trust and reliability towards clients.
- Empathy: Personal, careful attention given to clients [29].

Although there is not a consensus on dimensions that determine service quality, majority of marketing researchers and academia have used SERVQUAL model of Parasuraman either as a means of measuring service quality or building a new service quality model [3]. Buttle states that SERVQUAL ‘‘has undoubtedly had a major impact on the business and academic communities’’ [28].

Similar to Grönroos, Parasuraman put forward that service quality is ‘‘a form of attitude, related but not equivalent to satisfaction, that results from comparison of expectations with perceptions of performance’’ [30]. In his ‘‘expectation-performance’’ gap model, he argued that the customer and organization may differ regarding how they perceive a particular service performance and this leads to ‘‘gaps’’ in providing the service.

- GAP I: Consumers' expectations are not well understood: The difference between customer's expectation and management's perceptions of these expectations.
- GAP II: The mismatch of service quality standards: The difference between management's perceptions of customer's expectations and service quality specifications.
- GAP III: Service performance discrepancy :The difference between service quality specifications and the actual service quality delivered.
- GAP IV: The gap between actual service delivery and promises : The difference between service delivery and communications to customers about service delivery.
- GAP V: The mismatch of consumers' expected service and perceived service : The difference between the quality that the customer expects and the actual perceived quality [3].

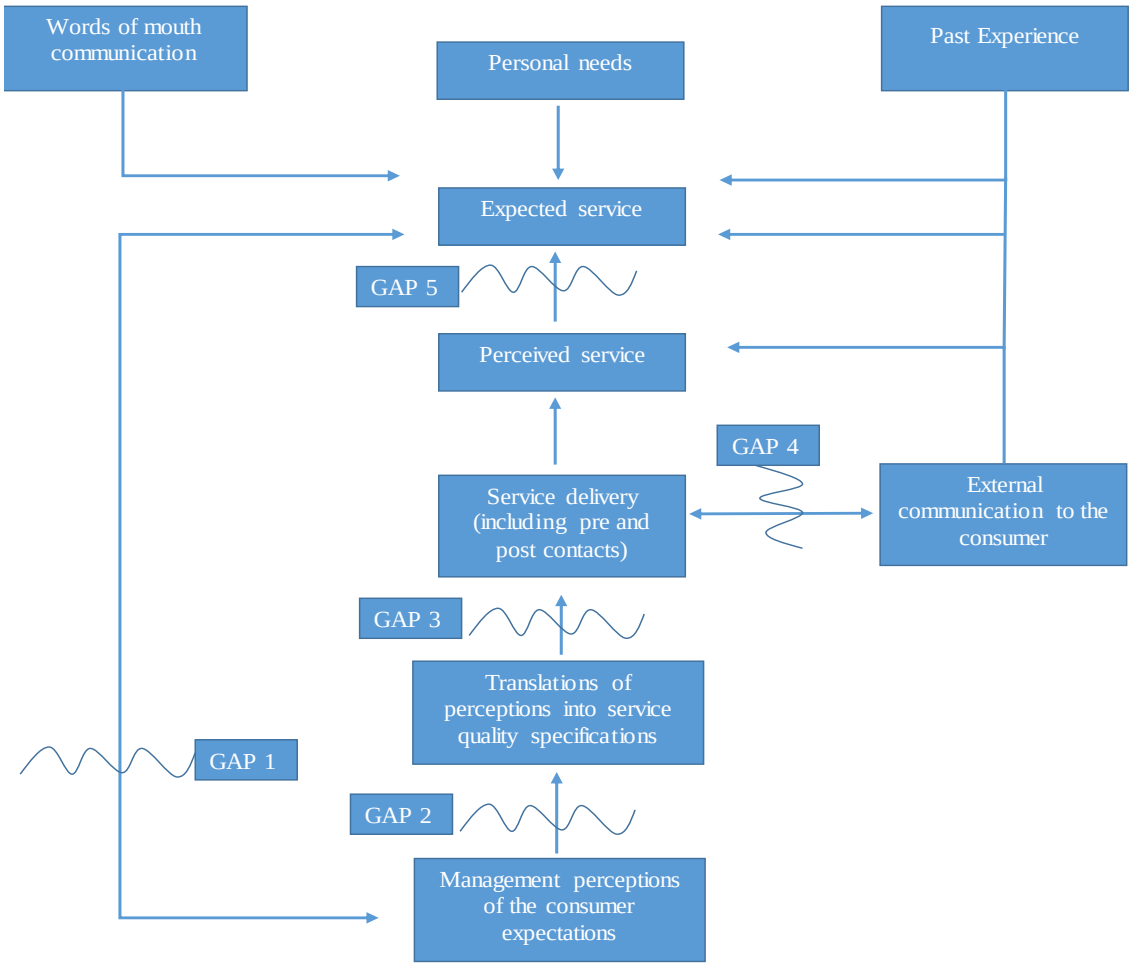

Figure 2.3. GAP model [3].

Based on the premises of the SERVQUAL, Parasuraman also developed Zone of Tolerance Model. Instead of SERVQUAL's original two scales (expectation & performance) Zone of Tolerance model applies three scales (desired service, adequate service & performance) [31,32].

Figure 2.4. Parasuraman's zone of tolerance.

This model assumes that as long as customers' perceived service quality level is between desired service level (what the customer hopes to receive) and adequate service level (what the customer accepts as sufficient), customer perceives the service as acceptable. The desired service expectation is the level of service that customers hope to receive. The adequate service expectation is the lowest level of performance that consumers can accept. The area between desired service and adequate service is described as zone of tolerance, which represent the range of service performance that customers are likely to tolerate.

Also it is argued that if the service delivered is within the zone, customers will be satisfied and if the service is better than their desired service level, customers consider service to be exceptionally superior. However, if the service falls below the zone of tolerance, customers will not show repurchase behavior due to the dissatisfaction and disappointment [33].

2.4. CUSTOMER SATISFACTION AND SERVICE QUALITY

There is no doubt that customer satisfaction and service quality are one of the most significant concepts for academicians studying consumer behavior and marketing practitioners who would like to create a competitive advantage by establishing a solid long term relationship with consumers.

Although quality and satisfaction have been conceptualized similarly in the literature, there appears to be at least relative consensus among marketing academia that customer satisfaction and service quality are independent constructs [34,35].

Table 2.1. indicates a number of distinction between customer satisfaction and service quality.

Table 2.1. The distinction between customer satisfaction and service quality [34,35].

Customer Satisfaction	Service Quality
Customer satisfaction can result from any dimension, whether or not it is quality related.	The dimensions underlying quality judgments are rather specific.
Customer satisfaction judgments can be formed by a large number of non-quality issues, such as needs, equity, perceptions of fairness.	Expectations for quality based on ideals or based perceptions of excellence.
Customer satisfaction is believed to have more conceptual antecedents.	Service quality has less conceptual antecedents.
Satisfaction judgments do require experience with the service or provider.	Quality perceptions do not require experience with the service or provider.

Service quality is a component of customer satisfaction, since customer satisfaction can be considered to be based on the customer's experience on a particular service [34]. Also, Parasuraman defended that there might be the mismatch of service quality standards between management's perceptions of customer's expectations and service quality specifications, which in turn cause customer dissatisfaction [3].

Service quality is an evaluation that reflect customer's perception of reliability, responsiveness, assurance, empathy and tangibles. On the other hand, customer satisfaction is more comprehensive and complex construct that includes a variety of perceptions such as service quality, product quality, price, situational factors and personal factors [36].

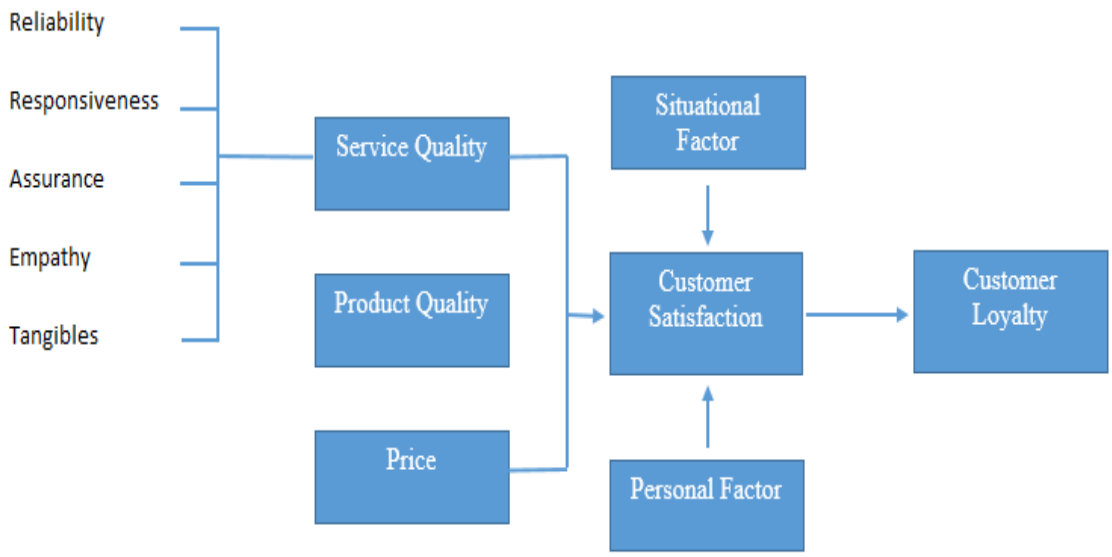

Figure 2.5. Customer perceptions of service quality and customer satisfaction [36].

2.5. CUSTOMER LOYALTY

It is a well-known fact that as market competition becomes fierce, the value of keeping a customer on your side rises significantly. Generally, consumers with high levels of loyalty have a natural tendency to repurchase a product or service they are already familiar and satisfied with. As a result, those who succeed to build a long-lasting relationship with customers are more likely to take advantage of several factors including repeat business, reduced costs and positive word-of-mouth.

Most analyses have viewed loyalty as behavior, excluding attitudinal dimension [37]. However, it is claimed that a customer may not purchase frequently from a firm, even though he/she may feel something toward that firm [38]. Also, it is argued that loyalty should be considered much more than just repeat purchase; someone who continue to buy may be doing so out of inertia, indifference or exit barriers rather than loyalty [39]. Accordingly, two researchers developed a framework for customer loyalty in which both attitudinal and behavioral components exist. As it can be seen in Figure 2.6, the authors advocate that loyalty is determined by a combination of repeat patronage and relative attitude. The highest form of loyalty is attained when the positive attitude of a customer toward a brand and repeat patronage behavior are high. In contrast, no loyalty exists when the repeat patronage of the

customer is low and the customer does not have much preference or attitude toward a brand over its competitors. Latent loyalty occurs when a customer has a strong preference toward a brand over its competitors, but does not show high repeat patronage due to situational or environmental factor he/she is involved in. For instance, a low-income family might have a strong and positive feeling toward BMW, but cannot purchase one, since their affordable income might not be sufficient for this acquisition. Finally, spurious loyalty exists when a customer exhibits high repeat patronage, but does not have a strong preference toward a brand. This might occur due to two main reasons; there is no alternative or past experience and habit plays a key role in purchase decision [40].

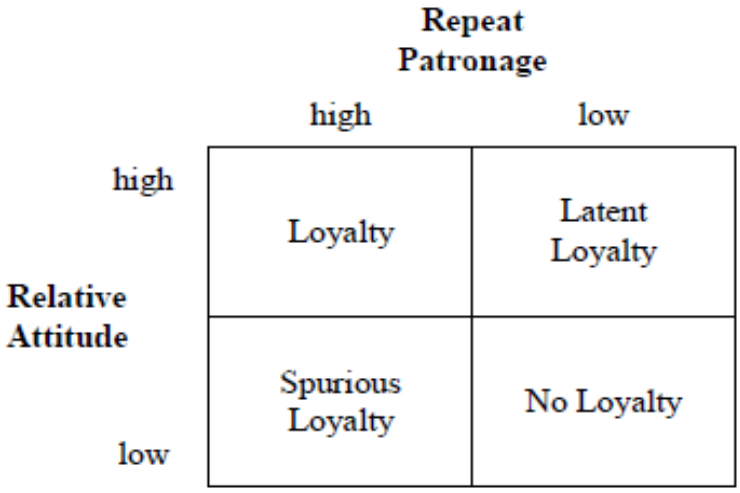

Figure 2.6. Service loyalty classification scheme [40].

2.6. CUSTOMER LOYALTY AND CUSTOMER SATISFACTION

Loyalty should not be confused with customer satisfaction. Although loyalty is built on satisfaction, organizations without loyalty can still have satisfaction. Customer satisfaction is an “opinion measure” about company performance and how customers feel their needs were met in past interactions or by past purchases, whereas customer loyalty is a result measure that includes expectations of future behavior [41].

Even though customer loyalty and customer satisfaction are two distinct concepts, there is a number of researches verifying the strong correlation between them [42,43]. It is claimed that the link between customer loyalty and customer satisfaction is affected by two

critical thresholds. When customer satisfaction reaches a certain point, customer loyalty increases dramatically. Similarly, when customer satisfaction declined to a certain level, loyalty decreased dramatically as well [44]. Furthermore, a research conducted by Xerox illustrate that satisfied customers are more likely to exhibit repurchase behavior. According to a research, 60 to 80 percent of customers who switch to competitors' brands stated that they were either satisfied or very satisfied with the product or service they left [2]. Therefore, it is claimed that in order to ensure customer retention, customers must be extremely satisfied [45].

However, it is also believed that customer satisfaction is not necessarily a guarantee of loyalty. In fact, customer satisfaction is really no more than the price of entry to a category. For satisfaction to be effective, loyalty must be created among customers. If a business focuses merely on customer satisfaction, it faces the risk of becoming an undifferentiated brand whose customers believe only that it meets the minimum performance criteria for the category. In today's competitive market, long-term customer retention requires the supplier to go beyond satisfaction. Hence, business owners have to look for ways of establishing ties of loyalty that will defuse the attack of a competitor [46].

All in all, based on the research done by numerous academicians, it can be concluded that even though customer satisfaction does not guarantee repeat purchase, it plays a crucial role in ensuring customer loyalty and retention.

2.7. RISK AVERSION

As an interdisciplinary concept, risk aversion has received considerable attention of researchers from the fields of Marketing, Economics and Finance. It can be asserted that consumers might vary with respect to the amount of risk they are willing to take in a given situation [47]. While risk averse customers prefer low expected utility with known risks, risk lover ones might pursue higher expected utility at the expense of unknown risks.

Due to being threatened by ambiguous novel situations, it is generally more likely for risk averse customers to refrain from trying new products, services and brands. Therefore, risk averse people have a general tendency to stick with the product, service or brand they are already satisfied with [48]. Also, it is asserted that risk averse customers decrease the

risk level by selecting higher-priced brands especially in markets where objective quality and intrinsic product information are less credible [49]. To minimize perceived risk, customers might also seek information from both formal and informal sources and use brand reputation as quality guide [50]. However, information searching might bring some additional costs. Instead of searching for new information and taking risks by trying a new product or service, consumers who have high level of risk aversion might follow a simplifying strategy and stay loyal to a brand [51].

In this research mediating role of risk aversion on the relationship between SMEs' power procurement satisfaction and SMEs' loyalty will be tested.

2.8. OVERVIEW OF THE TURKISH POWER SECTOR

2.8.1. Turkish Electricity Market Reform

Due to the increase in energy prices, many countries have started to take measures about cost and efficiency issues in order to ensure supply security. Being influenced by the liberalization and privatization trend, electricity sector has been started to be reconstructed all over the world. The motivation behind the liberalization of electricity sector is enhancing the current weak performance of the industry [52].

An electricity sector reform is generally comprised of privatization, competition and regulation [53]. Main stages of electricity sector reform are summarized in Table 2.2.

Table 2.2 Main steps in electricity reform [54].

Reconstruction	Vertical unbundling of power generation, transmission, distribution and supply
	Horizontal division of power generation and procurement activities
Competition & Markets	Competition in wholesale and retail markets
Regulation	Establishment of an independent regulator
	Encouraging regulation in power transmission and distribution stages
Ownership	Encouragement of the emergence of new private companies
	Privatization of public held companies

In order to switch from the state dominated power market to a competitive one, Turkish authorities have introduced competition gradually in Turkish electricity sector beginning with the enactment of Law No 4628 in 2001 by Energy Market Regulatory Authority (EMRA). The law and the secondary legislation enacted by EMRA, designed in a way that requires the dominance of the private sector in power market except transmission. The ultimate aim of EMRA is to establish a competitive, stable and transparent power market in Turkey. Being in line with this purpose, the share of private sector in Turkish power market has increased steadily thanks to gradual privatization process.

Being in line with its economic developments, driven by industrialization and urbanization electricity demand has been growing tremendously in Turkey over the past decade. Despite economic crisis of 2001 and 2008, electricity consumption has more than tripled in the last twenty years mostly due to the growth in electricity intensive sectors such as automotive, textile, construction, mining and production [55].

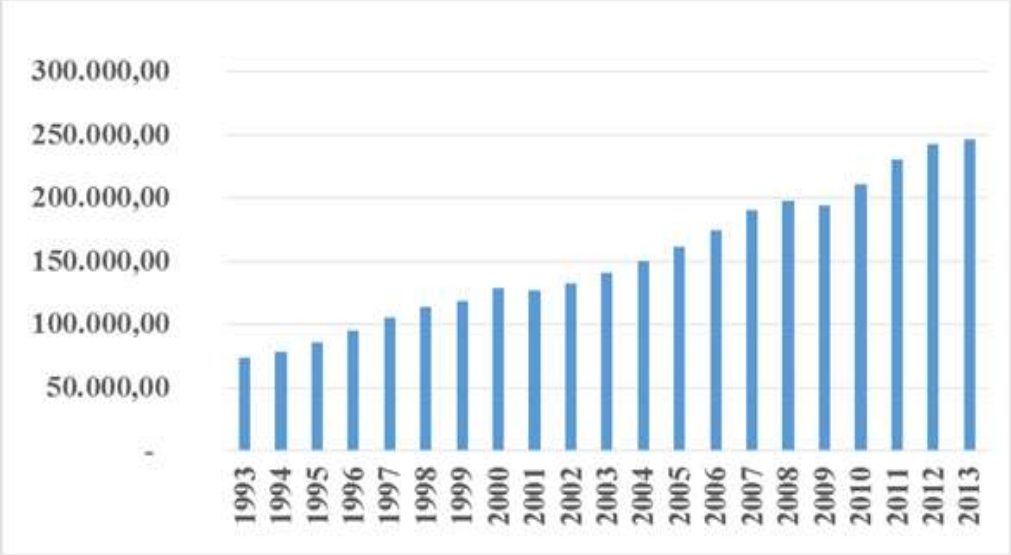

Figure 2.7. Turkey gross electricity demand (GWh) (TEIAS).

It is a generally accepted fact that electricity demand growth rate and GDP growth rate are highly correlated. For instance, Ferguson et al. (2000) analyzed the correlations between electricity use and economic development in over 100 countries. They found that for the global economy as a whole, there is a strong correlation between electricity use and wealth creation [56]. It is also verified by the below figure of Turkish gdp growth- electricity demand growth graph between 2000 and 2011.

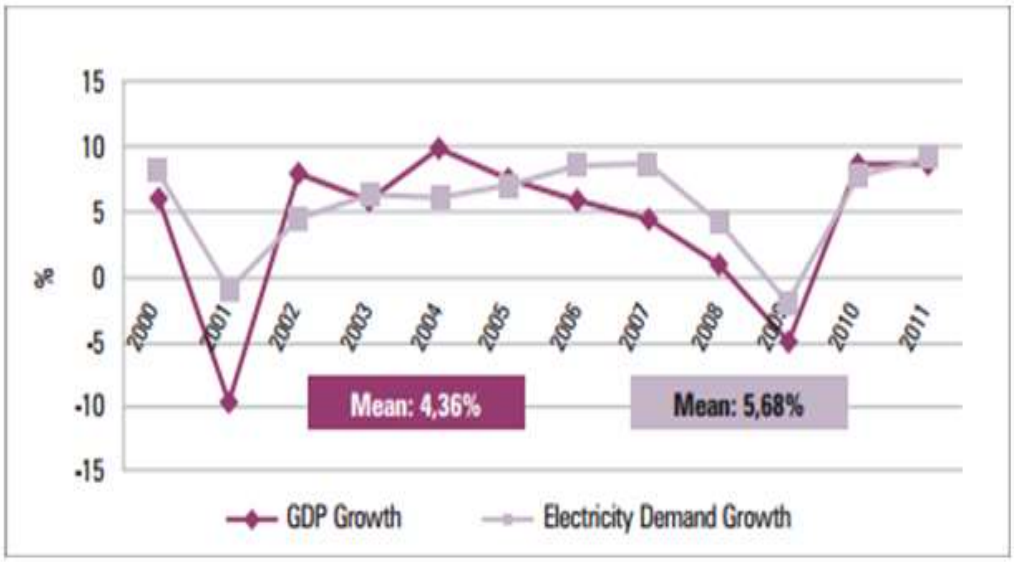

Figure 2.8. GDP growth-electricity demand growth (TEIAS).

According to TEIAS projections, electricity demand will continue to increase steadily in Turkey. As it can be seen from the figure, electricity demand will reach 398 or 434 billion kWh in 2020 depending on the high or low scenarios.

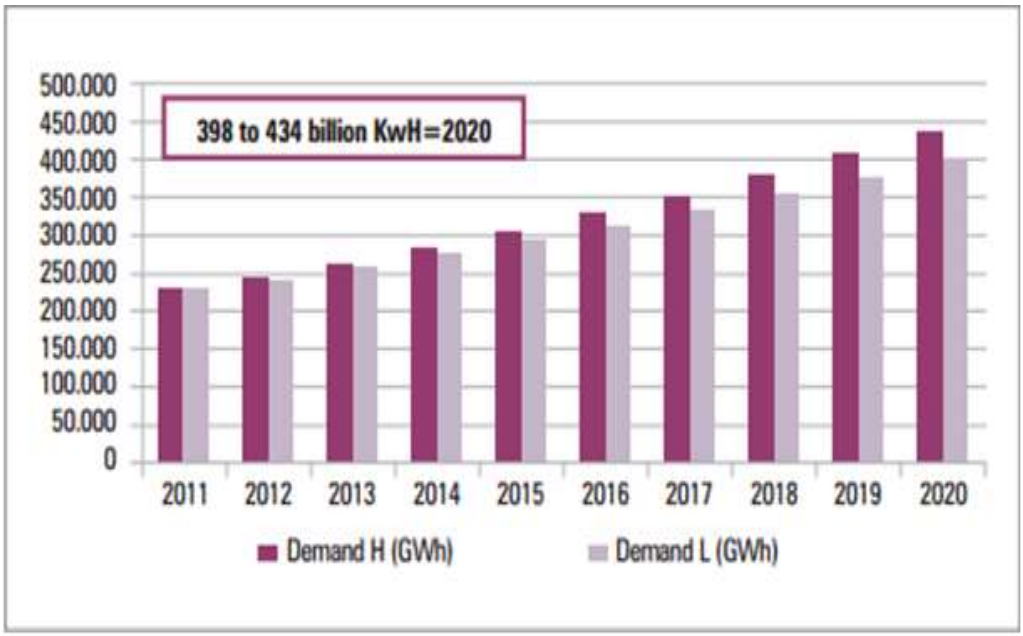

Figure 2.9. Demand forecast (TEIAS).

According to World Bank, while annual electricity consumption per person is around 2500 kWh in Turkey, it is around 8000 kWh in OECD countries. Therefore, it can be claimed that although electricity consumption has been increasing tremendously, it has not reached a satisfactory level when compared to other developed countries.

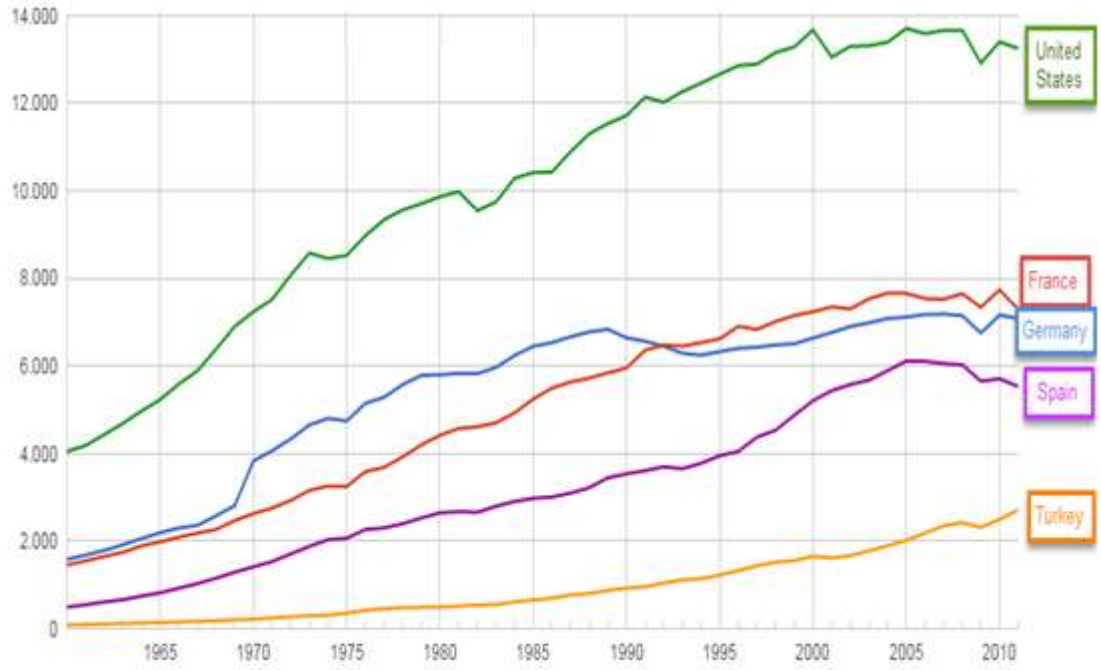

Figure 2.10. Annual electricity consumption per person [65].

All in all, it can be argued that Turkish Electricity Market has a great growth potential when considering the economic development of country as well as the relatively lower consumption compared to that of developed nations.

Until recent years, Turkish electricity sector was dominated by a state-owned utility, TEK (Turkish Electricity Institution). It was unbundled in 1994 into TEAŞ (Turkish Electricity Generation and Transmission Company) and TEDAŞ (Turkish Electricity Distribution Company). While TEAŞ was responsible for the operation of all state-owned plants as well as transmission, imports and export activities of electricity, TEDAŞ was responsible for distributing electricity nationwide. In order to create a liberal and competitive market mechanism, EMRA (Turkish Energy Market Regulatory Authority) was established and EPK (Turkish Electricity Market Law) was put into practice in 2001. After the enactment of EPK, TEAŞ was further split into EÜAŞ, TETAŞ and TEİAŞ. EÜAŞ is a state owned company which is responsible for generating electricity in compliance with the energy and economic policies of the state and in accordance with the principles of efficiency and profitability. The main responsibilities of TETAŞ is carrying out sale and purchase agreements within the scope of its contracts, engaging organized wholesale markets for sale and purchase agreements and conducting bilateral agreements. Finally, TEİAŞ is responsible

for the operation of the electrical transmission system, day ahead market and balancing power market.

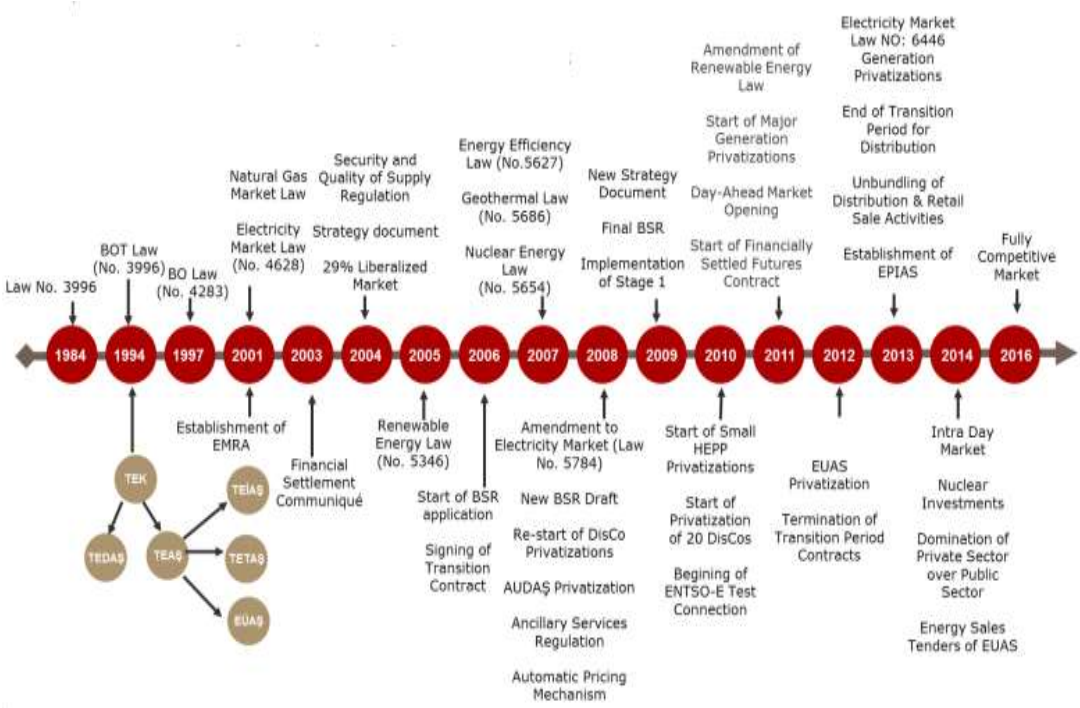

Figure 2.11. Turkish electricity market reform milestones [57].

EPK has enabled private sector investors to participate market operations such as electricity generation, distribution and wholesale/retail under the condition that they acquire the required licence. The ultimate purpose is to form a market mechanism in which market participants can make reciprocal agreements and customers can choose their own suppliers. Being in line with electricity market liberalization goal, a new concept known as ‘‘eligible customer’’ arouse in 2001. According to regulatory board’s decision, any customer who has a minimum electricity consumption of 9 GWs/year could be labeled as an eligible customer. An eligible customer could choose his/her own electricity supplier. After this initial movement, eligible customer limit has been decreased year by year. Finally, in 2015 eligible customer limit was decleared as 4.000 kWh/year.

Table 2.3. Annual eligible customer limit [12].

Eligible Customer Limit	
2004	7,8 GWh
2006	6 GWh
2007	3 GWh
2008	1,2 GWh
2009	0,48 GWh
2010	0,1 GWh
2011	0,03 GWh
2012	25.000 kWh
2013	5.000 kWh
2014	4.500 kWh
2015	4.000 kWh

As it can be seen from the above figure, EMRA has been gradually reducing the eligibility threshold to allow that more privately produced power can be sold in the free market. The most recent reduction was made at the beginning of 2015. According to new law, customers more than 4.000 kWh annual consumption are allowed to have direct access to wholesale market and procure their electricity via bilateral contracts with their suppliers under free market condition.

Being in line with this gradual decline period, share of customers free to choose their suppliers has been increasing as well. As it can be seen from Figure 2.12 market openness rate has increased from 23% to 77% between 2003 and 2012. In fact, according to Electricity Market and the Security of Supply Strategy Paper the ultimate aim is reaching 100% market openness by making all customers eligible. Hence more and more companies have started to make investment to give a particular kind of electricity service.

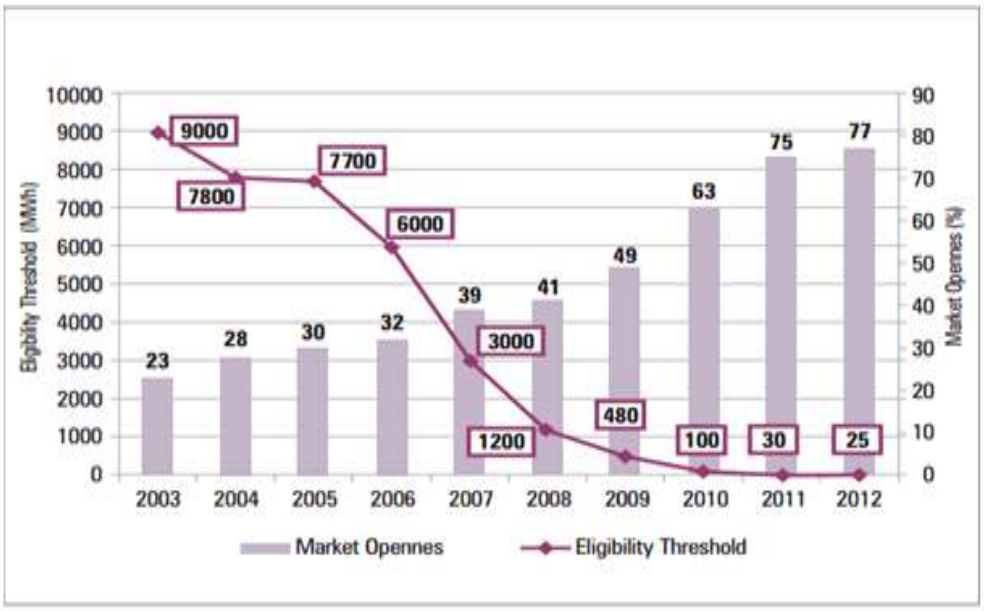

Figure 2.12. Eligibility threshold-market openness (%) (TEIAS).

As of 2014, there were 458 licensed private electricity generation companies, 21 licensed electricity distribution companies, and 172 licensed electricity wholesale companies in Turkey.

It can be claimed that as an industry becomes more liberal, competition among firms has become more severe. As competition becomes more severe, more companies try to do their best to give a better service so that they can differentiate themselves among others. The same situation is valid for companies operating in Turkish electricity business. With the existence of abundant of private electricity suppliers, eligible customers have become to set different criteria and make deep evaluations before choosing their electricity provider. Due to the fact that quality or function of electricity offered do not change from one supplier to another, suppliers operating in Turkish electricity business have become to focus on a number of factors. It can be asserted that with the help of building a trust mechanism, offering a better price, billing and payment conditions, excelling on customer service etc. one can differentiate itself from others. In order to figure out how one can differentiate itself from others, power suppliers should pay careful attention to the concepts of service quality, customer satisfaction and customer loyalty.

2.8.2. Market Structure

Market operations determined by EPK include generation, transmission, transportation, wholesale, retail sale, trade, import and export activities.

Figure 2.13. Market structure.

EÜAŞ as a state owned company, operates the generating facilities which have not been transferred to private sector.

Conducting transmission activities as a state monopoly, operating power balancing market and day ahead market are the fundamental responsibilities of TEİAŞ.

TETAŞ is responsible for carrying out sale and purchase agreements within the scope of its contracts, engaging organized wholesale markets for sale and purchase agreements and conducting bilateral agreements.

TEDAŞ had full control over distribution regions until recent years. In 2005, 20 out of 21 distribution companies were established as a subsidiary of TEDAŞ. Each distribution company has the right to operate the distribution system that is actually owned by TEDAŞ for 30 years. Each distribution company holds a monopoly in its region and also holds a retail sales license. Currently, privatizations of all distribution companies have been finalized.

2.8.3. Turkish Electricity Wholesale/Retail Market

By enacting the new Turkish Electricity Market Law No. 6446 in 2013, a new electricity market activity called "market operation" was introduced. Market operation is defined as "operation of organized wholesale markets, financial settlement of activities taking place in such markets and other related financial transactions". This activity, which is currently mostly conducted by the Electricity Market Financial Settlement Center (PMUM) will be conducted by Enerji Piyasaları İşletme Anonim Şirketi (EPİAŞ). In addition, with the new law wholesale and retail sale activities are combined under one license type, namely a supply license. Holders of a supply license will be entitled to perform wholesale and/or retail sale activities without being subject to any regional restrictions for eligible customers. As it is already mentioned before, annual consumption limit to be entitled as eligible customers has declined year by year. Due to the potential profit of this immature market, the number of licensed wholesale companies increased from 41 to 172 during the period between 2009 and 2014.

After the last reduction which brings eligibility limit to 4.000 kWh/year in 2015, Turkey aims to become a fully competitive retail market in a few years, with zero kWh/year as the eligibility limit. Hence, it is expected that the market for wholesale/retail companies will grow more competitive in the upcoming years, which requires suppliers to develop effective strategies for various segments with different electricity consumption profiles.

Even though the share of private sector electricity procurement increased to 42% in 2013, it can be asserted that there is a long way for Turkish electricity market liberalization.

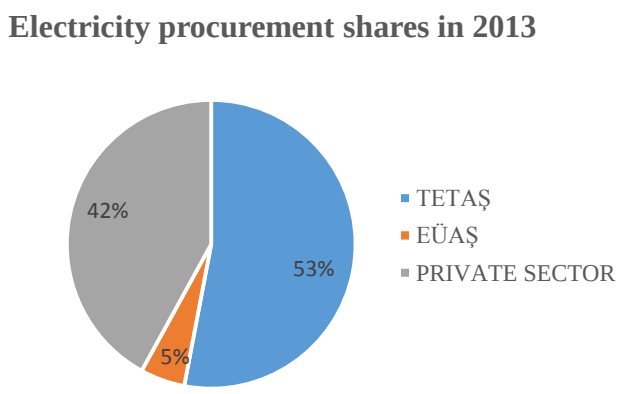

Figure 2.14. Electricity procurement in 2013 (TEIAS).

2.8.4. Regulatory Structure of Turkish Electricity Market

The process of developing a liberal and competitive electricity market for Turkey has also required the existence of a well-established regulatory framework. Within the regulatory structure of the Turkish electricity market, Electricity Market Law No: 6446 sets the general principles and guidelines. The relevant public institutions and the roles of these institutions within electricity regulatory environment are as follow:

EPDK- Regulatory Body

- Regulates and monitors electricity market
- Issue licences
- Set out pricing principles indicated in the law
- Amends, enforces and audits performance standards
- Ensures the development and implementation of an infrastructure

Ministry of Energy and Resources

- General energy policy making

TEİAŞ

- Load dispatch & frequency control
- Interconnections and generation capacity projection
- The Market Financial Settlement Center

3. METHODOLOGY

This section presents the methodology of the study. It consists of research design, population, sample selection, data collection, questionnaire design and the development of theoretical framework for analysis.

3.1. RESEARCH DESIGN

Before doing a survey, it would be better to contemplate on the assumptions behind the research tools chosen. Understanding the theoretical framework helps to recognize the techniques needed for a specific research subject. According to Saunders et al., research design is described as an outline of the systematic and scientific procedures used in a study. They suggested that there are mainly five components of a research design, which are research philosophy, research purpose, research approach, time horizon, and research strategy [58].

Research philosophy can be seen as a belief that shapes the researcher's interpretation of the world. According to Saunders et al., research philosophy can be classified as positivism or phenomenological. In positivism studies, the role of the researcher is regarded as limited to data collection and interpretation through objective approach and the research findings are usually observable and quantifiable. According to the principles of positivism, statistical analysis can be done via quantifiable observations [58]. Fellows and Liu advocates that phenomenology defends the scientific study of immediate experiences and focuses on events, occurrences and happenings as one experiences them with a minimum of regard for the external, physical reality. To put it in other way, in phenomenology studies ideas are generated from rich amount of data by both induction from the data and human interest [59]. Due to the fact that several structured and reliable models are available for assessing and analyzing service quality, customer satisfaction and customer loyalty positivism philosophy leads the way in this research.

Saunders et al. pointed out that the purpose of a research can be classified as exploratory/descriptive or explanatory. However, these categories are not mutually

exclusive, they are a matter of emphasis. Exploratory research as its name suggests is a research being done for exploring, understanding a new phenomenon. It can be defined as an initial research into a hypothetical or theoretical idea. It usually involves a literature search or focus group interviews. According to Saunders et al., descriptive research deals with portraying an accurate profile of persons, events or situations. It usually addresses "what" questions rather than "why/how" questions in order to describe characteristics of a phenomena. Explanatory research aims to establish relationship between variables via cause and effect analysis [58]. Zikmund suggests that the degree of uncertainty about the research problem determines the research methodology, as shown in the table below [60].

Table 3.1. Research Methodology.

	Exploratory Research	**Descriptive Research**	**Explanatory Research**
Degree of Problem Definition	Key variables not defined	Key variables are defined	Key variables and key relationships are defined
Possible Situations	"Quality of service is declining and we don't know why."	"What have been the trends in organisational downsizing over the past ten years?"	"Which of two training programs is more effective for reducing labour turnover?"
	"Would people be interested in our new product idea?"	"Did last year's product recall have an impact on our company's share price?"	"Can I predict the value of energy stocks if I know the current dividends and growth rates of dividends?"
	"How important is business process re-engineering as a strategy?"	"Has the average merger rate for financial institutions increased in the past decade?"	"Do buyers prefer our product in a new package?"

The purpose of this research is to describe and analyze SMEs' perceived service quality in Turkish electricity industry and explain the relationship between service quality factors and SMEs' satisfaction level.

Hence, this study can be labeled as both descriptive and explanatory in purpose.

Saunders et al., suggest that there are two research approaches, namely deductive and inductive. The inductive approach is comprised of data collection and theory development from the research findings. Inductive approach moves from specific observations to broader generalizations and theories. Inductive approach is more open-ended and exploratory [58].

The deductive approach involves causal relationships between variables. It works from the more general to the more specific. Deductive reasoning is narrower in nature and deals with testing or confirming hypothesis.

Because of the fact that factors affecting SMEs' electricity procurement satisfaction level will be determined via hypothesis testing, the deductive approach is used in this study.

Another important consideration is time dimension. According to Saunders et al., a cross-sectional research focuses a particular issue at a point in time. There is no historical trend analysis in this research type. Longitudinal research, on the other hand, involves data collection at multiple points in time [58].

This research is a cross-sectional one because data were collected from SMEs' in Marmara Region in Turkey at a point in time.

According to Saunders et al., research strategy is a general plan that helps researcher in answering the research questions in a systematic way. An effective research strategy contains the clear objectives, research questions, data collection resources and various constraints that affects the research in different ways such as access limitations, time limitations, location and money limitations, ethical issue constraints etc. An effective research strategy helps the researcher to define that why researcher employing a particular research strategy to conduct the research study in an effective manner. Research strategy is also helpful for the researcher to use specific data collection methods to support the arguments. Saunders et al., argue that the most common research strategies are action research, ethnographic studies, experiments, survey studies, case studies and grounded theory [58].

This research is survey based, since it aims to figure out the factors affecting SMEs' electricity procurement satisfaction through qualitative and quantitative research techniques.

3.2. POPULATION

The population of the research consists of SMEs operating in Marmara region of Turkey. According to European Commission "The category of micro, small and medium-sized enterprises (SMEs) is made up of enterprises which employ fewer than 250 persons and which have annual turnover not exceeding 50 million Euro, and/or an annual balance sheet total not exceeding 43 million Euro." [61]. The population is comprised of a variety of characteristics in terms of sex, level of education and business experience.

3.3. SAMPLE SELECTION

If the population of the people interested in is not small enough, if there is limited resources and time, it is nearly impossible for a researcher to survey all. Due to financial and time constraints, a sample size of two hundred SMEs in Marmara region of Turkey were selected using convenient sampling.

3.4. DATA COLLECTION

In this study, data was collected by visiting the small and medium sized firms randomly during business hours. Questionnaire survey, which consists of five sections, was used as data collection method. 200 out of 250 small and medium-sized enterprises in Marmara region of Turkey accepted to join the survey.

3.5. QUESTIONNAIRE DESIGN

The questionnaire was used to collect data from respondents (Appendix B). The questionnaire items were adopted from previous studies [30, 47, 62, 63, 64]. All questions were modified to suit the power industry context in Turkey, and sought respondents' feelings about overall customer satisfactions, customer loyalty, and evaluation of service quality dimensions. Specifically, the questionnaire had five main parts. The first part includes 4 items on the profile of respondents. The second section is comprised of 22 items on SMEs'

evaluation of service quality of the power suppliers. The third part includes 3 items on SMEs' power procurement satisfaction. The fourth section consists of 6 items on SMEs' risk aversiveness about power procurement. Finally, the last part is comprised of 10 items on SMEs' loyalty to their power suppliers.

3.6. THE DEVELOPMENT OF THEORETICAL FRAMEWORK FOR ANALYSIS

The theoretical framework theorizes the relationship among several factors that are related with the study. It can also be named as the conceptual model. This framework can be used to elaborate the relationship among variables and describe the nature of the relationships. Theoretical framework for this study is shown in figure.

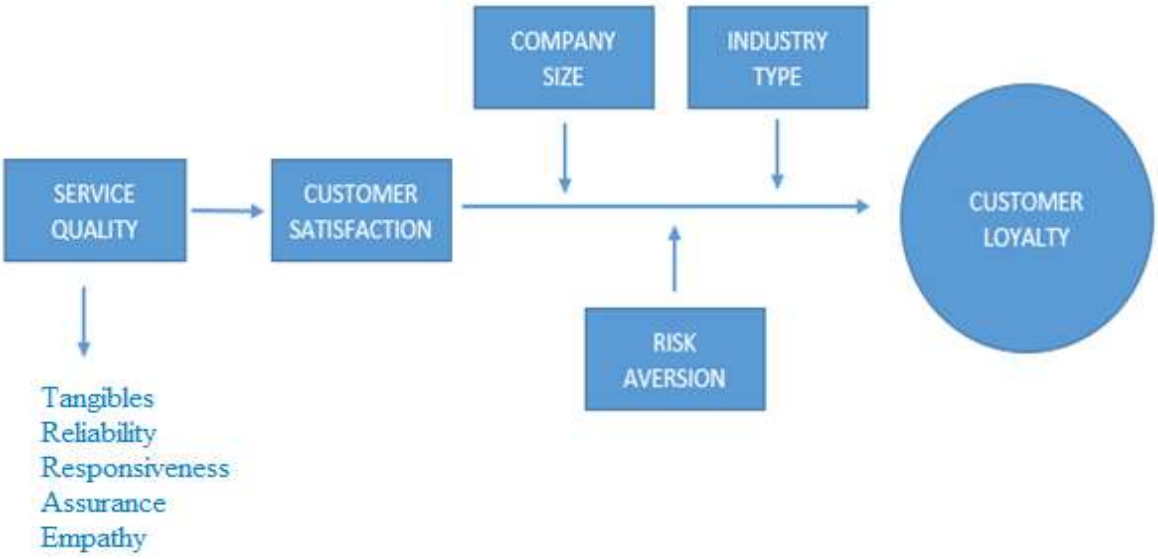

Figure 3.1. Theoretical framework for this study.

The following are the summary of the hypothesis that are to be tested in the research model:

- H1: There is a positive relationship between tangibles and customer satisfaction
- H2: There is a positive relationship between reliability and customer satisfaction

- H3: There is a positive relationship between responsiveness and customer satisfaction
- H4: There is a positive relationship between assurance and customer satisfaction
- H5: There is a positive relationship between empathy and customer satisfaction
- H6: There is a positive relationship between service quality and customer satisfaction
- H7: There is a positive relationship between customer satisfaction and behavioral-intentions loyalty
- H8: There is a positive relationship between customer satisfaction and attitudinal loyalty
- H9: There is a positive relationship between customer satisfaction and price loyalty
- H10: Type of industry has a significant effect on the relationship between customer satisfaction and behavioral-intentions loyalty
- H11: Type of industry has a significant effect on the relationship between customer satisfaction and attitudinal loyalty
- H12: Type of industry has a significant effect on the relationship between customer satisfaction and price loyalty
- H13: Annual sales has a significant effect on the relationship between customer satisfaction and behavioral-intentions loyalty
- H14: Annual sales has a significant effect on the relationship between customer satisfaction and attitudinal loyalty
- H15: Annual sales has a significant effect on the relationship between customer satisfaction and price loyalty
- H16: The number of employees has a significant effect on the relationship between customer satisfaction and behavioral-intentions loyalty
- H17: The number of employees has a significant effect on the relationship between customer satisfaction and attitudinal loyalty
- H18: The number of employees has a significant effect on the relationship between customer satisfaction and price loyalty
- H19: Risk aversion has a significant effect on the relationship between customer satisfaction and behavioral-intentions loyalty.

- H20: Risk aversion has a significant effect on the relationship between customer satisfaction and attitudinal loyalty.
- H21: Risk aversion has a significant effect on the relationship between customer satisfaction and price loyalty.

3.7. MAIN RESEARCH CONSTRUCTS AND DIMENSIONS

3.7.1. Service Quality Construct

In this research, 22 items adapted from Parasuraman, Zeithaml and Berry (1988) were used to measure service quality, using five-point Likert scale ranging from 1 for "strongly disagree" to 5 for "strongly agree" [30].

Table 3.2. Parasuraman, Zeithaml and Berry's Service Quality Construct (1988)

SERVICE QUALITY	1. XYZ has up-to-date equipment 2. XYZ's physical facilities are visually appealing 3. XYZ's employees are well dressed and appear neat 4. The appearance of the physical facilities of XYZ is sympathetic and reassuring 5. When XYZ promises to do something by a certain time, it does so 6. When you have problems, XYZ is sympathetic and reassuring 7. XYZ is dependable 8. XYZ provides its services at the time it promises to do so 9. XYZ keeps its records accurately 10. XYZ does not tell customers exactly when services will be performed 11. You do not receive prompt service from XYZ's employees 12. Employees of XYZ are not always willing to help customers 13. Employees of XYZ are too busy to respond to customer requests promptly

	14. You can trust employees of XYZ 15. You feel safe in your transactions with XYZ's employees 16. Employees of XYZ are polite 17. Employees get adequate support from XYZ to do their jobs well 18. XYZ does not give you individual attention 19. Employees of XYZ do not give you personal attention 20. Employees of XYZ do not know what your needs are 21. XYZ does not have your best interests at heart 22. XYZ does not have operating hours convenient to all their customer

3.7.2. Satisfaction Construct

In this study, 3 items adapted from Cronin, Brady, and Hult (2000) were used to measure customer satisfaction, using five-point Likert scale ranging from 1 for "strongly disagree" to 5 for "strongly agree" [62].

Table 3.3. Cronin, Brady, and Hult's Customer Satisfaction Construct (2000)

CUSTOMER SATISFACTION	1. My choice to purchase this service was a wise one 2. I think that I did the right thing when I purchased this service 3. This facility is exactly what is needed for this service

3.7.3. Risk Aversion Construct

In this research, 6 items adopted from Mandrik and Bao (2005) were used to measure risk aversion, using five-point Likert scale ranging from 1 for "strongly disagree" to 5 for "strongly agree" [47].

Table 3.4. Mandrik and Bao's Risk Aversion Construct (2005)

RISK AVERSION	1. I do not feel comfortable about taking chances 2. I prefer situations that have foreseeable outcomes 3. Before I make a decision, I like to be absolutely sure how things will turn out 4. I avoid situations that have uncertain outcomes 5. I feel comfortable improvising in new situations 6. I feel nervous when I have to make decisions in uncertain situations

3.7.4. Customer Loyalty Construct

In this study, 5 items adapted from Zeithaml, Berry, and Parasuraman (1996) were used to measure behavioral-intensions dimension of loyalty: consumers' intention to repurchase and their willingness to recommend the branded product, using five-point Likert scale ranging from 1 for "strongly disagree" to 5 for "strongly agree" [63].

In order to measure attitudinal loyalty, 3 items adapted from Foster and Cadogan (2000) were used, using five-point Likert scale ranging from 1 for "strongly disagree" to 5 for "strongly agree" [64].

Finally, 2 items adapted from Foster and Cadogan (2000) were used to measure price loyalty, using five-point Likert scale ranging from 1 for "strongly disagree" to 5 for "strongly agree" [64].

Table 3.5. Zeithaml, Berry, and Parasuraman's Behavioral Intentions Loyalty Construct (1996)

BEHAVIORAL-INTENTIONS LOYALTY	1. Say positive things about XYZ to other people 2. Recommend XYZ to someone who seeks your advice 3. Encourage friends and relatives to do business with XYZ 4. Consider XYZ your first choice to buy ____ services 5. Do more business with XYZ in the next few years

Table 3.6. Foster and Cadogan's Attitudinal Loyalty Construct (2000)

ATTITUDINAL LOYALTY	1. The XYZ brand has a personality 2. In comparison to other brands I know, the XYZ brand is growing in popularity 3. The XYZ brand is different from competing brands

Table 3.7. Foster and Cadogan's Price Loyalty Construct (2000)

PRICE LOYALTY	1. I would continue to do business with XYZ if its prices increased somewhat 2. I would pay more than competitors' prices for the benefits I am receiving from XYZ

4. DATA ANALYSIS AND DISCUSSION

4.1. RESPONDENTS' PROFILE

The first analysis with the data was done to find out the profile of the respondents. Descriptive statistics of the demographic variables were found.

4.2. DEMOGRAPHIC VARIABLES

Descriptive statistics for the survey respondents are type of industry, annual sales and the number of employees.

4.2.1. Respondents' Demographics – Type of Industry

The sample of survey respondents consists of ten industries: food, construction, automotive, healthcare, insurance, retail, transportation, textile, tourism and information technology. However, the majority of the respondents operate in three sectors which are food, textile and construction with 28.5, 23 and 21 percent respectively.

Table 4.1. Frequency distribution of industry.

Industry

	Frequency	Percent	Valid Percent	Cumulative Percent
Food	57	28.5	28.5	28.5
Construction	42	21.0	21.0	49.5
Automotive	13	6.5	6.5	56.0
Healthcare	9	4.5	4.5	60.5
Insurance	4	2.0	2.0	62.5
Retail	7	3.5	3.5	66.0
Transportation	3	1.5	1.5	67.5
Textile	46	23.0	23.0	90.5
Tourism	13	6.5	6.5	97.0
Information Technology	6	3.0	3.0	100.0
Total	200	100.0	100.0	

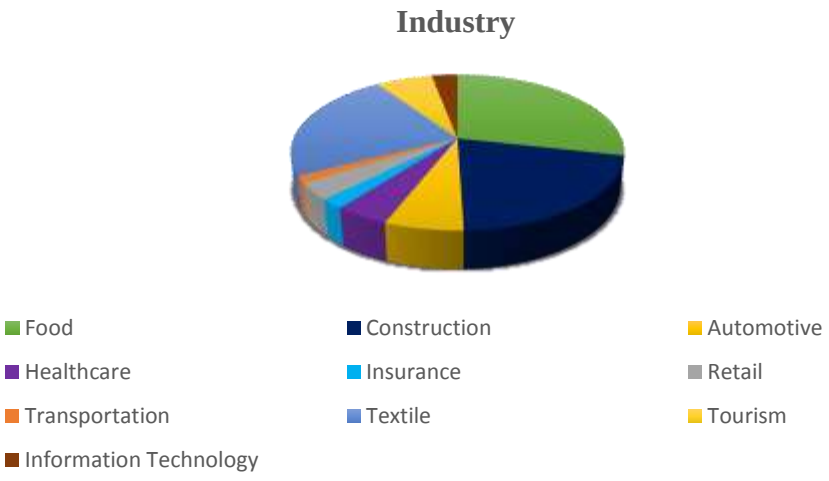

Figure 4.1. Industry frequency pie chart.

4.2.2. Respondents' Demographics – Annual Sales

Of all the respondents in this survey, 16% have annual sales of less than 500.000 TL, 16.5% have annual sales between 500.000 and 5.000.000 TL, 21.5% have annual sales between 5.000.001 and 10.000.000 TL, 26% have annual sales between 10.000.001 and 50.000.000 TL, 20% have annual sales between 50.000.001 and 150.000.000 TL.

Table 4.2. Frequency distribution of annual sale.

Annual Sales

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 500.000 TL	32	16.0	16.0	16.0
500.000-5.000.000 TL	33	16.5	16.5	32.5
5.000.001-10.000.000 TL	43	21.5	21.5	54.0
10.000.001-50.000.000 TL	52	26.0	26.0	80.0
50.000.001-150.000.000 TL	40	20.0	20.0	100.0
Total	200	100.0	100.0	

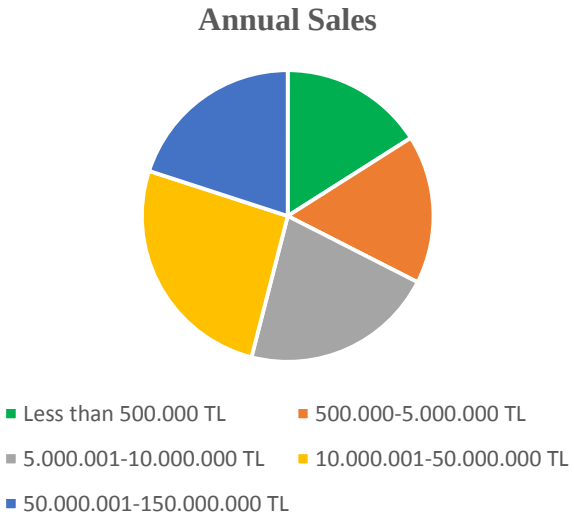

Figure 4.2. Annual sales frequency pie chart.

4.2.3. Respondents' Demographics – The Number of Employees

Of all the respondents in this survey, 45% have less than 25 employees, 20.5% have 25-50 employees, 28.5% have 51-100 employees and 6% have 101-200 employees.

Table 4.3. Frequency distribution of number of employees.

Number of Employees

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 25	90	45.0	45.0	45.0
25-50	41	20.5	20.5	65.5
51-100	57	28.5	28.5	94.0
101-200	12	6.0	6.0	100.0
Total	200	100.0	100.0	

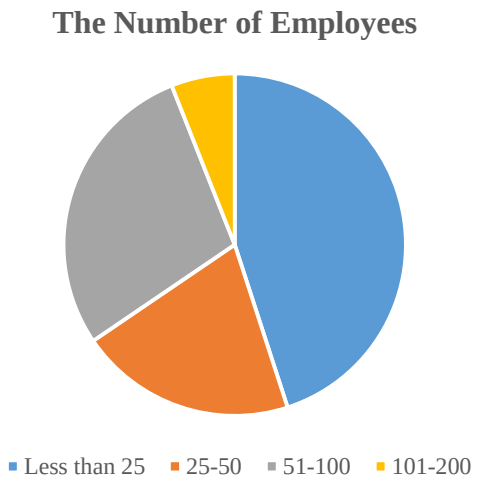

Figure 4.3. The number of employees frequency pie chart.

4.3. SERVICE QUALITY ANALYSIS

4.3.1. Factor and Reliability Analysis for Service Quality

Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett test of Sphericity tests were performed to test the appropriateness of data for conducting factor analysis. Result of the tests (KMO=0.893, p=0.000) were satisfactory. The diagonals of the anti-image correlation matrix were all over 0.50, supporting the inclusion of each item in the factor analysis. After all, principal component analysis and varimax rotation were employed to the data sets. Factors with eigenvalues over one were retained. To test the internal consistency of factors, Cronbach's coefficient alpha reliability was estimated. As a result of the analysis, three dimensions were found. These three dimensions were empathy, reliability and tangibles. According to factor and reliability analysis, responsiveness and assurance were not among the dimensions that form service quality. Therefore, the following hypotheses were rejected:

- H3: There is a positive relationship between responsiveness and customer satisfaction
- H4: There is a positive relationship between assurance and customer satisfaction

Table 4.4. KMO and Bartlett's test for service quality.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.893
Bartlett's Test of Sphericity	Approx. Chi-Square	1856.932
	df	45
	Sig.	.000

Table 4.5. Rotated component matrix for service quality.

Rotated Component Matrix[a]

	Component		
	1	2	3
Employees of our electricity supplier give us personal attention	.891	.279	.165
Employees of our electricity supplier understand our special needs	.888	.302	.170
Our electricity supplier has our best interests at heart	.876	.280	.188
Our electricity supplier gives us individual attention	.848	.318	.228
When we have problems, our electricity supplier is reassuring	.260	.862	.167
When our electricity supplier promises to do something by a certain time, it does so	.206	.860	.258
Our electricity supplier is dependable	.385	.789	.193
Our electricity supplier provides its services at the time it promises to do so	.376	.763	.213
Our electricity supplier has up-to-date equipment	.162	.225	.897
Our electricity supplier’s physical facilities are visually appealing	.266	.255	.848

Table 4.6. Factor and reliability test results for service quality.

Factor Name	Factor Item	Factor Loading	% Variance	Reliability
Empathy	Employees of our electricity supplier give us personal attention	.891	62.584	.959
	Employees of our electricity supplier understand our special needs	.888		
	Our electricity supplier has our best interests at heart	.876		
	Our electricity supplier gives us individual attention	.848		
Reliability	When we have problems, our electricity supplier is reassuring	.862	12.818	.920
	When our electricity supplier promises to do something by a certain time, it does so	.860		
	Our electricity supplier is dependable	.789		
	Our electricity supplier provides its services at the time it promises to do so	.763		
Tangibles	Our electricity supplier has up-to-date equipment	.897	10.213	.844
	Our electricity supplier's physical facilities are visually appealing	.848		

4.4. CUSTOMER SATISFACTION ANALYSIS

4.4.1. Factor and Reliability Analysis for Customer Satisfaction

Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett test of Sphericity tests were performed to test the appropriateness of data for conducting factor analysis. Result of the tests (KMO=0.721, p=0.000) were satisfactory. The diagonals of the anti-image correlation matrix were all over 0.50, supporting the inclusion of each item in the factor analysis. After all, principal component analysis and varimax rotation were employed to the data sets. Factors with eigenvalues over one were retained. To test the internal consistency of factors, Cronbach's coefficient alpha reliability was estimated. According to the factor and reliability test result for customer satisfaction, one dimension was found. All three questions within the dimension have meaningful factor loadings and satisfactory levels of reliability. As it can be seen from Table 4.9, these three questions altogether can explain 91.58 % of the variance of satisfaction. As a result, it can be concluded that the variable of satisfaction can be explained by measuring the responses of customers to these questions.

Table 4.7. KMO and Bartlett's test for customer satisfaction.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.721
Bartlett's Test of Sphericity	Approx. Chi-Square	743.756
	df	3
	Sig.	.000

Table 4.8. Component matrix for customer satisfaction.

Component Matrix[a]

	Component
	1
I think that I did the right thing when I purchased electricity from our supplier	.977
My choice to purchase electricity from my supplier was a wise one	.969
My electricity supplier is exactly what is needed for this service	.924

Table 4.9. Factor and reliability test result for customer satisfaction.

Factor Name	Factor Item	Factor Loading	% Variance	Reliability
Satisfaction	I think that I did the right thing when I purchased electricity from our supplier	.977	91.588	.953
	My choice to purchase electricity from my supplier was a wise one	.969		
	My electricity supplier is exactly what is needed for this service	.924		

4.4.2. Customer Satisfaction by Industry Type

To test if there were differences among how customer satisfaction was perceived by respondents with regard to their industry type, one way ANOVA test was performed. Due to the fact that some industry groups do not have satisfactory number of respondents, it was not possible to measure if there was a strong difference in customer satisfaction level with respect to industry type. However, customer satisfaction level of respondents from food, construction and textile industries can be compared as they have statistically meaningful sample size.

As it can be seen from the table, the mean score of food sector respondents' satisfaction level is nearly 3.15, which means that they have moderate level of satisfaction. The mean score of textile sector respondents' satisfaction level is 3.54, which means that their satisfaction level is slightly higher than the moderate level. Finally, the mean score of construction sector respondents' satisfaction level is nearly 3.86, which is the highest level among these three sectors.

Table 4.10. ANOVA test result for customer satisfaction by industry type.

Descriptives

Sectors	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
					Lower Bound	Upper Bound		
Food	57	3.1520	.87530	.11594	2.9198	3.3843	1.00	5.00
Construction	42	3.8571	.75849	.11704	3.6208	4.0935	1.33	5.00
Automotive	13	3.8718	.90818	.25188	3.3230	4.4206	2.00	5.00
Healthcare	9	3.7407	.66202	.22067	3.2319	4.2496	2.67	5.00
Insurance	4	3.0000	.00000	.00000	3.0000	3.0000	3.00	3.00
Retail	7	3.0476	.44840	.16948	2.6329	3.4623	2.67	4.00
Transportation	3	2.8889	.19245	.11111	2.4108	3.3670	2.67	3.00
Textile	46	3.5435	.81455	.12010	3.3016	3.7854	2.00	5.00
Tourism	13	3.3846	.65044	.18040	2.9916	3.7777	3.00	5.00
InformationTech	6	4.0000	1.22927	.50185	2.7100	5.2900	1.67	5.00
Total	200	3.4933	.84932	.06006	3.3749	3.6118	1.00	5.00

4.4.3. Customer Satisfaction by Annual Sales

To test if there were differences among how customer satisfaction was perceived by respondents with regard to their annual sales, one way ANOVA test was performed. Due to the fact that all groups have statistically meaningful sample size, it was possible to measure if there was a strong difference in customer satisfaction level with respect to companies' annual sales.

The analysis of variance was performed among the five groups with different annual sales levels. Levene's statistic was calculated for the variances in ANOVA. According to the result of Levene Statistics, variances of groups were equal, since p value > 0.05. Hence, the precondition to make One Way Anova is satisfied.

Table 4.11. Levene statistics test result.

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
1.622	4	195	.170

When Table 4.12 is analyzed, it is seen that the $p < 0.05$. Hence, it can be concluded that there is a significant difference in the satisfaction of respondents with different annual sales.

Table 4.12. ANOVA table for customer satisfaction by annual sales.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	30.591	4	7.648	13.203	.000
Within Groups	112.956	195	.579		
Total	143.547	199			

As it can be seen from Table 4.13, there is a general upward trend in respondents' satisfaction level with respect to the annual sales. The most satisfied group is those who have annual sales between 50.000.001-150.000.000 TL.

Table 4.13. ANOVA test result for customer satisfaction by annual sales.

Descriptives

Annual Sales	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
					Lower Bound	Upper Bound		
Less than 500.000 TL	32	3.1563	.88388	.15625	2.8376	3.4749	1.00	5.00
500.000-5.000.000 TL	33	2.9596	.78509	.13667	2.6812	3.2380	1.00	5.00
5.000.001-10.000.000 TL	43	3.2868	.64890	.09896	3.0871	3.4865	2.00	4.67
10.000.001-50.000.000 TL	52	3.8269	.85173	.11811	3.5898	4.0640	1.33	5.00
50.000.001-150.000.000 TL	40	3.9917	.60618	.09584	3.7978	4.1855	2.67	5.00
Total	200	3.4933	.84932	.06006	3.3749	3.6118	1.00	5.00

4.4.4. Customer Satisfaction by the Number of Employees

To analyze if there were differences between how customer satisfaction was perceived by respondents with regard to the number of employees they have, one way ANOVA test was performed. Due to the fact that some industry groups do not have satisfactory number of respondents, it was not possible to measure if there was a strong difference in customer satisfaction level with respect to the companies' number of employees. However, customer satisfaction level of respondents with less than 25 employees, 25-50 employees and 51-100 employees can be compared as they have statistically meaningful sample size.

As it can be seen from the table, among these three groups, respondents' satisfaction level increases with the rise in the number of employees.

Table 4.14. ANOVA test result for customer satisfaction by number of employees.

Descriptives

Number of Employees	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
					Lower Bound	Upper Bound		
Less than 25	90	3.1630	.84689	.08927	2.9856	3.3403	1.00	5.00
25-50	41	3.5366	.77056	.12034	3.2934	3.7798	2.00	5.00
51-100	57	3.8538	.73197	.09695	3.6596	4.0480	1.33	5.00
101-200	12	4.1111	.60858	.17568	3.7244	4.4978	3.00	5.00
Total	200	3.4933	.84932	.06006	3.3749	3.6118	1.00	5.00

4.5. REGRESSION ANALYSES BETWEEN SERVICE QUALITY AND CUSTOMER SATISFACTION

To test revised theoretical model a series of regression analyses were conducted.

4.5.1. Simple Linear Regression between Empathy and Customer Satisfaction

In order to test the relationship between empathy and customer satisfaction, simple linear regression analysis was performed.

Figure 4.4. Regression for empathy and customer satisfaction.

As it can be seen from Table 4.15, p value is equal to 0.000. Hence, it is statistically possible to estimate customer satisfaction with the variable of empathy.

Table 4.15. ANOVA table for customer satisfaction with the variable of empathy.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	79.479	1	79.479	245.626	.000[b]
	Residual	64.068	198	.324		
	Total	143.547	199			

Before constructing the regression equation, coefficients of constant and empathy were analyzed. Significance of the constant and t value of the constant are 0.000 and 9.688 respectively. Significance of the empathy and t value of the empathy are 0.000 and 15.672. Therefore, both variables were included in the model.

Table 4.16. Coefficients table for customer satisfaction with variable of empathy.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.370	.141		9.688	.000		
	Empathy	.669	.043	.744	15.672	.000	1.000	1.000

The overall explanatory power of model is 55.4% (R Sq = 0.554). Hence, it can be concluded that 55.4% of the variation in customer satisfaction can be explained with the variable of empathy. Therefore, the following hypothesis was accepted:

- H5: There is a positive relationship between empathy and customer satisfaction

Table 4.17. Model summary table for customer satisfaction with variable of empathy.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.744[a]	.554	.551	.56884

4.5.2. Simple Linear Regression between Reliability and Customer Satisfaction

In order to test the relationship between reliability and customer satisfaction, simple linear regression analysis was performed.

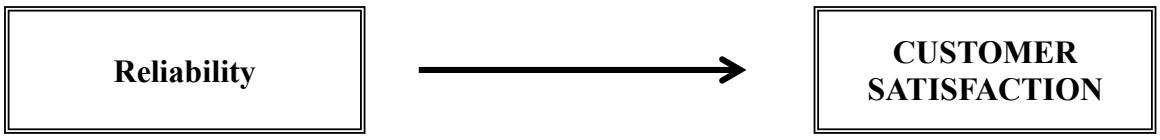

Figure 4.5. Regression for reliability and customer satisfaction.

As it can be seen from Table 4.18, p value is equal to 0.000. Hence, it is statistically possible to estimate customer satisfaction with the variable of reliability.

Table 4.18. ANOVA table for customer satisfaction with the variable of reliability.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	72.852	1	72.852	204.040	.000[b]
	Residual	70.695	198	.357		
	Total	143.547	199			

Before constructing the regression equation, coefficients of constant and reliability were analyzed. Significance of the constant and t value of the constant are 0.006 and 2.753 respectively. Significance of the reliability and t value of the reliability are 0.000 and 14.284. Hence, both variables were included in the model.

Table 4.19. Coefficients table for customer satisfaction with variable of reliability.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.574	.209		2.753	.006		
	Reliability	.795	.056	.712	14.284	.000	1.000	1.000

The overall explanatory power of model is 50.8% (R Sq = 0.508). Hence, it can be concluded that 50.8% of the variation in customer satisfaction can be explained with the variable of reliability. Therefore, the following hypothesis was accepted:

- H2: There is a positive relationship between reliability and customer satisfaction.

Table 4.20. Model summary table for customer satisfaction with variable of reliability.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.712[a]	.508	.505	.59753

4.5.3. Simple Linear Regression between Tangibles and Customer Satisfaction

In order to test the relationship between tangibles and customer satisfaction, simple linear regression analysis was performed.

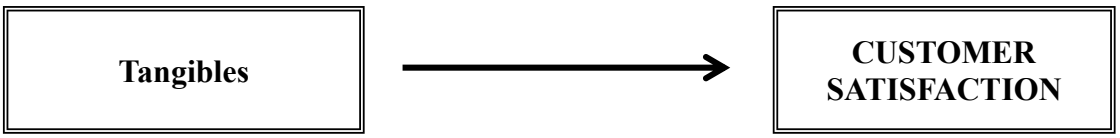

Figure 4.6. Regression for tangibles and customer satisfaction.

As it can be seen from Table 4.21, p value is equal to 0.000. Hence, it is statistically possible to estimate customer satisfaction with the variable of tangibles.

Table 4.21. ANOVA table for customer satisfaction with the variable of tangibles.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30.683	1	30.683	53.829	.000[b]
	Residual	112.863	198	.570		
	Total	143.547	199			

Before constructing the regression equation, coefficients of constant and tangibles were analyzed. Significance of the constant and t value of the constant are 0.000 and 7.298 respectively. Significance of the tangibles and t value of the tangibles are 0.000 and 7.337. Therefore, both variables were included in the model.

Table 4.22. Coefficients table for customer satisfaction with variable of tangibles.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.764	.242		7.298	.000		
	Tangibles	.511	.070	.462	7.337	.000	1.000	1.000

The overall explanatory power of model is 21.4% (R Sq = 0.214). Hence, it can be concluded that 21.4% of the variation in customer satisfaction can be explained with the variable of tangibles. Therefore, the following hypothesis was accepted:

- H1: There is a positive relationship between tangibles and customer satisfaction

Table 4.23. Model summary table for customer satisfaction with variable of tangibles.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.462[a]	.214	.210	.75499

4.5.4. Multiple Linear Regression between Service Quality and Customer Satisfaction

In order to test the relationship among empathy, reliability, tangibles and customer satisfaction, multiple linear regression analysis was performed.

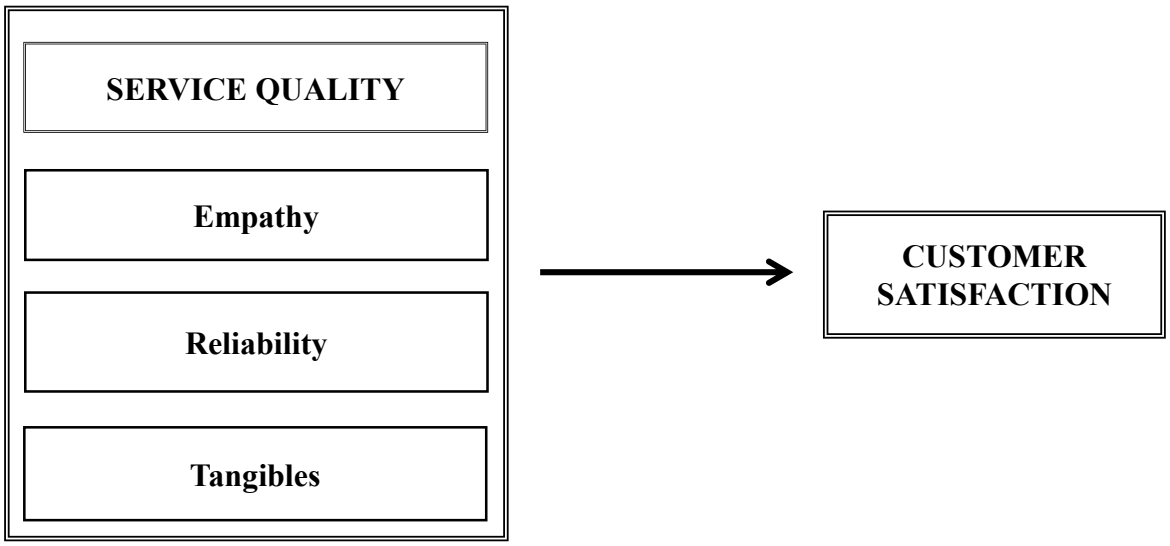

Figure 4.7. Multiple regression for service quality and customer satisfaction.

As it can be seen from Table 4.24, p value is equal to 0.000. Hence, it is statistically possible to estimate customer satisfaction with at least one variable. Moreover, It can be inferred from Table 4.24 that the factor of tangibles was automatically excluded in the analysis.

Table 4.24. ANOVA table for customer satisfaction with at least one variable.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	79.479	1	79.479	245.626	.000[b]
	Residual	64.068	198	.324		
	Total	143.547	199			
2	Regression	92.733	2	46.366	179.757	.000[c]
	Residual	50.814	197	.258		
	Total	143.547	199			

a. Dependent Variable: Satisfaction

b. Predictors: (Constant), Empathy

c. Predictors: (Constant), Empathy, Reliability

In order to find out which independent variables make meaningful contribution to the model, t and p values of all variables (constant, empathy, and reliability) were analyzed. After the analysis, it was seen that all variables can be used to measure the variable of customer satisfaction.

Table 4.25. Coefficients table for customer satisfaction with at least one variable.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.370	.141		9.688	.000		
	Empathy	.669	.043	.744	15.672	.000	1.000	1.000
2	(Constant)	.472	.178		2.658	.009		
	Empathy	.438	.050	.487	8.779	.000	.583	1.714
	Reliability	.444	.062	.398	7.168	.000	.583	1.714

The overall explanatory power of model is 64.6% (R Sq = 0.646). Hence, it can be concluded that 64.6% of the variation in customer satisfaction can be explained with the variables of empathy and reliability. Hence, the following hypothesis was accepted:

- H6: There is a positive relationship between service quality and customer satisfaction.

Table 4.26. Model summary table for customer satisfaction with at least one variable.

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.744[a]	.554	.551	.56884
2	.804[b]	.646	.642	.50788

a. Predictors: (Constant), Empathy

b. Predictors: (Constant), Empathy, Reliability

c. Dependent Variable: Satisfaction

4.6. RISK AVERSION ANALYSIS

4.6.1. Factor and Reliability Analysis for Risk Aversion

Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett test of Sphericity tests were performed to test the appropriateness of data for conducting factor analysis. Result of the tests (KMO=0.783, p=0.000) were satisfactory. The diagonals of the anti-image correlation matrix were all over 0.50, supporting the inclusion of each item in the factor analysis. After all, principal component analysis and varimax rotation were employed to the data sets. Factors with eigenvalues over one were retained. To test the internal consistency of factors, Cronbach's coefficient alpha reliability was estimated. As a result of the analysis, one dimension was found.

Table 4.27. KMO and Bartlett's test for risk aversion.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.783
Bartlett's Test of Sphericity	Approx. Chi-Square	318.233
	df	15
	Sig.	.000

Table 4.28. Component matrix for risk aversion.

Component Matrix[a]

	Component
	1
Before I make a decision, I like to be absolutely sure how things will turn out	.758
I avoid situations that have uncertain outcomes	.747
I prefer situations that have foreseeable outcomes	.705
I feel nervous when I have to make decisions in uncertain situations	.698
I do not feel comfortable about taking chances	.664
I do not feel comfortable improvising in new situations	.613

Table 4.29. Factor and reliability test result for risk aversion.

Factor Name	Factor item	Factor Loading	%Variance	Reliability
Risk Aversion	Before I make a decision, I like to be absolutely sure how things will turn out	.758	48.901	.776
	I avoid situations that have uncertain outcomes	.747		
	I prefer situations that have foreseeable outcomes	.705		
	I feel nervous when I have to make decisions in uncertain situations	.698		
	I do not feel comfortable about taking chances	.664		
	I do not feel comfortable improvising in new situations	.613		

4.7. CUSTOMER LOYALTY ANALYSIS

4.7.1. Factor and Reliability Analysis for Customer Loyalty

Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett test of Sphericity tests were performed to test the appropriateness of data for conducting factor analysis. Result of the tests (KMO=0.867, p=0.000) were satisfactory. The diagonals of the anti-image correlation matrix were all over 0.50, supporting the inclusion of each item in the factor analysis. After all, principal component analysis and varimax rotation were employed to the data sets. Factors with eigenvalues over one were retained. To test the internal consistency of factors, Cronbach's coefficient alpha reliability was estimated. As a result of the analysis,

two dimensions were found. These two dimensions are behavioral-intentions loyalty and price loyalty. According to the factor and reliability analysis, attitudinal loyalty was not among the dimensions that form customer loyalty. Therefore, the following hypotheses were rejected:

- H8: There is a positive relationship between customer satisfaction and attitudinal loyalty
- H11: Type of industry has a significant effect on the relationship between customer satisfaction and attitudinal loyalty
- H14: Annual sales has a significant effect on the relationship between customer satisfaction and attitudinal loyalty
- H17: The number of employees has a significant effect on the relationship between customer satisfaction and attitudinal loyalty
- H20: Risk aversion has a significant effect on the relationship between customer satisfaction and attitudinal loyalty.

Table 4.30. KMO and Bartlett's test for customer loyalty.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.867
Bartlett's Test of Sphericity	Approx. Chi-Square	1566.956
	df	21
	Sig.	.000

Table 4.31. Rotated component matrix for customer loyalty.

Rotated Component Matrix[a]

	Component	
	1	2
I recommend my electricity supplier to someone who seeks my advice	.950	.181
I would like to do more business with my electricity supplier in the next few years	.931	.183
I encourage friends and relatives to do business with my electricity supplier	.925	.155
I consider my electricity supplier my first choice to buy electricity	.919	.180
I say positive things about my electricity supplier to other people	.876	.276
I would continue to do business with my electricity supplier if its prices increased somewhat	.149	.946
I would pay more than competitors' prices for the benefits I am receiving from my electricity supplier	.243	.922

Table 4.32. Factor and reliability test result for customer loyalty.

Factor Name	Factor Item	Factor Loading	% Variance	Reliability
Behavioral-Intentions Loyalty	I would like to do more business with my electricity supplier in the next few years	.950	69.417	.967
	I say positive things about my electricity supplier to other people	.931		
	I encourage friends and relatives to do business with my electricity supplier	.925		
	I consider my electricity supplier my first choice to buy electricity	.919		
	I recommend my electricity supplier to someone who seeks my advice	.876		
Price Loyalty	I would continue to do business with my electricity supplier if its prices increased somewhat	.946	91.093	.902
	I would pay more than competitors' prices for the benefits I am receiving from my electricity supplier	.922		

4.8. REGRESSION ANALYSES BETWEEN CUSTOMER SATISFACTION AND CUSTOMER LOYALTY

4.8.1. Simple Linear Regression between Customer Satisfaction and Behavioral-Intentions Loyalty

In order to test the relationship between customer satisfaction and behavioral-intentions loyalty, simple linear regression analysis was performed.

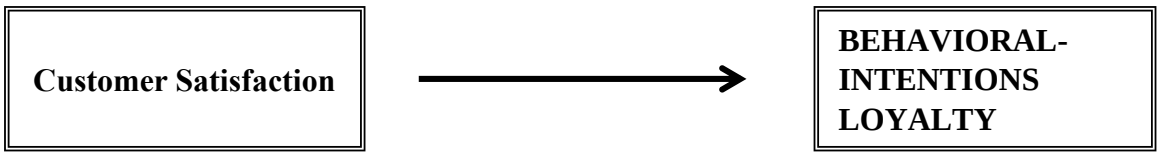

Figure 4.8. Regression for customer satisfaction and behavioral-intentions loyalty.

As it can be seen from Table 4.33, p value is equal to 0.000. Hence, it is statistically possible to estimate behavioral-intentions loyalty with the variable of customer satisfaction.

Table 4.33. ANOVA table for behavioral-intentions loyalty with the variable of customer satisfaction.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	95.807	1	95.807	417.972	.000[b]
	Residual	45.385	198	.229		
	Total	141.192	199			

In order to find out which independent variables make meaningful contribution to the model, t and p values of all variables (constant, satisfaction) were analyzed. After the analysis, it was seen that all variables can be used to measure the variable of customer loyalty.

Table 4.34. Coefficients table for behavioral-intentions loyalty with the variable of customer satisfaction.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.425	.144		2.959	.003		
	Satisfaction	.817	.040	.824	20.444	.000	1.000	1.000

The overall explanatory power of model is 67.9% (R Sq = 0.679). Hence, it can be concluded that 67.9% of the variation in behavioral-intentions loyalty can be explained with the variable of customer satisfaction. Hence, the following hypothesis was accepted:

- H7: There is a positive relationship between customer satisfaction and behavioral-intentions loyalty

Table 4.35. Model summary table for behavioral-intentions loyalty with the variable of customer satisfaction.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.824[a]	.679	.677	.47877

4.8.2. Simple Linear Regression between Customer Satisfaction and Price Loyalty

In order to test the relationship between customer satisfaction and price loyalty, simple linear regression analysis was performed.

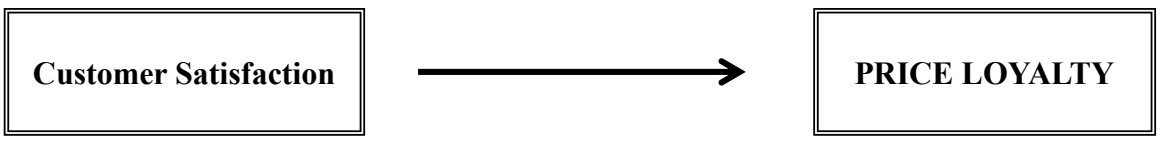

Figure 4.9. Regression for customer satisfaction and price loyalty.

As it can be seen from Table 4.36, p value is equal to 0.000. Hence, it is statistically possible to estimate price loyalty with the variable of customer satisfaction.

Table 4.36. ANOVA table for price loyalty with the variable of customer satisfaction.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.508	1	12.508	29.418	.000[b]
	Residual	84.187	198	.425		
	Total	96.695	199			

In order to find out which independent variables make meaningful contribution to the model, t and p values of all variables (constant, satisfaction) were analyzed. After the analysis, it was seen that all variables can be used to measure the variable of customer loyalty.

Table 4.37. Coefficients table for price loyalty with the variable of customer satisfaction.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.624	.196		3.189	.002		
	Satisfaction	.295	.054	.360	5.424	.000	1.000	1.000

The overall explanatory power of model is 12.9% (R Sq = 0.129). Hence, it can be concluded that 12.9% of the variation in price loyalty can be explained with the variable of customer satisfaction. Therefore, the following hypothesis was accepted:

- H9: There is a positive relationship between customer satisfaction and price loyalty

Table 4.38. Model summary table for price loyalty with the variable of customer satisfaction.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.360[a]	.129	.125	.65206

4.9. REGRESSION ANALYSIS BETWEEN CUSTOMER SATISFACTION, TYPE OF INDUSTRY AND CUSTOMER LOYALTY

4.9.1. Multiple Linear Regression between Customer Satisfaction, Type of Industry and Behavioral-Intentions Loyalty

In order to test if type of industry has a significant effect on the relationship between customer satisfaction and behavioral-intentions loyalty, multiple linear regression analysis was performed. Due to the fact that most of the industry groups did not have satisfactory number of respondents, only food, construction and textile industries that have statistically meaningful sample size were included in the regression analysis.

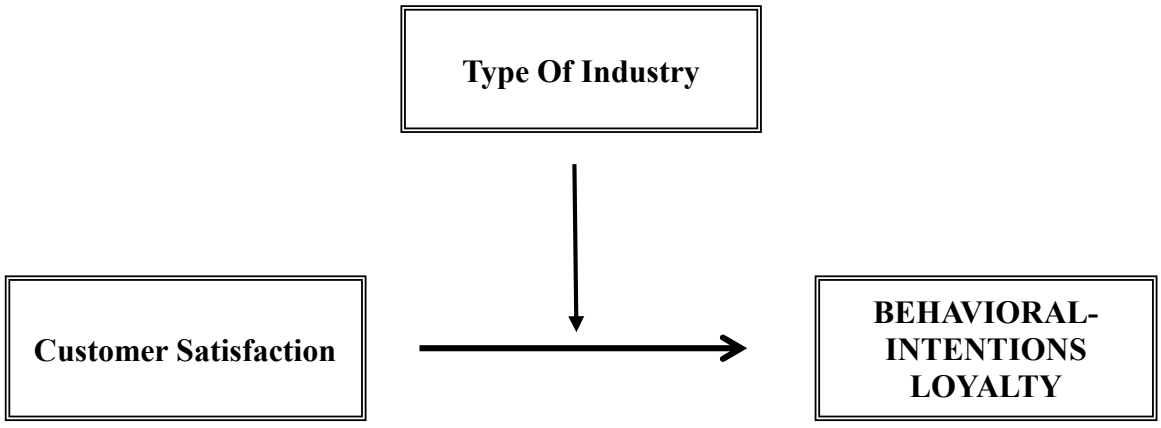

Figure 4.10. Regression for customer satisfaction, type of industry and behavioral-intentions loyalty.

As it can be seen from Table 4.39, p value is equal to 0.000. Hence, it is statistically possible to estimate behavioral-intentions loyalty with the variables of customer satisfaction and type of industry.

Table 4.39. ANOVA table for behavioral-intentions loyalty with the variables of customer satisfaction and type of industry.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	74.428	1	74.428	318.500	.000[b]
	Residual	33.417	143	.234		
	Total	107.844	144			

In order to find out which independent variables make meaningful contribution to the model, t and p values of all variables (constant, satisfaction) were analyzed. As it can be seen from Table 4.40, type of industry was excluded from the analysis. Hence, it can be concluded that type of industry does not have a significant effect on the relationship between customer satisfaction and behavioral-intentions loyalty. The following hypothesis was rejected:

- H10: Type of industry has a significant effect on the relationship between customer satisfaction and behavioral-intentions loyalty

Table 4.40. Coefficients table for behavioral-intentions loyalty with the variables of customer satisfaction and type of industry.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.385	.166		2.317	.022
	Satisfaction	.828	.046	.831	17.847	.000

4.9.2. Multiple Linear Regression between Customer Satisfaction, Type of Industry and Price Loyalty

In order to test if type of industry has a significant effect on the relationship between customer satisfaction and price loyalty, multiple linear regression analysis was performed. Due to the fact that most of the industry groups did not have satisfactory number of respondents, only food, construction and textile industries that have statistically meaningful sample size were included in the regression analysis.

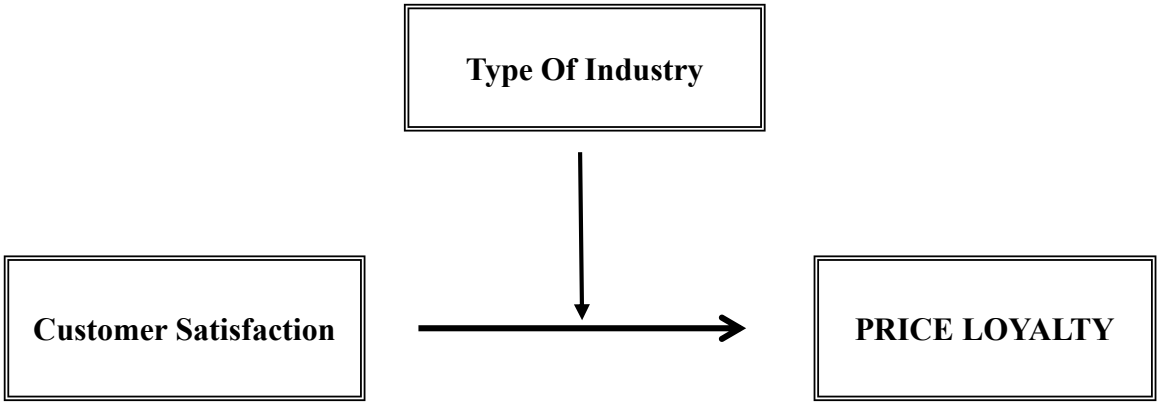

Figure 4.11. Regression for customer satisfaction, type of industry and price loyalty.

As it can be seen from Table 4.41, p value is equal to 0.000. Hence, it is statistically possible to estimate price loyalty with the variables of customer satisfaction and type of industry.

Table 4.41. ANOVA table for price loyalty with the variables of customer satisfaction and type of industry.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.716	2	6.358	15.309	.000[b]
	Residual	58.974	142	.415		
	Total	71.690	144			

In order to find out which independent variables make meaningful contribution to the model, t and p values of all variables (constant, satisfaction and industry) were analyzed. As it can be seen from Table 4.42, p value of type of industry is greater than 0.05. Hence, it can be concluded that type of industry does not have a significant effect on the relationship between customer satisfaction and price loyalty. The following hypothesis was rejected:

- H12: Type of industry has a significant effect on the relationship between customer satisfaction and price loyalty

Table 4.42. Coefficients table for price loyalty with the variables of customer satisfaction and type of industry.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.465	.226		2.063	.041
	Satisfaction	.337	.062	.415	5.432	.000
	Industry	.009	.017	.041	.543	.588

4.10. REGRESSION ANALYSIS BETWEEN CUSTOMER SATISFACTION, COMPANY SIZE AND CUSTOMER LOYALTY

4.10.1. Multiple Linear Regression between Customer Satisfaction, Annual Sales and Behavioral-Intentions Loyalty

In order to test if annual sales has a significant effect on the relationship between customer satisfaction and behavioral-intentions loyalty, multiple linear regression analysis was performed.

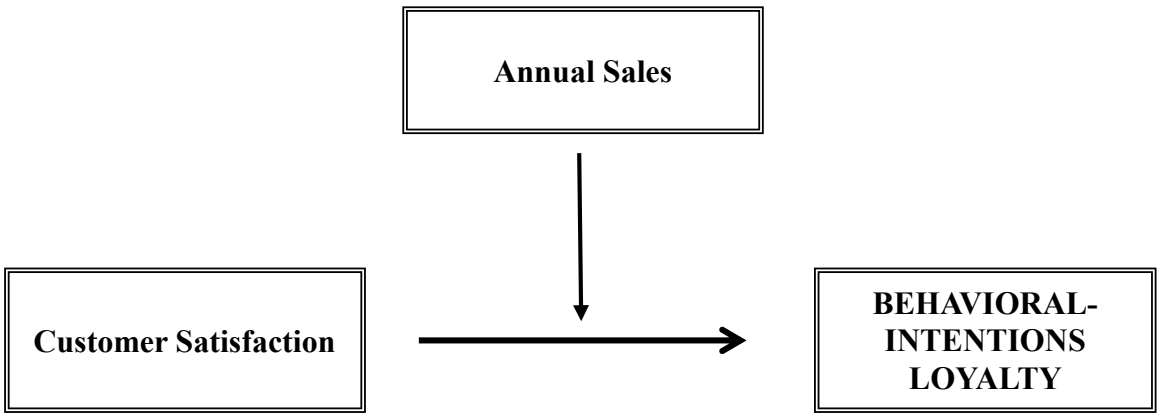

Figure 4.12. Regression for customer satisfaction, annual sales and behavioral-intentions loyalty.

As it can be seen from Table 4.43, p value is equal to 0.000. Hence, it is statistically possible to estimate behavioral-intentions loyalty with the variables of customer satisfaction and annual sales.

Table 4.43. ANOVA table for behavioral-intentions loyalty with the variables of customer satisfaction and annual sales.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	95.807	1	95.807	417.972	.000[b]
	Residual	45.385	198	.229		
	Total	141.192	199			

In order to find out which independent variables make meaningful contribution to the model, t and p values of all variables (constant, satisfaction) were analyzed. As it can be seen from Table 4.44, annual sales was excluded from the analysis. Hence, it can be concluded that annual sales does not have a significant effect on the relationship between customer satisfaction and behavioral-intentions loyalty. The following hypothesis was rejected:

- H13: Annual sales has a significant effect on the relationship between customer satisfaction and behavioral-intentions loyalty

Table 4.44. Coefficients table for behavioral-intentions loyalty with the variables of customer satisfaction and annual sales.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.425	.144		2.959	.003
	Satisfaction	.817	.040	.824	20.444	.000

4.10.2. Multiple Linear Regression between Customer Satisfaction, Annual Sales and Price Loyalty

In order to test if annual sales has a significant effect on the relationship between customer satisfaction and price loyalty, multiple linear regression analysis was performed.

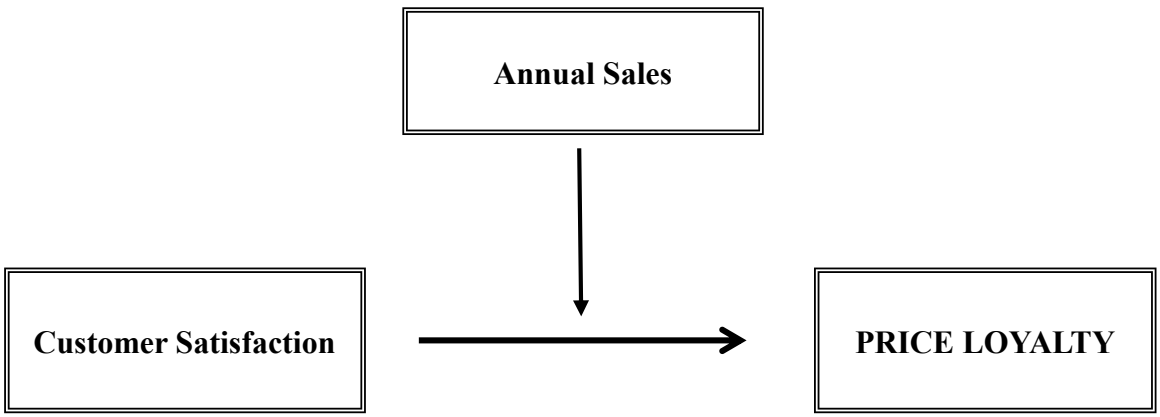

Figure 4.13. Regression for customer satisfaction, annual sales and price loyalty.

As it can be seen from Table 4.45, p value is equal to 0.000. Hence, it is statistically possible to estimate price loyalty with the variables of customer satisfaction and annual sales.

Table 4.45. ANOVA table for price loyalty with the variables of customer satisfaction and annual sales.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.508	1	12.508	29.418	.000[b]
	Residual	84.187	198	.425		
	Total	96.695	199			

In order to find out which independent variables make meaningful contribution to the model, t and p values of all variables (constant, satisfaction) were analyzed. As it can be seen from Table 4.46, annual sales was excluded from the analysis. Hence, it can be concluded that annual sales does not have a significant effect on the relationship between customer satisfaction and price loyalty. The following hypothesis was rejected:

- H15: Annual sales has a significant effect on the relationship between customer satisfaction and price loyalty

Table 4.46. Coefficients table for price loyalty with the variables of customer satisfaction and annual sales.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.624	.196		3.189	.002
	Satisfaction	.295	.054	.360	5.424	.000

4.10.3. Multiple Linear Regression between Customer Satisfaction, The Number of Employees and Behavioral-Intentions Loyalty

In order to test if the number of employees has a significant effect on the relationship between customer satisfaction and behavioral-intentions loyalty, multiple linear regression analysis was performed. Due to the fact that SMEs' with 101-200 and 201-250 employees did not have satisfactory sample size, these two groups were excluded from the analysis.

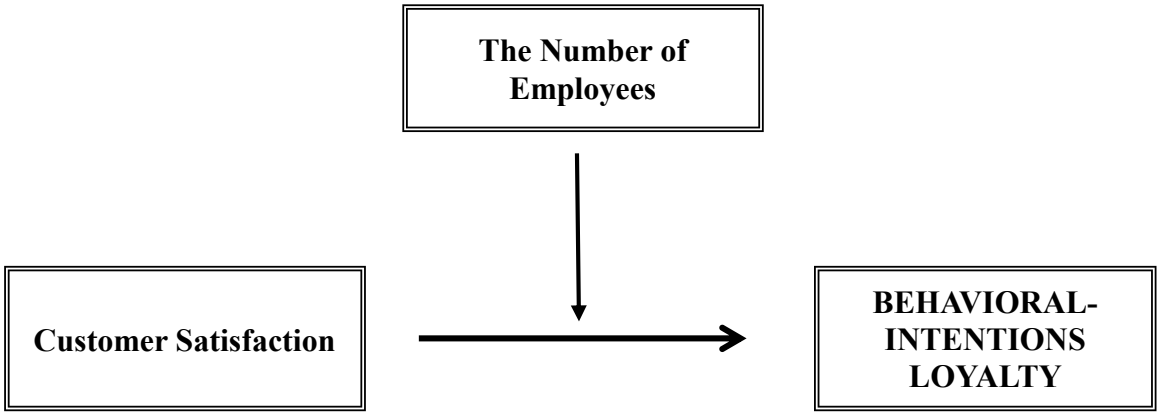

Figure 4.14. Regression for customer satisfaction, the number of employees and behavioral-intentions loyalty.

As it can be seen from Table 4.47, p value is equal to 0.000. Hence, it is statistically possible to estimate behavioral-intentions loyalty with the variables of customer satisfaction and the number of employees.

Table 4.47. ANOVA table for behavioral-intentions loyalty with the variables of customer satisfaction and the number of employees.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	90.590	1	90.590	394.428	.000[b]
	Residual	42.720	186	.230		
	Total	133.310	187			

In order to find out which independent variables make meaningful contribution to the model, t and p values of all variables (constant, satisfaction) were analyzed. As it can be seen from Table 4.48, the number of employees was excluded from the analysis. Hence, it can be concluded that the number of employees does not have a significant effect on the relationship between customer satisfaction and behavioral-intentions loyalty. The following hypothesis was rejected:

- H16: The number of employees has a significant effect on the relationship between customer satisfaction and behavioral-intentions loyalty

Table 4.48. Coefficients table for behavioral-intentions loyalty with the variables of customer satisfaction and the number of employees.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.415	.147		2.828	.005
	Satisfaction	.820	.041	.824	19.860	.000

4.10.4. Multiple Linear Regression between Customer Satisfaction, The Number of Employees and Price Loyalty

In order to test if the number of employees has a significant effect on the relationship between customer satisfaction and price loyalty, multiple linear regression analysis was performed. Due to the fact that SMEs' with 101-200 and 201-250 employees did not have satisfactory sample size, these two groups were excluded from the analysis.

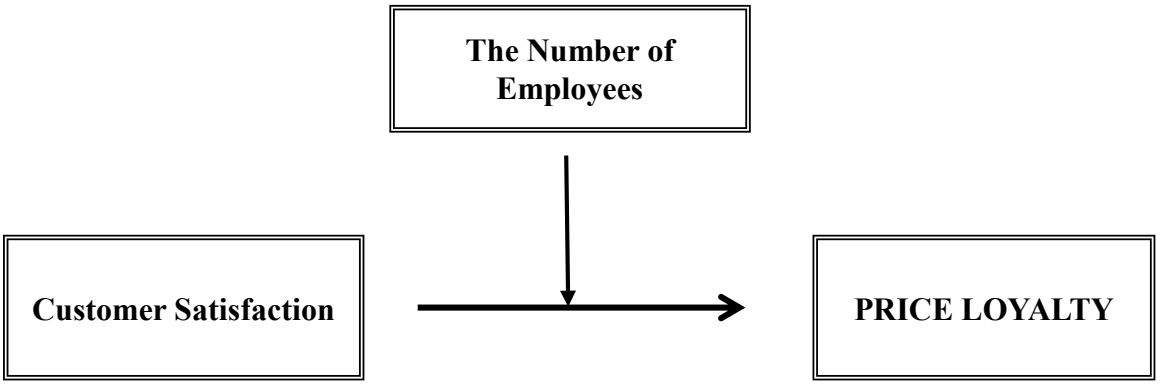

Figure 4.15. Regression for customer satisfaction, the number of employees and price loyalty.

As it can be seen from Table 4.49, p value is equal to 0.000. Hence, it is statistically possible to estimate price loyalty with the variables of customer satisfaction and the number of employees.

Table 4.49. ANOVA table for price loyalty with the variables of customer satisfaction and the number of employees.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.196	1	10.196	24.357	.000[b]
	Residual	77.861	186	.419		
	Total	88.057	187			
2	Regression	11.858	2	5.929	14.395	.000[c]
	Residual	76.199	185	.412		
	Total	88.057	187			

a. Dependent Variable: Price Loyalty

b. Predictors: (Constant), Satisfaction

c. Predictors: (Constant), Satisfaction, Number of Employees

In order to find out which independent variables make meaningful contribution to the model, t and p values of all variables (constant, satisfaction, the number of employees) were analyzed. After the analysis, it was seen that all variables can be used to measure the variable of price loyalty.

Table 4.50. Coefficients table for price loyalty with the variables of customer satisfaction and the number of employees.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.680	.198		3.427	.001
	Satisfaction	.275	.056	.340	4.935	.000
2	(Constant)	.614	.199		3.078	.002
	Satisfaction	.233	.059	.288	3.937	.000
	Number of Employees	.116	.058	.147	2.009	.046

The overall explanatory power of model 1, which consists of constant and satisfaction, is 11.6% (R Sq = 0.116). The overall explanatory power of model 2, which includes constant, satisfaction and the number of employees as independent variables, is 13.5% (R Sq = 0.135). Hence, it can be concluded that 13.5% of the variation in price loyalty can be explained with the variables of satisfaction and the number of employees. The following hypothesis was accepted:

- H18: The number of employees has a significant effect on the relationship between customer satisfaction and price loyalty.

Table 4.51. Model summary table for price loyalty with the variables of customer satisfaction and the number of employees.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.340[a]	.116	.111	.64700
2	.367[b]	.135	.125	.64178

a. Predictors: (Constant), Satisfaction

b. Predictors: (Constant), Satisfaction, Number of Employees

4.11. REGRESSION ANALYSIS BETWEEN CUSTOMER SATISFACTION, RISK AVERSION AND CUSTOMER LOYALTY

4.11.1. Regression Analysis between Customer Satisfaction, Risk Aversion and Behavioral-Intentions Loyalty

In order to test if risk aversion has a significant effect on the relationship between customer satisfaction and behavioral-intentions loyalty, multiple linear regression analysis was performed.

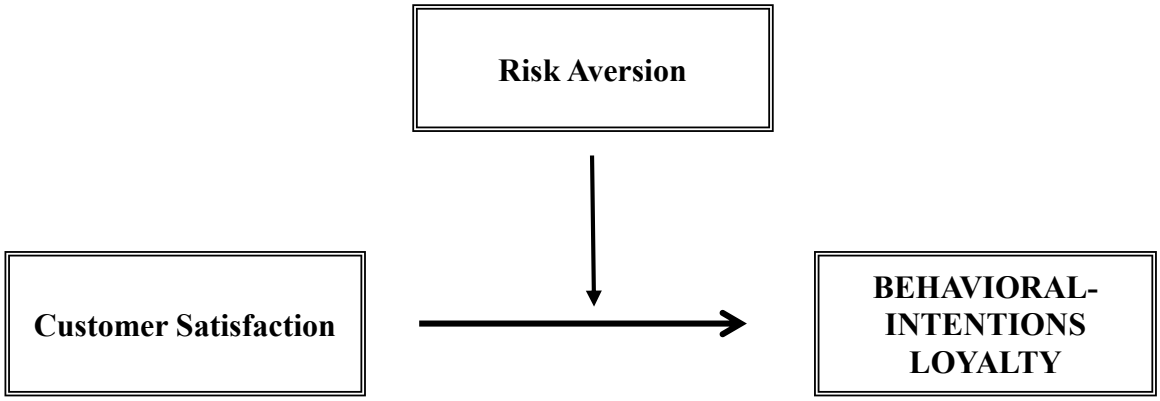

Figure 4.16. Regression for customer satisfaction, risk aversion and behavioral-intentions loyalty.

As it can be seen from Table 4.52, p value is equal to 0.000. Hence, it is statistically possible to estimate behavioral-intentions loyalty with the variables of customer satisfaction and risk aversion.

Table 4.52. ANOVA table for behavioral-intentions loyalty with the variables of customer satisfaction and risk aversion.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	95.807	1	95.807	417.972	.000[b]
	Residual	45.385	198	.229		
	Total	141.192	199			

In order to find out which independent variables make meaningful contribution to the model, t and p values of all variables (constant, satisfaction) were analyzed. As it can be seen from Table 4.53, risk aversion was excluded from the analysis. Hence, it can be concluded that the risk aversion does not have a significant effect on the relationship between customer satisfaction and behavioral-intentions loyalty. Therefore, the following hypothesis was rejected:

- H19: Risk aversion has a significant effect on the relationship between customer satisfaction and behavioral-intentions loyalty.

Table 4.53. Coefficients table for behavioral-intentions loyalty with the variables of customer satisfaction and risk aversion.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.425	.144		2.959	.003
	Satisfaction	.817	.040	.824	20.444	.000

4.11.2. Regression Analysis between Customer Satisfaction, Risk Aversion and Price Loyalty

In order to test if risk aversion has a significant effect on the relationship between customer satisfaction and price loyalty, multiple linear regression analysis was performed.

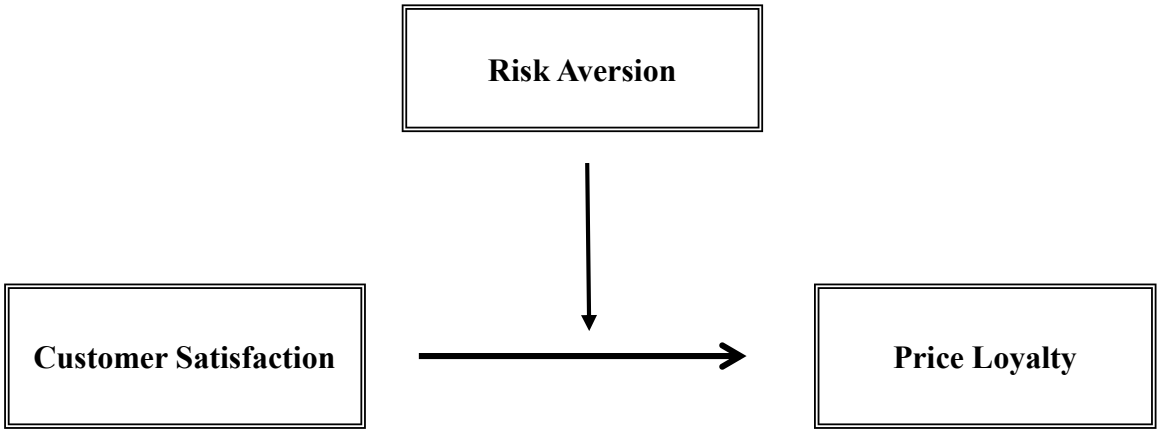

Figure 4.17. Regression for customer satisfaction, risk aversion and price loyalty.

As it can be seen from the Table 4.54, p value is equal to 0.000. Hence, it is statistically possible to estimate behavioral-intentions loyalty with the variables of customer satisfaction and risk aversion.

Table 4.54. ANOVA table for price loyalty with the variables of customer satisfaction and risk aversion.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.508	1	12.508	29.418	.000[b]
	Residual	84.187	198	.425		
	Total	96.695	199			

In order to find out which independent variables make meaningful contribution to the model, t and p values of all variables (constant, satisfaction) were analyzed. As it can be seen from Table 4.55, risk aversion was excluded from the analysis. Hence, it can be concluded that the risk aversion does not have a significant effect on the relationship between customer satisfaction and price loyalty. The following hypothesis was rejected:

- H21: Risk aversion has a significant effect on the relationship between customer satisfaction and price loyalty.

Table 4.55. Coefficients table for price loyalty with the variables of customer satisfaction and risk aversion.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.624	.196		3.189	.002
	Satisfaction	.295	.054	.360	5.424	.000

5. CONCLUSION OF THE RESEARCH

The primary purpose of the study was to identify factors affecting the power procurement satisfaction of small and medium-sized enterprises in Marmara region of Turkey. The study also investigated the relationship between SMEs' satisfaction level and SMEs' loyalty with the independent variables of annual sales, the number of employees, risk aversion and type of industry.

200 out of 250 small and medium-sized enterprises in Marmara region of Turkey accepted to join this survey. According to the descriptive statistics, majority of the respondents have business in food, construction, and textile industries. Although there are not great differences across groups in terms of annual sales, majority of the respondents have annual sales between 10.000.001 and 50.000.000 TL. In terms of the number of employees, of all the respondents in this survey, 45% have less than 25 employees, which constitute the biggest group.

One of the major issues of the study was to identify the key dimensions of overall service quality of power suppliers in Turkey according to small and medium-sized enterprises in Marmara region of Turkey. According to the factor and reliability analyses of service quality factors, three dimensions were found. These three dimensions were empathy, reliability and tangibles. The findings of the study revealed that the critical factors of power suppliers' service quality according to small and medium sized firms in Marmara region of Turkey are empathy and reliability. Hence, in order to improve service quality, it is recommended that greater emphasis should be placed on empathy and reliability.

Another significant subject of the study was to test the relationship between service quality and customer satisfaction. The findings showed that there is a significant positive relationship between power supplier's service quality and SMEs' satisfaction level. According to the result of hypothesis testing, 64.6% of the variation in customer satisfaction can be explained with the variables of empathy and reliability. Therefore, in order to increase SMEs' satisfaction level, power suppliers should focus on the ways to improve their empathy and reliability in the eyes of their customers.

This study also tested the relationship between customer satisfaction and customer loyalty. According to the factor and reliability analyses of customer loyalty, two dimensions were found. These two dimensions were behavioral-intentions loyalty and price loyalty. The findings showed that there is a significant positive relationship between SMEs' satisfaction level and SMEs' behavioral-intentions loyalty to their power suppliers. According to the result of hypothesis testing, 67.9% of the variation in behavioral-intentions loyalty can be explained with the variable of customer satisfaction. Also, the findings of the study revealed that there is a positive relationship between customer satisfaction and price loyalty. 12.9% of the variation in price loyalty can be explained with the variable of customer satisfaction. All in all, the level of behavioral-intentions loyalty and price loyalty of SMEs' can increase if the power supplier gives much importance to the ways to improve satisfaction level of its customer.

Furthermore, a number of hypotheses tested the effects of the variables, namely annual sales, the number of employees, risk aversion and type of industry on the relationship between customer satisfaction and customer loyalty. As a result of the analyses, only one hypothesis was accepted. The findings of the study illustrated that the number of employees has a significant effect on the relationship between SMEs' satisfaction and SMEs' price loyalty. 13.5% of the variation in price loyalty can be explained with the variables of satisfaction and the number of employees. Other independent variables do not have a significant effect on the relationship between customer satisfaction and customer loyalty.

6. MANAGERIAL IMPLICATIONS

This thesis has yielded findings that have also managerial insights on service quality, customer satisfaction and customer loyalty. As Turkish Power Industry has been working on the effective ways to enter the new era, the time that all individuals will choose his/her own supplier, it is believed that the results of the study might be useful not only for companies that supply electricity to small and medium-sized enterprises but also for companies that have a vision to supply electricity to households. Although the findings of this research cannot be extended and applied to household case, it can still give some useful practical insights.

To begin with, the study showed that there is indeed a high correlation between service quality and customer satisfaction. According to the result of hypothesis testing, 64.6% of the variation in customer satisfaction can be explained with the variables of empathy and reliability. Hence, managers must concentrate on ways to improve the perceived empathy and reliability of the company in the eyes of customers.

Secondly, the study illustrated that there is a significant positive relationship between customer satisfaction and behavioral-intentions loyalty. According to the result of hypothesis testing, 67.9% of the variation in behavioral-intentions loyalty can be explained with the variable of customer satisfaction. Therefore, it can be asserted that satisfied customers are more likely to do more business with their current power suppliers as well as recommending it to someone who seeks their advice.

Finally, the research concluded that there is a significant positive relationship between customer satisfaction and price loyalty. However, only 12.9% of the variation in price loyalty can be explained with the variable of customer satisfaction. Hence, it can be defended that although there is a positive correlation between the level of satisfaction and price loyalty, customer satisfaction alone may not be sufficient to increase price loyalty considerably. Customers seem to be very responsive to upward price changes. As a result, power supplier companies must also keep in mind that other than service quality, they also have to be very competitive in terms of price they offered. In fact, price seems to be one of the most significant dimensions of customer retention.

7. FUTURE RESEARCH

It is an undoubted fact that this research has certain limitations. With a sample size of 200, one may not be able to generalize the findings of the study. As the small and medium-sized enterprises spread all over the country, a large amount of financial resources is required to survey all. Another key constraint of this research is time. Despite limited resources, the researcher might still reach more respondents if there were plenty of time. The last key constraint is that the findings of the current study were applicable only to the small and medium-sized enterprises in Marmara region of Turkey.

Opportunities exist to further advance this study by expanding the sample size and investigate at different geographical location for better and more representative data analysis as the sample was only collected among 200 small and medium-sized enterprises in Marmara region of Turkey, limiting the generalizability of the research findings. After eligible customer limit is removed in the next coming years, which will enable all individuals to choose their own power supplier, it is strongly believed that new researches should focus on what an ordinary person expects from his/her power supplier, and how he/she evaluate the given service, as households constitute a big proportion of the power consumption across the country.

REFERENCES

1. Kotler, Philip, and Kevin Lane Keller. Marketing Management. Prentice Hall Publishing. 12th Edition, 2006.

2. Reichheld, Frederick F., and Thomas Teal. The loyalty effect: The hidden force behind growth, profits, and lasting value. Harvard Business Press, 1996.

3. Parasuraman, Anantharanthan; Zeithaml, Valarie A.; Berry, Leonard L. A conceptual model of service quality and its implications for future research. The Journal of Marketing, 1985, 41-50.

4. Grönroos, Christian. "An applied service marketing theory." European journal of marketing 16.7, 1982, 30-41.

5. Frederick, F. Reichheld, and W. Earl Sasser. "Zero defections: quality comes to services." Harvard Business Review 68.5, 1990, 105.

6. Fornell, Claes, and Birger Wernerfelt. "Defensive marketing strategy by customer complaint management: a theoretical analysis." Journal of Marketing research, 1987, 337-346.

7. Rust, Roland T., and Anthony J. Zahorik. "Customer satisfaction, customer retention, and market share." Journal of retailing 69.2, 1993, 193-215.

8. Oliver, Richard L. "Whence consumer loyalty?." the Journal of Marketing, 1999, 33-44.

9. Bryman, Alan. "The research question in social research: what is its role?."International Journal of Social Research Methodology 10.1, 2007, 5-20.

10. Electricity Market Report, Energy Market Regulatory Authority (EMRA), 2010.

11. Electricity Market Development Report, Energy Market Regulatory Authority (EMRA), 2013.

12. EPDK, elektrik piyasası mevzuat, 2015. Avaible from: <http://www3.epdk.org.tr/index.php/elektrik-piyasasi/mevzuat?id=142 > [12.10.2015]

13. McKinney, Vicki, Kanghyun Yoon, and Fatemeh Mariam Zahedi. "The measurement of web-customer satisfaction: An expectation and disconfirmation approach. Information systems research 13.3, 2002, 296-315.

14. Kotler, Philip. "Marketing Management: Planning, Analysis, Implementation and Control." Prentice Hall Publishing, 10th Edition , 2000.

15. Hunt, H. Keith. "CS/D-overview and future research directions."Conceptualization and measurement of consumer satisfaction and dissatisfaction, 1977, 455-488.

16. Howard, John A., and Jagdish N. Sheth. The theory of buyer behavior. Vol. 14. New York: Wiley, 1969.

17. Yi, Youjae. "A critical review of consumer satisfaction." Review of marketing 4.1, 1990, 68-123.

18. Naumann, Earl, and Kathleen Giel. Customer satisfaction measurement and management: Using the voice of the customer. Van Nostrand Reinhold, 1995.

19. Zairi, Mohamed. "Managing customer dissatisfaction through effective complaints management systems." The TQM magazine 12.5, 2000, 331-337.

20. LaBarbera, Priscilla A., and David Mazursky. "A longitudinal assessment of consumer satisfaction/dissatisfaction: the dynamic aspect of the cognitive process." Journal of marketing research, 1983, 393-404.

21. Hoyer, Wayne D., Deborah J. MacInnis. Consumer behavior. Houghton Boston, 2nd Edition, 2001.

22. Kano, N., and N. Seraku. "Must-be quality and attractive quality." The Best on Quality 7, 1996, 165.

23. Palmer, Adrian. Principles of services marketing. McGraw-Hill Book Company Limited, 1994.

24. Lovelock, Christopher, and Jochen Wirtz. "Servcies Marketing: People, Technology, Strategy, Pearson Prentice Hall, New Jersey." (2007).

25. Kotler, Philip. Marketing Management. Prentice Hall Publishing. 11th Edition, 2003.

26. Grönroos, Christian. "The perceived service quality concept-a mistake?."Managing Service Quality: An International Journal 11.3, 2001, 150-152.

27. Grönroos, Christian. "A service quality model and its marketing implications. "European Journal of marketing 18.4, 1984, 36-44.

28. Buttle, Francis A. What's wrong with SERVQUAL?. Manchester: Manchester Business School, 1994.

29. Berry, Leonard L., Valarie A. Zeithaml, and A. Parasuraman. "Five imperatives for improving service quality." Sloan Management Review, 1990, 29-38.

30. Parasuraman, A., Valarie A. Zeithaml, and Leonard L. Berry. "SERVQUAL: A Multiple-Item Scale for Measuring Customer Perceptions of Service Quality," Journal of Retailing, Spring, 1988, 12- 40.

31. Parasuraman, Arun, Leonard L. Berry, and Valarie A. Zeithaml. "More on improving service quality measurement." Journal of retailing 69.1, 1993, 140-147.

32. Parasuraman, Ananthanarayanan, Valarie A. Zeithaml, and Leonard L. Berry. "Reassessment of expectations as a comparison standard in measuring service quality: implications for further research." the Journal of Marketing, 1994, 111-124.

33. Parasuraman, Arun. "Assessing and improving service performancefor maximum impact: insights from a two-decade-long research journey."Performance Measurement and Metrics 5.2, 2004, 45-52.

34. Cronin Jr, J. Joseph, and Steven A. Taylor. "Measuring service quality: a reexamination and extension." The journal of marketing, 1992, 55-68.

35. Oliver, Richard L. "A conceptual model of service quality and service satisfaction: compatible goals, different concepts." Advances in services marketing and management 2.4, 1993, 65-85.

36. Wilson, A. M., et al. "Services marketing: 1st European edition." 2008.

37. McMullan, Rosalind. "A multiple-item scale for measuring customer loyalty development." Journal of Services Marketing 19.7, 2005, 470-481.

38. Barnes, James G. "Closeness, strength, and satisfaction: examining the nature of relationships between providers of financial services and their retail customers." Psychology & Marketing 14.8, 1997, 765-790.

39. Reichheld, Frederick F. "The one number you need to grow." Harvard business review 81.12, 2003, 46-55

40. Dick, Alan S., and Kunal Basu. "Customer loyalty: toward an integrated conceptual framework." Journal of the academy of marketing science 22.2, 1994, 99-113.

41. Sarner, A., and T. Berg. "The Loyal and Profitable Customer." Strategic Analysis Report, Gartner Research, 2003.

42. Fornell, Claes. "A national customer satisfaction barometer: the Swedish experience." the Journal of Marketing, 1992, 6-21.

43. Hallowell, Roger. "The relationships of customer satisfaction, customer loyalty, and profitability: an empirical study." International journal of service industry management 7.4, 1996, 27-42.

44. Coyne, Kevin. "Beyond Service Fads-Meaningful Strategies For The Real Wor." MIT Sloan Management Review 30.4, 1989, 69.

45. Bowen, John T., and Shiang-Lih Chen. "The relationship between customer loyalty and customer satisfaction." International journal of contemporary hospitality management 13.5, 2001, 213-217.

46. Clarke, Ken. "What price on loyalty when a brand switch is just a click away?."Qualitative Market Research: An International Journal 4.3, 2001, 160-168.

47. Mandrik, Carter A., and Yeqing Bao. "Exploring the concept and measurement of general risk aversion." Advances in Consumer Research 32, 2005, 531.

48. Steenkamp, Jan-Benedict EM, Frenkel ter Hofstede, and Michel Wedel. "A cross-national investigation into the individual and national cultural antecedents of consumer innovativeness." The Journal of Marketing, 1999, 55-69.

49. Zhou, Kevin Zheng, Chenting Su, and Yeqing Bao. "A paradox of price–quality and market efficiency: a comparative study of the US and China markets."International Journal of Research in marketing 19.4, 2002, 349-365.

50. Akaah, Ishmael P., and Pradeep K. Korgaonkar. "A conjoint investigation of the relative importance of risk relievers in direct marketing." Journal of Advertising Research 28.4, 1988, 38-44.

51. Matzler, Kurt, Sonja Grabner-Kräuter, and Sonja Bidmon. "Risk aversion and brand loyalty: the mediating role of brand trust and brand affect." Journal of Product & Brand Management 17.3, 2008, 154-162.

52. Pollitt, Michael G. "The impact of liberalization on the performance of the electricity supply industry: an international survey." Journal of energy literature 3, 1997, 3-31.

53. Zhang, Yin-Fang, David Parker, and Colin Kirkpatrick. "Electricity sector reform in developing countries: an econometric assessment of the effects of privatization, competition and regulation." Journal of Regulatory Economics33.2, 2008, 159-178.

54. Jamasb, Tooraj, and Michael Pollitt. "Electricity market reform in the European Union: review of progress toward liberalization & integration." The Energy Journal, 2005, 11-41.

55. Turkish Energy Market: An Investor's Guide, Energy Market Regulatory Authority (EMRA), 2012.

56. Ferguson, Ross, William Wilkinson, and Robert Hill. "Electricity use and economic development." Energy policy 28.13, 2000, 923-934.

57. Investment Support and Promotion Agency of Turkey, Deloitte, 2013

58. Saunders, M. Lewis. "P. and Thornhill." Research methods for business students, 2003.

59. Fellows, R. F., and A. M. M. Liu. "Research Methods for Construction." 2008, 1-307.

60. Zikmund, William G. "Business Research Methods" 1984.

61. User Guide to the SME Definition, European Commission, 2005.

62. Cronin, J. Joseph, Michael K. Brady, and G. Tomas M. Hult. "Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments." Journal of retailing 76.2, 2000, 193-218.

63. Zeithaml, Valarie A., Leonard L. Berry, and Ananthanarayanan Parasuraman. "The behavioral consequences of service quality." the Journal of Marketing, 1996, 31-46.

64. Foster, Brian D., and John W. Cadogan. "Relationship selling and customer loyalty: an empirical investigation." Marketing Intelligence & Planning 18.4, 2000, 185-199.

65. Worldbank, Annual electricity consumption per person.
< http://data.worldbank.org/indicator/EG.USE.ELEC.KH.PC/countries/1W-TR?display=graph >
[13.10.2015].

APPENDIX

MÜŞTERİ MEMNUNİYETİ DEĞERLENDİRME ANKETİ

Sayın Katılımcı;
İstanbul Bilgi Üniversitesi Pazarlama Bölümü Yüksek Lisans çalışmamıza yönelik hazırlamış olduğumuz bu ankete katılımınız bizim için çok değerlidir. Bu çalışmanın temel amacı Marmara bölgesinde faaliyetlerini sürdürmekte olan KOBİ'lerin elektrik tedarik memnuniyetini etkileyen faktörlerin ölçülmesi ve KOBİ'lerin elektrik tedarik memnuniyetleri ile firma sadakatleri arasındaki ilişkinin değerlendirilmesidir. Çalışmamız sadece akademik amaçlı yapılmakta olup, çalışmanın güvenilir ve doğru sonuçlar vermesi ankette yer alan sorulara gerçekçi yanıtlar vermenize bağlıdır. Çoktan seçmeli olarak hazırlanmış olan soruları sizin en için en uygun olan veya sizin görüşünüzü en iyi temsil ettiğine inandığınız kutucuğu işaretleyerek yanıtlayabilirsiniz.

Katılımınız için teşekkürler.

1) Şirketiniz Marmara Bölgesi'nde mi faaliyet gösteriyor?
   - ☐ Evet
   - ☐ Hayır

2) Faaliyet göstermekte olduğunuz sektör?

3) Yıllık cironuz (TL)?
   - ☐ 500.000 TL'den az
   - ☐ 500.000-5.000.000 TL arası
   - ☐ 5.000.001-10.000.000 TL arası
   - ☐ 10.000.001-50.000.000 TL arası
   - ☐ 50.000.001-150.000.000 TL arası

4) Çalışan Sayınız?
   - ☐ 25'den az
   - ☐ 25-50 arası
   - ☐ 51-100 arası
   - ☐ 101-200 arası
   - ☐ 201-250 arası

	Kesinlikle Katılmıyorum	Kısmen Katılmıyorum	Kararsızım	Kısmen Katılıyorum	Kesinlikle Katılıyorum
5. Elektrik tedarikçimiz modern ekipmanlara sahiptir.	1	2	3	4	5
6. Elektrik tedarikçimizin fiziksel tesisleri çekici görünümlüdür	1	2	3	4	5
7. Elektrik tedarikçimizin çalışanları temiz görünümlüdür	1	2	3	4	5
8. Elektrik tedarikçimizde kullanılan ekipmanların görünümü sunulan hizmet tipiyle uyumludur	1	2	3	4	5
9. Elektrik tedarikçimiz söz verdiği işi zamanında bitirir	1	2	3	4	5
10. Elektrik tedarikçimiz sorunumuz olduğunda endişelerimizi gidermeye çalışır	1	2	3	4	5
11. Elektrik tedarikçimiz güvenilirdir	1	2	3	4	5
12. Elektrik tedarikçimiz hizmetlerini söz verdiği zamanda sunar	1	2	3	4	5
13. Elektrik tedarikçimiz doğru kayıt tutar	1	2	3	4	5
14. Elektrik tedarikçimiz hizmetin ne zaman sunulacağını tam olarak söyler	1	2	3	4	5
15. Elektrik tedarikçimiz çalışanları müşterilerine hızlı hizmet verir	1	2	3	4	5
16. Elektrik tedarikçimiz çalışanları bize her zaman hizmet vermeye istekli ve gönüllüdür	1	2	3	4	5
17. Elektrik tedarikçimiz çalışanları asla ricalarımızı cevaplayamayacak kadar meşgul değildir	1	2	3	4	5

18. Elektrik tedarikçimiz çalışanları davranışları güven vermektedir	1	2	3	4	5
19. Elektrik tedarikçimiz ile yapılan işlemlerde kendinizi güvende hissedersiniz	1	2	3	4	5
20. Elektrik tedarikçimiz çalışanları naziktir	1	2	3	4	5
21. Elektrik tedarikçimiz çalışanları müşterilerin sorularını cevaplayabilecek bilgiye sahiptir	1	2	3	4	5
22. Elektrik tedarikçimiz bizlere özel ilgi ve alaka göstermektedir	1	2	3	4	5
23. Elektrik tedarikçimiz çalışanları bizlere kişisel ilgi göstermektedir	1	2	3	4	5
24. Elektrik tedarikçimiz çalışanları özel ihtiyaçlarımızı anlamaktadır	1	2	3	4	5
25. Elektrik tedarikçimiz çıkarlarımızla yakından ilgilenmektedir	1	2	3	4	5
26. Elektrik tedarikçimiz müşteri hizmetleri merkezlerinde sırada bekletmeden hızlı ve kaliteli bir şekilde hizmet verir	1	2	3	4	5
27. Elektriğimi mevcut tedarikçimden satın almam akıllıcaydı	1	2	3	4	5
28. Elektriğimi mevcut tedarikçimden satın alarak doğru yaptığımı düşünüyorum	1	2	3	4	5
29. Mevcut tedarikçim elektrik alımı için tam da ihtiyaç duyulan firmadır	1	2	3	4	5
30. Yeni şeyleri deneme konusunda rahat hissetmem	1	2	3	4	5
31. Öngörülebilir sonuçları olan durumları tercih ederim	1	2	3	4	5
32. Karar vermeden önce ilgili kararın nasıl sonuçlanacağından emin olmak isterim	1	2	3	4	5

33. Belirsiz sonuçları olan durumlardan kaçınırım	1	2	3	4	5
34. Yeni durumlarla ilgili hazırlıksız yakalandığımda kendimi rahat hissederim	1	2	3	4	5
35. Belirsiz durumlarda karar vermek zorunda kaldığım zamanlarda gergin olurum	1	2	3	4	5
36. Elektrik tedarikçimiz hakkında diğer insanlara olumlu şeyler söylerim.	1	2	3	4	5
37. Elektrik tedarikçimizi tavsiye isteyen insanlara öneririm	1	2	3	4	5
38. Elektrik tedarikçimizle iş yapma konusunda arkadaşlarımı ve akrabalarımı teşvik ederim	1	2	3	4	5
39. Elektrik tedarik hizmeti alırken mevcut elektrik tedarik şirketimi ilk tercihim olarak görürüm	1	2	3	4	5
40. Elektrik tedarikçimizle önümüzdeki yıllarda daha çok iş yapmak isterim	1	2	3	4	5
41. Elektrik tedarikçimiz karakter sahibidir	1	2	3	4	5
42. Elektrik tedarikçimiz diğer bildiğim markalara nazaran büyüyen popülariteye sahiptir	1	2	3	4	5
43. Elektrik tedarikçimiz rakiplerinden farklıdır	1	2	3	4	5
44. Fiyat artışı halinde elektrik tedarikçimizle iş yapmaya devam edebilirim	1	2	3	4	5
45. Elektrik tedarikçimizden sağlamış olduğum yararlardan ötürü, elektrik tedarikçimize rakip firmaların fiyatlarından daha yüksek fiyat ödeyebilirim	1	2	3	4	5