

RELIABILITY AND VALIDITY OF TURKISH VERSION OF CUSTOMER  
SATISFACTION SCALE FOR HEALTH CARE AND FITNESS CLUBS

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## **ABSTRACT**

### **RELIABILITY AND VALIDITY OF TURKISH VERSION OF CUSTOMER SATISFACTION SCALE FOR HEALTH CARE AND FITNESS CLUBS**

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Customer satisfaction is the key for the accomplishment of health care and fitness companies. It is a process beginning with identifying customer vision management and ending with customer loyalty and retention.

The purpose of this study was to test the reliability and validity of Turkish version of the Customer Satisfaction Scale (CSS) for health care and fitness clubs. The sampling group that was the customers of the private health care and fitness centers consisted of 150 female (47.3 %) and 167 male (52.7 %), totally 317 people. Principal component analysis (PCA) was performed for the factor analysis of the items. Five factors emerged which accounted for 65.7 % of the variance related with social and intellectual improvement, physical and psychological satisfaction, facility attractivity, staff attitudes and competence and cleanness of the center. Internal consistency method was used to test reliability. Cronbach alpha values indicated highly reliable results. For all items= .92 Factor 1= .88, factor 2= .89, factor 3= .80, factor 4= .81, factor 5= .81 The present study demonstrated that Customer Satisfaction Scale is a reliable and a valid instrument to measure customer satisfaction of the members of health care and fitness clubs in Turkey.

Key words: Health-fitness clubs, customer satisfaction, reliability, validity.

## ÖZ

# SAĞLIKLI YAŞAM VE FİTNES KULÜPLERİNE YÖNELİK MÜŞTERİ TATMIN ÖLÇEĞİNİN TÜRKÇE VERSİYONUNUN GÜVENİLİRLİK VE GEÇERLİLİĞİ

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Müşteri tatmini, sağlıklı yaşam ve fitnes kuruluşlarını başarıya götüren anahtardır. Müşteri vizyon yönetimini tanılamakla başlayan ve müşteri sadakati ve sürekliliği ile biten bir süreçtir.

Bu çalışmanın amacı, sağlıklı yaşam ve fitnes kulüplerine yönelik müşteri tatmin ölçeğinin Türkçe sürümünün güvenilirlik ve geçerliliğini ölçmektir.

Örneklem grubu, özel sağlıklı yaşam ve fitnes kulüplerine üye, 150 kadın (% 47.3) ve 167 erkek (% 52.7), toplam 317 kişiden oluşmaktadır. Maddelerin faktör analizi için principal component analizi (PCA) uygulanmıştır. Uygulama sonucunda, % 65.677 varyanslı beş faktör elde edilmiştir. Bu faktörleri, sosyal ve entelektüel gelişim, fiziksel ve psikolojik tatmin, tesis çekiciliği, personel davranışları ve yeterliliği ve tesislerin temizliği oluşturmaktadır. Güvenilirliği ölçmek için iç tutarlılık metodu kullanılmıştır. Cronbach alfa değerleri yüksek güvenilirlik sonuçları göstermektedir. Tüm maddeler için alfa değerleri= .92. Faktör 1= .88, faktör 2= .89, faktör 3= .80, faktör 4= .81, faktör 5= .81. Bu çalışma Müşteri Tatmin Ölçeğinin, sağlıklı yaşam ve fitnes salonlarına üye müşterilerin, tatminlerini ölçmede geçerli ve güvenilir bir araç olduğunu göstermektedir.

Anahtar kelimeler: Sağlık- fitnes kulüpleri, müşteri tatmini, güvenilirlik, geçerlilik.

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## **LIST OF SYMBOLS AND ABBREVIATIONS**

CSS	Customer Satisfaction Scale
PCA	Principal Component Analysis
PA	Principal Components
KMO	Kaiser-Meyer-Olkin Measure of Sampling Adequacy

## CHAPTER I

### INTRODUCTION

Health and fitness movement is a rapidly growing industry. Over the last decade, by the encouragement of media, education associations and health associations, people begin to give a great interest in fitness and leisure activities. As a result of this, fitness and health clubs find their places in the service sector. There are more than 33.000 health and fitness facilities, 20.000 communities Y. M. C. A. programs giving health and fitness services to people in the United States (Patton, 2000). In Turkey, it is not possible to say the same amount but just in Ankara, according to General Directorate of Youth Sports (Gençlik Spor İl Müdürlüğü; GSGM), there are 33 registered small and big fitness and health care centers.

The increase in the number of fitness and health care centers brings the competition in service quality.

There are alternative conceptualizations of service quality. Grönroos (1990) pointed mainly on customer satisfaction; according to him quality is what customers perceive. The interest in what customer is left with and how he/she receives service. On the other hand, Klaus (1985) defines service quality as a “shared experience of gain” by all participants; the quality intended here is the satisfaction of both the employees and the customers. Another conceptualization of service quality states that, the meaning, the definition and evaluation of quality exist in customer’s mind. It is defined as “the extend of discrepancy between customers’ expectations and perceptions” (Parasuraman et. al 1988).

The common point of all these conceptions is the customer satisfaction.

Customer satisfaction through its deliverables and processes must drive the organization. The focus on the profit as the primary purpose of an organization is meaningless. The successful organization must make a strong effort to meet the customer expectations through the continuous improvement of process, people and product focusing on total customer satisfaction. This effort promotes the use of best business practices which leads to excellent business systems that provides total customer satisfaction.

The chain reaction starts with customer expectations, with total customer satisfaction being the focus of all efforts. This setup results in a successful organization (Saylor 1992).

Triado' et al (1999) pointed out that customer's satisfaction depend much on the quality and the degree to which it satisfies customer needs instead of depending on the quality level that a company believes. The customer mentioned here is the consumer or direct user of the service rather than a customer just pays for the service.

Satisfaction implies complete fulfillment of one's wishes, needs and expectations. The marketing concept views the customer as king, business philosophy advises to satisfy customer needs and wants. Similarly relationship marketing advises to set up a long-term relationship with customers and after reap the benefits of customer loyalty. Customer satisfaction is the key concept for keeping customers. It has direct effect on organizational performance through its influence on retention.

Satisfied customers are easier to reach with communications, more likely to increase purchase volumes, and more tolerant of price increases. (Arnould & Zinkhan, 2004) Organizations can survive or find new ways to compete by

maintaining excellent levels of customer satisfaction. Customer satisfaction is a multidimensional concept and it is not easy to measure it in sport services thus sport services are both intangible and perishable. Consequently, even if health and fitness clubs are customer oriented organizations there have been limited investigations to understand the concept of customer satisfaction in Turkey.

Finally there is a great need in the area of measuring customer satisfaction in sport services. This research can be helpful for managers and employees to realize customer needs and expectations eliminate mistakes in the organization and to obtain customer loyalty.

### **1.1 Statement of the problem**

The quality revolutions in the marketing sector all over the world brought the quality dimensions into the service sector. Although there are several studies related with customer satisfaction in service sector in Turkey, there is a considerable deficiency in the health and fitness industry.

From day to day the number of health care and fitness centers and the rate of the customers are increasing. The problem of this study was to test the reliability and validity of the Customer Satisfaction Scale (CSS) for adaptation to Turkish culture.

### **1.2 Significance of the Study**

Each service company should improve their overall performance to survive or to grow. The way of improving the performance is first to satisfy the customers. The competition within the health and fitness marketplace is increasing in Turkey therefore; taking attention to customer satisfaction in the area of fitness is inevitable

Customer satisfaction is functioning like a bridge for connecting perceived service quality and customer loyalty. Customers do not necessarily buy the highest quality services; preferably, they may buy services that provide more satisfaction.

There are few printed studies related with customer satisfaction subject (Berçin 1996, Kılıç 1998, Özer 1998,) Thus, there is only one job satisfaction study in the field of health and fitness (Karlı, 2001). On the other hand, there are limited studies on the customer satisfaction in health care and fitness centers. These centers' growth in Turkey has been remarkable for this reason there is a meaningful necessity to investigate the satisfaction levels of the customers. It is beneficial for both the customers and the companies and organizations.

In connection with these reasons the purpose of this study is to test a reliable and valid instrument to measure satisfaction levels of fitness and sport clubs' members.

### **1.3. Limitations**

- Elite level health care and fitness centers in Ankara were included in this study.
- Frequency of participation was not taken into consideration within the scope of the research

### **1.4. Assumptions**

- It is assumed that The Customer Satisfaction Questionnaire was completed by the customers who were the members of elite health care and fitness centers.
- It is assumed that the subjects completed the questionnaire truthfully and unbiasedly.

## **1.5. Definition of Terms**

### **Customer**

The *customer* is “an individual or an institution that is a prospective buyer of a product or service” and “buys the product or the service frequently and systematically”. (Patton, Bleuel, 2000).

### **Customer Satisfaction**

*Satisfaction* implies complete fulfillment of one’s needs. Every organization and everyone in the organization must strive to satisfy the current customer and create new customers.

The most commonly used representation of *customer satisfaction* is referred to as the disconfirmation model. (Oliver, 1980) - the extent of satisfaction (or lack of satisfaction) that a customer has with a service encounter is determined by the disconfirmation between the customer’s expectations of performance and the actual perceived performance of the service.



## **CHAPTER II**

### **REVIEW OF LITERATURE**

The review of literature is composed of two parts; the theoretical information about the meaning and models of customer satisfaction process, and theories about how to measure customer satisfaction and the connection with service quality.

#### **2.1. Customer Satisfaction Process**

Customer satisfaction is a process begins with knowing who your customers are and end with the profit you gained. It is a long process and includes many components. Goetsch identify this process as follows:

- Determine who your customers are
- Determine what attributes of your product /service are most important to your customer
- Arrange these attributes in the order of importance indicated by your customers.
- Determine your customers' level of satisfaction with each of these attributes.
- Tie results of customer feedback to your processes
- Develop a set of metrics that tell how you are performing and which areas within the process are having the greatest impact on performance
- Implement measurements at the lowest possible level in the organization.

- Work on the process that relate to attributes that have high importance, but low customer satisfaction
- Work on those areas within the process that offer the greatest opportunity to improve
- Update customer input and feedback on a continual basis. Then, as process improvements corresponding improve customer satisfaction, move on to the next most important process improvements
- Maintain open continual communication with all stakeholders on what is being done, why, what results are expected, and when
- Aggregate metric organization-wide into a format for management review on a continual basis. Adjust as necessary. (Stanley, 1997, p.164)

### **2.1.1. Who is Customer?**

Customers, who are the most important asset of any organization, allow an organization to exist. And the successes of an organization mostly depend on how many customer it has, how much and how often they buy. The customer is more selective in buying goods and services than before. In fact, as more and more options become available as a result of the development of market and competition, the customer becomes increasingly discriminating, demanding added value. So for an organization, keeping and getting new customers becomes more important.

### **2.1.2. Customer Needs and Expectations**

#### *Needs*

To define the needs and expectations of customer, an organization first has to know its customers. So the organization can identify who their customers are and

what types of people interested in the product or service of the organization. For example, what is the customer profile of the organization; is it depends on males or females; children or youths; the high-wages people or middle wages people; Americans or Turks etc.

Identifying the customer profile requires systematic and continuous marketing research. The marketing researches must be continuous because customer needs are not static. They are always changing. (Saylor 1992)

### *Expectations*

In every model of the satisfaction formation process it is underlined that satisfaction arise when consumers compare their perceptions of a product's performance to their expectations but there is not more agreement in the literature about the conceptual definition of the expectations construct. There are two components of expectation; one of them is the probability of occurrence (e.g., the likelihood that a fitness instructor will be available to give program to customers) and an evaluation of the occurrence. (e.g., the degree to which the instructor's desire is desirable or undesirable, good or bad, etc.) (Spreng, MacKenzie, Olshavsky, 1996) In the literature some view expectations as probability of occurrence (Bearden and Teel 1983) and some view as an evaluation of occurrence. (Oliver 1980; Tse and Wilton 1988, Churchill and Surprenant 1982)

Expectations are used to develop the performance standards to which the service or the product should be designed. In practice, there is a need to develop the optimal combination of performance standards that will allow the designed service to satisfy customers, to compare favorably with competitors' services, and to be delivered at a cost that will allow the company to cell the service profitably.

ZBP (Zeithaml and Berry and Parasuraman 1996) discussed the types of

expectations as ideal, desired, predicted and acceptable. Ideal expectations refer to the performance wished for in a perfect service. Desired expectations are the performance levels that customer want the service to meet in practice. If the service provider cannot deliver service at the desired level, customers may be willing to tolerate deviations in performance up to their acceptable expectations with relatively small reduction in satisfaction. Dissatisfaction results if the performance falls below this level.

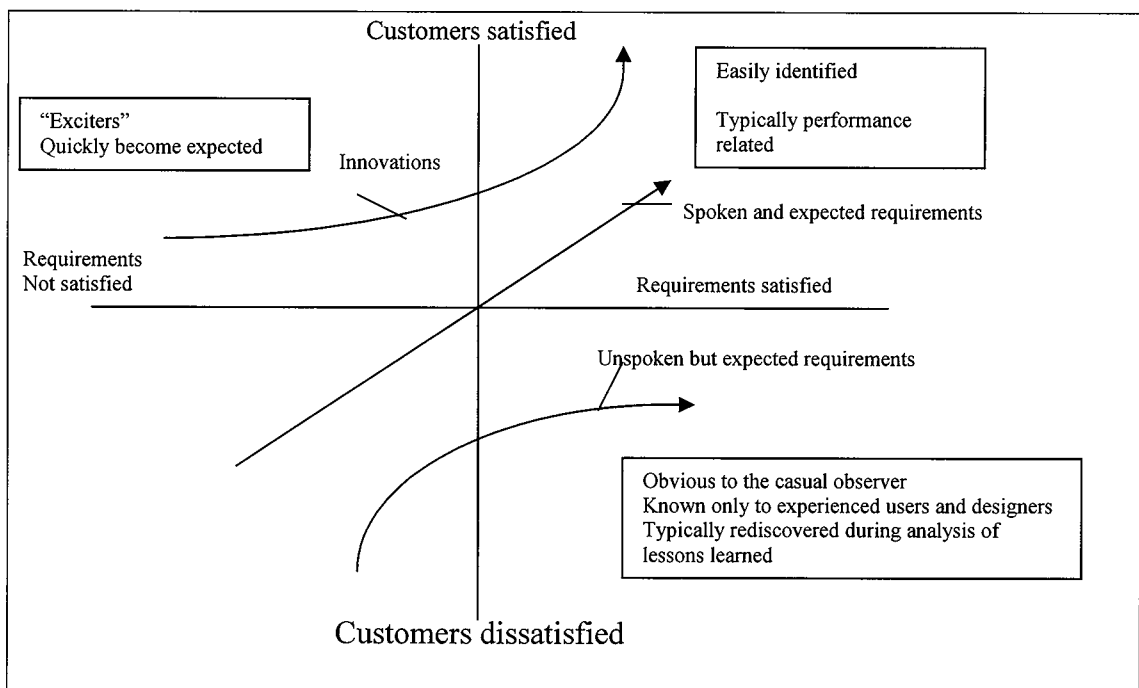
The predicted expectation is the performance level that the customer anticipates will be achieved by a service encounter before this encounter is experienced. This is determined by past experience with the service. If past service encounters have been unsatisfactory, the predicted expectation for the next encounter is likely to be low.

Some other types of expectations that defined in the literature are comparative, normative and value-based. Comparative expectations refer to the performance levels anticipated for the service derived from experiences with competing services. Normative expectations of services are based on brand names\_ a well-known brand may be expected to perform better than one that is lesser known. Value-based expectations depend on a “worth what is paid for” analysis the performance expectations of a service depend on its price. (Ramasawy, 1996)

### **2.1.3. Translating needs into requirements**

This is a model of requirements representing three major areas of customer satisfaction. It is composed of three major areas of customer satisfaction. The first area of customer satisfaction depicted by the diagonal line represents explicit requirements, which include written or verbal requirements and are easily

identified, expected to be met, and typically performance related. Satisfying the customer would be relatively simple if these were the only requirements. The second area of customer satisfaction represents innovations, as shown by the curved line in upper left corner of the figure. A customer's written instructions are often purposefully vague to avoid stifling new ideas during conceptualization and product definition. Because they are unexpected, these creative ideas often excite and delight the customer. These ideas quickly become expected. The third and most significant are of customer satisfaction represent unstated or unspoken requirements, as show by lower right curve of the figure. The customer may indeed be unaware of them or assume that such requirements will be automatically supplied.



**Figure 2.1.3. Kano Model** (Service Quality, Besterfield et al., 1999 p 67 )

#### **2.1.4. Developing Products or Services to Needs**

However good the service or the product, no one will buy it if they don't want it or believe they don't need it. Knowing and understanding customer needs is at the center of every successful business.

All needs are not created equal, and the resolution of all needs does not have the same impact on customer satisfaction.

##### Methods of Obtaining Needs

- Surveys and market research
- Group interviews
- One-on-one interviews
- Observation (Ramasawy, 1996,p.57)

#### **2.2. Measurement of Customer Satisfaction**

Customers are the only one who can determine total customer satisfaction. In order to know if the customer is satisfied, intense observation is necessary.

“Satisfaction is the consumer's fulfillment response. It is a judgment that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption related fulfillment, including levels of under or over fulfillment” (Oliver, 1997, p.13).

To give importance to measure expectations originated in that expectations play a role in satisfaction formation. In other words, without observing performance, expectations may have already made the consumer adaptable to respond to the product or service in a certain way. (Oliver, 1997)

Recently, few service company managers know to keep on committing to satisfy customers on the contrary, service companies become conscious that quality does not improve unless you *measure* it. (Reichheld & Sasser 1990)

Measuring customer satisfaction produces a base for the management to know how well the business process is working, where to make changes to create improvements, if changes are needed, and determine if the changes led to improvements. As a result of the measurements, customer loyalty can be maintained.

### **2.3 Models of Customer Satisfaction**

The customer satisfaction models are classified into two groups, which are macro- and micro-models by marketing research discipline (Erevelles & Leavitt, 1992; Hom, 2000). Macro-models consist of concepts as value, quality and loyalty. On the other hand, micro-models consist of concepts associated with customer satisfaction such as disconfirmation of expectations, equity, attribution, affect, and regret. Micro-models are the multidimensionality of the satisfaction construct. Hom (2000) stated that the micro-models allow researchers to properly operationalize measurements of customer satisfaction. Consequently, these models give the chance to achieve construct validity in the satisfaction surveys. On the other hand the macro-model provides strategic context of the design.

#### **2.3.1. Micro-Models**

There are seven micro model groups. These are: Expectations disconfirmation model, perceived performance model, norms models, multiple process models, attribution models, affective models and equity models. Three dominant models will be introduced.

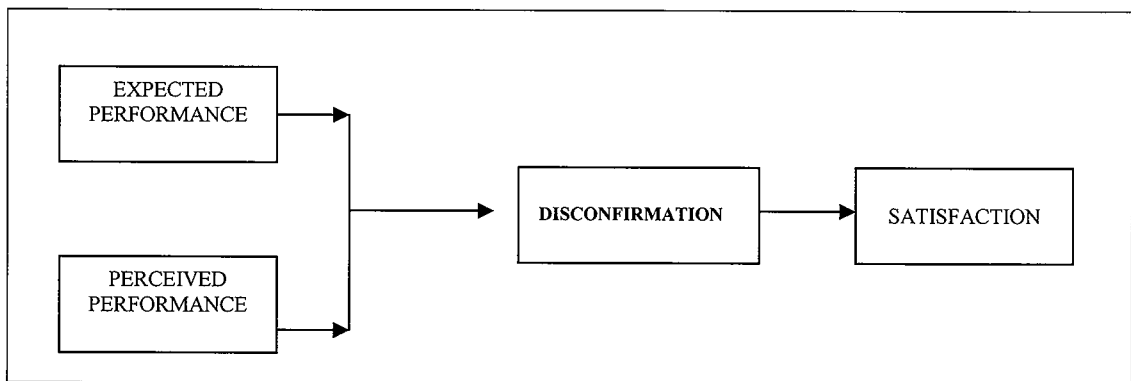
### 2.3.1.1. The Expectations- Disconfirmation Model

In the service quality literature the most commonly used representation of customer satisfaction is the expectations disconfirmation model.

According to this model, the extend of satisfaction (or lack of satisfaction) that a customer has with a service encounter is determined by the disconfirmation between the customer's expectations of performance and the actual perceived performance of the service (Ramaswamy1996).

In disconfirmation model, satisfaction appears to mediate changes between preexposure and post exposure attitudinal components (Oliver, 1980).

Positive disconfirmation occurs when the perceived performance is better than what was expected which results in a satisfied customer. Negative disconfirmation is the result of perceived performance being worse than expectations (Ramaswamy1996).



**Figure 2.3.1.1.** The Expectations- Disconfirmation Model (Ramasawy, p.345)



#### **2.3.1.2.1. The Perceived Performance Model**

The perceived performance model is different from the expectations disconfirmation model from the point that a product or service performs so positively that the consumer's expectations lose its effect in her/his post consumption reaction to the product/service. (Hom, 2000)

Oliver (1994) suggested that apart from driving the intervening disconfirmation variable, perceived performance directly influences satisfaction.

In some circumstances, direct causal links from perceived performance to satisfaction can significantly increase the proportion of explained variance in satisfaction, and that sometimes perceived performance was an even better predictor of satisfaction than the disconfirmation-of-expectations variable (Tse & Wilton, 1988).

#### **2.3.1.3. Equity Models**

In equity models, customers expect a certain level of distributive fairness in exchanges. (Oliver 1997). "Fair treatment can use the concept of the equity ratio (that is the amount of her/his return for her/his effort made) or the concept of social comparison (that is, the perceived, relative level of product/ service performance that other consumers experience.)" (Hom, 2000, p.106)

#### **2.3.2. Individual and group satisfaction**

In order to measure satisfaction of a group directly which is the output of the performance /expectation comparison, the population must be segmented into groups of homogenous expectations, so that satisfaction can be measured against a common standard. The homogeneity defined here is different from socioeconomic

groupings of age, gender, income, or geographic location...

Typically, homogeneities are looking for in the use of the service or product.

Homogenous groups can be defined by some of the key dimensions as:

Similar needs, similar priority rankings of needs, similar ratings of the performance of key competitors, similar satisfaction ratings of service profiles (i.e., similar satisfaction/ performance relationships)

### **2.3.3. Transaction- specific and cumulative satisfaction**

The disconfirmation model in its simplest form can predict the transaction-specific satisfaction. Satisfaction of an individual with each service encounter can be given as an example. A customer makes an independent evaluation of the perception of performance relative to expectations each time he or she experiences the service, and the satisfaction or dissatisfaction with this experience is measured.

It is not necessary to measure satisfaction of each service encounter if a long term loyalty is aimed. Under this circumstance, the focus should be on how to shift customers to a new satisfaction/ performance curve, or how to respond to customers' changing needs. These occur as a result of changes in customers' attitudes towards the service, based on their experience and satisfaction with the service over time. This long-term concept is referred as cumulative satisfaction. (Ramaswamy 1996)

### **2.3.4. User and decision-maker satisfaction**

This model can be useful to get best source of information from three types of customers; decision makers, regular users of the service and customers who leave the service or who complain.

Decision makers are the customers able to objectively articulate the performance requirements for a service that meets their selection criteria,

Regular users are long term customers of the firm, and so they are able to form their evaluations of satisfaction on their cumulative experience with the service rather than on a single encounter.

Customers who leave or complain can be useful because currently, they are dissatisfied with the service or they have a specific dissatisfying incident.

(Ramaswamy1996).

#### **2.4. Characteristics of Satisfaction**

In order to measure customer satisfaction, the characteristics of satisfaction must first be understood.

Patton and Bleuel (2000, p 224) identified and described the four elements that characterize satisfaction below:

*Intensity of satisfaction:* The intensity of satisfaction is a measure of the value of the specific activity relative to the personal needs or the needs of a company. The satisfaction pointed here is the level that is directly related to the value of service provided. The more valuable it is the more intense will be the level satisfaction.

*Congruence of satisfaction:* The congruence of satisfaction represents that difference between actual and expected satisfaction will directly affect the level of satisfaction. According to the performance of a service or the delivery of goods, a customer has a level of expectation. How closely the actual goods or service meets that expectation will determine the amount of congruence between the expected and actual level. As these two come closer together, the level of satisfaction will increase.

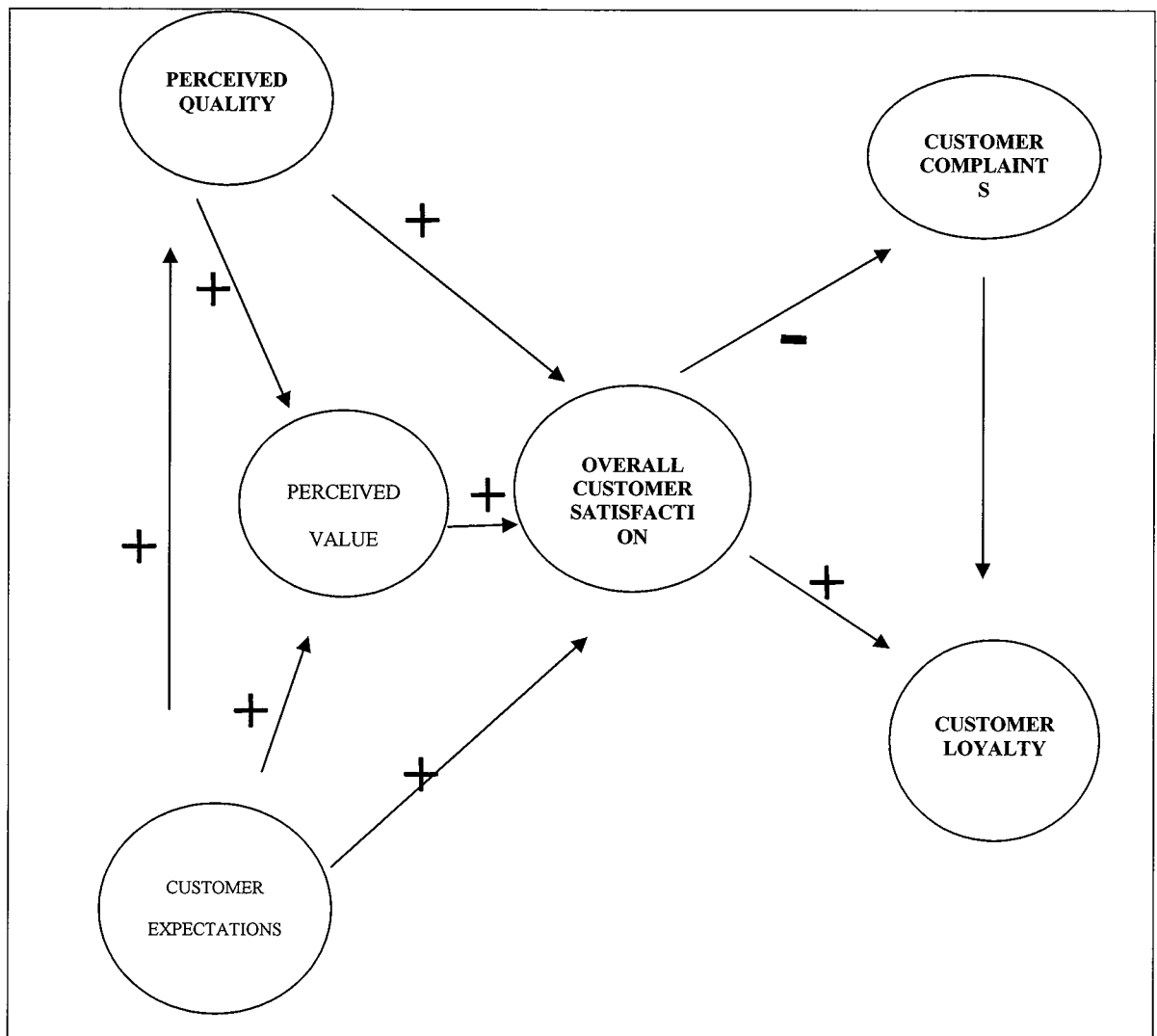
*Ambiguity of satisfaction:* The level of customer satisfaction can be directly related to degree of the customer's understanding of the goods or service he has been provided. In many service support areas the customer is not specifically aware of what has been done. In order to eliminate the ambiguity of satisfaction, customer's can be informed or educated.

*Periodicity of satisfaction:* The frequency with which service is provided to a customer is a very important point and will also have dramatic impact on level of satisfaction.

Satisfaction will be maximized when the periodicity of the service comes in congruence with the customer's expectation of the frequency with which service should be provided. Too frequent service can be just as harmful as little service and can have the same negative effect on the level satisfaction.

In the competing business sector, it will be a valuable advantage over the competitors to understand how these characteristics contribute the satisfaction process.

## 2.5 Antecedents and Consequences of Overall Customer Satisfaction



**Figure 2.5.** Antecedents and Consequences of Overall Customer Satisfaction  
(Adapted from “A National Customer Satisfaction Barometer: The Swedish Experience” by Fornell, 1992. Journal of Marketing, Vol. 56, January, p 8)

According to Fornell and colleagues (1996) customer satisfaction model embedded in the system of cause and effect relationships which the relationship is running from the antecedents of overall customer satisfaction to the consequences of overall customer satisfaction.

The *antecedents* refer expectations, perceived quality and value and the consequences refer voice and loyalty.

In their model called The American Customer Satisfaction Index (ACSI), they underline three determinants of overall satisfaction.

The first determinant is perceived quality or performance, which is the evaluation of past experience and expected effect on overall customer satisfaction. (Fornell, 1992)

In the literature beginning with Oliver (1980) researchers give a great importance to the expectancy- disconfirmation paradigm. As a result expectations provide a baseline for a customer's level of satisfaction.

The second determinant is perceived value, or the perceived level of product quality relative to the price paid.

According to Bolton and Lemon (1999), a customer is more satisfied when he or she perceives the price/usage exchange as more equitable.

The third determinant is the served market's expectations, which represent both the served market's prior consumption experience with the firm's offering and a forecast of the supplier's ability to deliver quality in the future.

Shugan, (1980) also discuss the key elements of antecedents- perceived quality, performance, or profit actually experienced and expectations as a comparison standard- and pointed that antecedents influence not only satisfaction but also the likelihood of repurchase.

Cognitive and behavioral responses to satisfaction subjects have an important assistance for the firms' managements for future changes. The immediate *consequences* of increased customer satisfaction are decreased customer complaints and increased customer loyalty.

“Following Hirschman’s (1970) exit-voice theory, the immediate consequences of increased customer satisfaction are decreased customer complaints and increased customer loyalty.” (Fornell, 1992, p.9)

Improved efficiency in customer recovery is one of the key objectives of management in understanding exit- voice theory. Fornell (1992) suggested that firms should first encourage dissatisfied customers to complain and then manage those complaints in order to keep customers.

## **2. 6. Quality - Satisfaction**

Customer satisfaction can be measured to the *quality* extend to which products or services meet the requirements of people who use them.

Montgomery (1996) distinguishes between two types of quality: quality of design and quality of conformance. Quality of design reflects the extend to which a product or service possesses an intended feature and quality of conformance reflects the extend to which the product or service conforms to the intend of the design. (Hayes, 1998, p.1,2).

These aspects of quality can be measured and they can give businesses an exact indication of the well being of their business processes and determine the quality of products and services resulting from these processes.

Hayes (1998) identify the benefits of the measures to the business as; knowing how well the business process is working, knowing where to make changes to create improvements, if changes are needed, and determining if the changes led to improvements.

Oliver (1997) pointed out that quality and satisfaction are different concepts. First, while quality perceptions could come from external mediation instead of

experience of service, satisfaction has to be experienced by consumers in person. Thus, quality judgments standards are based on ideals or perceptions of excellence, while satisfaction judgments include predictive expectations, needs, product category norms, and even expectations of service quality.

In addition, while quality judgment is mainly cognitive, satisfaction is an affective experience (Oliver, 1994). While satisfaction is more vulnerable to cognitive and affective processes such as equity, attribution, and emotion, service quality is influenced by very few variables such as external cues like price, reputation, and various communication sources.

Cronin and Taylor (1992) stated that some factors such as price, location and other family and friend members might influence satisfaction as well as future purchase intention while not actually affecting customers' perceptions of service quality. So it is important to distinguish and manage factors, which may not be related to service quality, but related to satisfaction.

### **2.6.1. Service Quality**

“A service is an activity or a series of activities, which takes place in interactions with a contact person or a physical machine and provides consumer satisfaction.” (Alpaslan, 1995, p.10)

Products are tangible, whereas services are intangible. Thus, products produced by machines, services by people. As a result, services tend to be more variable in quality, while products are more standardized. Another difference between products and services is that unused services cannot be stored. An airline cannot store empty seats, whereas an auto manufacturer can keep unsold cars in inventory. Compared to products, the perishability of services creates more risks



for services marketers. (Assael, 1990)

Parasuraman, Berry and Zeithaml's (PZB) (1994) define the service quality (SERVQUAL), stated that, the meaning, definition and evaluation of quality exist in customer's mind. They (1988) revealed that the primary criteria utilized by consumers in assessing service quality could be described by five dimensions: tangibles, reliability, responsiveness, assurance (knowledge and courtesy of employees and their ability to inspire trust and confidence), and empathy (caring; individual attention the firm provides its customers). The last of the two dimensions, assurance and empathy, contain items as communication, credibility, security, competence, courtesy, understanding/knowing customers and access.

According to Cronin and Taylor (1992), satisfaction is super ordinate to quality-that quality is one of the service dimensions factored into the consumer's satisfaction judgment. Subsequent to this effect, satisfaction may reinforce quality perceptions, but only indirectly. Quality is hypothesized as one dimension on which satisfaction is based and satisfaction is one potential influence on future quality perceptions. If one can conceptualize occasions where satisfaction and quality are at variance (satisfaction with low quality) then the concepts are not the same.

Perceived quality is frequently compared to overall attitude, and the two constructs are viewed as similar (Bitner, 1990; Parasuraman et al., 1988; Zeithalm, 1988). The classic definition of attitude is "a learned predisposition to respond to an object in a consistently favorable or unfavorable way" (Allport, 1935). Perceived quality is then viewed as similar to attitude because it represent a general, overall appraisal of a product or service. As with satisfaction, it would appear that perceptions of quality could occur at multiple levels in a service organization setting. For example, the consumer is likely to be able to distinguish between the quality

of the interaction with the services provider, the quality of the core service, and the overall quality of the organization.

Service quality has been operationalized most often by assessing service expectations and performance

## **2.7. Satisfaction and Value**

Value is the key determinant of a customer's decision to purchase a service. In detail Zeithaml (1988) defined value as a consumer's overall estimation of product utility, based on perceptions of what was received and what was given in the exchange. Even a service whose performance delights customer may not be purchased if it is perceived to cost more than it is worth. Value is therefore the true driver of customer behavior, and the strategic objective of the company should therefore be to maximize the value of the service provided to the customer. This is done by providing the customers with the desired level of quality at the price that they are willing to pay. For the firm, this means that the service needs to be designed and operated to deliver the desired quality level at a cost that supports this price and keeps the firm profitable.

In the literature researchers have expressed different theoretical views. Bitner & Hubert (1994) use the word value, to refer explicitly to the customer's assessments of quality/ price trade- off. And they use the word satisfaction to refer to customers' assessment of either one the other variable in the value equation. Cronin et. al. (2000) proposed that price and the service received are the two dimensions of value and according to their results customers give more importance to quality of service than the costs associated with its acquisitions. As a result, perceptions of service quality may drive perceptions of value, which in turn influence satisfaction judgments

and future intentions of customers.

Value that the customer determines is the evidence of customer satisfaction.

Measuring value is strictly a customer satisfaction issue.

Lam et al (2004) pointed out that customer satisfaction mediates the relationship between customer value and customer loyalty, and that customer satisfaction and loyalty have significant reciprocal effects on each other.

Customer satisfaction measurements are important vehicle for collecting customer's opinions and needs in the marketing area. Service or product standards could be developed by the findings of measurements and results improve customer loyalty.

## **2.8. Related Research**

In the literature, there are lots of researches, studied related with customer satisfaction. In this part, various researches related with customer satisfaction are discussed.

Anderson and colleagues (1994) made a research to investigate the nature and strength of how expectations quality and price affect customer satisfaction and why customer satisfaction, in turn, should affect profitability. In this study, researchers used questionnaire method on the customers of 77 firms. The results of the study showed that the market's expectations of the quality of a firm's output positively affect customers' overall satisfaction with the firm.

Bearden and Teel (1983) conducted a study on consumer experiences to examine the antecedents and consequences of consumer satisfaction. The data for the study was obtained from 375 members of consumer panel. The results indicated that

expectations and disconfirmation are related positively to satisfaction.

In a research, the effect of a service change on customer attitudes about service quality were studied by Bolton and Drew (1991). For the research they interviewed with 119 households. They found that service changes are found to have strong influence on customer evaluations of service quality through their effect on customer perception of current performance and disconfirmation. And these results showed that the effect of disconfirmation is larger and the effect of prior attitudes is smaller directly after the service change than in a subsequent time period.

Bolton and Lemon (1999) developed a dynamic model of customer usage of services to find the relationship between customer satisfaction and subsequent service usage and provided a new theoretical insight into the antecedents of customer satisfaction by introducing the concept of perceived payment equity.

Mohr and Bitner (1995) made a research to investigate how one aspect of the service encounter, perceived employee effort, customer satisfaction with service transactions. The study results concluded that perceived effort has strong positive impact on transaction satisfaction, and this effect is not eliminated when the perceived success of the service outcome is statistically controlled. This shows that employee effort is appreciated by customer in its own right, regardless of its impact on the outcome. This means customers may like to see employees working hard as a sign that they care about them.

Martinez-Tur and colleagues (2001) made a research on the gender differences in the relationships between perceptions of justice, customers' satisfaction and behavioral intentions. The data for the study was obtained from 205 male and 129 female participants. The results of the questionnaire, the researchers made to measure, showed that the correlation between scores for distributive

justice and customer satisfaction were greater for men than for women.

In the survey of Triado, Aparicio and Rimbau (1999) which aimed to investigate the elements most influence customer satisfaction in sport centers, found that according to circumstances; the human resource component of the service, the facilities, communication and monetary matters have a real influence on customer satisfaction. The data collected from 698 active customers of municipal sports centers.

In a study which aimed to examine the mediating role of both the workers' and customers' perceived control of the service situation, on the relationship between the workers' perception of the service climate, on the other hand, and the customers' satisfaction, on the other hand. Yagil and Gal (2002) made their investigation among 113 pairs of service workers and customers at service organizations. The results show that service climate is related to a customer's satisfaction through the mediation of a service worker's self reported control of the service situation.

Tzetzis and Costa conducted a study to identify the services that the clients of fitness centers demand so that they will stay loyal to their club. Four hundred and eighty fitness club customers responded to the questions, the response rate was over fifty five percent (55%). The questionnaires distributed and collected by the networking method. The results of the survey underlined that women spent more time than men in the club, the reason for attending the fitness club in order is; physical fitness and health, improvement of appearance, loosing weight and recreation, and the last reasons were socialization and body building. Thus, the members gave great attention to cleanliness of the facilities, then variety of programs and equipment. Politeness and education of the staff is also important factors that the members demand from a club.

To investigate the relationship between social variables and satisfaction and exercise behavior Unger and Johnson (1995) conducted a study. The results show that friendship that involve exercising together and the social contacts that results from exercising in health clubs may motivate exercise behavior. Most of the population may derive social and also physical benefits from the exercise. Thus, these social benefits may encourage them to keep on exercising. The results also suggested that social interaction might be a more important motivator of exercise behavior for single people than for people who are married and more significant for the people who are single, divorced or widowed.

In a similar study, which aimed to investigate the social exchange theory variables' association with exercise behavior and satisfaction is completed by 190 health club members. Variables consist of the perceived rewards of exercising, perceived costs of exercising, the social and tangible investments, and available alternative activities. Participants were asked to reply questions about attitudes toward exercise, exercise behavior and demographic information. Results emphasized that exercise satisfaction, the numbers of investments in exercise, and the numbers of available alternative activities were significantly related to exercise frequency, and the number of perceived rewards of exercise and the number of investments were significantly related to exercise satisfaction. (Unger and Johnson 1995)

Yeung and Hemsley (1996) conducted a study on the relationships between exercise, personality traits and psychological health. Two hundred and four women and 48 men from health clubs and adult education classes returned complete sets of data. Results revealed that there is an indirect relationship between exercise and physical, psychological health. Since exercise almost certainly has a strong

effect on physical health, exercise may have indirect effects on psychological well-being.

In a research, a correlate of a response of dissatisfaction that represents the telling other consumers about the dissatisfaction is studied. 201 consumers respond the questionnaires completely. The study results concluded that the nature of dissatisfaction problem, consumers' attributions of blame for the dissatisfaction and perceptions of the complaint situation are related to responses to dissatisfaction.

To compare customer satisfaction aspects between public and private sport and fitness clubs in Greece, Alexandris et. al. (2001) conducted a study. Four hundred eighteen participants who were members of five public and five private sports and fitness clubs were completed the questionnaire. They responded the satisfaction questions about the facility, programmes, staff attitude and competence, relaxation, intellectual social, and health and fitness. They stated according to their study, the customers of public sport centers scored lower than the customers of private sport centers from the dimensions of facilities, staff, intellectual and health and fitness.

Barber and Havitz (2001) conducted a study on the adult participation rates in six sport and fitness activities for the period 1980 to 1989. The data were collected by the Print Measurement Bureau (PMB) - PMB is a federally incorporated, nonprofit association of publishers, advertising agencies, and advertisers - via in-home interviews with people, aged 12 and over. The sample size is two thousand four hundred fifteen. The new participation rates split by gender revealed that women exhibit less participation compared with old participation rates. And also the older populations' participation rates are increasing comparing to last years.-

Theodorakis et. al. (2004) studied to test the satisfaction levels of customers of health clubs in Portugal, sampling group of four hundred and twenty six (N=426) individuals, who were members of five private clubs in Braga, Portugal responded to the questions. According to the results, the principal component analysis of the need-satisfaction scale revealed five dimensions, which were labeled as follows: facilities / services, staff, relaxation, health / fitness, social / intellectual. All the sub-scales were shown to have good internal consistency reliabilities. The descriptive statistics indicated high mean scores for all the need-satisfaction dimensions. Demographic comparisons furthermore indicated that females were less satisfied than males in the facilities / services.

In a study, sought to establish levels of satisfaction among military members and their immediate families with on-installation fitness facilities and exercise programs, based on a random sample of military families surveyed at 38 installations worldwide and at remote locations. A total of 8,572 service member and 3,493 spouse (55% and 32% response rate, respectively) questionnaires were completed and returned. Overall, members were satisfied with fitness facilities and programs, but spouses were less satisfied and more unfamiliar with these facilities. Most valued programs were fitness centers and swimming pools. Results show that elimination of fitness facilities would greatly decrease the quality of life on installations, particularly at sites outside the continental United States, whereas spouses reported that this would not have a dramatic effect. (Lee, 2000).

Alexandris and Palialia (1999) made a research for developing a scale for measuring customer satisfaction in sport and fitness clubs. From three private fitness clubs, two hundred and ten members participated in the research. The results



supported the multidimensionality of the concept of customer satisfaction. After performing principal component analysis, five factors were existed. These are facilities/services, individual/psychological, relaxation, social, and health/ fitness. All scales were shown to have satisfactory psychometric properties.

Greenwell, Fink and Pastore (2002) examined the influence of spectator sport facilities on customer satisfaction. There were two hundred and eighteen participants whom attended minor league hokey games. Results show that when perceived as a whole, facility elements predicted customer satisfaction, whereas attributes of the facility had little impact individually. It was found that both perceptions of service personnel and of the physical facility contributed to customer satisfaction over and above the impact of customers' perceptions of the core product.

## **CHAPTER III**

### **METHODS AND PROCEDURE**

This chapter is composed of selection of subjects, data collection instrument, data collection procedures and the statistical analysis.

#### **3.1 Selection of Subjects**

The participants of the study were constituted from 150 female (47.3 %) and 167 male (52.7 %), totally 317 individuals. Subject group was composed of the members of elite level health care and fitness centers in Ankara and they were randomly selected.

Customer satisfaction questionnaire that was developed from the customer satisfaction scale (Alexandris et.al.1999) were given to the customers. The questionnaires are applied in Ankara. Hundred questionnaires were distributed to each of the six centers, the total numbers of distributed questionnaires were 600 truly completed 317 questionnaires, and with a returning rate of % 52 were included in the statistical analysis of this study.

Detailed information about the participants is represented in Table 3.1.

**Table 3.1** Descriptive Information about participants' age, gender, marital status occupation and education.

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Standard Dev.</b>
<b>Age</b>	317	15	65	33.38	10.321

		<b>Frequency</b>	<b>Percent</b>	<b>Valid percent</b>	<b>Cumulative percent</b>
<b>Gender</b>	Male	167	52.7	52.7	52.7
	Female	150	47.3	47.3	100,0
<b>Marital Status</b>	Married	153	48.3	48.4	48.4
	Single	155	48.9	49.1	97.5
	Other	8	2.5	2.5	100,0
	(Divorced, death)				
<b>Occupation</b>	Student	50	15.8	16.0	16.0
	Self employed	161	50.8	51.6	67.6
	Official	54	17.0	17.3	84.9
	Housewife	21	6.6	6.7	91.7
	Retired	14	4.4	4.5	96.2
	Worker	12	3.8	3.8	100.0
<b>Education</b>	Primary s.	2	6	.6	.6
	Secondary s.	5	1.6	1.6	2.2
	High school	76	24.0	24.0	26.2
	University	160	50.5	50.5	76.7
	Master	49	15.5	15.5	92.1
	Ph.D.	25	7.9	7.9	100.0

### **3.2 Data Collection Instrument**

Customer Satisfaction Questionnaire is composed of two parts.

The first part includes demographics. These are age, gender, marital status, occupation, and education level.

Second part is developed from The Customer Satisfaction Scale (CSS) (Alexandris and Palialia, 1999) and composed of twenty-four items aiming to assess the extent to which customer needs and expectations are satisfied through fitness participation.

#### **3.2.1 Customer Satisfaction Scale (CSS)**

The Customer Satisfaction Scale (CSS) that was developed by Alexandris and Palialia, 1999, translated into Turkish by two different instructors from Ankara University Foreign Language Preparatory Department. The translations were compared and two different specialists translate the Turkish version of the Customer Satisfaction Scale (CSS) back into English. The committee compared the CSS that was translated into Turkish and translated back again into English to determine if any differences existed between the original and the translated version. It was clear that wording of items in meaning are equivalent between Turkish and original version.

After controlling translation, two different informal interviews with the fitness department managers, fitness and aerobic instructors are conducted. The relevance of the items to Turkish culture was discussed with the experts from Physical Education and Sport department of Middle East Technical University. It is decided that the final form of the scale is available from the points of easiness to understand, clarity of the items and sufficiency of content.

The help of a 5- Point Likert-Scale made the analysis of the data gathered from the respondents, ranging as “strongly agree = 5”, “agree = 4”,

“undecided = 3”, “disagree = 2”, “strongly disagree = 1”.

### **3.3 Data Collection Procedures**

There are 33-licensed private health and fitness clubs in Ankara recorded in the General Directorate of Youth and Sports (GSGM) (2005)([www.ankara-gsim.gov.tr](http://www.ankara-gsim.gov.tr)). From the 33 private clubs, 6 of them were randomly chosen. Some of the health and fitness clubs were eliminated from the sample because of their inadequate size and range of programmes and limited number of members. The chosen health care and fitness centers offer a minimum six months membership and services as aerobic studios, free weight areas, circuit-training areas, general fitness areas, swimming pools, tennis courts, squash, sauna and Jacuzzi.

The Turkish version of the CSS was given to the participants who agreed to participate voluntarily. They were asked to participate in this research when they enter the club for exercising. The purpose of the study was explained and information is given about the questionnaire and point to read the instruction part before completing the questionnaire.

Truly completed 317 questionnaires, with a returning rate % 52, were included in the statistical analysis of this study. Participants who returned incomplete inventories were eliminated from the study.

### **3.4 Statistical Analysis**

The following statistical analyses were conducted using SPSS.

1-Kaiser-Meyer-Olkin Measure of Sampling Adequacy was conducted to ensure that there was adequate and high variability in the collected data.

2- Bartlett's Test of Sphericity was conducted to ensure that the items of

the instrument were correlated sufficient enough.

3- Principal Component Analysis with Varimax rotation was conducted on the collected data. (Construct validity)

4- Reliability test (Cronbach alpha) was conducted to find internal consistency among the items.

## CHAPTER IV

### RESULTS

The returning rate was 52%, which corresponded to 317 truly completed and usable questionnaires from the totally distributed 600 questionnaires. One hundred and fifty of the total participants (47.3%) were females and 167(52.7%) of the participants were males.

One hundred fifty three (48.4%) of the subjects were married group, 155 (49.1%) were singles' group and 8 (2.5%) of them composed the others group (divorced, death, widowed etc.). There is only one subject who did not define the marital group (0.3 %). Two (0.6%) of the subjects were graduated from primary school, 5 (1.6%) of the subjects were graduated from secondary school, 76(24%) of the subjects had high school diploma, 160 (50.5%) of the subjects were graduated from university, 49 (15.5%) of the subjects had master degree, 25 (7.9%) of the subjects had Ph. Degree.

#### 4.1 Construct Validity

The data were inspected with regard to their appropriateness for principal component analysis through the Kaiser-Meyer-Olkin Measure of Sampling Adequacy. Kaiser-Meyer-Olkin Measure of Sampling Adequacy measure for the data was .893, which suggested that there was sufficient and high variability in the data to conduct component analysis.

The results of Bartlett's Test of Sphericity (Approximate Chi-Square= 4268.233, df = 276, sig. = 000) suggested that the items were sufficient correlated to conduct component analysis. (Table 4.1.1)

**Table 4.1. KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.893
Bartlett's Test of Sphericity	Approx Chi-Square	4268.233
	df	276
	Sig.	.000

Principal Component Analysis (PCA) is the most common form of factor analysis. Principle component analysis (PCA) is a statistical technique that linearly transforms a group of correlated variables into a substantially smaller set of uncorrelated variables it is much easier to deal with a smaller set of uncorrelated variables than the original data set of correlated variables.

Principle components reduce the dimensionality of the original data set, interpretation, and orthogonalization of predictors to overcome multicollinearity problem. (Sürücü, 1999)

The components with an eigenvalue greater than 1.0 were taken into consideration.

The greater the eigenvalue the better explains the variance.

One way to obtain more interpretable results is to rotate the solution. After rotation, the results are easier to interpret. Varimax orthogonal rotation method that was proposed by Kaiser was used. The component matrix was rotated and five factors emerged which accounted for 65.677 % of the variance. (It is different from Alexandris et. al (1999) - the original scale- because in that one six factors emerged) The rotated component matrix is produced to find correlations between observed variables and factors. Making an orthogonal rotation is to shift to a new coordinate axes in the same space spanned by PC's. The best orthogonal fit is achieved by using



an orthogonal rotation. The amount that is explained by rotated components is as the same as that of before. (Sürücü 1999) The rotated component matrix is presented in Table 4.1.2.

**Table 4.1.2.** Rotated Component Matrix

<b>Principal Component Analysis For The CSS</b>					
	<b>Component</b>				
	<b>1-Social-Intellectual</b>	<b>2- Physical-Psychological</b>	<b>3-Facilities</b>	<b>4-Staff attitude</b>	<b>5-Cleanness of facilities</b>
X 1			.762		
X 2			.741		
X 3					.868
X 4					.847
X 5			.496		
X 6			.649		
X 7				.746	
X 8				.691	
X 9				.774	
X 10				.737	
X 11		.591			
X 12		.645			
X 13		.564			
X 14	.611				
X 15	.737				
X 16	.841				
X 17	.583				
X 18	.793				
X 19		.591			
X 20		.782			
X 21		.775			
X 22	.644				
X 23	.519				
X 24	.489				
Extraction Method: Principal Component Analysis Rotation Method: Varimax with Kaiser Normalization. a. Rotation converged in 7 iterations					
Eigenvalue % of variance explained = 65.677					

The questions among factors can be seen from the component matrix.

The five factors defined as follows: 38

### **Factor 1: Social and Intellectual Satisfaction**

Question 14: Exercising in the center gives me a sense of accomplishment.

Question 15: Exercising in the center gives me the chance to know myself better.

Question 16: Exercising in the center gives me the chance to learn new things.

Question 17: I use variety of skills when exercising in the center.

Question 18: Exercising in the center gives me the chance to increase my knowledge.

Question 22: Exercising in the center gives me the chance to socialize.

Question 23: Exercising in the center gives me the chance to meet new people.

Question 24: The participants in the programmes are friendly to me.

### **Factor 2: Physical and Psychological Satisfaction**

Question 11: The activities and programmes help me relax.

Question 12: The activities and programmes help me reduce my stress.

Question 13: The programmes contribute to my psychological well being.

Question 19: The programmes help my physical restoration.

Question 20: The programmes help me keep healthy.

Question 21: The programmes help me in keeping fit.

### **Factor 3: Attractivity of Facilities and Programmes**

Question 1: The facilities and programmes are attractive.

Question 2: The facilities and programmes are well designed.

Question 5: There is a wide range of programmes.

Question 6: The programmes are interesting to me.

#### **Factor 4: Staff Attitude and Competence**

Question 7: The fitness instructors are friendly.

Question 8: The instruction in the sessions is good.

Question 9: The staff is helpful.

Question 10: The instructors are well educated.

#### **Factor 5: Cleanness of the Fitness Center**

Question 3: The exercise places are clean.

Question 4: The changing rooms are clean.

### **4.2 Reliability**

Reliability is defined as the extend to which measurements are free from random error variance. Random error decreases the reliability of the measurement (Hayes, 1998)

In this research, internal consistency method was used to estimate reliability. This method involves administering a test to a group of individuals, computing the correlations among all items and computing the average of those intercorrelations, and finally using appropriate formulas to estimate reliability. (Murphy, Davidshofer 1998). Cronbach has developed one of these formulas. The cronbach alpha estimates how highly the items in the questionnaire are interrelated.

Reliability Analysis of All Items

Reliability Coefficients

N of Cases = 304.0

N of Items = 24

Alpha = **.9214**

Reliability Analysis of items 14, 15, 16, 17, 18, 22, 23, 24 (Factor 1)

Reliability Coefficients

N of Cases = 313.0                      N of Items = 8

Alpha = **.8772**

Reliability Analysis of items 7,8,9,10 (Factor4)

Reliability Coefficients

N of Cases = 312.0                      N of Items = 4

Alpha = **.8144**

Reliability Analysis of items 3,4 (Factor5)

Reliability Coefficients

N of Cases = 317.0                      N of Items = 2

Alpha = **.8151**

Reliability Analysis of items 11, 12, 13, 19, 20, 21 (Factor 2)

Reliability Coefficients

N of Cases = 315.0                      N of Items = 6

Alpha = **.8873**

Reliability Analysis of items 1,2,5,6 (Factor 3)

Reliability Coefficients

N of Cases = 313.0                      N of Items = 4

Alpha = **.8017**

The cronbach alpha values indicate a high reliability degree of the questionnaire.

## CHAPTER V

### DISCUSSION

The current study was designed to investigate the validity and reliability of the Customer Satisfaction Scale.

Principal component analysis (PCA) was used to discover the factor structure of the data. There is adequate discrimination between factors. Based on the information, it was decided to do an orthogonal rotation. After a varimax rotation, each original variable tends to be associated with one of factors. These analyses yielded a factor structure for use in future research and practice in the health and fitness area. The factor structure that emerged has five factors that were labeled as follows: factor 1; social and intellectual satisfaction, factor 2; physical and psychological satisfaction, factor 3; facilities and programmes, factor 4; staff attitude and competence, factor 5: cleanliness of the fitness center. Together they account for 65.7 % of the variance.

It is different from Alexandris et al (1999) - the original scale- because in that one six factors emerged. The Original Scale factors were as: Facilities and programs, staff attitude and competence, relaxation, intellectual, health-fitness and social.

The content of the intellectual and social factors are same as the original one where 15<sup>th</sup>, 16<sup>th</sup>, 17<sup>th</sup>, 18<sup>th</sup> questions form factor named as intellectual and 22<sup>nd</sup>, 23<sup>rd</sup>, 24<sup>th</sup>. Questions form factor named as social. In the Turkish version of the CSS intellectual and social factors occur as one combined factor according to the PCA results. (Factor 1 items' values: .737, .841, .583, .793, .644, .519, .489- cluster in the same factor) In a similar study, Theodorakis et al (2004) examined the satisfaction

levels of customers of health clubs in Portugal, based on a sample of four hundred and twenty six individuals, who were members of private health clubs in Portugal which revealed five dimensions and social and intellectual components clustered in same factor.

Furthermore, fourteenth question “exercising in the center gives me the sense of accomplishment” occurred in relaxation labeled factor in the original scale while it lied in the social and intellectual factor. Due to the results of both PCA (question 14 clustered in factor 1) and internal consistency (alpha for factor 1 = .8772) sense of accomplishment highly represents social and intellectual factor. The results revealed that Turkish cultural structure, perceive and concur “sense of accomplishment” as knowing her/his self better, learning new things and socialization.

Another difference is the conception of hygiene. In the original scale, cleanliness of activity areas and changing rooms clustered in the facility and programmes factor. On the other hand, cleanliness represents a factor independently in the Turkish version. Also alpha value for these items = .8151 indicate a high reliability. In a similar study, that purposed to identify the factors of customer satisfaction in municipal sport centers in Barcelona, hygiene and maintenance is also an important factor itself and an important influence on customer satisfaction. (Triado et. al., 1999). It must be concerned that hygiene, itself is one of the important factors that shows customer satisfaction -in our culture in the area of health and fitness so, managers should identify cleanliness as a major concern at health clubs both in terms of member safety and attraction and retention.

Factor 4, which performs staff attitude and competence, was perceived same when compared to original scale. Also, alpha value is equal to .8144 and it is good enough to explain it as a reliable one.

Internal consistency measures estimate how consistently individuals respond to the items within a scale. Cronbach alpha is the most common estimate of internal consistency of items in a scale. Alpha measures the extent to which item responses obtained at the same time correlate highly with each other. The cronbach alpha values for all the factors demonstrate that they show excellent internal consistency for the scale. Total scale shows an alpha of .9214, while each factor also shows high levels of reliability, .8772 for factor 1, .8873 for factor 2, .8017 for factor 3, .8144 for factor 4 and .8151 for factor 5 for each of the respective factors.

This demonstrates that for research purposes, these factors are internally consistent enough to yield useful data.

As a conclusion, the high value obtained in the statistics show that the scale is appropriate for the explanation of satisfaction of health care and fitness center customers.

## CHAPTER VI

### CONCLUSION

This study was design to test the reliability and validity of Turkish Version of the Customer Satisfaction Scale.

317 health care and fitness club members in Ankara were analyzed by the customer satisfaction scale.

The 10.0 version of statistical program for social sciences (SPSS 10.0) packet program was used in the statistical analyses of the study. Principal Component Analysis with Varimax rotation and reliability test (Cronbach alpha) were used for the statistical purpose.

Based upon the results of the study the following conclusions can be made:

- Customer satisfaction is a multi-dimensional concept, so customers have multiple expectations and it is therefore necessary to manage them appropriately with a great care and effort.
- Statistical findings show that Turkish version of the Customer Satisfaction Scale is an appropriate scale for determining satisfaction levels of health care and fitness center customers.
- The results indicate that social- intellectual satisfaction, physical and psychological satisfaction, function and cleanness of facilities and staff attitudes are the factors influencing overall customer satisfaction. This study has demonstrated the value of knowing the important elements that keeps the health care and fitness clubs alive.



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## APPENDICES

### A

#### MÜŞTERİ TATMİN ÖLÇEĞİ

Aşağıdaki ifadelerden oluşan MÜŞTERİ TATMİN ÖLÇEĞİ spor ve fitness salonlarındaki müşterilerin aldıkları hizmet karşısında duydukları tatmin seviyesini belirtmek için hazırlanmıştır. Ölçek iki bölümden oluşmaktadır. Birinci bölüm müşteriler hakkında demografik bilgi edinmek için hazırlanmış kişisel bilgiler bölümünden oluşmaktadır. İkinci bölüm ise müşterilerin spor ve fitness salonlarından aldıkları hizmetten duydukları tatmin seviyesini belirlemek üzere hazırlanmış ifadelerden oluşmaktadır. İfadeler hakkında herkes farklı yorumlara sahip olabilir. Doğru veya yanlış cevap yoktur. Her ifadeyi dikkatlice okuyunuz sonra ne derece katıldığınıza karar verip ifadenin sağ tarafında bulunan kutucuğu işaretleyiniz. Sorulara vereceğiniz cevaplar çok önemlidir ve elde edilecek cevaplar sadece araştırma kapsamında kullanılacaktır. Katılımınızdan dolayı teşekkür ederim.

#### **I. Bölüm**

##### **Kişisel Bilgiler**

Yaşınız: \_\_\_\_\_

Cinsiyetiniz: Erkek  Bayan

Medeni Durumunuz: Evli  Bekar  Diğer  
(belirtiniz) \_\_\_\_\_

Mesleğiniz: \_\_\_\_\_

Eğitim durumunuz (en son mezun olduğunuz okul):

- a) İlkokul
- b) Ortaokul
- c) Lise
- d) Yüksek okul veya üniversite
- e) Yüksek lisans
- f) Doktora



## II. Bölüm

Değerlendirme için aşağıdaki ölçekten yararlanın ;

Tamamen katılıyorum	= 5
Katılıyorum	= 4
Kararsızım	= 3
Katılmıyorum	= 2
Hiç katılmıyorum	= 1

### **Üyesi bulunduğum salonda:**

- 1) Tesisler ilgi çekicidir.
- 2) Tesis ve sunulan aktiviteler iyi organize edilmiştir.
- 3) Egzersiz alanları temiz.
- 4) Soyunma odaları temiz.
- 5) Herkese uygun geniş bir program ağı var.
- 6) Uygulanan spor programları benim için ilgi çekicidir.
- 7) Spor eğitmenleri arkadaş canlısı
- 8) Programların seanslarında eğitim iyidir.
- 9) Personel yardımseverdir.
- 10) Hocalar iyi eğitilidir.
- 11) Sunulan programlar rahatlamama yardımcı olur.
- 12) Sunulan programlar stresimi azaltmaya yardımcı olur.

- 13) Sunulan programlar psikolojik olarak iyi hissetmeme katkıda bulunur.
- 14) Spor merkezinde egzersiz yapmak bana başarı duygusu verir.
- 15) Bu merkezde egzersiz yapmak bana kendimi daha iyi tanıma imkanı verir.
- 16) Bu merkezde egzersiz yapmak bana yeni şeyler öğrenme fırsatı verir.
- 17) Egzersiz yaparken farklı çeşitli hareketler kullanırım.
- 18) Bu merkezde egzersiz yapmak bana bilgimi artırma fırsatı verir.
- 19) Sunulan programlar fiziksel olarak yenilenmeme yardımcı olur.
- 20) Sunulan programlar sağlıklı kalmama yardımcı olur.
- 21) Sunulan programlar zinde/formda kalmama yardımcı olur.
- 22) Tesiste egzersiz yapmak bana sosyal olma fırsatı verir.
- 23) Tesiste spor yapmak bana yeni insanlarla tanışma fırsatı verir.
- 24) Diğer program katılımcılarının bana yaklaşımı arkadaşça.