

 **Universidade do Porto**

Faculdade de Ciências do
Desporto e de Educação Física

Service Quality and Service Value in Sport Services

A Study Conducted in Vila Nova de Gaia Municipal
Swimming Pools

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Porto, October 2003

TM



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A Study Conducted in Vila Nova de Gaia Municipal Swimming Pools

Study Submitted in Fulfilment of the
Requirements for the Degree of Master
of Sport Management

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Abstract

Consumers are becoming more demanding and conscientious of the sport services they want and they search for the best. In order to survive and win costumers confidence, organizations must learn how to give their customers not only a good service but also the best service. Public services are assuming that this concern is not only a private sector issue. Not just because public and private services compete for the same customers but also because quality in public services is also an official recommendation. Practitioners and investigators are developing strategies not only to evaluate the quality of these services but also to improve it.

There is abundant evidence in the literature that perceptions of quality influence customers' attitudes, and that good perceptions of quality promote their satisfaction and positive behavioural intentions.

In this context, this study evaluates the influence of perceived quality in the formation of the perceptions of service value that act as an indicator of repurchase intentions and word of mouth (Petrick, 2002).

Service Quality was measured using the Service Quality Scale (Alexandris, in press) and Service Value was measured using the SER-PERVAL (Pertick, 2002).

Four of the five dimensions of service quality were found to predict a significant proportion of variance of overall value. The dimension Responsiveness offered the strongest contribution, followed by the Tangibles, than by Perceived Outcome. The dimension Reliability showed the lowest contribution.

Key Words: Service Quality, Service Value, Sport Services, Public Services.

Resumo

Os consumidores estão a tornar-se cada vez mais conscientes dos serviços desportivos que desejam e procuram os melhores. De forma a sobreviver e ganhar a sua confiança, as organizações terão de aprender de que forma a dar aos seus clientes, não só um bom serviço mas o melhor serviço. As organizações que prestam serviços públicos assumem já que este já não é apenas um problema do sector privado. Não só porque os serviços públicos e privados competem pelos mesmos clientes mas também porque a qualidade nos serviços públicos é oficialmente recomendada.

Académicos e Gestores estão a desenvolver não só formas de avaliar a qualidade dos serviços como também os métodos para a melhorar.

Abunda na literatura evidência de que a qualidade dos serviços influencia as atitudes dos consumidores e de que elevadas percepções de qualidade contribuem para a satisfação dos clientes.

Neste contexto, este estudo avalia a influência que as percepções de Qualidade do Serviço têm na formação das percepções do Valor do Serviço que actua como indicador das intenções de repetição da aquisição do serviço e do fenómeno "boca-a-orelha" (Petrick, 2002).

A Qualidade do Serviço foi medida através da Service Quality Scale (Alexandris, in press) e o Valor do Serviço foi medido através do SER-PERVAL (Petrick, 2002). Quatro das cinco dimensões da qualidade do serviço parecem predizer uma proporção significativa da variância do valor global do serviço. A dimensão Capacidade de Resposta ofereceu a contribuição mais forte e a dimensão Fiabilidade a contribuição mais fraca.

Palavras Chave: Qualidade do Serviço, Valor do Serviço, Serviços Desportivos, Serviços Públicos.

Résumé

Les consommateurs deviennent de plus en plus conscients des services sportifs qu'ils souhaitent et ils cherchent les meilleurs. Les organisations, pour survivre et acquérir leur confiance, devront apprendre la façon de donner à leurs clients, pas à peine un bon service, mais surtout le meilleur service. Les organisations qui rendent les services publics ont la conscience que celui-ci n'est plus un problème du secteur privé, car les services publics et privés luttent par les mêmes clients et la qualité des services publics est officiellement recommandée.

Les Académiques et les gestionnaires sont en train de développer des formules d'évaluer la qualité des services, ainsi que les méthodes pour l'améliorer. Dans la littérature spécifique, il y a beaucoup de références qui mettent en évidence que la qualité des services influence les attitudes des consommateurs et que les perceptions de qualité élevée contribuent pour la satisfaction des clients.

Dans ce domaine, cette étude évalue l'influence que les perceptions de qualité de service ont dans les perceptions de la valeur du service qui fonctionne comme indicateur des intentions de répétition de l'acquisition du service et du phénomène «de la bouche à l'oreille» (Petrick, 2002).

La Qualité du Service a été mesurée à travers la "Service Quality Scale" (Alexandris, in press) et la valeur du service a été mesurée à travers le SERPERVAL (Pertick, 2002). Les quatre des cinq dimensions de qualité du service semblent prévoir une proportion significative de la variation de la valeur globale du service. La dimension capacité de réponse a offert la contribution la plus visible et la dimension fiabilité la contribution la moins visible.

Mots Clés: Qualité du Service, Valeur du Service, Services Sportives, Services Publiques.

Index

Acknowledgements	III
Agradecimentos	V
Abstract	VII
Resumo	IX
Résumé	XI
Index of Tables and Figures	3
1. Introduction	5
1.1. Purpose of the study	6
1.2. Significance of the study	7
1.3. Limitations and Delimitations of the study	7
1.4. Terminology	8
2. Review of the Literature	11
2.1. Towards a definition of Sports Services	11
2.1.1. Sport as a public service	11
2.1.2. Through the perspective of the European Union	12
2.1.3. Through the perspective of the Portuguese Law	15
2.2. The concept of Service Quality	18
2.2.1. Characterization and definition of services	18
2.2.2. The unique characteristics of services	20
2.2.3. Quality	21
2.3. Measuring Service Quality	23
2.3.1. Service Quality Gap	24
2.3.2. Service Quality dimensions and instruments	25
2.3. The concept of Service Value	28
2.3.1. Value	28
2.4. Measuring Service Value	28
2.4.1. Service Value dimensions and instruments	31
3. Methodology	35
3.1. Sample	35
3.1.2. Sampling Process	35

3.2. Service Quality and Service Value Instruments	36
3.2.1. Service Quality Instrument	37
3.2.2. Service Value Instrument	39
3.3. Service Quality (SQS) and Service Value (SERV-PERVAL) scales adaptation to study context	40
3.3.1. Translation and adaptation to Portuguese language and culture	40
3.3.2. Scales psychometric property examination	42
3.4. Procedures	48
3.4.1. Data collect procedures	48
3.4.2. Data analyses	49
4. Results and Discussion	51
4.1. Descriptive Study	51
4.1.1. Sample characterization	51
4.1.2. Service Quality (SQSp) and Service Value (SERV-PERVALp) dimensions	53
4.1.3. Comparison among groups – Vila D’Este, Maravedi, Granja	54
4.1.4. Analyses factor: Age	56
4.1.5. Analyses factor: Gender	57
4.1.6. Analyses factor: Education	59
4.1.7. Analyses factor: Professional situation	62
4.1.8. Analyses factor: Household	63
4.1.9. Analyses factor: Household Monthly Income	65
4.1.10. Analyses factor: Weekly Frequency	68
4.1.11. Analyses factor: Usual frequency schedule	71
4.1.12. Analyses factor: Displacement Time	74
4.2. Predictive Study	74
4.2.1. Correlations between Service Quality and Service Value dimensions	74
4.2.1. Regression Analyses	75
5. Conclusions and Recommendations	77
6. References	81
7. Appendix	89

Index of Tables and Figures

Table 1:	Selected components of the service sector (Nickels & Wood, 1997)	18
Table 2:	Service Attributes (Dotchin & Oakland, 1994)	19
Table 3:	Sample distribution	36
Table 4:	Exploratory Factor Analyses of SQSp	44
Table 5:	Exploratory Factor Analyses of SERV-PERVALp	46
Table 6:	Reliability scores in our study and in Alexandris et al.'s (in press).	47
Table 7:	Reliability scores in our study and in Pectrick's (2002)	48
Table 8:	Sample characterization: Gender, Education, Marital Status, Professional Situation, Household, Household Monthly Income, Weekly Frequency, and Usual Frequency Schedule	52
Table 9:	Sample characterization: Age, Displacement Time	53
Table 10:	Descriptive statistics of Service Quality dimensions	53
Table 11:	Descriptive statistics of Service Value dimensions	54
Table 12:	Service Quality mean scores comparison among groups – Vila D'Este, Maravedi, Granja	55
Table 13:	Service Value mean scores comparison among groups – Vila D'Este, Maravedi, Granja	56
Table 14:	Correlations between Age and Service Quality dimensions	57
Table 15:	Correlations between Age and Service Value dimensions	57
Table 16:	Service Quality mean comparison according to Gender	58
Table 17:	Service Value mean comparison according to Gender	58
Table 18:	Service Quality mean scores comparison according to Education Level	60
Table 19:	Service Value mean scores comparison according to Education Level	61
Table 20:	Service Quality mean scores comparison according to Professional Situation	62
Table 21:	Service Value means scores comparison according to Professional Situation	63
Table 22:	Mean scores comparison according to Household	64
Table 23:	Mean scores comparison according to Household	65
Table 24:	Mean scores comparison according to Household Monthly Income	66
Table 25:	Mean scores comparison according to Household Monthly Income	67

Table 26:	Mean scores comparison according to Weekly Frequency	69
Table 27:	Mean scores comparison according to Weekly Frequency	70
Table 28:	Mean scores comparison according to Usual Frequency Schedule	72
Table 29:	Mean scores comparison according to Usual Frequency Schedule	73
Table 30:	Correlations between Displacement Time and Service Quality dimensions	74
Table 31:	Correlations between Displacement Time and Service Value dimensions	74
Table 32:	Correlations between Service Quality and Service Value dimensions.	75
Table 33:	Regression Analyses for the prediction of Overall Value	76
Figure 1:	Goods-services continuum (Nickels & Wood, 1997)	20
Figure 2:	Model of Post-experience Perceived Value in the Service Choice Process, Petrick (2002)	32
Appendix I:	Service Quality items mean comparison among groups.	89
Appendix II:	Service Value items mean comparison among groups.	90
Appendix III:	Service Value Questionnaire	91
Appendix IV:	Service Quality Questionnaire	92

1. INTRODUCTION

We must understand not only what we do, but how and why we do it. (Wright, 1997)

Once satisfied the subsistence needs of individuals and societies, these look for carrying through their existence and for basing their development in health, general welfare, ecology, quality of life and in the enjoyment of pleasant sensations in general, as individuals and as a social collective. Thus, the social obligation to promote activities that enable these wishes is obvious. It is also obvious that the diversity and quality of these activities is needed according to the evolutions of societies, in which sport has a basic and extraordinary role to play. On the other hand, people's lives depend greatly on the available public services and in the sports field this dependence is clear and very central since that the available conditions to develop sport practices and recreation activities contribute greatly for a life with quality at every age.

However, consumers are becoming more demanding and conscientious of the sports services they want and they search for the best. In order to survive and win costumers' confidence, organizations must learn how to give their customers not only a good service but the best one. Theodorakis at al. (1998) stated that in the beginning of this decade, services marketers started to recognize the importance of Service Quality and its impact on the success of the organizations and Service Quality became one of the most important topics among researchers. They showed its strong relationship to other vital marketing concepts such as customer satisfaction, value, customer retention, profitability, behavioural intention and actual choice behaviour.

According to Rowley (1998), quality in the public sector is particularly important, since it is not merely concerned with customer retention and reputation, but it is only associated with the service to the community; public

services should contribute to the development of the community, its values and the individual's experience as a member of that community. In order to achieve this, public sector services need to cooperate and complement each other while they also compete other. Public services are also increasingly experiencing more discerning and discriminating customers, who may choose between private and public sector services. New management solutions, modern policies and more efficient administrative procedures, emphasizing competition and personnel motivation, are changing the public sports services, and a huge part of public sports service aspects has been brought closer to private sports service industry. Murray & Howat (2002) stated that retaining customers and improved profitability have become increasingly important for local government sports and leisure services due to the change from the traditional community merit approach towards local recreation provision. A better understanding of how to achieve customers' satisfaction in sports services will help managers to foresee the return of their work – managing sports services searching excellence and, in this search, quality has been the catchword in the management circles for sometime now (Chelladurai & Chang, 2000).

1.1. Purpose of the study

Being aware that the services offered in a swimming pool can be defined as sports services, in this particular case, public sports services, this study aims to analyze the relationship between Service Quality (SQ) and Service Value (SV) in Municipal swimming pool services. Considering the development and modernization of public service and public administration in Portugal we will try to perceive the municipal service customers as clients and not just as citizens, focusing on the role that a good/bad Service Quality has in the perception of good/bad value for a service. The relationship between each one

of the Service Quality dimensions, considered as antecedents of value assessments, and the perceived value is analyzed in order to clarify which of those dimensions has stronger influence on the overall value. Finally this study will try to propose strategies to help practitioners to meet customers' needs and exceed expectations through the appropriation of the reasons behind the assessment of sports services quality and value.

1.2. Significance of the study

According to Duman (2002), one of the main indicators of the validity of a theory is that it needs to be shown that the theory works under a variety of circumstances. With this study we attempt to contribute to the theory of Service Quality and Service Value through extension of previous models to a specific sport service area – municipal swimming pool services, in which the model has not been explored and it was considered an important step for the improvement of the existing theories. Additionally, to learn the actual evaluations that customers make of the quality of the services provided in the swimming pools of the study and the value they attribute to those services, might support the manager's decisions about the changes to implement in order to improve the offered services. Adding new empirical data to the existing theories of the concepts in question was also considered a significant contribute of this work.

1.3. Limitations and Delimitations of the study

This investigation took place in the three Vila Nova de Gaia Municipal swimming pools and it is a transverse descriptive study based on customers' opinions collected through appropriated data collect framework: Service Quality Scale (SQS) (Alexandris et al., in press) and SERV-PERVAL (Petrick,

2002). The results gathered and presented here are not extensive to another place neither should be generalized to similar services. Future research on this subject ought to take into account social, cultural and environmental differences.

Also significant to refer is that hermeneutics is one of the underlying problems of the trans-cultural investigations, even though investigators use several techniques in order to translate the instruments and minimize the semantic problems and find external validity of the measurement frameworks. In our study, both scales were translated from English to Portuguese and the results to which ours were compared to, emerged from data collected in Greek, in the case of Service Quality and in English in the case of Service Value. These features were taken into account and the inherent risk was assumed and, as far as possible, controlled. The attempt to relate two constructs which have been widely theoretically and conceptually explored, departing from recent and still in progress scales that lack empirical study and, that were developed in different services and different contexts, also represents a risky task. Though, the contribution of this study is also achieved by adding new empirical information to the existing theories of the concepts in question.

1.4. Terminology

Some terms and expressions emerge in literature with diverse definitions and meanings. In order to clarify the meaning of those expressions that are used in this research we established the following:

Goods: Tangible products that are evaluated mainly with their tangible attributes.

Services: Services are deeds, processes, and performances (Zeithaml & Bitner, 2000).

Swimming Pool Services: services provided in the swimming pools of the present study, including all physical activities related with water use: swimming classes, other modality classes (hydro-gymnastics) and free use or self-oriented use.

Quality: "An overall judgment of performance excellence of the swimming pool services". This overall judgment involves the evaluation of service features such as the tangible attributes of service providers and service environment as well as the intangible features of service offering as measured by common Service Quality measures (e.g., SERVQUAL, SERVPERF, SQS). Adapted from Duman (2002).

Value: "Value is what the consumers get for what they give" (Zeithaml, 1988). Overall value is a more comprehensive construct than quality and satisfaction because it includes a comparison between quality and satisfaction versus sacrifice (adapted from Duman, 2002).

Satisfaction: Swimming pool service consumers' overall "fulfilment response, the degree to which the level of fulfilment is pleasant or unpleasant" (adapted from Duman, 2002).

Behavioural Intentions: The consequences of the swimming pool service evaluations including intentions to recommend and repurchase (adapted from Duman, 2002).

Behavioural variables: Variables that characterize consumers in non demographic aspects (e.g. Weekly Frequency and Displacement Time).

SQSp: Service Quality scale in our study (Portuguese version).

SERV-PERVALp: Service Value scale in our study (Portuguese version).

2. REVIEW OF THE LITERATURE

In this chapter we propose a journey through literature, crossing diverse fields of investigation in an effort to embrace parallel developments of this phenomenon. Literature review starts with an attempt to contextualize sport in the domain of public services through the European perspective and throughout Portuguese legal framework. Afterwards we discuss the local autarchies role in this matter. Next, we present the investigation panorama of Service Quality and Service Value investigation and explore an overall perspective of these constructs position in sport service management field.

2.1. Towards a definition of Sports Services

2.1.1. Sport as a public service

Public service is an ambiguous term since it may refer either to the actual entity providing the service or to the general interest role assigned to the concerned body. It is with the purpose of promoting or facilitating the performance of the general interest role that “public service” is issued here, as this relates to the vocation to render a service to the public in terms of what/how the service is/should be provided. The service cited here is the sports service. In this context we believe that it is broadly agreed that the agenda supporting today’s sports practices is sustained in a significant number of authors and publications that describe several reasons from physiological, biological, sociological, psychological, political and historical scope to the simultaneous diversity and specificity and to the quantity and quality of the sports practices we have nowadays (Constantino, 1992 e 1999; Bento 1998; Mota 1998; Sá & Sá 2002; Pires 2003).

2.1.2. Through the perspective of the European Union

In the European environment, sport has its major institutional expression in the Sports definition from the European Sports Charter (ESC)¹ that emphasizes the multiplicity of practices and a certain personalization of each citizen's sport. The ESC also commits the governments of member States to take the necessary steps to enable every individual to participate in sport, which is of extraordinary importance in the context of a true public service because people's cultural and social expression is, and will be more each day through sport, which is also becoming a priority in the fulfilment of non-working time. Due to this trend and to the increase of free time, the importance of sport in the development of each country is growing every day, Portugal included. It is undeniable the social importance that sport assumes nowadays in the life of societies. We can see it through the way each society answers to other essential values of the citizen's life: education, freedom, employment, equality, health, life quality, etc (Constantino, 1992).

At the international level we should also point out the Declaration on Sport² annexed to the Treaty of Amsterdam (1997) and the European Model of Sport (1998) produced by the European Commission that also values the social significance of sport by including themes like "sport and education", "sport as a means of social integration, combating racism and promoting tolerance", "sport and environment", "sport and public health" and "sport and employment", which directly connect sport to the major areas of the Europeans' lives. In 1999

¹ 2nd article, No.1, a): Sport means all forms of physical activity which, through casual or organized participation, aim at expressing or improving physical fitness and mental well-being, forming social relationships or obtaining results in competition at all levels

² The Conference emphasizes the social significance of sport, in particular its role in forging identity and bringing people together. The Conference therefore calls on the bodies of the European Union to listen to sports associations when important questions affecting sport are at issue. In this connection, special consideration should be given to the particular characteristics of amateur sport.

another document, the Helsinki Report on Sport, enhanced the social importance of sport in a singular way reminding that the actual development of sport in Europe risks weakening its educational and social function and stressed that leisure sport, social sport, and sport for all deserve special treatment and a special approach.

It is useful to reinforce that sport constitutes a fundamental means for citizens' education and training, making indispensable contributions to the multilateral training of youth, in the building up of self-esteem and self-confidence, to the promotion of health and professional performance of the populations, to the improvement of the quality of life and of spare time occupation, or as a factor of socio-cultural development and education to democratic citizenship³. Also about the importance of sport in Europe, the European Council at the Nice summit held in December 2000, adopted a Declaration⁴ on the specific characteristics of sport and its social functions in Europe which, according to the Declaration, should be taken into consideration when implementing Community policies which, from our point of view, include the local autarchies strategies and programs. This result emerged from a meeting devoted to subjects of fundamental importance for the future of Europe and can thus be considered as a major victory for sport. Never before had a text of such density and such importance been adopted by the heads of state and government, which proves, if needed, that there is an increasing recognition at the highest level of the importance of sport. This declaration is moreover a positive response by the Council to the Helsinki Report on Sport adopted one year earlier by the Commission as mentioned before. The Nice Declaration on sport is important in itself, but it is also important in terms of contents. The Nice Declaration has indeed provided a clear political signal for

³ Troika meeting, Lisbon, 17 March 2000 – Presidency conclusions.

⁴ http://europa.eu.int/commsportdocecomdecl_nice_2000_en.pdf

sport to be better taken into account, along with its social and educational values, in national and Community policies. Thus the importance of sport as a leisure activity and of sport for everyone was stressed too. It was also emphasized in the 9th Conference of European Ministers responsible for Sport⁵, in the course of the resolution No 2/2000, the conviction that sport is a significant social right that should be available and accessible to everybody, and that the policy designed for sports should bear in mind that society is dynamic and constantly changing and must pursue quality across the spectrum.

Finally, one of the most recent examples of the magnitude of sport in Europe is the establishment of the European Year of Education through Sport 2004⁶. Regarding the quality of life, the Joint Declaration⁷ by the Council and the representatives of governments of the Member States, on "The social value of sport for young people" stressed that "the development of physical, intellectual and social powers through physical education and sport should be encouraged for everyone, both within the educational system and in other aspects of social life and emphasized the need to disseminate the values of sport, promotion of physical and mental well-being, and improvement of quality of life.

Another very important step for the development of sport is in the text from the European Convention⁸, in which it is clear that sport is achieving a position in the future Treaty of the European Union, with members assenting to inscribe sport in the fundamental right of the Union side by side with education, youth, civilian protection, culture, industry and tourism. In this matter it was already presented to the Convention the draft Constitution⁹ containing a proposal of the article concerning sport from which we underline that "the Union shall

⁵ Bratislava, Slovak Republic 30-31 May 2000

⁶ Decision Number 291/2003/EC of the European Parliament and of the Council of 6 February 2003. Official Journal L 043, 18/02/2003 P. 0001 – 0005.

⁷ Official Journal of the European Union, 7/06/2003, C 134/5, 2003/C 134/03.

⁸ The European Convention, Brussels, 10 January 2003, CONV 478/03

⁹ The European Convention, Brussels, 27 May 2003, CONV 725/03

contribute to the promotion of European sporting issues, given the social and educational function of sport”.

According to Constantino (1999) we believe that sport appears as a new right available to all, independently of age, sex or performance. It is different concept of sport, a sport that therefore reflects the direction of the time we are living: it is volatile, it is ephemeral, it is instantaneous and it is characterized by consumption. These characteristics of the practices request new forms of organization more adequate to citizens' life styles and their personal wishes and needs in both private and public sector, especially when both sectors are competing for the same customers.

2.1.3. Through the perspective of the Portuguese Law

The access to sport in Portugal is a Constitutional right (79th Article)¹⁰. As the State has a vital responsibility in implementing the right to sport, and while the establishment of legal standards is a significant means for the accomplishment of this purpose, it is of great importance the publication of the Framework Law of the Sport System¹¹ that establishes the guidelines of this sector and has as purpose “to promote and to guide the generalization of the sports activity as an indispensable cultural factor in the full formation of the person and in the development of the society”. “Beyond any doubt, sport has acquired a dimension in citizenship, making a truly significant leap within the framework of social state, so that sport activities could become a matter of important public interest” (Meirim, 1998). Following this conviction, it is appropriate to notice that the Municipalities have strong legal competences regarding this area

¹⁰ Portuguese Republic Constitution, 79^o Article - Physical Culture and Sport: Establishes that everybody has the right to sport and that the State in cooperation with schools and with sport associations has to promote, stimulate, orient and support the practice and diffusion of physical culture and sport..

¹¹ Law No1/90 of 13 January

because, through the Framework Law of Attribution and Competence Transference to the Local Autarchies¹², the government transferred “free time and sports competences” to the autarchies. In the 21st article of the same law, the Portuguese government defined that the municipal organs are responsible for the planning, management and public investments concerning sport equipments and facilities and, these organs are also responsible for supporting sports and recreation activities of municipal interest.

Knowing this and given the fact that, for reasons that do not fit in the scope of this work, the associations and clubs do not have capacity to fulfil this imperative in the necessary amount and quality, it seems thus relevant to discuss the range of the right to sport in Portugal and of its forms of organization because it is not enough that it is constitutionally recognized but it becomes absolutely necessary that the citizens access to it in conditions where the quality today established for any service, private or public, is guaranteed.

The local autarchies through the public responsibilities they have concerning the populations are politically and culturally obliged to reflect on this new period of sport, to look for the best practical solutions, for the finest sport practices of those they represent and to make a serious effort to clarify the place that sport must occupy in the life of citizens. A sport that is more plural, diversified, creative, in a time and place increasingly interdependent of other social variables (Constantino, 1999).

In this context, it is important to refer that since 1999 there has been in Portugal the “Quality System in Public Services¹³” which defines that quality is not only universally recognized and accepted as the customer’s satisfaction at adequate costs, as it became an imperative for all public and private organizations given the increasing conscience that consumers possess of their

¹² Law No 159/99 of 14 September

¹³ Decree Law n^o 166-A/99 of 13th May

rights. This legal imperative sustains as well that more than a new theory, quality is a management philosophy to any organization that wants to be credible or socially useful and reinforces the suggestion that Municipalities are competing with private enterprises, which makes them responsible for the reconversion of management methods in order to increase the quality of the services they provide to citizens.

We believe that citizens will only be active if they have an easy access the sports facilities of high quality and at an acceptable cost. As that the local authorities remain as the greatest supplier of sports facilities, and, in the case of our study, the autarchy is also the service supplier, the structure designed for the strategy of local sporting development has to be conscious of the modernization agenda, and that being executed by the local authorities, this development should lead to the realization of efficient and economical policies for the necessary community sporting environment.

Public authorities face the question of how to ensure that the missions they assign to services of public interest, like sport, are executed according to a high standard of quality and in the most efficient manner. There are certainly different ways in which such missions can be fulfilled and, because this unprecedented wave of enlargement is creating entirely new perspectives, we try to deepen in this study the knowledge about the concepts of quality and value in public sports services.

2. 2. The concept of Service Quality

2.2.1. Characterization and definition of services

According to Nickels & Wood (1997), service economy, also known as service sector refers to the segment of nation economy represented by services of all kinds. The authors suggest a characterization of services based on their components (Table 1).

Table 1: Selected components of the service sector (Nickels & Wood, 1997)

Type of Service	Example
Amusement and recreation services	Movie theatres
Automotive services	Auto rental services
Business services	Collection agencies
Educational services	Schools
Financial services	Banks
Health services	Medical laboratories
Legal services	Law offices
Lodging services	Hotels
Repair services	Appliance repair stores
Social services	Job training institutions

Another model is the one suggested by Dotchin & Oakland (1994) and discussed by Rowley (1998) that contains the following components:

(1) Labour intensity: the ratio of labour costs incurred to the value of plant and equipment which is used; (2) Contact: the proportion of the total time required to provide the service for which the consumer is present in the system; (3) Interaction: the extent to which the consumer actively intervenes in the service process to change the content of the service. Intervention also includes customers' participation to provide information, from which needs can be assessed, and also customers' feedback, from which satisfaction can be inferred; (4) Customization: is defined as having two main parts: (a) choice, or meeting customer's needs by supplying one or more selections from a fixed range of

options; (b) adaptation, or the interaction process in which the customers' requirement is decided upon, designed and delivered to match the individuals' needs; (5) The nature of the service act: can be either "tangible", that is, perceptible to touch and capable of being possessed or "intangible", that is, insubstantial and eluding the grasp of the mind); (6) The direct recipient of the service can be either people or things.

The authors proceed to use these characteristics to classify specific service sectors (Table2).

Table 2: Service Attributes (Dotchin & Oakland, 1994)

Service Attributes \ Services	Cafeteria	Equipment hire	Leisure centres	Rail services	Bank
Labour intensity	Low	Low	Low	Low	Low
Contact	High	Low	High	High	Low
Interaction	High	Low	High	Low	Low
Customization	Choice	Choice	Choice	Choice	Fixed
Nature of act	Tangible	Tangible	Tangible	Tangible	Intangible
Recipient of act	People	Things	People	People	Things

Based on these attributes five distinct groups of services were identified: Personal services, Service shops, Professional services, Mass services, Service factory.

Along with the components there has also been pointed out in the literature that services and goods can be classified according to tangibility characteristics, which is based on the fact that it is difficult to find pure services and pure goods (Figure 1). On the one end are goods such as milk and bicycles that can be physically examined hence they are predominantly tangible. On the other hand there are services, such as legal advice and nursing that are predominantly intangible. In between there are products from organizations

such as restaurants that are a blend of goods (food) and services (cooking, table services).

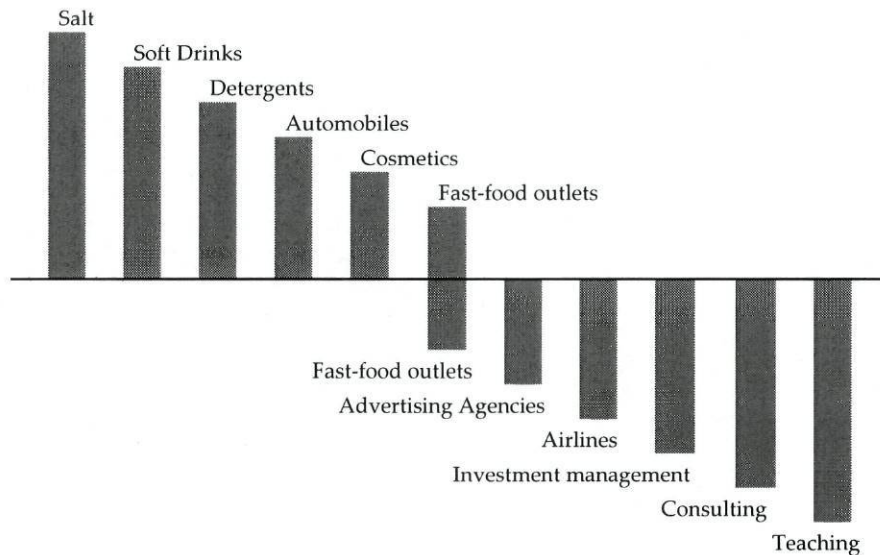


Figure 1: Goods-services continuum (Nickels & Wood, 1997)

2.2.2. The unique characteristics of services

Although the line between goods and services is blurring, it is certainly not disappearing. Services are set apart from goods just by four characteristics: Intangibility, Perishability, Inseparability and Heterogeneity that, according to Rowley (1998), add particular challenges to service performance.

Intangibility: their outputs cannot be measured in terms of their physical attributes. Services are performances rather than objects and are experienced by the customer; **Perishability:** services cannot be stored, and excess capacity cannot be claimed or inventoried; **Inseparability of production and consumption:** Services are sold first and then produced and consumed at one and the same time. This means that the customer is part of the system; **Heterogeneity:** service is likely to be different for each individual who receives it. Services are inherently variable and lack consistency.

There have been many attempts to classify services, and one of the most popular definitions is the one proposed by Zeithaml & Bitner (2000) that defines services as “deeds, processes, and performances”. Compatible with this definition Quinn et al. (1987), quoted by Zeithaml & Bitner (2000) defined services to “include all economic activities whose output is not a physical product or construction, which is generally consumed at the time it is produced, and provides added value in forms (such as convenience, amusement, timeliness, comfort or health) that are essentially intangible concerns of its first purchaser”.

2.2.3. Quality

Subsequent to the question of where the frontier between services and goods is emerges the services marketing question of how to reach customer satisfaction and loyalty, where Service Quality investigation has its role.

Edwards Deming never defined quality. When asked, he would respond "it's all about improvement and innovation". These two words, “improvement” and “innovation”, are to be found in the undercurrent in all Deming's teachings to Japanese executives from 1950 onwards. This contrasts with the approach at the same time in the UK, which was focused on the control of processes and conformance to standards. Indeed, to contrast this with “getting it right first time, every time”, which, if Deming were listened to, would become “getting it right first time and improving it next time” (Wright, 1997).

“As a result of growing competition and increased customer expectations, Service Quality has been identified as a key factor in building a competitive advantage in the service industry” (Alexandris et al., 2001).

Rowley (1998) stated that earlier work on quality focused on the quality of products. Only in the past 10 years, with the mushrooming of the service

industries have theoretical perspectives on Service Quality begun to develop. Service quality is important in allowing a service organization to differentiate itself from its competitors. Evidence also suggests that quality can promote repeated purchases as well as new customers. To retain customers is beneficial to any organization. According to Wright (1997), quality, from 1950 to the mid-1980's, the two distinct approaches were developing almost independently of each other: the Western approach characterized by conformance to standards, control of processes and command of personnel; and the Eastern, or more specifically Japanese approach, characterized by an unending pursuit of improvement and innovation by mobilizing the entire workforce in pursuit of these aims. From the mid 1980s to the present day the West has been working to cross the divide.

According to Zeithaml et al. (1996) an issue of higher priority for practitioners is the impact of Service Quality on retaining customers.

About the issue of retaining customers, Nickels & Wood (1997) stated that "the cost of losing a loyal service customer is as much as eight times higher than the cost of retaining one, when you add in forgone future profits". And to retain a customer who has been dissatisfied with your service, you prove yourself up to twelve more times to overcome the effects of one bad experience and Zeithaml & Bitner (2000) sustained that satisfaction is the customers' evaluation of a product or service in terms of whether that product or service has met their needs and expectations. The previous authors also confirm that clear linkages have been drawn between customer's satisfaction, loyalty and the organization profitability.

Many authors (Gronroos, 1988; Lehtinen & Lehtinen, 1982; Parasuraman et al., 1985; Sasser et al., 1978) support the notion that Service Quality, as perceived by customers, stems from a comparison of what they feel service

organizations should offer (i.e. from their expectations) with their perception of the performance of organizations that provide the services. Consumers' expectations are beliefs about service delivery that function as standards or reference points against which performance is judged (Zeithaml & Bitner, 2000).

2.3. Measuring Service Quality

Investigation on Service Quality reveals that there is significant complexity associated with the measurement of the construct. Some of the definitions and descriptions of quality in services focus on what should be evaluated and, according to Chelladurai and Chang (2000) these targets of quality evaluations include the core service, the physical context, including the facilities and equipment and the interpersonal interactions in the performance of the service.

The construct of quality as conceptualized in the services literature centres on perceived quality, which has been defined as a global judgment or attitude relating to the superiority of a service (Zeithaml & Bitner, 2000).

According to Rowley (1998), perceived quality is a form of attitude, related to, but not the same as, satisfaction and resulting from a comparison of expectations with perceptions of performance. Parasuraman et al. (1991) support the notion that Service Quality is an overall evaluation similar to attitude. On the other hand, Oliver's (1981) review of the nature of satisfaction confirms the transaction-specific nature of satisfaction, and differentiates it from attitude, that is the consumer's relatively enduring affective orientation for a product, store or process (e.g. customer service). Satisfaction is defined by the author as the emotional reaction following a disconfirmation experience which acts on the base attitude level and is consumption-specific.

2.3.1. Service Quality Gap

Parasuraman, Zeithaml & Berry (1985) developed the Gap Model of Service Quality that is synthesized by Zeithaml & Bitner (2000) as follows: Gap 1: Not knowing what customers expect; Gap 2: Not selecting the right service designs and standards; Gap3: Not delivering to service standards; Gap 4: Not matching performances to promises and Gap 5, the Customers Gap, that is to say, the difference between customers' expectations and perceptions.

In the Gap Model, Rowley (1998) sustains that managing Service Quality is concerned with managing the gaps between expectations and perceptions of management, employers and customers. The most important gap is that between customers' expectation of service and their perception of the service actually delivered. Customers' expectations are influenced by their own experience, those of others and the claims of the supplying organization. Public sector organizations are often subject to expectations that were formed in a customer's last encounter, which may have been several years before, or media coverage, which may lead to unrealistically high or low expectations.

Gronroos (1984) identified a number of influences on consumers' expectations: marketing activities, traditions, ideology, communication with other customers and previous experience of the service concerned.

Different service sectors, and indeed different participants within the same sector, may have different traditions in relation to these influences, which may affect perceptions of Service Quality. According to Rowley (1998), the public service culture is concerned with offering a service, the underlying core aspiration of which is to improve the quality of life for the community.

The authors of SERVPERF, another model of Service Quality (Cronin & Taylor, 1992) believe that the different formulation of Service Quality is

fundamentally flawed, and propose a definition of Service Quality which is entirely based on perceptions.

2.3.2. Service Quality dimensions and instruments

“The way of measuring Service Quality reflects a researcher’s view of its conceptualizations. This is the reason of the different measurement methods presented in the literature” Theodorakis et al. (1998).

Rowley (1998) stated that Service Quality dimensions or attributes are those attributes which contribute to consumers’ expectations and perceptions of Service Quality. These are the attributes of the service that are important to the customer and contribute significantly to their quality assessment. Being aware of these dimensions and possibly of the ability to measure them, can help to yield an insight into more effective ways of improving Service Quality. While it may be relatively easy to identify appropriate dimensions of specific services, researchers have sought to investigate whether there are generic dimensions of Service Quality that can be identified. In general, this work has led to a number of distinct models and no clear answers. Nevertheless, the research has provided insights into the general nature of potential attributes, which can be useful in evaluation in specific contexts.

The majority of research in Service Quality has been built around the SERVQUAL (Parasuraman, et al., 1988) methodology, which is based on the gap model (Alexandris et al., 2001). According to the SERVQUAL model, Service Quality can be measured by identifying the gaps between customers’ expectations and perceptions about the performance of the service (Alexandris et al., 2001).

Parasuraman et al. (1988) and Zeithaml & Bitner (2000) suggested that Service Quality is a multidimensional concept consisting of five dimensions:

Reliability, which refers to the ability to perform the promised service dependably and accurately; assurance, which refers to the knowledge and courtesy of employees and their ability to convey trust and confidence; tangibles, which refers to the appearance of physical facilities, equipment, personnel and communication materials; empathy, which refers to the provision of caring, individualized attention to customers; and responsiveness, which refers to the willingness to help customers and to provide prompt services. The scale currently contains 21 perception items and also includes expectation items (Zeithaml & Bitner, 2000).

However, there have been other attempts to define Service Quality dimensions. According to Rowley (1998), the earlier work by Sasser et al. (1978) identified seven service attributes, which may be useful to consider: security: confidence as well as physical safety; consistency: receiving the same each time; attitude: politeness and social manners; completeness: ancillary services available; conditions: of facilities (clean, comfortable); availability: access, location, frequency; training: propitious execution. Lehtinen and Lehtinen (1982) defined Service Quality as a three-dimensional construct consisting of "interactive", "physical" and "corporate" quality dimensions. Gronroos (1984) conceptualized Service Quality with the two components: technical and functional quality. Hedvall and Paltschik (1989) more recently identified two dimensions, and referred to a "willingness and ability to serve" and "physical and psychological access"; Babakus and Boller (1992) report a study of a utility service which demonstrated a unidimensional scale in this instance. They hypothesize that consumers may form an overall unidimensional abstraction of quality for utility service, and suggest that this may be associated with the level of customers' involvement in the service.

Although there are other dimensions proposed for measuring Service Quality, SERVQUAL scale has been extensively used in a variety of service sectors and has been proved to be a very useful assessment and management tool (Bloemer et al., 1999; Parasuraman, et al., 1988; Zeithaml & Bitner, 2000). However, it has also been criticized on a theoretical and operational basis (Buttle, 1996). Researchers (e.g. Cronin & Taylor, 1992; Teas, 1993) have questioned the gap model, suggesting that measuring only perceptions might be a better indication of Service Quality.

In the sport service sector the measurement of Service Quality is still a controversial issue (Williams, 1998). Several scales have been proposed, some of which have used the SERVQUAL methodology as a basis. A review of these scales indicates that validity and reliability issues have yet to be fully addressed Alexandris et al. (in press). Examples of these scales are: QUESC, with eleven distinct dimensions, developed in Korean sports centres (Kim & Kim, 1995); CERM, developed in the context of leisure clubs in Australia (Howat et al., 1996); REQUAL developed in the context of leisure and recreational services by McKay & Crompton (1990); TEAMQUAL developed to measure Service Quality in professional sports by McDonald et al. (1995). Chang (1998) in Ferreira (2001) developed the SQFS – Scale of Quality in Fitness Services. The SQFS scale contains three scales: one that measures quality, including nine dimensions, one that measures customer satisfaction with two dimensions and another that measures customer loyalty including one dimension.

According to Alexandris et al. (2001), the conceptual evidence and internal consistency's reliability of some of QUESC dimensions are questionable and two of the proposed dimensions had low internal consistency's reliability, and the CERM instrument (Howat et al. 1996), fails to cover the range of dimensions proposed by the SERVQUAL model. It proposes only three dimensions of

Service Quality, which are related to staff, core and peripheral/supportive services. The author states that the diagnostic value of this Service Quality instrument with three dimensions is questionable.

In the still complex field of Service Quality measurement, the diversity of opinion regarding the dimensionality of a scale suggests that it may be wise to continue to ask the question of whether it is possible to design a standard measurement scale suitable to a wide variety of services. The domain of Service Quality may be factorially complex in some industries and very simple and unidimensional in others. Measures designed for specific service industries may be more appropriate (Rowley, 1988).

2.3. The concept of Service Value

All that has been said about the characterization of services and their single characteristics, in the previous sections, should be taken into account when reflecting Service Value concept.

2.3.1. Value

The best-performing company will be the one that can generate the greatest customer value and sustain it over time (Kotler, 2002).

Different terms for the value construct have been proposed in the literature (Duman, 2002): consumer value (Holbrook, 1999), consumption value (Sheth et al., 1991), customer value (Gale, 1994; Holbrook, 1996; Oh, 2000; Woodruff, 1997), perceived value (Dodds et al., 1991; Zeithaml, 1988; Zeithaml & Bitner, 2000; Petrick, 2002), service value (Bolton & Drew, 1991; Jayanti & Ghosh, 1996), acquisition and transaction value (Grewal et al., 1998; Monroe, 1990) and value for money (Ashworth & Johnson, 1996). Our study was based on Petrick (2002) model and, consequently in Zeithaml's (1988) definition of perceived value:

“the consumer’ overall assessment of the utility of a product based on perceptions of what is received and what is given”.

The marketing concept holds that the key to achieving organizational goals consists of the company being more effective than its competitors in creating, delivering, and communicating customer value to its chosen target markets (Kotler, 2002).

In the context of Service Quality/Service Value relationship, according to Murray & Howat (2002), several recent studies support the dominant idea that satisfaction is a consequence of Service Quality (Brady & Robertson, 2001; McDougall & Levesque, 2000) and this appears consistent across the service contexts. McDougall & Levesque (2000) recognized the already extensive research on Service Quality and its relationship to customer satisfaction and argue for more comprehensive models to assist managers in better understanding the key drivers of satisfaction. A specific focus was the concept of perceived value.

As perceived value is generally defined as the gap between what is received compared to what is given in exchange, McDougall & Levesque (2000) argued that, along with perceived Service Quality, perceived value was an antecedent to customer satisfaction, which was directly related to their future purchase intentions. While McDougall & Levesque (2000) encouraged further research on concepts such as perceived value, Cronin et al. (2000) asserted that partial consensus had been achieved, supporting perceived value along with Service Quality as antecedents to customer satisfaction. However, Cronin et al. (2000) did also note that the literature was deficient in research that simultaneously compares the relative influence of quality, value and satisfaction with service outcomes. Such research, they believe, would further clarify our understanding of consumers’ decision making. Similarly, Petrick et al. (1999) supported the

need to increase consumer satisfaction measurement with such variables as perceived value to provide more in-depth understandings of customers' perceptions at a diagnostic managerial level.

Also at the managerial level and in terms of marketing Kotler (2002) states that the product or offering will be successful if it delivers value and satisfaction to the target buyer. The buyer chooses between different offerings on the basis of which is perceived to deliver the most value. The author defines value as a ratio between what the customer gets and what he gives. The customer gets benefits and assumes costs, as shown in this equation:
$$\text{Value} = \frac{\text{Benefits}}{\text{Costs}} = \frac{(\text{Functional Benefits} + \text{Emotional Benefits})}{(\text{Monetary Costs} + \text{Time Costs} + \text{Energy Costs} + \text{Psychic Costs})}$$
 Based on this equation, the manager can increase the value of the customer offering by (1) raising benefits, (2) reducing costs, (3) raising benefits and reducing costs, (4) raising benefits by more than the raise in costs, or (5) lowering benefits by less than the reduction in costs (Kotler, 2002).

On a more theoretical level, Murray & Howat (2002) results support the basic premise that perceptions of Service Quality influence satisfaction that in turn affects customers' future intentions. They also found that satisfaction has a direct effect on future intentions, as well as an indirect effect, which is mediated by value. The authors suggested that the effect of value on future intentions is direct, with no indirect effect mediated by satisfaction and "Additionally, the results also provide support for the position that perception of value does play a mediating role in the formation of satisfaction judgements of customers, rather than satisfaction leading to perceptions of value" (Murray & Howat, 2002). Zeithaml (1988) found after a series of qualitative studies that consumers give four meanings to the Value concept: low price, whatever one wants in a product, the quality that consumer receives for the price paid or what the

consumer gets for what she/he gives. The latter meaning has been the concern for most researchers. A broad representation of give and get components of perceived value has been proposed as a trade-off between perceived benefits and perceived sacrifice (Zeithaml, 1988; Zeithaml & Bitner, 2000). Earlier conceptualizations of the get component of perceived value included perceived quality of the products (Bojanic, 1996; Bolton & Drew, 1991; Chang & Wildt, 1994; Dodds et al., 1991; Grewal et al., 1998; Jayanti & Ghosh, 1996; Zeithaml, 1988). According to Petrick (2002), the give component of perceived value, perception of the monetary price consumers pay to acquire the product, has been used in earlier studies (Grewal et al., 1998; Jayanti & Ghosh, 1996; Murphy & Pritchard, 1997). However, only to include the perceived monetary price was a limited representation of the sacrifice consumers make because for some products non-monetary sacrifice was an important part of the purchase. Zeithaml (1988) proposed that perceived monetary and non-monetary price constitute perceived sacrifice. Perceived non-monetary price might include time and effort to purchase the product (Petrick, 2002).

2.4. Measuring Service Value

2.4.1. Service Value dimensions and instruments

Perceived Value is most commonly measured by using a self-reported unidimensional measure asking respondents to rate the value they receive for their purchase but, as reported in Petrick's (2002) work, the problem with a one-dimension measure is that it assumes that consumers have a shared meaning of Value (Zeithaml, 1988). Another inherent problem is that unidimensional measures result in the knowledge of how well one is rated for value, but they give no specific direction in how to improve value (Petrick, 2002).

Regarding the measurement of this construct and its role on the Service Quality – Repurchase Intentions chain, the author developed a model of Post-experience Perceived Value in the Service Choice Process (Figure 2), based on which SERV-PERVAL scale was created. The context in which the study was conducted was leisure services more specifically cruise travels. For its importance, further details of this scale are presented ahead.

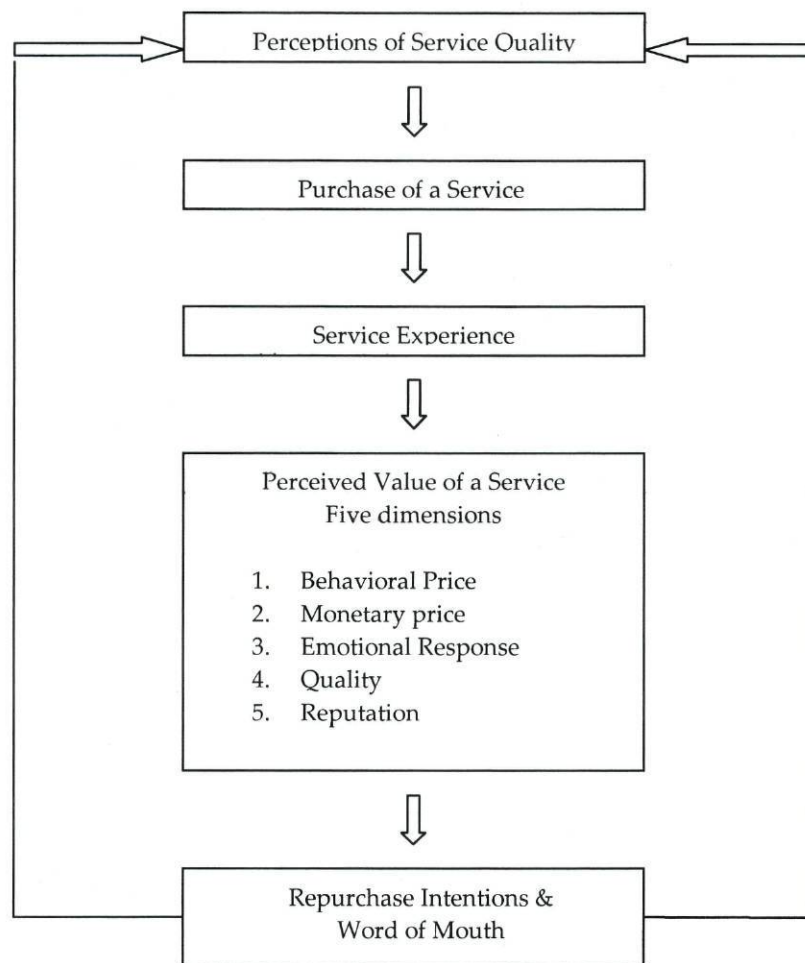


Figure 2: Model of Post-experience Perceived Value in the Service Choice Process, Petrick (2002)

Additionally, Murray and Howat (2002) tested a model of the role that value may play in the Service Quality-satisfaction-behavioural intentions chain in

which value was measured by using a single item "The centre provided good value for money". The results of the study provided evidence of the mediating role that value plays in the formation of satisfaction judgments of customers and also supported the basic premise that perceptions of Service Quality influence satisfaction which in turn affects customers' future intentions in the sport leisure context.

Williams & Soutar (2000), in another work about a tourism consumption experience, even though the authors did not suggest any instrument to measure these dimensions, found four value dimensions: functional value, emotional value, social value, and epistemic value. Functional value is the perceived utility acquired from an alternative's capacity for functional, utilitarian or physical performance. Emotional Value is the ability of the product or service to arouse feelings or affective states. Social Value is defined as the perceived utility acquired from an alternative's association with one or more specific social groups and finally, Epistemic Value is defined as the perceived utility acquired when the product arouses curiosity, provides novelty and/or satisfies a desire for knowledge. "The four value dimensions suggested cannot be applied to all tourism consumption situations since these dimensions may change over time and rate differently depending on the type of experiences and the characteristics of the consumers. However, knowledge of the likely contribution of each value dimension in any choice situation is valuable marketing information for a tour operator or a destination marketer" (Williams & Soutar, 2000).

3. METHODOLOGY

3.1. Sample

For this investigation we established as a priority the analysis of the predictive power of Service Quality Dimensions on Overall Service Value. Additionally, and in result of the indications publicized in literature, we also considered very important to look for the existence of differences in the perceptions of Service Quality and Service Value due to some demographic variables (e.g. gender, age) and behavioural characteristics (e.g. weekly frequency and household monthly income).

We expect that Service Quality evaluations would predict Service Value assessments and that Service Quality Dimension with the strongest weight on overall Service Value assessments would be Perceived Outcome. We also consider that the evaluation of Service Quality and Service Value would be similar among the three swimming pools.

3.1.2. Sampling Process

Vila Nova de Gaia has 288.749 inhabitants and it is one of the largest councils in Portugal with 168.7 Km²¹⁴. There are three public swimming pools in this city characterized by their specific location and age: The oldest is Granja Municipal Swimming Pool (1938) (Piscina Municipal da Granja) that has two tanks, one outdoor and another indoor. It is located in the coast area and the salted water is collected from the Atlantic Ocean; Maravedi Municipal Swimming Pool (Piscina Municipal de Maravedi) is located in the centre of the city, in one of the most urbanized areas of the council and it was built in 1998; Vila D'Este Municipal Swimming Pool (Piscina Municipal de Vila D'Este) is

¹⁴ Instituto Nacional de Estatística, Census 2001 (Portuguese Statistics Institute)

located in an extremely crowded area in a social neighbourhood. It opened to the public in December 2001.

The respondents in this study were one hundred and eighty two costumers of the three Vila Nova de Gaia municipal swimming pool services (Table 3), from an overall number of eight hundred and twenty users (according to the swimming pool manager). The sample included both gender costumers whose minimum age was sixteen years old, selected randomly among costumers registered at least six months before the data collect and free willing to participate in the study. The inquired were asked to answer the questionnaire at the moment.

Table 3: Sample distribution

Swimming pool	Vila D'Este	Maravedi	Granja
Universe	120	300	400
Sample	58	60	64

3.2. Service Quality and Service Value Instruments

The empirical evaluation of the constructs in our study appealed to the use of adequate data collect frameworks and, through literature review it was not possible to find instruments developed specifically for this type of services, characterized by their sportive basis and also by the specificity of the supplier and the nature of the social function associated to Municipal swimming pool services.

However, in recent studies on Service Quality developed in six Portuguese councils Vilas Boas & Ramos (2003) included two of the three Vila Nova de Gaia swimming pools. The authors used Parasuraman et al. (1985) SERVQUAL model, measuring Service Quality as the difference between perceptions and expectations, which as discussed before is a model that suffered enormous

critique from researchers and specially because this scale did not fulfil our goal of including perceived outcome in the analyses as a technical quality evaluator dimension. Still, SERVQUAL has been used in a large number of studies and it is also the basis for other instruments such as McDonald et al.'s (1995) TEAMQUAL and Alexandris et al.'s (in Press) Service Quality Scale SQS.

At this moment we needed to decide between the development of a new scale and the trans-cultural adaptation of an existing one. The option was for the latter because it would allow a comparison with other studies developed with the same scale. These factors, along with our initial question of to what extent Service Quality implicates Service Value assessments that is, test the predictive power of Service Quality dimensions on customers Perceived Value, led us to choose for Alexandris et al.'s (in press) Service Quality Scale (SQS) that measures Service Quality and Petrick's (2002) SERV-PERVAL instrument, which measures Service Value.

3.2.1. Service Quality Instrument

Our choice for Alexandris et al.'s (in press) Service Quality Scale (SQS) was defined as this scale incorporates Perceived Outcome and also because it was developed from the SERVQUAL (Parasuraman et al., 1988) model, which has been used as the basis in a larger number of Service Quality studies. Another important argument is that the scale was developed in the context of sport, in Greek Health Clubs.

Considering the limited research on the role of outcome quality in measuring Service Quality in sports services and the practical implications of research in this area, the objective of using this scale was to contribute to the development of Perceived Outcome construct implications in Service Quality evaluation by adding new insights from our data collect (e.g. mean

comparisons for each dimension in function of demographic and behavioural variables).

Perceived Outcome dimension measures technical quality that can be defined as "participants' perceptions' about the outcome of their exercise participation" Alexandris et al. (in Press). According to the author, a number of studies in the services marketing literature has provided evidence for the important role of technical quality in measuring Service Quality perceptions.

As costumers' participation is fundamental to the production of most services in sport, it seems particularly important that Service Quality evaluation include their perceptions of the outcome of exercise participations.

Chelladurai & Chang (2000) also reported that costumers' perception of the quality of their own involvement in sport is critical for continued participation in that activity. As Zeithaml & Bitner (2000) suggested, there are services (e.g., doctors, engineers, college professors etc) where the outcome of the service – technical quality – is not easy for the customers to judge. As referred by Alexandris et al. (in Press) it could be argued that this is the case for exercise and fitness services where the outcome is evaluated against the health consequences of exercise involvement. If programs do not lead to health related benefits for participants, against their expectations (e.g. poor design and delivery, wrong advice and counselling, etc.), or if participants are unable to see and feel these positive consequences (e.g. because of their long-term nature), they will judge the technical quality as low.

The Service Quality Scale has twenty five items distributed in five dimensions as follows:

Responsiveness (measuring evaluations about the swimming pool ability to provide prompt service): "Customers' suggestions are considered", "Problems are solved quickly", "Requests are responded quickly", "and Customers are

instantly informed about changes"; Perceived Outcome (related to positive consequences of exercise participation): "Increase my energy", "Improve my health", "Improve my mood", "Improve my psychological well-being", "Improve my fitness", "and "Improve my appearance"; Personnel (measuring employee's behaviour, knowledge and willingness to provide individualized attention to the customers): "Knowledgeable staff", "Reliable staff", "Well-trained staff", "Trusted staff", "Staff gives individual attention" and "Polite staff"; Tangibles (related to facilities and equipment): "Attractive facilities", "Spacious exercise rooms", "Variety of equipment", "Good condition of equipment" and "Clean facilities"; Reliability (measuring the ability of the swimming pools to keep their promises): "Classes start on time", "Accurate information about the timetable", "Duties are performed consistently well" and "Accurate classes description". A 5 point Likert Scale was used in the data collect.

3.2.2. Service Value Instrument

To measure Service Value we selected SERV-PERVAL (Petrick, 2002) as we did not find in the literature any other multidimensional scale to measure this construct confirming Petrick's (2002) statement: "While recent multi-dimensional scales have been created for measuring the Perceived Value of tangible products, a multi-dimensional for the measurements of Perceived Value of intangible products (services) does not exist"

In the field of marketing, Perceived Value has been identified as one of the most important measures for gaining a competitive edge (Parasuraman, 1997) and it has been argued to be the most important indicator of repurchase intentions (Parasuraman & Grewal, 2000). According to Petrick (2002) just because a consumer is satisfied with a service, it does not necessarily mean that

the service is a good value. It is quite possible that a consumer who is very satisfied with a service may consider it a poor value if the costs for obtaining it are perceived to be too high. On the contrary, moderately satisfied consumers may find a service to have good value, if they believe they receive good utility for the price paid.

Regarding the improvement of this construct, the author developed a model of Post-experience Perceived Value in the Service Choice Process (Figure 2¹⁵), based on which SERV-PERVAL scale was created.

SERV-PERVAL has twenty four items distributed for five dimensions as follows: Emotional Response to the service – “Makes me feel good”, “Gives me pleasure”, “Gives me a sense of joy”, “Makes me feel delighted” and “Gives me happiness”; Quality received from the service: “Is outstanding quality”, “Is very reliable”, “Is very dependable” and “Is very consistent”; Reputation of the service rendered: “Has good reputation”, “Is well respected”, “Is well thought of”, “Has status” and “Is reputable”; Monetary Price: “Is a good buy”, “Is worth the money”, “Is fairly priced”, “Is reasonably priced”, “Is economical” and “Appears to be a good bargain”; Behavioural Price: “Is easy to buy”, “Require little energy to purchase”, “Is easy to shop for”, “Require little effort to buy” and “Is easily bought”. A 5 point Likert Scale was used in the data collect.

3.3. Service Quality (SQS) and Service Value (SERV-PERVAL) scales adaptation to study context

3.3.1. Translation and adaptation to Portuguese language and culture

In order to ensure that the Portuguese versions of the scales were as much as possible equivalent in semantics and content to the originals, an expert in translation participated in the construction of the first version. This version was

¹⁵ Page 45

afterwards appreciated by a panel of judges composed by two swimming pool managers, two sport scientists and an expert on research methods. Considering the suggestions made, a new version was created and appreciated again by the panel of judges that unanimously read them comprehensively. A qualified Portuguese-English teacher finally reviewed the scale in order to ensure appropriate language and comprehensiveness. From these procedures, and because they did not get a satisfactory adaptation, resulted a transformation of two items of Service Value Scale (“required little effort to buy” and “Required little energy to purchase”) into one (“required little effort to purchase”).

In order to examine the scales external validity, a pre-test was conducted in another Municipality Swimming Pool, specifically to verify comprehensiveness and to test application problems, like time expenditure and best methodology for customers’ approach and questionnaires delivery. The pre-test, with 168 respondents showed no misinterpretations of the items or difficulty in the filling of the questionnaires. The mean time spent by the respondents was acceptable (10 to 12 minutes). The pre-tests also indicated that the moment of arrival to the facility and before attending the class was the one preferred by the majority of the customers. The analyses of the collected data showed us the need for a change in the order of the items related to Reliability dimension (SQ) as the first item, “classes start time”, lead to missing answers in all following items by the customers who use the swimming pool in the “free use” set. In order to minimize the phenomena the items were reordered as follows: “Duties are performed consistently well”, “Accurate information about the timetable”, “Classes start on time”, and “Accurate classes description”.

3.3.2. Scales psychometric property examination

Regarding the determination of psychometric properties, particularly scales reliability and validity, we decided to analyse the factor structures through an exploratory factor analyses. The criterion used to retain Factors was eigenvalue equal or superior to one and the criterion used to retain items in their respective Factors was a loading value of .40 as suggested by Fonseca (1999). The results are discussed below and presented in Table 4.

Factor analysis is often used in data reduction to identify a small number of factors that explain most of the variance observed in a much larger number of manifest variables. In a more comprehensive way factor analyses is used to learn if the Factors are reliably measuring their respective constructs.

3.3.2.1. *Service Quality Scale (SQSp) Factor Analyses*

The exploratory factor analyses to the twenty five items of Service Quality Scale (SQSp) after varimax rotation (Table 4), extracted five Factors that explain 73.2% of the total variance, which is a higher percentage than the one of the original study (69.0%).

In Factor 1, to which corresponded 39.2% of the total variance, saturated seven items related with Perceived Outcome: "Improve my psychological well-being", "Improve my mood", "Improve my health", "Increase my energy", "Improve my fitness", "Improve my appearance" and "Attractive facilities". This is not consistent with the original study results (Alexandris et al., in Press) because in the author's study the last item, "Attractive facilities", loaded at Tangibles dimension. Factor 2, with 14.2% of all variance, included the items "Trusted staff", "Well-trained staff", "Staff gives individual attention", "Knowledgeable staff", "Polite staff" and "Reliable staff" and shaped the Personnel Dimension, which matched Alexandris et al.'s (in Press) results.

Factor 3 explained 9.5% of the variance and integrated five items related to Responsiveness: "Problems are solved quickly", "Requests are responded quickly", "Customers are instantly informed about changes", "Customers' suggestions are considered" and "Duties are performed consistently well". Comparing to Alexandris et al.'s (in press) examination, all items correspond to the original Responsiveness dimension except the last one "Duties are performed consistently well", that was originally loading at Reliability. This suggests that in our study delivering consistently well performed duties is not considered very important in the evaluation of the reliability of the service provider. Factor 4, explained 5.6% of the total variance and corresponded to Tangibles dimension. In this Factor four items saturated: "Variety of equipment", "Good condition of equipment", "Clean facilities", "Spacious exercise rooms". As mentioned before the item "Attractive facilities" loaded at the first Factor (our study) and consequently, the Tangibles Dimension "lost" an item compared to Alexandris et al.'s (in Press) results. The last Factor that explained 4.7% of the total variance, gathered three items related to Reliability, namely: "Classes start on time", "Accurate classes description", "Accurate information about the timetable". Compared with the SQS, Reliability lost the item "Duties are performed consistently well".

Table 4: Exploratory Factor Analyses of SQSp

Item	1	2	3	4	5
<i>Perceived Outcome (PO)</i>					
PO1 Improve my psychological well-being	.88	.16	.18	.20	.00
PO2 Improve my mood	.87	.14	.23	.21	.05
PO3 Improve my health	.87	.13	.07	.12	-.13
PO4 Increase my energy	.87	.04	.10	.15	.08
PO5 Improve my fitness	.84	.15	.06	.10	.05
PO6 Improve my appearance	.73	.18	.17	.10	.06
PO7 Attractive facilities	.56	.15	.25	.46	.04
<i>Personnel (P)</i>					
P1 Trusted staff	.14	.90	.09	.06	.04
P2 Well-trained staff	.07	.84	.06	.10	.29
P3 Staff gives individual attention	.30	.77	.14	.17	.11
P4 Knowledgeable staff	.06	.72	.21	.24	.22
P5 Polite staff	.19	.71	-.01	.14	-.10
P6 Reliable staff	.10	.67	.27	.13	.29
<i>Responsiveness (RS)</i>					
RS1 Problems are solved quickly	.18	.10	.86	.19	.12
RS2 Requests are responded quickly	.18	.13	.86	.21	-.04
RS3 Customers are instantly informed about changes	.10	.16	.80	.21	.06
RS4 Customers suggestions are considered	.32	.06	.76	.13	.16
RS5 Duties are performed consistently well	.12	.22	.49	.39	.38
<i>Tangibles (T)</i>					
T1 Variety of equipment	.20	.21	.23	.78	.05
T2 Good condition of equipment	.24	.20	.21	.77	.07
T3 Clean facilities	.15	.20	.20	.69	.20
T4 Spacious exercise rooms	.44	.05	.23	.56	.12
<i>Reliability (RL)</i>					
RL1 Classes start on time	-.03	.17	.06	.14	.91
RL2 Accurate classes description	-.04	.20	.13	.08	.89
RL3 Accurate information about the timetable	.08	.36	.44	.26	.44
Eigenvalue	9.8	3.5	2.4	1.4	1.2
% of Variance	39.2	14.2	9.5	5.6	4.7
Cumulative % of Variance	39.2	53.4	62.9	68.5	73.2

3.3.2.2. *Service Value Scale (SERV-PERVALp) Factor Analyses*

The exploratory factor analyses to the twenty four items of Service Value Scale (SERV-PERVALp), after varimax rotation (Table 5), extracted six Factors that explain 82% of the total variance. These findings are compared here with Petrick's (2002) Standardized Path Coefficients of confirmatory factor analyses predicting factors.

In Factor 1, to which corresponds 45.8% of the variance, saturated the five items related with Reputation: "Is well thought of", "Has good reputation", "Is well respected", "Is reputable", "Has status". Our results are consistent with Petrick's (2002) because the same exact items loaded at this dimension.

Factor 2, with 10.2% of the total variance, is formed by the items "Makes me feel delighted", "Gives me a sense of joy", "Gives me pleasure", "Gives me happiness" and "Makes me feel good", that is to say, it constitutes the dimension Emotional Response, also confirming Petrick's (2002) results.

Factor 3, to which corresponds 9.5% of the total variance, integrates four items related to the Behavioural Price: "Is easy to shop for"; "Is easily bought"; "Is easy to buy", "Require little effort to buy", which is also consistent with the original scale even after having eliminated one item that was not found to fit in the translation and adaptation of the scale into our context of investigation.

Factor 4, containing 6.8% of the total variance, corresponds to the dimension Monetary Price, and in it four items loaded: "Is fairly priced", "Is worth the money", "Is reasonably priced", "Is a good buy". These results do not corroborate Petrick's (2002) results because the items "Appears to be a good bargain" and "Is economical" did not load at the same factor meaning that in our study these specific items are not similarly related with the same construct and do not contribute to the measurement of Monetary Price identically.

Table 5: Exploratory Factor Analyses of SERV-PERVALp

Item	1	2	3	4	5	6
<i>Reputation (RP)</i>						
RP1 Is well thought of	.90	.13	.20	.18	.23	.02
RP2 Has a good reputation	.87	.13	.13	.17	.25	.02
RP3 Is well respected	.87	.14	.22	.21	.23	.01
RP4 Is reputable	.85	.20	.11	.15	.28	.09
RP5 Has status	.83	.19	.18	.18	.19	.13
<i>Emotional Response (ER)</i>						
ER1 Makes me feel delighted	.12	.85	.15	.18	.16	.07
ER2 Gives me a sense of joy	.23	.84	.10	.14	.14	.15
ER3 Gives me pleasure	.09	.80	.11	.26	.26	-.03
ER4 Gives me happiness	.17	.79	.14	.06	.03	.29
ER5 Makes me feel good	.16	.69	.18	.33	.35	-.14
<i>Behavioural price (BP)</i>						
BP1 Is easy to shop for	.13	.11	.86	.20	.05	-.02
BP2 Is easily bought	.11	.13	.85	.06	.06	.11
BP3 Is easy to buy	.22	.21	.83	.15	.19	.00
BP4 Required little energy to purchase	.18	.08	.79	.09	.05	.09
<i>Monetary Price (MP)</i>						
MP1 Is fairly priced	.18	.17	.23	.83	.21	.17
MP2 Is worth the money	.25	.27	.02	.77	.28	.05
MP3 Is reasonably priced	.21	.17	.25	.74	.07	.30
MP4 Is a good buy	.32	.35	.11	.64	.20	-.11
<i>Quality (Q)</i>						
Q1 Is very dependable	.30	.19	.08	.12	.83	-.03
Q2 Is very reliable	.31	.13	.10	.25	.82	.11
Q3 Is very consistent	.27	.30	.09	.14	.79	.12
Q4 Is outstanding quality	.38	.24	.17	.31	.66	.17
<i>Opportunity Price (OP)</i>						
OP1 Appears to be a good bargain	.07	.14	.03	.12	.11	.89
OP2 Is economical	.08	.15	.30	.53	.12	.63
Eigenvalue	10.9	2.4	2.3	1.6	1.3	1.0
% of Variance	45.8	10.2	9.5	6.8	5.2	4.5
Cumulative % of Variance	45.8	55.9	65.5	72.3	77.5	82

Factor 5, with 5.2% of the total variance, contains the four items related with the dimension Quality: "Is very dependable", "Is very reliable", "Is very consistent", "Is outstanding quality", that is consistent with Petrick's (2002)

Finally in Factor 6, which explains 4.5% of the total variance, two items loaded: “Appears to be a good bargain”, “Is economical”. As this Factor did not exist at Petrick’s (2002) model, it was named Opportunity Price.

3.3.2.3. Reliability scores for each dimension

3.3.2.3.1. SQSp Reliability Scores

The Service Quality Scale reliability scores, coefficient alpha (Table 6), reflect the internal consistency of the indicators measuring each dimension. Our study revealed high values for alpha in all five dimensions. Compared to Alexandris et al.’s (in Press) Perceived Outcome and Personnel have higher scores; Tangibles and Reliability have exactly the same alpha scores in both studies; and Responsiveness had a lower reliability score than the original study (.89). The reliability coefficient for the twenty five items of Service Quality Scale was .93.

Table 6: Reliability scores in our study and in Alexandris et al.’s (in press).

		SQSp		SQS	
		Number of items	α	Number of items	α
PO	Perceived Outcome	7	.93	6	.89
P	Personnel	6	.90	6	.89
RS	Responsiveness	5	.89	4	.93
T	Tangibles	4	.83	5	.83
RL	Reliability	3	.81	4	.81

3.3.2.3.2. SERV-PERVALp Reliability Scores

The comparison between SER-PERVALp and SERV-PERVAL (Table 7), unveils similar alpha values for Quality and higher values for Reputation dimensions. In the dimensions Emotional Response, Behavioural Price and Monetary Price the reliability scores were higher in Petrick’s (2002) study.

Opportunity Price came out with an alpha of .72. This is the lowest reliability score in the scale but it is still acceptable. This value is probably due to the number of items in the dimension (two). The reliability coefficient for the twenty four items of Service Value scale was .94

Table 7: Reliability scores in our study and in Pectrick's (2002)

		SERV-PERVALp		SERV-PERVAL ¹⁶	
		Number of items	α	Number of items	α
RP	Reputation	5	.96	5	.92
ER	Emotional Response	5	.91	5	.95
BP	Behavioural Price	4	.90	5	.95
MP	Monetary Price	4	.89	6	.94
Q	Quality	4	.92	4	.92
OP	Opportunity Price	2	.72	-	-

3.4. Procedures

3.4.1. Data collect procedures

The scales used were SQSp and SERV-PERVALp according to the previous study (translation and adaptation to the study specific context) and were applied simultaneously

The respondents were asked to indicate their perceptions of Service Quality and Service Value items of the respective swimming pool, in a five point Likert Scale from Totally False to Totally Truth following the procedure of the original studies. Additionally, and in order to attend the study objectives the participants were asked to indicate a set of information related to personal data like gender, age, professional situation, household and monthly income.

¹⁶ The alpha values correspond to Pectrick (2002) Cruise2 sample composite reliability scores. Composite reliability is analogous to coefficient alpha (Cronbach).

The questionnaires were distributed in the swimming pools and the customers were asked to participate in the study at the reception as they came in to attend the class; participants completed the questionnaire in a convenient place (e.g., bar, reception), prior to their workout. Data was collected during 4 days, simultaneously at the three municipal pools. All procedures were previously explained to the inquires and the confidentiality of the data collected was guaranteed

3.4.2. Data analyses

To complete statistic procedures considered relevant (e.g. Mean, Standard deviation, Pearson correlation index, T-test and Regression analyses) SPSS 11.0 program was used.

4. RESULTS AND DISCUSSION

For a better understanding of the meaning of the results presented in this chapter we will start with the sample characterization and then present all analyses made to the collected data.

In order to analyse our data according to a pre-determined set of continuous variables we used the Oneway Anova Test. For the variables Age and Displacement Time we used the Person Correlation Test because those are metric variables.

4.1. Descriptive Study

4.1.1. Sample characterization

Our sample (Table 8 and Table 9) was constituted by men (43.6%) and women (56.4%) with mean age of 37.9 (SD=13.8) years old. All individuals were users of aquatic activities such as swimming and hydro gymnastics. 30.2% respondents were university graduates and 27.4% had secondary education. In the professional field 67.4% of the individuals had a job.

In the familiar context our sample was constituted by 79.8% individuals belonging to households between two and four members. In the matters of household monthly income 36% of the respondents reported 400€ to 1000€ household monthly income¹⁷. 64.4% of the participants reported a regular frequency of the swimming pool of two times a week and a large percentage of them, 43.1%, uses the services after 18:00 hours.

Finally, when asked about the time spent in displacements to the swimming pool the participants reported an average of 18.7 minutes travel.

¹⁷ The minimum national salary is 356,60€ (Law No. 320-C/2002 of 30 December)

Table 8: Sample characterization: Gender, Education, Marital Status, Professional Situation, Household, Household Monthly Income, Weekly Frequency, and Usual Frequency Schedule

		N	%
Gender	Men	79	43.6
	Women	102	56.4
Education	4 years mandatory education	22	12.3
	6 years mandatory education	26	14.5
	9 years mandatory education	28	15.6
	Secondary Education	49	27.4
	University	54	30.2
Marital status	Single	56	31.6
	Married	104	58.8
	Divorced	14	7.9
	Widowed	3	1.7
Professional situation	Student	26	14.6
	Self-employed	34	19.1
	Employee	86	48.3
	Unemployed	12	6.7
	Retired	20	11.2
Household (number of members)	1	25	14.9
	2	44	26.2
	3	44	26.2
	4	46	27.4
	5	7	4.2
	6	2	1.2
Household monthly income	≤ 400€	14	8.8
	400€ - 1000€	58	36.5
	1000€ - 1500€	29	18.2
	1500€ - 2500€	29	18.2
	2500€ - 3500€	13	8.2
	>3500€	16	10.1
Weekly frequency (number of times)	1	21	11.7
	2	116	64.4
	3	26	14.4
	>3	17	9.4
Usual frequency schedule	< 11h	15	8.3
	11h-13h	23	12.7
	13h-15h	26	14.4
	15h-18h	39	21.5
	>18h	78	43.1

Table 9: Sample characterization: Age, Displacement Time

	N	Minimum	Maximum	Mean	SD
Age	182	16	74	37.9	13.8
Displacement time	182	2'	60'	18.7'	13.7'

4.1.2. Service Quality (SQSp) and Service Value (SERV-PERVALp) dimensions.

As seen in Table 10, the results indicated high mean scores for all Service Quality dimensions (between 4.10 and 4.52). Personnel and Reliability dimensions had the highest mean scores (4.52 and 4.44 respectively), followed by the Perceived Outcome (4.43) and Tangibles 4.33. The lowest score was expressed by Responsiveness (4.10). According to these results, the customers of Vila Nova de Gaia swimming pools demonstrated high evaluation of the quality of the service they get.

Table 10: Descriptive statistics of Service Quality dimensions

		N	Number of items	Mean	SD
PO	Perceived Outcome	167	7	4,43	.63
P	Personnel	171	6	4.52	.55
RS	Responsiveness	168	5	4.10	.81
T	Tangibles	177	4	4.33	.64
RL	Reliability	168	3	4.44	.65
Total (SQSp 25 items)		148	25	4.33	.53

Compared to Service Quality evaluations, Service Value mean scores (Table 11) are generally lower but still considered high: Mean scores range between 3.10 for Opportunity Price and 4.31 for Reputation. The low mean score in the Opportunity Price dimension is probably due to the short number of items (2).

In spite of being a goal in this study, the comparison between total SQSp and the Quality dimension (in SERV-PERVALp) mean scores showed similarity of evaluation: 4.33 and 4.24 respectively.

Table 11: Descriptive statistics of Service Value dimensions

		N	Number of items	Mean	SD
RP	Reputation	175	5	4.31	.80
ER	Emotional Response	175	5	4.29	.63
BP	Behavioural Price	169	4	4.17	.75
MP	Monetary Price	170	4	4.20	.72
Q	Quality	174	4	4.24	.73
OP	Opportunity Price	172	2	3.10	1.13
Total (SERV-PERVALp 24 items)		148	24	4.15	.56

4.1.3. Comparison among groups – Vila D’Este, Maravedi, Granja

In order to investigate mean differences among the three groups (Vila D’Este, Maravedi, Granja) we ran an Oneway Anova test among them (Table 12).

The Service Quality study showed significant differences for the mean scores only in Perceived Outcome dimension with the most favourable evaluation attributed by Vila D’Este customers and the least favourable evaluation by Maravedi respondents. For all the other dimensions, even though the differences are not significant, the most positive evaluations were made by Vila D’Este customers. This could be explained by the fact that Vila D’Este citizens still feel the local swimming pool as an extraordinary benefit to their neighbourhood as it is recent and there are no other facilities of the kind in the area.

Vila D'Este and Granja respondents seem to have very similar opinions about Service Quality in their swimming pools as there are great similarities in mean scores for most dimensions in both pools.

Considering Overall Service Quality, Vila D'Este respondents evaluated their swimming pool significantly higher than all other.

Table 12: Service Quality mean scores comparison among groups – Vila D'Este, Maravedi, Granja

		Vila D'Este			Maravedi			Granja			T-test	
		N	M	Sd	N	M	Sd	N	M	Sd	F	Sig
PO	Perceived Outcome	51	4.62	.45	58	4.21	.71	58	4.50	.63	6.50	.002
P	Personnel	57	4.62	.50	54	4.48	.45	60	4.47	.66	1.46	n.s.
R	Responsiveness	52	4.26	.67	55	4.05	.87	61	4.03	.86	1.22	n.s.
T	Tangibles	55	4.51	.54	59	4.22	.63	63	4.28	.72	3.34	n.s.
R	Reliability	56	4.6	.60	51	4.36	.64	61	4.38	.70	2.39	n.s.
	Overall Service Quality	46	4.5	.44	49	4.2	.51	53	4.3	.59	3.83	.02

In the Service Value study (Table 13), Reputation is the only dimension that had significant mean scores differences. According to their customer's opinion, the least reputable swimming pool is Maravedi and the most reputable is Granja.

Vila D'Este group distinguishes with the most favourable evaluations in Emotional Response, Behavioural Price and Monetary Price; Granja users attributed higher values to Quality than any other group, despite the fact that, as we can see in Table 13, none of these differences are significant. Considering Overall Service Value, differences among swimming pools were not significantly.

In order to clarify these results we compared mean score items among groups (Annex I and Annex II).

In order to identify relationships among service evaluations, demographic data and customers' behavioural characteristics we present in the subsequent tables the mean comparisons and Pearson correlations of the most important data.

Table 13: Service Value mean scores comparison among groups – Vila D'Este, Maravedi, Granja

		Vila D'Este			Maravedi			Granja			T-test	
		N	M	Sd	N	M	Sd	N	M	Sd	F	Sig
RP	Reputation	56	4.21	.83	57	4.08	.95	62	4.60	.51	7.00	.001
ER	Emotional Response	56	4.46	.61	55	4.17	.63	64	4.25	.63	3.10	n.s.
BP	Behavioural Price	52	4.30	.75	59	4.11	.77	58	4.10	.73	1.23	n.s.
MP	Monetary Price	54	4.34	.65	60	4.01	.78	56	4.30	.69	3.40	n.s.
Q	Quality	54	4.28	.64	58	4.13	.77	62	4.30	.77	.95	n.s.
OP	Opportunity Price	53	3.21	1.0	58	3.36	1.26	61	2.75	1.1	4.75	n.s.
Overall Service Value		46	4.2	.54	51	4.0	.61	51	4.1	.52	.92	n.s.

4.1.4. Analyses factor: Age

When the analyses factor is the age of the respondents (Table 14), data suggests that the age increasing has very strong positive correlation with the evaluation of Responsiveness ($p \leq .01$) and strong correlation with Personnel evaluation ($p \leq .05$). The correlation found between age and overall quality value is also positive ($r=.185$) and strong ($p \leq .02$).

These findings suggest that items associated with inter-personnel relations as (e.g. "problems are solved quickly" and "Staff gives individual attention") are likely to be favourably evaluated by older customers.

Concerning Service Value evaluation (Table 15) the correlation index showed that age relates positively with Emotional Response and Behavioural Price ($p \leq .05$). These results suggest that the assessment of items related with pleasant sensations (e.g. "makes me fill good" or "gives me a sense of joy") tend

to be more favourable as the age increases. The same relation occurred with items related with behavioural sacrifice (e.g. "Is easy to buy" and "Required little energy to purchase"). In our view these outcomes might happen because older people probably become more tolerant and need more social contact.

Table 14: Correlations between Age and Service Quality dimensions

	Perceived Outcome	Personnel	Responsiveness	Tangibles	Reliability
r Pearson	.151	.172*	.224**	.116	-.009
Sig.	.051	.025	.003	.123	.909
N	167	171	168	177	168

** Correlation is significant at the .01 level (2-tailed).

* Correlation is significant at the .05 level (2-tailed).

Table 15: Correlations between Age and Service Value dimensions

	Reputation	Emotional Response	Behavioural Price	Monetary Price	Quality	Opportunity Price
r Pearson	.014	.154*	.182*	.070	.071	.065
Sig.	.854	.042	.018	.367	.355	.396
N	175	175	169	170	174	172

* Correlation is significant at the 0.05 level (2-tailed).

4.1.5. Analyses factor: Gender

The mean score comparison of Service Quality dimensions in function of gender (Table 16) reveals that even though female customers generally evaluate services more favourably than male customers, the only dimensions in which the differences are significant is Reliability. We highlight the findings for Personnel differences, even though they are not significant, they are very close to the acceptable level of significance. As for the Overall Service Quality, the mean differences were significant ($p \leq .04$) and women ($M=4.4$; $S.D.=.52$) evidenced more favourable evaluations than men ($M=4.2$; $S.D.=.52$).

These findings might be explained for the reasons pointed out by Neng-Pai Lin et al. (2001). The authors stated that different customers' gender may affect

the perception of Service Quality and that men are generally more aggressive and autonomous than women and tend to be highly exploratory.

Regarding Service Value even though neither one of the dimensions showed significant mean differences in function of gender (Table 17) the Overall Service Value presented significant ($p \leq .04$) differences between men ($M=4.3$; $S.D.=.52$) and women's ($M=4.0$; $S.D.=.59$) evaluations.

Table 16: Service Quality mean comparison according to Gender

		N	Mean	SD	F	Sig
Perceived Outcome	F	93	4.51	0.67	.11	n.s.
	M	73	4.34	0.58		
Personnel	F	96	4.63	0.49	4.02	.05
	M	74	4.38	0.60		
Responsiveness	F	95	4.17	0.76	2.63	n.s.
	M	72	4.00	0.87		
Tangibles	F	98	4.40	0.63	.07	n.s.
	M	78	4.24	0.67		
Reliability	F	97	4.58	0.55	15.77	.00
	M	70	4.24	0.74		

Table 17: Service Value mean comparison according to Gender

		N	Mean	SD	F	Sig
Reputation	F	101	4.39	0.79	.31	n.s.
	M	73	4.18	0.82		
Emotional Response	F	97	4.40	0.60	.45	n.s.
	M	77	4.14	0.64		
Behavioural Price	F	95	4.26	0.67	1.18	n.s.
	M	73	4.03	0.83		
Monetary Price	F	97	4.25	0.69	.60	n.s.
	M	72	4.13	0.76		
Quality	F	97	4.29	0.70	.36	n.s.
	M	76	4.16	0.77		
Opportunity Price	F	98	3.18	1.10	.02	n.s.
	M	73	2.97	1.18		

4.1.6. Analyses factor: Education

Concerning Service Quality evaluation related to education (Table 18), the individuals with lower levels of education attributed higher mean scores to all dimensions. This might be related to social characteristics like being short of other experiences and lack of information about sport activities. The fact that the significant differences are in Personnel and Tangibles dimensions reinforces the previous statement and reflects social significance of Personnel related issues for instance, giving personal attention, showing knowledge about the exercise programs and courtesy with customers. In the remaining dimensions, Perceived Outcome, Responsiveness and Reliability, the education level did not prove to be a significant variable in the distinction between mean scores.

Table 18: Service Quality mean scores comparison according to Education Level

Dimensions	Education	N	Mean	SD	F	Sig
Perceived Outcome	4 years m.e.	20	4.62	.48	1.78	n.s.
	6 years m.e.	23	4.61	.49		
	9 years m.e.	24	4.20	.72		
	Secondary Education	46	4.43	.69		
	University	51	4.39	.64		
Personnel	4 years m.e.	21	4.83	.36	3.19	.02
	6 years m.e.	24	4.59	.54		
	9 years m.e.	26	4.28	.51		
	Secondary Education	47	4.51	.54		
	University	50	4.46	.61		
Responsiveness	4 years m.e.	20	4.57	.50	2.04	n.s.
	6 years m.e.	21	4.05	.84		
	9 years m.e.	25	3.96	1.05		
	Secondary Education	48	4.05	.72		
	University	51	4.05	.81		
Tangibles	4 years m.e.	21	4.61	.57	2.57	.04
	6 years m.e.	24	4.36	.61		
	9 years m.e.	28	4.13	.84		
	Secondary Education	48	4.43	.54		
	University	53	4.20	.63		
Reliability	4 years m.e.	21	4.75	.47	1.98	n.s.
	6 years m.e.	23	4.57	.59		
	9 years m.e.	26	4.38	.67		
	Secondary Education	46	4.33	.71		
	University	49	4.35	.67		

The analyses of mean score differences in Service Value assessment (Table 19) demonstrated that three - Emotional Response, Quality and Opportunity Price - of the six dimensions have significant mean differences, once again with the higher scores coming from the less educated individuals.

Table 19: Service Value mean scores comparison according to Education Level

Dimensions	Education	N	Mean	SD	F	Sig
Reputation	4 years m.e.	22	4.51	.61	.53	n.s.
	6 years m.e.	24	4.22	1.03		
	9 years m.e.	27	4.20	.94		
	Secondary Education	47	4.29	.79		
	University	52	4.29	.72		
Emotional Response	4 years m.e.	22	4.63	.53	3.82	.01
	6 years m.e.	24	4.42	.59		
	9 years m.e.	27	4.22	.57		
	Secondary Education	47	4.33	.63		
	University	52	4.07	.65		
Behavioural Price	4 years m.e.	21	4.44	.72	1.21	n.s.
	6 years m.e.	22	4.28	.62		
	9 years m.e.	28	4.06	.70		
	Secondary Education	44	4.14	.70		
	University	51	4.07	.86		
Monetary Price	4 years m.e.	20	4.36	.73	1.41	n.s.
	6 years m.e.	23	4.22	.78		
	9 years m.e.	27	4.03	.82		
	Secondary Education	45	4.33	.65		
	University	52	4.07	.69		
Quality	4 years m.e.	20	4.58	.54	2.43	.05
	6 years m.e.	25	4.13	.82		
	9 years m.e.	28	4.09	.91		
	Secondary Education	46	4.36	.66		
	University	52	4.09	.66		
Opportunity Price	4 years m.e.	19	3.53	1.18	3.04	.02
	6 years m.e.	23	3.37	.97		
	9 years m.e.	27	3.15	1.05		
	Secondary Education	47	3.18	1.16		
	University	53	2.68	1.10		

In opposition, the graduated individuals evaluate most dimensions with less favourable scores. Probably these results are related with the fact that higher educated customers, that is to say better informed, are more demanding regarding the quality and value of the service they get.

4.1.7. Analyses factor: Professional situation

The analyses of mean score differences for Service Quality (Table 20) and Service Value (Table 21) assessments revealed no significant differences among pools.

Even though the higher evaluations are generally indicated by the unemployed individuals, the short number of these respondents inhibits further considerations.

Table 20: Service Quality mean scores comparison according to Professional Situation

Dimensions	Professional Situation	N	Mean	SD	F	Sig
Perceived Outcome	Student	25	4.25	.85	1.04	n.s.
	Self-employed	29	4.42	.62		
	Employee	81	4.50	.60		
	Unemployed	11	4.60	.57		
	Retired	17	4.34	.49		
Personnel	Student	26	4.40	.50	.71	n.s.
	Self-employed	31	4.56	.55		
	Employee	80	4.51	.57		
	Unemployed	12	4.69	.58		
	Retired	18	4.59	.49		
Responsiveness	Student	22	4.04	.58	.47	n.s.
	Self-employed	33	4.23	.83		
	Employee	82	4.05	.83		
	Unemployed	10	4.30	.89		
	Retired	18	4.11	.91		
Tangibles	Student	26	4.40	.49	.31	n.s.
	Self-employed	33	4.26	.65		
	Employee	84	4.32	.66		
	Unemployed	12	4.46	.76		
	Retired	18	4.35	.73		
Reliability	Student	24	4.46	.71	.35	n.s.
	Self-employed	30	4.38	.79		
	Employee	81	4.46	.59		
	Unemployed	11	4.61	.55		
	Retired	18	4.35	.70		

Table 21: Service Value means scores comparison according to Professional Situation

Dimensions	Professional Situation	N	Mean	SD	F	Sig
Reputation	Student	26	4.37	.63	.91	n.s.
	Self-employed	30	4.23	.92		
	Employee	83	4.29	.80		
	Unemployed	12	4.68	.72		
	Retired	20	4.17	.92		
Emotional Response	Student	25	4.28	.61	.28	n.s.
	Self-employed	32	4.21	.64		
	Employee	84	4.30	.64		
	Unemployed	12	4.43	.61		
	Retired	19	4.26	.67		
Behavioural Price	Student	26	3.84	.85	1.60	n.s.
	Self-employed	29	4.22	.78		
	Employee	79	4.21	.71		
	Unemployed	12	4.25	.80		
	Retired	20	4.31	.64		
Monetary Price	Student	25	4.31	.62	1.26	n.s.
	Self-employed	30	4.14	.67		
	Employee	81	4.15	.76		
	Unemployed	12	4.58	.57		
	Retired	19	4.08	.86		
Quality	Student	26	4.21	.63	1.15	n.s.
	Self-employed	31	4.27	.76		
	Employee	83	4.18	.72		
	Unemployed	12	4.65	.43		
	Retired	18	4.21	.79		
Opportunity Price	Student	26	3.29	1.10	.87	n.s.
	Self-employed	30	2.78	1.10		
	Employee	83	3.08	1.12		
	Unemployed	10	3.30	1.42		
	Retired	20	3.18	1.13		

4.1.8. Analyses factor: Household

Individual's household does not appear to be determinant for evaluating differently Service Quality or Service Value of Vila Nova de Gaia swimming pools. In our sample, households vary from 1 to 6 members from which we

analyzed only the results for individuals with households of 1, 2, 3, and as the individuals with 5 and 6 members household represent only 5.4 % of the sample and they do not bring significant changes to the presented data.

As shown in Tables 22 and 23, even though the mean scores range from 3.96 to 4.65 in Service Quality and from 2.90 to 4.45 in Service Value evaluations, none of the differences found were significant

Table 22: Mean scores comparison according to Household

Dimensions	Household	N	Mean	Sd	F	Sig
Perceived Outcome	1	22	4.19	.94	1.48	n.s.
	2	41	4.45	.60		
	3	39	4.43	.59		
	4	44	4.54	.58		
Personnel	1	22	4.33	.51	1.68	n.s.
	2	41	4.65	.53		
	3	43	4.47	.55		
	4	43	4.51	.64		
Responsiveness	1	23	3.96	.91	.42	n.s.
	2	42	4.16	.82		
	3	39	4.15	.69		
	4	41	4.05	.82		
Tangibles	1	24	4.29	.74	.21	n.s.
	2	41	4.26	.71		
	3	44	4.37	.60		
	4	45	4.34	.67		
Reliability	1	23	4.28	.70	1.29	n.s.
	2	41	4.35	.73		
	3	42	4.45	.62		
	4	40	4.58	.59		

Table 23: Mean scores comparison according to Household

Dimensions	Household	N	Mean	Sd	F	Sig
Reputation	1	25	4.22	.80	.98	n.s.
	2	43	4.19	.91		
	3	42	4.38	.81		
	4	43	4.45	.66		
Emotional Response	1	23	4.17	.63	.33	n.s.
	2	43	4.23	.66		
	3	43	4.27	.66		
	4	43	4.32	.59		
Behavioural Price	1	25	3.93	.66	1.19	n.s.
	2	44	4.16	.74		
	3	40	4.13	.82		
	4	40	4.29	.78		
Monetary Price	1	24	3.98	.78	2.47	n.s.
	2	42	4.12	.79		
	3	41	4.21	.71		
	4	42	4.44	.63		
Quality	1	25	4.27	.85	0.49	n.s.
	2	40	4.10	.85		
	3	42	4.27	.67		
	4	44	4.24	.59		
Opportunity Price	1	25	2.90	1.31	.70	n.s.
	2	43	3.24	1.16		
	3	42	3.04	1.10		
	4	40	2.94	1.03		

4.1.9. Analyses factor: Household Monthly Income

The analyses of our sample mean scores of Service Quality and Service Value revealed that differences of evaluation are not significantly related with Household Monthly Income (Table 24 and Table 25 respectively).

Table 24: Mean scores comparison according to Household Monthly Income

Dimensions	Monthly income ¹⁸	N	Mean	Sd	F	Sig
Perceived Outcome	≤ 400	13	4.43	.50	1.74	n.s.
	from 400 to 1000	53	4.39	.79		
	from 1000 to 1500	26	4.46	.56		
	from 1500 to 2500	28	4.23	.67		
	from 2500 to 3500	12	4.86	.21		
	> 3500	15	4.55	.49		
Personnel	≤ 400	12	4.43	.45	.28	n.s.
	from 400 to 1000	55	4.56	.49		
	from 1000 to 1500	26	4.54	.49		
	from 1500 to 2500	29	4.43	.73		
	from 2500 to 3500	13	4.51	.65		
Responsiveness	≤ 400	12	4.50	.47	1.87	n.s.
	from 400 to 1000	52	4.08	.90		
	from 1000 to 1500	28	4.18	.69		
	from 1500 to 2500	27	3.79	.85		
	from 2500 to 3500	13	4.31	.76		
	> 3500	15	4.31	.69		
	> 3500	15	4.50	.57		
Tangibles	≤ 400	14	4.48	.40	.56	n.s.
	from 400 to 1000	56	4.33	.72		
	from 1000 to 1500	27	4.38	.64		
	from 1500 to 2500	29	4.18	.68		
	from 2500 to 3500	12	4.44	.63		
	> 3500	16	4.28	.57		
Reliability	≤ 400	12	4.67	.38	.79	n.s.
	from 400 to 1000	54	4.46	.66		
	from 1000 to 1500	27	4.51	.75		
	from 1500 to 2500	29	4.43	.62		
	from 2500 to 3500	11	4.33	.63		
	> 3500	14	4.19	.81		

¹⁸ All values in Euros (€)

Table 25: Mean scores comparison according to Household Monthly Income

Dimensions	Monthly income ¹⁹	N	Mean	SD	F	Sig
Reputation	≤ 400	14	4.60	.46	1.06	n.s.
	from 400 to 1000	57	4.24	.91		
	from 1000 to 1500	29	4.24	.84		
	from 1500 to 2500	28	4.16	.79		
	from 2500 to 3500	11	4.42	.75		
	> 3500	15	4.57	.57		
Emotional Response	≤400	14	4.46	.37	.67	n.s.
	from 400 to 1000	55	4.26	.69		
	from 1000 to 1500	27	4.36	.58		
	from 1500 to 2500	29	4.14	.68		
	from 2500 to 3500	13	4.32	.61		
	> 3500	15	4.19	.69		
Behavioural Price	≤ 400	14	4.46	.47	1.69	n.s.
	from 400 to 1000	55	4.10	.84		
	from 1000 to 1500	27	4.02	.68		
	from 1500 to 2500	28	4.01	.81		
	from 2500 to 3500	10	4.53	.69		
	> 3500	14	4.39	.63		
Monetary Price	≤ 400	12	4.35	.65	2.06	n.s.
	from 400 to 1000	55	4.00	.85		
	from 1000 to 1500	27	4.33	.63		
	from 1500 to 2500	28	4.19	.73		
	from 2500 to 3500	10	4.43	.59		
	> 3500	15	4.55	.39		
Quality	≤ 400	13	4.54	.51	.93	n.s.
	from 400 to 1000	56	4.17	.82		
	from 1000 to 1500	28	4.23	.74		
	from 1500 to 2500	28	4.16	.77		
	from 2500 to 3500	12	4.38	.60		
	> 3500	15	4.45	.51		
Opportunity Price	≤ 400	14	3.54	1.25	1.32	n.s.
	from 400 to 1000	56	3.01	1.13		
	from 1000 to 1500	29	3.40	1.13		
	from 1500 to 2500	27	2.83	1.07		
	from 2500 to 3500	10	3.25	1.27		
	> 3500	14	2.89	1.04		

¹⁹ All values in Euros(€)

This might indicate either that the service price is well tolerated by customers or that the differences in individual's assessments of Quality and Value are not based on Monetary questions. On the other hand we may also suggest that if the respondents are already customers of these services they are probably used to the amount of money they pay and tend to evaluate more conscientiously only what they receive.

4.1.10. Analyses factor: Weekly Frequency

The variable Weekly Frequency refers to the number of times customers generally go to the swimming pool in a week and it has significant relationship with Perceived Outcome, Responsiveness and Reliability in the Service Quality scale and, with Emotional Response and Behavioural Price in the Service Value scale (Table 26 and Table 27 respectively).

Our data indicates that individuals with three times per week frequency generally evaluate less favourably both constructs, Service Quality and Service Value, than all other customers, those with lower and those with higher frequency. That is, mean scores decrease as frequency rises, but only up to a certain degree of frequency (three times per week frequency) and a frequency of four or more times per week is associated with the most favourable evaluations.

This might be related with the benefits that a person who goes to the swimming pool with such frequency believes to achieve. Probably these customers have strong positive feelings about the activity they participate in. This is supported by the high mean score evaluation in the dimension Perceived Outcome (4.73) given by this individuals. In this dimension respondents judge questions like: Programs help me "increase my energy"; "improve my health"; "improves my fitness" and "improve my psychological well-being".

Table 26: Mean scores comparison according to Weekly Frequency

Dimensions	Weekly frequency	N	Mean	Sd	F	Sig
Perceived Outcome	1	19	4.41	.68	3.03	0,03
	2	108	4.46	.59		
	3	23	4.14	.87		
	4	16	4.73	.30		
Personnel	1	17	4.33	.66	1.31	n.s.
	2	110	4.55	.54		
	3	25	4.42	.57		
	4	17	4.65	.47		
Responsiveness	1	17	4.24	.75	2.56	0,05
	2	109	4.09	.78		
	3	24	3.83	1.04		
	4	16	4.53	.49		
Tangibles	1	21	4.42	.69	1.73	n.s.
	2	112	4.34	.64		
	3	25	4.11	.73		
	4	17	4.54	.41		
Reliability	1	16	4.25	.74	3.35	0,02
	2	109	4.54	.58		
	3	25	4.12	.86		
	4	16	4.48	.60		

The mean scores found for Responsiveness and Reliability might be related to the fact that customers who go to the activity four or more times per week are more autonomous, because of their experience, tending to evaluate these dimensions favourably. The most favourable evaluation in Behavioural Price (4.53) and Monetary Price (4.47) (Service Value), both representing what one gives for what one gets, also suggests that customers with four or more times per week frequency believe that the benefits they get are worth the efforts (monetary and non-monetary) they make. Not to exclude that the lower number of respondents with this characteristic (four times per week) might influence these results.

Table 27: Mean scores comparison according to Weekly Frequency

Dimensions	Weekly frequency	N	Mean	Sd	F	Sig
Reputation	1	20	4.48	.67	1.40	n.s.
	2	110	4.32	.79		
	3	26	4.05	1.03		
	4	17	4.45	.63		
Emotional Response	1	20	4.42	.56	3.89	.01
	2	111	4.35	.63		
	3	25	3.90	.68		
	4	17	4.33	.48		
Behavioural Price	1	20	4.08	.79	3.60	.01
	2	105	4.22	.67		
	3	26	3.82	.96		
	4	16	4.53	.59		
Monetary Price	1	20	4.38	.53	1.79	n.s.
	2	105	4.17	.74		
	3	26	4.02	.84		
	4	17	4.47	.50		
Quality	1	20	4.43	.69	1.57	n.s.
	2	110	4.28	.64		
	3	26	4.00	.96		
	4	16	4.16	.88		
Opportunity Price	1	21	3.43	.87	1.38	n.s.
	2	106	3.16	1.16		
	3	26	2.83	1.12		
	4	17	2.88	1.22		

The generally less favourable evaluations made by the three times per week frequency group might be related to the fact that they are not totally convinced of the benefits of the activity due to the long term effects of physical activities. On the other hand, and because they spend more time in the swimming pool than the one and two times per week group, they are more likely to face negative experiences and for that reason be more critical about the service.

4.1.11. Analyses factor: Usual frequency schedule

When establishing mean comparisons in relation with usual frequency schedule, that is to say the hour of the day that customer generally goes to the swimming pool, there are no significant differences in any dimension except in Responsiveness (Table 28 and Table 29). This means that the moment of the day in which a person goes to practice his or her activity influences the evaluation that this person makes of aspects related to Responsiveness (the pool willingness to help customers and provide prompt services) The less favourable evaluation is made at the end of the morning, between 11:00h and 13:00h, (4.19) and specially at the end of the day after 18:00 h (3.87). These results might be related to two aspects: The customers at the end of the morning attend these services in a hurry and are less tolerable to delays. At the end of the day the evaluation might also be related to the number of customers. This is the moment in which there are a large number of customers in the swimming pool at the same time (43.1%).

Table 28: Mean scores comparison according to Usual Frequency Schedule

Dimensions	Frequency Schedule	N	Mean	Sd	F	Sig
Perceived Outcome	before 11	14	4.26	1.17	.73	n.s.
	between 11 and 13	22	4.54	.49		
	between 13 and 15	25	4.37	.56		
	between 15 and 18	34	4.54	.49		
	after 18	71	4.41	.62		
Personnel	before 11	15	4.50	.66	.22	n.s.
	between 11 and 13	23	4.49	.50		
	between 13 and 15	22	4.48	.67		
	between 15 and 18	37	4.47	.58		
	after 18	73	4.56	.50		
Responsiveness	before 11	14	4.34	.73	2.84	.03
	between 11 and 13	20	4.19	.85		
	between 13 and 15	23	4.30	.86		
	between 15 and 18	37	4.29	.54		
	after 18	73	3.87	.87		
Tangibles	before 11	15	4.43	.61	1.76	n.s.
	between 11 and 13	22	4.35	.72		
	between 13 and 15	26	4.38	.68		
	between 15 and 18	38	4.51	.53		
	after 18	75	4.19	.66		
Reliability	before 11	14	4.24	.80	1.17	n.s.
	between 11 and 13	19	4.28	.58		
	between 13 and 15	21	4.41	.74		
	between 15 and 18	38	4.60	.50		
	after 18	76	4.45	.68		

Table 29: Mean scores comparison according to Usual Frequency Schedule

Dimensions	Frequency Schedule	N	Mean	Sd	F	Sig
Reputation	before 11	15	4.63	.48	1.33	n.s.
	between 11 and 13	22	4.38	.74		
	between 13 and 15	24	4.44	.76		
	between 15 and 18	38	4.30	.78		
	after 18	75	4.17	.89		
Emotional Response	before 11	15	4.27	.67	.44	n.s.
	between 11 and 13	23	4.38	.69		
	between 13 and 15	25	4.15	.52		
	between 15 and 18	38	4.31	.65		
	after 18	74	4.30	.63		
Behavioural Price	before 11	15	4.12	.71	.96	n.s.
	between 11 and 13	23	4.12	.75		
	between 13 and 15	25	4.37	.59		
	between 15 and 18	38	4.25	.64		
	after 18	67	4.06	.86		
Monetary Price	before 11	15	4.38	.42	.49	n.s.
	between 11 and 13	22	4.23	.86		
	between 13 and 15	23	4.29	.60		
	between 15 and 18	39	4.14	.69		
	after 18	70	4.15	.79		
Quality	before 11	15	4.33	.83	.43	n.s.
	between 11 and 13	23	4.33	.83		
	between 13 and 15	23	4.18	.87		
	between 15 and 18	38	4.31	.59		
	after 18	75	4.17	.71		
Opportunity Price	before 11	15	2.67	1.13	1.13	n.s.
	between 11 and 13	22	3.32	1.31		
	between 13 and 15	25	3.36	1.15		
	between 15 and 18	38	3.08	1.12		
	after 18	72	3.04	1.08		

4.1.12. Analyses factor: Displacement Time

It was not found any correlation between Displacement time and Service Quality or Service Value (Table 30 and Table 31)

Table 30: Correlations between Displacement Time and Service Quality dimensions

	Perceived Outcome	Personnel	Responsiveness	Tangibles	Reliability
r Pearson	.034	-.009	.143	-.005	-.014
Sig.	.664	.911	.064	.946	.859
N	167	171	168	177	168

Table 31: Correlations between Displacement Time and Service Value dimensions

	Reputation	Emotional Response	Behavioural Price	Monetary Price	Quality	Opportunity Price
r Pearson	.065	.076	-.018	.025	.057	.105
Sig.	.393	.320	.816	.743	.455	.169
N	175	175	169	170	174	172

4.2. Predictive Study

4.2.1. Correlations between Service Quality and Service Value dimensions

In order to find the extent to which Service Quality and Service Value dimensions vary together we used the Pearson correlation as shown in Table 32.

All Service Quality dimensions have shown to have positive correlations ($p \leq .01$) with Service Value dimensions except between Perceived Outcome and Opportunity Price where it was not found any significant correlation. The strongest correlation coefficient was found between Responsiveness and Monetary Price ($R = .60$) which means that 36% of the variance in Monetary Price is explained by the variance in Responsiveness. Reliability and Opportunity Price showed the lowest correlation coefficient ($R = .17$) which means that 2.8% of the variance in Opportunity Price is explained by the variance in Reliability. We should take into account that this procedure does not control the effects of any other variable in the correlation coefficients presented.

Table 32: Correlations between Service Quality and Service Value dimensions.

Quality Dimensions	Value Dimensions	Quality	Emotional Response	Monetary Price	Opportunity Price	Behavioural price	Reputation
Responsiveness	r Pearson	.535**	.545**	.606**	.385**	.508**	.550**
	Sig.	.000	.000	.000	.000	.000	.000
	N	161	162	158	161	158	163
Perceived Outcome	r Pearson	.339**	.526**	.429**	.120	.390**	.409**
	Sig.	.000	.000	.000	.134	.000	.000
	N	162	161	158	158	157	162
Personnel	r Pearson	.410**	.439**	.414**	.255**	.337**	.375**
	Sig.	.000	.000	.000	.001	.000	.000
	N	164	164	160	161	160	165
Tangibles	r Pearson	.535**	.578**	.536**	.331**	.455**	.430**
	Sig.	.000	.000	.000	.000	.000	.000
	N	170	170	165	167	164	170
Reliability	r Pearson	.353**	.251**	.361**	.179*	.420**	.378**
	Sig.	.000	.001	.000	.023	.000	.000
	N	162	162	157	161	157	164

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

4.2.1. Regression Analyses

As shown in Table 33, the five dimensions of Service Quality predict a significant proportion ($F=46.76$, $p < .00$) of variance (67%) of the overall value. Given the fact that the reliability coefficient of the 24 items of Service Value was .94, overall Value was estimated by the sum of the scores of all the value items divided by the number of items.

Among Service Quality dimensions, Responsiveness ($t=5.4$, $p < .00$) offered the strongest contribution, followed by Tangibles ($t=3.6$, $p < .001$), Reliability ($t=2.4$, $p < .01$) and Perceived Outcome ($t=2.0$, $p < .04$). Personnel did not show significant contribution to the prediction of overall value even though the Pearson correlations (Table 32) between Personnel and all of the six Value dimensions were significant.

According to these results it is possible to state that customers' perceptions of the value of the service are likely to be predicted from customers' perceptions of the quality of that service.

Table 33: Regression Analyses for the prediction of Overall Value

Service Quality Dimensions	Beta	t	Sig.
Perceived Outcome	.14	2.0	.043
Personnel	.13	1.9	.060
Responsiveness	.37	5.4	.000
Tangibles	.28	3.6	.001
Reliability	.16	2.4	.019

F= 46.76, P< 0.00, R²=0.67

5. CONCLUSIONS AND RECOMMENDATIONS

The present study was able to reach the following conclusions:

SQSp was found to have external validity and high scores of reliability in all its dimensions. The factorial structure of the scale was maintained although items changed their loading location in the dimensions: “attractive facilities” changed from Tangibles to Perceived Outcome and “duties are performed consistently well” changed from Reliability to Responsiveness.

SERV-PERVALp was found to have external validity and high scores of reliability in all its dimensions. The factorial structure of the scale was changed as a new dimension called Opportunity Price rose. This dimension was constituted by two items, which originally (Petrick, 2002) loaded at the Monetary Price dimension: “appears to be a good bargain” and “is economical”.

Mean scores of Service Quality and Service Value in all three municipal swimming pools were high and the latter concept had lower values than the former.

Regarding Service Quality evaluations, the mean comparison among swimming pools revealed significant differences with Vila D’Este respondents attributing the most favourable evaluation and Maravedi’s the least favourable. Analysing each dimension separately, only Perceived Outcome showed to have significant differences with Vila D’Este attributing the most favourable evaluation and Maravedi the least favourable.

Concerning Service Value evaluations the mean comparison among swimming pools revealed no significant differences. As for each one of its dimensions only Reputation presented significant differences with Granja attributing the most favourable evaluation and Maravedi the least favourable.

In order to increase comprehensiveness of both concepts studied in our dissertation we analysed their variation according to a pre-determined set of variables (age, gender, education, professional situation, household, household monthly income, weekly frequency, usual frequency schedule and displacement time).

In the Service Quality Study the most significant findings were:

- (1) Responsiveness was found to be positively correlated with Age and its mean scores varied in function of Usual Frequency Schedule;
- (2) Perceived Outcome's mean scores varied in function of Weekly Frequency;
- (3) Personnel was found to be positively correlated with Age and its mean scores varied in function of Education;
- (4) Tangibles' mean scores varied in function of Education;
- (5) Reliability's mean scores varied in function of Gender and Weekly Frequency;
- (6) Overall Quality was found to be positively correlated with Age and its mean scores varied in function of Gender.

In the Service Value Study the most significant findings were:

- (1) Emotional Response was found to be positively correlated with Age and its mean scores varied in function of Education and Weekly Frequency;
- (2) Opportunity Price's mean scores varied in function of Education;
- (3) Behavioural Price was found to be positively correlated with Age and its mean scores varied in function of Weekly Frequency;
- (4) Reliability's mean scores varied in function of Gender and Weekly Frequency;
- (5) Overall Value's mean scores varied in function of Gender;

- (6) Quality, Monetary Price and Reputation's mean scores showed no significant relation with any of the pre-determined variables analysed in this study.

Finally, Service Quality perceptions were found to be a very strong predictor of Service Value perceptions. Responsiveness dimension showed to have the strongest predictive power and Perceived Outcome showed to have the lowest predictive power. The Personnel dimension was found not to have any significant predictive power.

This study gathered and analyzed information about customers' perceptions of Service Quality and Service Value in a specific moment, though it could be important to investigate longitudinally the evolution of these perceptions as Bolton and Drew (1991) confirmed the importance of longitudinal analyses of the impact of service changes on customers' attitudes in "continuously provided" services. They noted that changes over time in individual customers' ratings of the components of Service Quality are sensitive to the effects of service change, but that, in contrast, average ratings of perceived Service Quality are very stable and change slowly, so that the effects of a service change become noticeable only in the long run. Customers' attitudes, then, have a large carry-over component, and service changes will not result in immediate improvements in customers' global evaluation of service offerings. For instance, changes in expectation with life or life experience, such as study experience making people more discriminating users of information, unemployment making people feel disadvantaged or retirement, making them feel more stable, might be significant in the evaluation process.

Considering that a service of a municipal swimming pool is a public sports service, we concluded that, although the evaluation is never finished, at the time of this investigation, customers of Vila Nova de Gaia swimming pools had

the perception that they receive services with high quality and also perceived those services as having high value.

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7. APPENDIX

Appendix I: Service Quality items mean comparison among groups.

		VILA D'ESTE		MARAVEDI		GRANJA		Sig.	
		Média	d.p.	Média	d.p.	Média	d.p.	F	p.
PO1	Improve my psychological well-being	4,67	0,55	4,29	0,84	4,49	0,77	3,81	0,02
PO2	Improve my mood	4,62	0,60	4,16	0,85	4,43	0,76	5,46	0,01
PO3	Improve my health	4,75	0,48	4,39	0,77	4,63	0,66	4,70	0,01
PO4	Increase my energy	4,64	0,59	4,37	0,79	4,52	0,70	2,08	n.s
PO5	Improve my fitness	4,73	0,49	4,42	0,81	4,53	0,74	2,87	0,06
PO6	Improve my appearance	4,38	0,71	3,86	1,06	4,15	0,98	4,23	0,02
PO7	Attractive facilities	4,60	0,56	3,97	0,84	4,49	0,77	12,75	0,00
P1	Trusted staff	4,67	0,60	4,48	0,54	4,49	0,87	1,42	n.s
P2	Well-trained staff	4,59	0,68	4,59	0,53	4,44	0,80	0,99	n.s
P3	Staff gives individual attention	4,58	0,73	4,25	0,75	4,37	0,90	2,53	n.s
P4	Knowledgeable staff	4,48	0,68	4,40	0,62	4,35	0,77	0,57	n.s
P5	Polite staff	4,81	0,44	4,67	0,48	4,62	0,71	1,91	n.s
P6	Reliable staff	4,62	0,56	4,46	0,63	4,40	0,78	1,69	n.s
RS1	Problems are solved quickly	4,09	0,92	4,07	1,00	3,83	1,11	1,26	n.s
RS2	Requests are responded quickly	4,18	0,88	4,02	1,00	4,08	0,87	0,45	n.s
RS3	Customers are instantly informed about changes	4,47	0,68	4,10	1,04	4,22	0,97	2,54	n.s
RS4	Customers suggestions are considered	4,11	0,90	3,95	1,08	3,92	1,07	0,57	n.s
RS5	Duties are performed consistently well	4,43	0,70	4,16	1,07	4,14	1,02	1,75	n.s
T1	Variety of equipment	4,39	0,70	4,15	0,76	4,10	0,89	2,22	n.s
T2	Good condition of equipment	4,41	0,75	4,22	0,72	4,11	1,03	2,00	n.s
T3	Clean facilities	4,66	0,58	4,35	0,73	4,61	0,66	3,76	0,03
T4	Spacious exercise rooms	4,64	0,58	4,17	0,81	4,23	1,00	5,56	0,00
RL1	Classes start on time	4,48	0,89	4,33	0,82	4,29	0,91	0,75	n.s
RL2	Accurate classes description	4,57	0,68	4,42	0,66	4,31	0,89	1,74	n.s
RL3	Accurate information about the timetable	4,74	0,48	4,37	0,72	4,53	0,64	5,18	0,01

Appendix II: Service Value items mean comparison among groups.

		VILA D'ESTE		MARAVEDI		GRANJA		Sig.	
		Média	d.p.	Média	d.p.	Média	d.p.	F	p.
RP1	Is well thought of	4,23	0,95	4,09	0,96	4,63	0,55	7,14	0,00
RP2	Has a good reputation	4,16	0,94	4,10	0,99	4,67	0,56	8,63	0,00
RP3	Is well respected	4,28	0,90	4,12	1,02	4,58	0,59	4,60	0,01
RP4	Is reputable	4,37	0,79	4,14	0,96	4,56	0,62	4,37	0,01
RP5	Has status	4,07	0,92	4,02	0,98	4,55	0,59	7,26	0,00
ER1	Makes me feel delighted	4,42	0,71	4,20	0,74	4,30	0,71	1,35	n.s.
ER2	Gives me a sense of joy	4,46	0,76	4,07	0,67	4,20	0,72	4,34	0,01
ER3	Gives me pleasure	4,55	0,60	4,26	0,66	4,36	0,74	2,81	n.s.
ER4	Gives me happiness	4,26	0,97	3,95	0,78	3,84	0,86	3,69	0,03
ER5	Makes me feel good	4,65	0,55	4,27	0,72	4,5	0,64	5,35	0,01
BP1	Is easy to shop for	4,38	0,82	4,22	0,77	4,10	0,81	1,75	n.s.
BP2	Is easily bought	4,25	0,85	4,08	0,92	3,93	0,96	1,64	n.s.
BP3	Is easy to buy	4,44	0,82	4,18	0,83	4,26	0,75	1,54	n.s.
BP4	Required little energy to purchase	4,31	0,81	3,97	1,03	4,12	0,78	2,14	n.s.
MP1	Is fairly priced	4,26	0,86	3,92	0,98	4,18	0,84	2,41	n.s.
MP2	Is worth the money	4,38	0,75	4,05	0,75	4,40	0,82	3,93	0,02
MP3	Is reasonably priced	4,18	0,77	3,88	1,03	4,03	0,81	1,66	n.s.
MP4	Is a good buy	4,61	0,59	4,20	0,84	4,47	0,78	4,63	0,01
Q1	Is very dependable	4,41	0,75	4,31	0,75	4,44	0,85	0,48	n.s.
Q2	Is very reliable	4,32	0,69	4,07	0,96	4,34	0,84	1,96	n.s.
Q3	Is very consistent	4,24	0,78	4,17	0,77	4,22	0,83	0,13	n.s.
Q4	Is outstanding quality	4,18	0,67	4,00	0,93	4,21	0,83	1,13	n.s.
OP1	Appears to be a good bargain	2,65	1,25	3,16	1,53	2,00	1,23	11,19	0,00
OP2	Is economical	3,80	0,99	3,55	1,23	3,51	1,16	1,09	n.s.

Appendix III: Service Value Questionnaire

Apresentamos em seguida várias afirmações sobre o **Valor dos Serviços** na Piscina X.

Queremos a sua opinião.

Por favor, classifique cada uma delas de acordo com a sua opinião: Marque **“Totalmente Falso”** se discordar completamente da afirmação; Marque **“Totalmente Verdadeiro”** se concordar plenamente com a afirmação; Se sentir que as suas convicções não são suficientemente fortes para aquelas classificações, utilize **“Parcialmente Falso”**, **“Nem Falso nem Verdadeiro”** ou **“Parcialmente Verdadeiro”**.

Por favor classifique todas as afirmações, com a maior sinceridade.

	Totalmente falso	Parcialmente falso	Nem falso nem verdadeiro	Parcialmente verdadeiro	Totalmente verdadeiro
A qualidade dos serviços da Piscina da Granja:					
1. É extraordinária	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. É digna de muita confiança	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Oferece segurança	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. É muito consistente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Os serviços que recebo na Piscina da Granja:					
5. Fazem-me sentir bem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Dão-me prazer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Dão-me uma sensação de alegria	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Fazem-me sentir extremamente satisfeito/a	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Dão-me felicidade	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Os serviços da Piscina da Granja:					
10. São uma boa aquisição	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Valem o dinheiro que custam	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Custam um preço justo	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Custam um preço razoável	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. São económicos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. São uma pechincha	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Os serviços da Piscina da Granja:					
16. São fáceis de adquirir	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. Requerem pouco esforço para obter	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. São fáceis de encontrar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Compram-se facilmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A Piscina da Granja:					
20. Tem boa reputação	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. É bastante respeitada	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. É bem vista pelas pessoas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. Tem prestígio	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. É respeitável	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix IV: Service Quality Questionnaire

Apresentamos em seguida várias afirmações sobre a **Qualidade dos Serviços** na Piscina

X. Queremos a sua opinião.

Por favor, **classifique** cada uma delas de acordo com a **sua opinião**: Marque **"Totalmente Falso"** se discordar completamente da afirmação; Marque **"Totalmente Verdadeiro"** se concordar plenamente com a afirmação; Se sentir que as suas convicções não são suficientemente fortes para aquelas classificações, utilize **"Parcialmente Falso"**, **"Nem Falso nem Verdadeiro"** ou **"Parcialmente Verdadeiro"**.

Por favor classifique todas as afirmações, com a maior sinceridade.

	Totalmente falso	Parcialmente falso	Nem falso nem verdadeiro	Parcialmente verdadeiro	Totalmente verdadeiro
Na Piscina da Granja:					
1. As sugestões dos clientes são tidas em consideração	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Os problemas são resolvidos rapidamente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Os pedidos são atendidos rapidamente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Os clientes são imediatamente informados das alterações de funcionamento	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Os exercícios que realizo:					
5. Ajudam-me a aumentar a minha energia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Ajudam-me a melhorar a minha saúde	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Ajudam-me a melhorar o meu humor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Ajudam-me a melhorar o meu estado de espírito	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Ajudam-me a melhorar a minha condição física	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Ajudam-me a melhorar a minha aparência	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
O pessoal (professores e funcionários) da Piscina da Granja:					
11. Está bem informado	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. É fiável	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Está bem treinado	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Inspira confiança	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Dá-me atenção personalizada	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. É bem educado	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Na Piscina da Granja:					
17. As instalações são atractivas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. As instalações são espaçosas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Os materiais e equipamentos são variados	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. Os materiais e equipamentos estão em boas condições	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. As instalações estão limpas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Na Piscina da Granja:					
22. As obrigações da Piscina são sempre bem cumpridas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. As informações sobre os horários são correctas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. As aulas começam à hora marcada	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. As informações sobre as aulas são correctas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>