Comparing patient satisfaction in public and private hospitals

Mariella Pinna
Research Fellow in Marketing, University of Sassari
Via Muroni, 25   - 07100 Sassari
Mail: mapinna@uniss.it

Marcello Atzeni
PhD Candidate in Marketing, University of Cagliari
Viale Sant'Ignazio, 17 - 09123 Cagliari
Mail: marcelloatzeni@icloud.com

Giacomo Del Chiappa
Assistant Professor in Marketing, University of Sassari
Senior Research Fellow, School of Tourism & Hospitality, University of Johannesburg
Via Muroni, 25 -   07100 Sassari
Mail: gdelchiappa@uniss.it

Abstract

This study provides a comparison between public and private health sector in terms of patients satisfaction towards technical aspects of the offer and based on the emotions experienced during their stay at the hospital. Further, it profiles patients based on the same variables (technical aspects of the offer and emotions) and investigates whether significant differences do exist among the clusters, based on the socio-demographic characteristics of respondents and whether these cluster do differ in term of behavioral intentions (i.e. intention to return). Findings reveal that respondents show different levels of satisfaction and a different emotional feeling based on the private or public nature of the service provider. When cluster analysis was run, two segments were identified. Specifically, the cluster with the highest positive emotions was reported to have a higher level of satisfaction and a higher intention to return; this evidence is much stronger when a private service provider rather than a public one is considered. A series of chi-squared tests revealed that no significant differences among clusters based on socio demographic characteristics exist.

Keywords: Emotions**,** service quality, patient satisfaction, behavioral intentions, healthcare sector, cluster analysis.

Introduction and Objectives

During the last decades consumers have become more demanding and concerns for service quality, in any sector,has reached unprecedented levels. As a consequence, public and private organizations in any sector have been focusing on service quality as one of the main driver of competitiveness. As Altuntas, Dereli and Yilmaz (2012, p. 1379) have stated:"perceived service quality can make a difference and determine the superiority of an organization in competitive environments".Previous seminal works have suggested that providing superior service quality and higher levels of satisfaction could lead to greater customer loyalty, secure future revenues, reduce the costs of future transactions through positive referrals, decrease price elasticity and, ultimately, affect company's bottom line (Andreassen and Lindestadn, 1998).

In Italy, universal coverage for healthcare services is provided by the National Health Care System (NHS), which was introduced in 1978. The NHS is funded via general taxation. Financial resources are then moved to the single regions that are in charge of managing their own local systems. The organizations belonging to the Italian healthcare sector are mainly public (ASL, AO), private accredited providers and private hospitals (France et al., 2005). The regional government refundsItalian health care providers for health services provided, according to the DRG (diagnosis related groups) tariffs. Suchcompensations are set by law

and revisedeach year to take into account hospitals' costs and possible management distortions (e.g., upcoding) (France, 2005). The NHS provides health services for a large range of diseases, except a limited number, "because of their proven clinical ineffectiveness or because they are considered not to fall within the remit of the NHS (i.e. cosmetic surgery - except in cases of malformation and injury-, ritual circumcision, non-conventional medicine, vaccinations for employment and vacation purposes and over 20 types of physiotherapy)" (France et al., 2005 p. 189). Therefore, health services are mainly financed by the Ministry of Health, in some cases with a partial contribution from patients via the so called "ticket" (based on their income), or total contribution via "out-of-pocket" payment essentially for non-LEA health services (essential assistance levels).

Health services are composed of a combination of services and goods, which include mostly intangiblesfeatures that often the patient is not able to see/touchor to evaluate even while experiencing the service (Altuntas, Dereli and Yilmaz, 2012). Perceived service quality in hospitals should be constantly investigated as from this depends their sustainability and appreciation by patients and hospital attendants (Altuntas, Dereli and Yilmaz, 2012).

To our best knowledge, only a handful of academic papers have adopted an emotion-oriented approach to assess patient satisfaction in the healthcare sector; further, none of them eitherprofiled patients based on the emotions felt during their recovery experience, or provided comparisons between public and private hospitals. That said,the aim of this paper istwofold. First, it attempts to definethe different levels of satisfaction towards technical aspects of health services; second, ittries to explore the emotional status experienced by patients during the recovery period, both depending on the public or private nature of the service provider. Then, based on technical aspects of the offer and emotionstogether with the final effect they exert on behavioral intentions, patients are segmented in clusters. Finally, differences among clusters, based on the socio-demographic profile of respondents, are observed.

The paper is structured as follows. In the first parta review of the recent literature on satisfaction and the role of emotions in the healthcare sector is presented; section 2 explains the methodology adopted and section 3 illustrates the main findings. The following parts discuss the findings and limitations of the study, thereby setting out the direction of future research and highlighting management implications.

Literature Review

Measuring the perceived quality of services and the levels of satisfaction is, in any sector, a central issue both for the academic community and managers. Perceived quality has been defined as the consumer's subjective assessment about a product's overall excellence in reference to competitive offerings (Parasuraman et al., 1988; Zeithaml et al., 2013). Similarly, service quality perceptions have generally been defined as a consumer's judgment of, or impression about, an entity's overall excellence or superiority (Bitner and Hubbert, 1994). A number of factors can influence a consumer's assessment of quality, including personal product experience, special needs and consumption (Yoo et al., 2000). High perceived quality will foster trust in a product or service, thus motivates a consumer to choose a product or service over competing products or services (Dodds et al., 1991; Netemeyer et al., 2004). Moreover, the current literature shows a positive relationship between service quality, customer satisfaction and behavioral intentions, such as revisiting intention and intention to recommend the product or service to relatives and friends (Vassiliadis et al., 2014).

Healthcare has been considered one of the most important, yet personalized services, people experience in their life (Kemp et al., 2014). Demand for qualitatively better services has arise, thus improving and providing the quality of medical care services has become a

primary concern for hospitals (Amin et al., 2013) willing to attract and maintain their patients. Satisfaction in the healthcare sector is mainly influenced by a mix of tangible (i.e. the adequacy of facilities and equipment, the competence of medical professionals) and intangible elements (i.e. individual preferences, personality traits and experience) (Fotiadis and Vassiliadis, 2013).In particular, the tangible dimension of service quality is related to the availability of facilities and equipment (namely, bed capacity, surgery instruments, medicine, etc.), which are relevant dimensions of quality significantly affectingthe satisfaction of patients (Vassiliadis et al., 2014).

Owing to the information asymmetry between patients and doctors,patients are often unable to assess the technical quality of a healthcare service, thus functional quality ("the manner in which the healthcare service is delivered to the patient" Babakus and Mangold, 1992, p.768) is usually the primary determinant of patients' quality perceptions (Babakus and Mangold, 1992; Donabedian, 1982). Following Babakus and Mangold (1992) approach, hospitals' employees behavior(i.e., doctors, nurses)is an important aspect to assess the functional quality of the health service. These customer-oriented and emphatic behaviors of employees reinforce the customers' trust towards the healthcare providers (Kemp, 2014).

All that said, measuring the perceived quality of services isextremely important in the healthcare sector. Some scholars studied the dimensions that affect patients'perceptions and evaluations towards a healthcare provider. Woodside et al. (1989) have shownthat patient satisfaction was determined by several aspects, such as admissions, discharge, nursing care, food, housekeeping and technical services.Similarly, Ware et al. (1978) have highlighted thatthe physician conduct, the service availability,the continuity, the confidence, the efficiency and outcomes represent the most important dimensions affecting patient evaluations.More recently, Fowdar (2005) has considered core services, customization, professional credibility, competence and communications.

Healthcare service quality and patient satisfaction in hospitals, clinics or medical center environments have often been measured with a SERVQUAL scaleParasuraman et al. (1988) or modified SERVQUAL scale (Babakus and Mangold, 1992; Headleyand Miller, 1993; Youssef, Nel and Bovaird, 1995; Lam, 1997; Lim and Tang, 2000; Wisniewski and Wisniewski, 2005; Lin et al., 2009). Such dimensions are manly related to the following items: reliability (competence), responsiveness (communication), tangibles (physical facilities) and empathy (staff).Several researchers have showed inconsistenciesbetween expectations and performance of service quality. According to Parasuraman et al. (1988), Zeithaml et al. (2002) and Parasuraman (2005) the widest gap in service quality has been observed in dimensions such as "reliability" and "assurance". Some scholars have reported service quality gaps in "reliability" (Youssef et al., 1995; Wisniewski and Wisniewski, 2005), in"assurance" (Babakus and Mangold, 1992; Guiry and Vequist, 2011), in"empathy" (Lin et al., 2009; Altuntas et al., 2012), and "responsiveness"(Lim and Tang, 2000).

Among the socio-demographic factors predicting and moderating the patient's satisfaction, age, education, health status, race, marital status and social class are among the most relevant (Butler et al., 1996). According to Tucker (2002) lower levels of satisfaction are generally associated to younger, less educated, lower ranking, married, poorer health and high-service use patients. Overall,perceived facility-related quality has been found to reach higher levelsin older than younger respondents; more in females than males (Butler et al., 1996). Further, Butler et al. (1996) have found no significant differences in health quality perceptions between users and observers (friends and families of patient), except from the facility quality dimension (i.e., hospital's tangible characteristics) (Butler et al., 1996; Naidu, 2009).

The marketing literature have widely discussed on theeffects of a consumer's subjective assessment of service quality and the influence of one's perceptions on future behavioral

intentions. Consumers who are affectively committed to a brand, a product or a service, are less expensive to be retained; less vulnerable to loss from competitive efforts, brand blunders, or service failures (Bolton et al., 2000) and more willing to maintain a relationship that the customer perceives to be of value (Morgan and Hunt, 1994).

In the healthcare sector, Woodside, Frey and Daly (1989) have used a single basic repurchase intent measure to associate a measurement of quality regarding hospital stays and have found that service quality does have a strong association with a consumer's intention to return to the same hospital. Similarly, Headley and Miller (1993) have measured the strength of behavioral intentions regarding a range of future actions for a medical care sample.The authors have found that significant relationships exist between perceived service quality, measured as a difference betweenpre- and post-encounter opinion, and intent to repurchase, compliment, complain, recommend, switch, and not use medicalcare services. Results of their analysis suggest that perceived higher service quality will generate favorable intentions (e.g., repurchase, complimenting) and that perceived lower service quality will lead to unfavorable intentions (e.g., complaining, switching, and nonuse of any services).

Finally, a key element in healthcare studies is the topic of perceived service quality differences between public and private providers. Scholars, from various countries, agree in stating that patients perceive private hospitals to deliver qualitatively better services when compared to public ones, thus are more satisfied (Andaleeb, 2000; Arasli, et al., 2008; Irfan and Ijaz, 2011; Polsa et al., 2011, Taner and Antony, 2006; Yousapronpaiboon K. and Johnson W.C., 2013).

The role of emotions in the healthcare sector

Emotionscan be defined as mental states of readiness that arise in response to unique and psychological appraisals an individual makes for something of relevance to one's well-being, for specific events or for one's own thoughts (Bagozzi et al., 1999).

Two seminal works concerning the role of emotions in marketing (Edell and Burke, 1987; Holbrook and Batra, 1987) have stated that emotions can be simply explained by three factors: upbeat feelings, negative feelings and warm feelings. Other authors have found that emotional items basically load on two factors: positive affect and negative affect (Westbrook, 1987).

Nonetheless, data from a customer satisfaction surveyhave showed that consumption related emotions are more complex than the 2 or 3factor structure outlined in precedent studies, arguing that 16 clusters of emotions (each measured by 2 to 8 indicators) are more consistent with consumers' mood (Richins, 1997). The rising interest on emotions in studies of consumer satisfaction lead to a great variety of studies concerning the content and structure of consumption emotions, the way in which they interrelate one to another, the mechanisms that causeemotional appraisals (Bagozzi et al., 1999; Laros and Steenkamp, 2005). Early research have showed that positive and negative emotions, along with expectation and disconfirmations beliefs, influence customer satisfaction (Westbrook, 1987). Similarly, research by Liljander and Strandvik (1997) suggest consideringsatisfaction as an emotional response, as a mediator between cognitive assessment and global satisfaction and as predictor of satisfaction. A number of studies have so far addressed the issue of emotions in satisfaction. Dubè-Rioux, (1990), Oliver (1993) and Westbrook (1987) have investigated the correlation between positive emotions and satisfaction; while, Westbrook (1987), Taylor and Cronin (1994),Price et al., (1995), Oliver (1993), Dubè-Rioux (1990), Hui and Tse (1996) have showed that negative emotions directly relate to satisfaction in a normal service or product consumption. Overall, the most part of existing literature concur that positive emotions increase satisfaction, while negative ones decrease it. However, there are some

studies contradicting this position. For example, some scholars have found that satisfaction can be positively influenced even by negative emotions (e.g. Arnould and Price, 1993; Dubè and Morgan, 1996).

Only a handful of papershave explored the influence of positive and negative emotions on satisfaction in the healthcare sectorso far (Williams et al., 1998; Crow et al., 2002; Kahn et al., 2003; Larsson and Wilde-Larsson, 2010; Vinagre and Neves, 2010).For example, Vinagre and Neves (2010) have developed a care-context adapted version of the ESRQ (Emotional Stress Reaction Questionnaire) and have found that the personal experiences and related emotions felt during the illness and the recovery period exert a relevant moderating effect on patients' satisfaction; further, they have showed the odds of reporting higher patientsatisfaction is higher among patients who are older, have a higher education, have a favorable self-reported health, are extravert and emotionallystable, have ascribed high importance to the doctor's commitment, empathy, and respect,and, finally, perceived the obtained information and the doctor's commitment,empathy, and respect favorably.

Method

For the purposes of the study, a structured ad-hoc questionnaire was built using a three-stage methodology. First, qualitative information through three focus groups of patients with different profiles was gathered to explore the way they evaluate and perceive health services. Secondly, three focus group with Italian doctor and health managers were conducted to collect more information on the side of the service providers. From the statements proposed in the focus groups, information was collected to draft items to be used in the questionnaire. Then, the questionnaire was completed with additional items based on studies devoted to service quality and consumer satisfaction in the healthcare sector (e.g, Babakus and Mangold, 1992; Headley and Miller, 1993; Lim and Tang, 2000; Lin et al., 2009; Fotiadis and Vassiliadis, 2013).

The survey includes three sections. In the first section respondents were asked to reply to some general sociodemographic questions. In the second section respondents were invited to assess their satisfaction with a list of 15 service features (both tangible and intangible); for this purpose a 5-Point Likert scale was used (1= not at all, 5 = very much).The third one included 7 questions aimed at investigating their emotional affect during the visit (based on a five-point Likert scale: 1= not at all, 5= very much). The emotions to which we referred were drawn based on prior literature (Bigné and Andreu, 2004; Gil and Ritchie, 2009; Paul, 2009; Russell, 1980); further a single item question was used to measure loyalty, specifically intention to return (Zeithaml et al. 2013) (5-point Likert scale: 1= not probable, 5 = very probable).

Sardinian residents were approached face-to-face in their daily life in the period January-March 2012 and they were asked whether they experienced any hospital recover in the last two months and, if yes, whether this occurred at a private or public hospital; only people who answered positively were allowed to complete the questionnaire. At the end of the data collection a convenience sample of 770 complete responses was collected.

Hierarchical and non-hierarchical cluster analysis and a series of chi-squared tests were run for the purpose of the study.

Findings

As table 1 shows, the most part of respondents are women (54.1%), with a high school degree (42.5%), fully or part-time employed (32.3%), with an annual net income up to € 30.000 (66.5%); further, the most part of them is reported having an economic reliance on healthcare

sector (59.8%).

Table 1 – The sample

Gender	
Male	45.9%
Female	**54.1%**
Level of education	
None	3.3%
Below secondary school	14.3%
Secondary school	23.4%
Higher school	**42.5%**
University degree	14.9%
Postgraduate degree (Master, Ph.D.)	1.6%
Occupation	
Self employed/ freelance	10.0%
Employed (full or part time)	**32.3%**
Student	**11.3%**
Seasonal/ project worker	2.8%
Housewife	11.3%
Unemployed	5.9%
Retired	25.5%
Other	1.1%
Annual net income (in euro)	
<10.000	14.7%
10.000 - 20.000	**30.9%**
21.000 - 30.000	**2.9%**
31.000 - 40.000	7.8%
41.000 - 50.000	2.9%
51.000 - 75.000	1.8%
76.000 - 100.000	0.6%
101.000 - 150.000	0.0%
>150.000	0.0%
Doesn't know/ no answer	20.4%
Is your income level related to the healthcare sector?	
Yes	**59.8%**
No	40.2%

A hierarchical (Ward's method and Manhattan distance) and non-hierarchical (K - Means method) cluster analysis has been run separately for public and private hospitals in order to segment patients based on a list of 15 technical aspects of the offer, on a list of 7 emotions and on patients' behavioral intentions. Subsequent use of the two clustering methods shows the benefits of both (Hair, 2010). The optimal structure of clustering, both for public and private hospitals, was identified in 2 groups as reported in Table 2 and 3.The T-test confirms the validity of the analysis, since significant differences occur among the means of the two groups (p <0.001) in relation to all attributes included in the clustering process, except for the following variables: "quality of meals" ($t=1.82$; $p=0.070$); "quantity of meals ($t=1.42$; $p=0.160$); "sheets change" ($t=1.34$; $p=0.180$).

In the public sector (Table 2), the first cluster is the largest, consisting of 213 people. In terms of demographics, the cluster includes 52.4% of women, with a high school degree (45.1%), employed (32.8%) or students (11.9%), with a net income comprised between

€10,000 and €30.000 (47.6%). Overall, patients ofthe first cluster show lower levels of satisfaction for all the technical aspects displayed in Table 2. In particular, the fact that "doctors respect patients' privacy" (M= 3.49) and "the hygiene of the medical equipment" (M=3.33) are the most relevant technical aspects. Patients in the first group are mainly experiencing negative emotions "I felt nervous" (M= 3.19), "I felt I was wasting my time" (M= 3.09), "I felt embarrassed" (M=3.03) during the recovery period.Coherently, they show negative intention to return to the same hospital declaring that, in case of need in the future, they would rather choose a private healthcare provider than a public one (M=3.37).

Table 2 - Levels of satisfaction, emotion and behavioral intention in the public sector

	Group 1 (N=213)	Group 2 (N=123)	t-test	Sig.
Technical aspects				
Competence of doctors	3.16	3.65	-8.23	0.0000
Competence of nurses	2.81	3.38	7.81	0.0000
Doctors' willingness to listen	2.81	3.51	-9.98	0.0000
Nurses' willingness to listen	2.59	3.25	-8.37	0.0000
Information released from doctors	2.76	3.56	-11.67	0.0000
Information released from nurses	2.45	3.11	-8.44	0,0000
Doctors respect my privacy	3.49	3.98	-6.73	0.0000
Nurses respect my privacy	3.24	3.76	-5.80	0.0000
Hygiene of medical equipment	3.33	3.74	-5.52	0.0000
The organization of the health service	2.47	3.11	-8.32	0.0000
Comfort of the Hospital (waiting rooms, hallways, rooms, toilets etc.)	2.44	3.03	-8.02	0.0000
Cleanliness of the Hospital (waiting rooms, hallways, rooms, toilets etc.)	2.77	3.28	-6.91	0.0000
Quality of meal	2.51	3.01	-3.66	0.0000
Quantity of meal	2.91	3.33	-3.78	0.0000
Sheets' change	3	3.58	-5.40	0.0000
Emotions				
I felt lost	2.9	1.63	17.54	0.0000
I felt nervous	3.19	2.02	14.00	0.0000
I felt embarrassed	3.03	1.71	17.31	0.0000
I felt I was wasting my time	3.09	1.42	20.96	0.0000
I felt guided	2.15	3.24	-14.83	0.0000
I felt reassured	2.2	3.49	-19.07	0.0000
I learned something new about my health conditions	2.37	3.42	-13.13	0.0000
Behavioral Intention				
In the future, if you need health service, would you go to a private rather than public hospital?	3.37	2.95	3.98	0.003

The second cluster includes 123 people, mostly women (55.3%), with a high school degree (40.5%). Members of the second cluster are mainly employees (31.8%), retired (27.4%) or housewives (12.4%), with an annual revenue slightly higher than respondents of the first cluster (the 46.1% have an income annual net between € 10.000 and € 30.000). Members of the second cluster are affected by the majority of the technical attributes

considered in the survey, especially "the competence of doctors" (M= 3.65), the fact that patients' privacy is respected from doctors (M= 3.98) and nurses (M= 3.76), "the hygiene of the medical equipment" (M=3.74) and "the sheets change" (M=3.58). Patients in the second group are mainly experiencing positive emotions "I felt reassured" (M= 3.49), "I learned something new about my health conditions" (M=3.42), "I felt guided" (M=3.24) during the recovery period. Coherently, they show positive intention to return to the same hospital declaring that, in case of need in the future, they would not choose a private healthcare provider than a public one (M=2.95).

Moreover, a series of statistical tests (χ^2) is conducted to verify the existence of significant differences based on socio-demographic characteristics of the different groups. The tests show that no significant differences based on gender (χ^2 =0.51, p >0.01), education (χ^2= 7.86, p >0.1), occupation (χ^2 =6.74, p>0.01), income (χ^2 = 7.39, p >0.01) and economic reliance on health sector (χ^2 = 0.04, p> 0.1) occur among clusters.

In the private sector (Table 3), the first cluster is the largest, consisting of 213 people. In terms of demographics, the cluster includes 60.8% of women, with a high school degree (50.2%), employed (39.2%) or students (16%), with a net income comprised between €10,000 and €30.000 (46.1%). Again, the T-test confirms the validity of the analysis, since significant differences occur among the means of the two groups (p <0.001) in relation to all attributes included in the clustering process, except for the following variables: "quality of meals" (*t*=1.82; p=0.070); "quantity of meals (*t*=1.42; p=0.160); "sheets change" (*t*=1.34; p=0.180).

Overall, patients of the first cluster show higher levels of satisfaction for all the technical aspects displayed in Table 1. In particular, "the hygiene of the medical equipment" (M=4.41), the fact that "doctors (M= 3.49) and nurses (M=4.27) respect patients' privacy", the "cleanliness of the Hospital" (M= 4.36) and "the competence of doctors" are the most valuable technical aspects. Patients in the first group are mainly experiencing positive emotions "I felt reassured" (M= 4.03), "I learned something new about my health conditions" (M= 3.87), "I felt guided" (M=3.78) during the recovery period. Coherently, they show positive intention to return to the same hospital declaring that, in case of need in the future, they would choose again a private healthcare provider rather than a public one (M=3.59).

The second cluster includes 123 people, mostly women (57.7%), with a high school degree (49.2%). Members of the second cluster are mainly employees (36.9%) and retired (21.3%), with an annual revenue slightly higher than respondents of the first cluster (the 47.1% have an income annual net between € 10.000 and € 30.000). Members of the second cluster show lower levels of satisfaction towards the technical attributes considered in the survey when compared to the first cluster. In particular, "the hygiene of the medical equipment" (M=4), the fact that patients' privacy is respected from doctors (M= 3.89) and nurses (M= 3.74) and "the competence of doctors" (M=3.73) are the most relevant factors affecting satisfaction. When asked how they felt during the recovery period, patients in the second group show low means both for positive and negative emotions. In particular, they have reportedthe following positive emotions: "I felt reassured" (M= 2.78) "I felt guided" (M=2.74).Unlikely, when compared to the first segment they have declared to be slightly less willing to choose again a private healthcare provider rather than a public one (M=3.17). A series of statistical tests (χ^2) is conducted to verify the existence of significant differences based on socio-demographic characteristics of the different groups. The tests show that no significant differences based on gender (χ^2 =0.32, p >0.01), education (χ^2= 3.24, p >0.1), occupation (χ^2 =4.25, p>0.01), income (χ^2 = 8.62, p >0.01) and economic reliance on health sector (χ^2 = 0.05, p> 0.1) occur among clusters.

Table 3 – Levels of satisfaction, emotion and behavioral intention in the private sector

	Group 1 (N=213)	Group 2 (N=123)	T test	Sig.
Technical aspects				
Competence of doctors	4.27	3.73	7.42	0.000
Competence of nurses	4.04	3.45	6.27	0.000
Doctors' willingness to listen	4.28	3.55	8.72	0.000
Nurses' willingness to listen	3.98	3.36	5.88	0.000
Information released from doctors	4.28	3.61	8.53	0.000
Information released from nurses	3.84	3.27	5.4	0.000
Doctors respect my privacy	4.38	3.89	5.67	0.000
Nurses respect my privacy	4.27	3.74	4.94	0.000
Hygiene of medical equipment	4.41	4	5.32	0.000
The organization of the health service	4.3	3.63	7.66	0.000
Comfort of the Hospital (waiting rooms, hallways, rooms, toilets etc.)	4.23	3.51	8.43	0,000
Cleanliness of the Hospital (waiting rooms, hallways, rooms, toilets etc.)	4.36	3.67	8.95	0.000
Quality of meal	3.84	3.2	1.82	0.070
Quantity of meal	3.87	3.4	1.42	0.160
Sheets' change	4.03	3.6	1.34	0.180
Emotions				
I felt lost	1.13	2.23	-14.62	0.000
I felt nervous	1.47	2.49	-10.3	0.000
I feltembarrassed	1.21	2.42	-14.93	0.000
I felt I was wasting my time	1.13	1.99	-11.14	0.000
I felt guided	3.78	2.74	10.07	0.000
I felt reassured	4.03	2.78	13.27	0.000
I learned something new about my health conditions	3.87	2.6	12.96	0.000
Behavioral Intention				
In the future, if you need health service, would you go to a private rather than public hospital?	3.59	3.17	3.006	0.003

Discussion

This study aimed at providing a comparison between public and private health sector in terms of patients satisfaction towards technical aspects of the offer and based on the emotions experienced during their stay at the hospital. Further, it profiled patients based on the same variables (technical aspects of the offer and emotions) and investigated whether significant differences existed among the clusters, based on the socio-demographic characteristics of respondents and whether these cluster do differ in term of behavioral intentions (i.e. intention to return).

Consistently with previous studies (Andaleeb, 2000; Arasli, et al., 2008; Irfan and Ijaz, 2011; Polsa et al., 2011, Taner and Antony, 2006; Yousapronpaiboon K. and Johnson W.C., 2013),our findings revealed that patients hospitalized in private hospitals showed higher levels of satisfaction toward the technical aspects of services, when compared to patients

admitted in public hospitals; further, private hospitals' patients were found being more affected by positive emotions than the public hospitals' ones. Overall, this explains why respondents were reported to express a higher intention to revisit a private service provider rather than a public one.

Further, this study showed that two clusters do exist both when the private or public health sector is considered. Overall, the cluster with the highest positive emotions was reported to have a higher level of satisfaction toward the technical attributes as well as the highest intention to return. This confirms that emotions can be a determinant of satisfaction in any sector(e.g. Bagozzi et al., 1999) and even in the healthcare one (Vinagre and Neves, 2010). This research provided further evidences to the growing literature on emotions as a tool for segmentation and positioning in the context of health services. Further, our findings revealed that no significant differences do exist among the clusters based on socio-demographics of respondents, thus partially contradicting the most part or prior studies (e.g. Butler et al., 1996, Tucker, 2002). The fact that no significant differences were reported based on socio-demographic characteristics seems to suggest that emotions account more than "objectivism" in shaping patients' satisfaction, with emotions belonging to an uppermost level of abstraction whereby the objective traits of the consumer make no difference. These findings are in line with the extant literature, which states that variables traditionally considered for segmentation are no longer useful for identifying differentiated groups of customers (Story and Hess, 2006).

Limitations and Further Research

Aside from the theoretical contributions of this study, there are some limitations that ought to be mentioned. This study is highly site-specific (i.e. data was collected just from a single geographical area), thus, coupled with the fact that the study is based on a convenience sample with socio-demographic bias, our findings are hardly generalizable. This suggests that it would be useful to repeat the study in hospitals located in other Italian Regions orcountries and/or to considerpatients' experiencing services delivered by other types of healthcare-related service providers (e.g., pharmacies, clinics, private physicians and dentists).Further, adding one or more control variables (e.g., the length of stay measured by the days spent at the hospital) can be useful in order to state that the differences found in the satisfaction are only related to the public/private nature of the structure.

Managerial Implications

It could be argued, that as far as healthcare services remain one of the most important and emotional related experiences of a person's life, it is of great importance for health providers, both public and private, to acquire a more systematic customer-oriented approach. Aside from the theoretical contributions of this study, our findings provide useful suggestions to health managers attempting to better understand the factors that influence patients' satisfaction and behavioral intentions in the healthcare sector. Specifically, we suggest that managers in hospitals need to re-emphasize how patientsemotionally feel about their experience of service deliverypaying greater attention to what could be done (when designing and planning their services)not just in term of delivering and promoting the "technical" skills of doctors/nurses. On the contrary, health managers should take care of inspiringpatients'emotions during the recovery period; this latter point, will be relevant to assure the highest patients' compliance to the care services provided and, overall, patients' wellbeing. For example, health managers, especially in public hospitals,shouldimprove the servicescape and the ability of health

personnel to express empathy towards patients, their attendants and companions, thus being more able to reassure them and to pamper their mental status.

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