Relationships Between Service Personal Values, Service Value, Satisfaction, and Loyalty: A Study Regarding Services of Private and State Hospitals in Turkey

Metin Argan[1*], and Mehpare Tokay Argan[2]

[1] *Department of Sport Management, Sport Science Faculty, Anadolu University, Eskisehir, Turkey*
[2] *Department of Tourism, Applied Sciences School, Bilecik Seyh Edabali University, Turkey*

*Corresponding e-mail: margan@anadolu.edu.tr

ABSTRACT

Service and value are the two inseparable concepts in experiential service environment. Service personal value is a concept that is subjectively assessed from a consumer perspective, and is associated with service value, consumer satisfaction and loyalty. In this context, the purpose of this study was to examine the relationships between services personal values, service value, satisfaction, and loyalty. Data were collected from persons (996) receiving services from private hospitals and state hospitals using convenience sampling method. The scales of service personal values, service value, satisfaction and loyalty were adapted from literature. Confirmatory factor analysis (CFA) was used to investigate validity and reliability of the scales. Then, a structural equation model (SEM) was developed and tested using data with Lisrel 8.80 software. The results of the study indicate significant relationships between services personal values, service value, satisfaction, and loyalty. The results of the study have significant implications as to how well private hospital managers design strategies of health service, satisfaction, and loyalty.

Keywords: Service personal value, service value, health marketing, loyalty, Turkey

INTRODUCTION

A service-oriented economy is considered important by both economists and managers. In the present-day service-dominated business environment, aspects such as perceived service quality, service value, satisfaction, and loyalty are gaining more weight and importance. Similarly, the healthcare services industry is an essential sector that provides much needed services. Creating value for consumers is a paradigm change, which businesses today have to take into account in order to gain a competitive edge. The most important components for creating value are service quality and consumer satisfaction [1]. All of these concepts and factors also apply for the creation of a more competitive healthcare services as well.

Personal values are an important influence on human and consumer behaviour [2]. As Schwartz [3] argues, values are our goals or aims, and they guide our lives. Consumption, a necessity in life, is also affected by these values. Consumers can decide to consume, or not to consume, on the basis of their value judgments. In general, even though there can be exceptions, people usually make consumption decisions in line with their values. When it comes to services, values are arguably more important and exert a greater influence. Examples of this are people watching movies, reading books, and frequenting restaurants or bars that are in line with their value judgments.

To examine quality, satisfaction and loyalty in healthcare services, researchers adopt various comprehensive approaches. One of these approaches focuses on personal values and service values. Previous studies have shown the influence of personal values in relation to many conventional products. Similarly, certain studies examine the influence of personal values in various branches of the service sector. Examining the influence of personal values in the case of healthcare services, which are usually an unavoidable necessity for individuals and sometimes a voluntary decision (check-up), may have beneficial consequences for both practitioners and academics. Because studies on the effects of personal values in the healthcare services sector are limited both in scope and in number, the present study could help fill an important gap in the literature. Demonstrating the influence of personal values, which have been shown to be important in the case of many conventional products, would constitute an important contribution.

Many studies have been conducted on service value in different sectors. Studies have examined the issue of value both within the context of conventional products and within the context of e-services or online services, which today provide essential value to customers. For example, Heinonen [4] examined service value in online banking, while Rotchanakitumnuai [5] examined value in the context of public or government e-services. Many other studies have also been conducted on the relationship between personal value, service value, satisfaction and loyalty. However, the number of studies that examine this relationship in the case of critical services, such as healthcare services, is very limited. In particular, looking at the issue from the perspective of private hospitals that are able to demonstrate creating value will generate useful results. From this perspective, the present study would contribute both to the international literature and to the field. This study is based on the premise that perceived value among healthcare service consumers is critical in terms of satisfaction and loyalty. Therefore, this study aims to examine the relationships between service personal values, service value, satisfaction, and loyalty.

LITERATURE BACKGROUND AND THE RESEARCH MODEL

Service personal values

The effects of values held by people on their behaviours have been studied in many fields, from sociology to marketing, psychology and organizational behaviour [2]. Human values relate to the perceptions of what is good for the community and cultural environment in which they live. According to a brief definition, values refer to "concepts or beliefs, pertaining to desirable end states" [6]. Although many definitions have been offered for the concept of personal value, according to Rokeach [7] who was the first to define the concept and served as a main reference in marketing applications, personal value refers to "durable beliefs concerning a personally preferred mode of conduct or desired end state of existence". In other words, Rokeach [7] defines personality as a system of values. Therefore, given the close connection between personality and a system of values, it could be expected to have a significant influence on consumption.

According to other behavioural consistency models (e.g. the Fritzsche model), values predict behaviour [8]. Personal value is also considered to be an important construct in understanding consumer behaviour [9]. In this sense, personal values perform basic functions for behaviour in general, and for consumption behaviour [10]. Kahle [11] argues that values function as direct or intermediary factors concerning consumer behaviour, whereas other researchers have shown that this relationship is direct. Various studies demonstrate that values affect end behaviour. For example, Williams [12] shows that values serve as unambiguous criteria for judgments, preferences, and choices (cited in [10]).

Approaches adopted by Rokeach [7], Schwartz [3] and Lages and Fernandes [9] suggest a three-component (or three-factor) construct concerning service personal values. Service personal values thus consist of the components of peaceful life, social recognition, and social integration. These service personal values are considered to be important criteria when consumers evaluate a service. In other words, a service is valuable to a consumer to the extent that it is able to make the consumer feel happy, peaceful or secure. Values, such as preservation or strengthening of social status, gaining social approval from others and self-realization, are also considered to be in this context [13]. Opportunities that are provided via a service (for example in an elite fitness club), or forming a family, friendships or social relationships also count as value. All these relationships serve as instruments in the social integration of an individual [9].

Previous studies have demonstrated the connection between personal values and consumer and purchasing behaviour. Many studies on this topic [10,14] show that values affect consumption behaviour. Observing that there is a limited number of studies on the relationship between personal values and consumer behaviour, particularly in the field of e-commerce, Jayawardhena [10] conducted a study with the participation of 626 online shoppers and found that there was a significant relationship between attitudes, behaviour and intentions regarding e-commerce. Many subsequent studies have also demonstrated the influence of values on online services.

Service value

Value is an important concept in the literature on marketing and service management. The concept of value has a prominent place in the literature on service marketing, and it usually refers to value as perceived by consumers [15]. Although it is popular among both academics and practitioners, defining the concept of value is not an easy task [16]. In the field of healthcare, value is characterized as health outcomes in relation to expenses [17]. According to a

similar definition, value refers to "output per input or per unit of expense" [18]. These approaches view value from an economic perspective. However, in sectors such as health, which need to be evaluated differently, there is a need for approaches that go beyond viewing value as an economic phenomenon. Two approaches would be helpful when studying this topic. One of these approaches focuses on experiences, whereas the other focuses on outcomes. In other words, these approaches underline process quality and outcome quality. According to Holbrook [19], value is a sort of customer experience, defined as an "interactive relativistic preference experience." According to Bitner, et al. [20], customers' roles as participants are especially important in services such as healthcare and personal health services. In this context, ensuring customer participation is emphasized as key in creating value, and because provision of services involves more interaction than provision of conventional physical goods, customer participation gains additional significance [21]. For value to be generated, the product needs to be used [22] and outcomes need to be evaluated. In a similar approach, value is defined as a benefit in relation to the sacrifice that the customer makes [4,23,24]. For example, when the patient is cured of an illness, this is an outcome and represents a value for the user of the service. In this approach, the value is defined on the basis of outcomes. Holbrook [19], on the other hand, makes a distinction between extrinsic value (efficiency value, excellence value and social value) and intrinsic value (emotional value and altruistic or selfless value) value. These approaches show that value has a multidimensional structure (process and outcome). What is more, value is a subjective and filed-specific phenomenon [16]. Value creation takes place during the course of interaction between a business and a customer at various stages of the consumption process, as the product or service is created. In the case of healthcare services, interaction is inevitable in many healthcare service processes.

Service personal values, service value, satisfaction, and loyalty

Many previous studies have demonstrated the influence of personal values of individuals on attitudes and behaviour [1,25]. Durgee, et al. [25] refers to personal value systems as the ideal method for understanding and gaining customers. Kamakura and Novak [26] describe personal values as the foundation on which cognitive states and attitudes towards other people and objects are built. Studies demonstrate that personal values regarding services influence a consumer's assessment of services after the decision to receive services is already taken [27]. On the basis of the means-end theory, Huber, et al. [28] describes, as cited in [1], that in process of service consumption, means refer to the service and end refers to personal values. When patients assess the value of the services they receive, they are considered to make use of service personal values.

On the basis of this assumption, the following hypothesis was developed:

H1. Service personal values are related to service value.

Similarly, values held by consumers may also be related to satisfaction from healthcare services. For example, individuals with more peaceful and positive value judgments would be more positive in their assessment of the healthcare services they receive, in line with their expectations, and vice versa. Values can sometimes directly affect loyalty for services. In their study on banking services, Henrique and Matos [29] found a significant relationship between personal values and loyalty. This may also apply to healthcare services, and feelings of loyalty may develop towards the services of doctors with whom the patient had a positive experience in the past.

The following hypotheses were developed on the basis of these considerations and reasons.

H2. Service personal values are related to satisfaction.

H3. Service personal values are related to satisfaction.

Service value, satisfaction, and loyalty

Satisfaction is one of the fundamental concepts in the service marketing literature [30]. Satisfaction is determined based a comparison of expectations and perceptions, which may result in confirmation or disconfirmation. If the perception exceed expectation, this will result in satisfaction, while perception falling short of expectation will result in dissatisfaction. In line with the framework of this research, satisfaction is defined as the response of the customer in face a certain value [30,31]. Satisfaction is also defined as a pleasant experience of consumption that results from a contentment with the value of the service provided [31]. On the basis of the value-attitude-behaviour hierarchy, it is possible to say that value level has a significant impact on satisfaction. In recent years, researchers have performed

studies demonstrating the importance of value in explaining satisfaction [31]. Oliver [30] describes values as having an important effect on satisfaction. Rosen and Surprenant [32] similarly describe that raising value through service-related elements plays an important role in explaining satisfaction. Moreover, in health services, satisfaction is sometimes seen as part of a positive feedback mechanism, and is considered as a factor that prompts healthcare consumers to continue receiving the healthcare service.

Customer loyalty, which is another relevant concept, is conceptualized as a deep commitment to the future purchase of a product or service [29,30]. The concept of loyalty is one that is widely researched in marketing, and there is particularly a focus on studies evaluating the relationship between satisfaction and loyalty. The same can be said for the relationship between satisfaction from services and loyalty. In this respect, it is possible to speak in health services of a relationship between satisfaction and loyalty. Just as loyalty may take the form of a patient preferring the same physician or hospital when faced with recurring health problems, it may also consist of recommending the healthcare provider to others. A healthcare service that results in satisfaction can be recommended to others, and word-of-mouth is effective in healthcare services too. In the end, the value of the service perceived by the consumer will be associated with the level of satisfaction. If the service is perceived to have a high value, this will result in a high level of satisfaction from the service, which in turn may induce loyalty.

Studies in recent years have focused on the role of values to understand consumer behaviour. There are numerous studies in the literature addressing the relationship between value and consumer behaviour with many different goods and services [2]. For example, one study emphasized a positive relationship between read meat consumption and self-enhancement [33]. A study on automobile brands demonstrated a negative relationship between Toyota Corolla and the values of hedonism and self-direction [34]. A study on organic foods identified positive relationships between universalism, benevolence, and self-direction [2,35]. In their study, Vinhal Nepomuceno and Porto [2] confirmed the role of the conservation value on life, house, and car insurance. The results of their study demonstrated that the services offered by financial organizations are related to, and interact with, personal values and motivations. In another study, there was a negative relationship between self-enhancement and ethical fashion consumption, and a positive relationship between openness and ethical fashion consumption. Many studies in the service literature demonstrate a relationship between service value and satisfaction, loyalty, and re-purchase [36]. There is a limited number of studies on the relationship between satisfaction and perceived value in the field of healthcare. However, one study in the field of healthcare calls attention to the importance of customer value for satisfaction, and underlines the significance of value in healthcare management [37,38]. In this study, functional value and emotional value were examined and the relationships between value, satisfaction and behavioural intention were analyzed.

The following hypotheses were formed in light of the above considerations:

H4. Service value is related to customer satisfaction.

H5. Service personal values are related to customer loyalty.

Many studies in the marketing literature demonstrate the relationship between loyalty on the one hand and satisfaction from goods and services on the other. Many of these studies find satisfaction and loyalty to be closely related.

The following hypothesis was formed on the basis of the findings of these studies:

H6. Satisfaction with health services is related to customer loyalty.

Based on literature review, above discussions and six research hypotheses, the research model described in Figure 1 was developed.
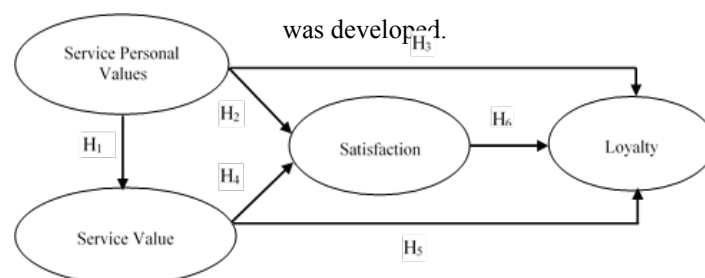

Figure 1 The Conceptual model

METHODS

Measurement Scales and Sample: A structural questionnaire was designed to collect empirical data among health services users regarding private and state hospitals in Turkey. The data were collected using scales of service personal values, service value, satisfaction, and loyalty. The scales of service personal values and service value adopted from literature [1,9]. The scale of service personal values including three dimensions (peaceful life, social recognition, and social integration) was measured by 12 items. And also, service value scale composing two dimensions (outcome value and process value) was included 8 items. Items regarding satisfaction and loyalty were drawn from existing literature, but modified towards health services, coordinated the research purpose. Hence selected items were modified to reflect the context of customers' use of private and state hospitals' services. The items regarding satisfaction and loyalty dimensions adapted from Oliver [30] and Zeithaml, et al. [39]. The scales were then translated into Turkish and back translation into English after that and a proofread by some bilinguals capable of speaking Turkish and English to ensure the consistence of scales. Items in the scale of service personal value were assessed on five-point Likert scales, ranging from 1=Absolutely Unimportant to 5=Absolutely Important. Also, the scale of service value used in the questionnaire was five-point Likert scales ranging from strongly disagree (1) to strongly agree (5).

The sample of the study consisted of people receiving health services from private and state hospitals in a city located in the Central Anatolian Region of Turkey. The data were generated from a total of eight hospitals, including medical faculty hospital, five private hospital, and two state hospitals affiliated to the Social Security Institution (SGK) in Turkey. The data were collected using nonprobability convenience sampling, where participants who fit the eligibility requirements (higher than 18 years and who have used the health services in private and state hospital) were asked to fill in a self-completion or surveyor-aided questionnaire. Twenty students in marketing research course trained as surveyors for this study were stationed at the hospitals. Data were collected through twenty surveyors due to its advantage of faster, return rate, and easier use for both participants and researchers compared to online survey. Patients using services of private or state hospitals were approached and asked to participate in the study. Participation in the survey was entirely voluntary. The questionnaire was distributed to respondents between October 2014 and January 2015. Totally, 1023 data were collected in four months. Excluding invalid responds and blank questionnaires, the final sample for analysis consisted of 996 respondents, 500 respondents for private hospitals and 496 for state hospitals.

RESULTS

Characteristics of sample

Table 1 shows the characteristics of the entire sample, for public hospitals, private hospitals, and both. According to this table, the ratio of females (49.4%) and males (50.6%) are almost equal, while the ratio of those in the 18-25 and 26-35 age groups are close to each other (31.8% and 32.6%, respectively). In terms of occupation, most were university students and workers. In parallel with this, study participants who currently attend university or have graduated from one was more than half the study sample (54.8%). Finally, in terms of average monthly income, the ratios of participants earning between $434 and 866 and between $867-1299 a month were the same (29%).

Table 1 Characteristics of samples

Variables		Whole Sample		Private Hospitals		State Hospitals	
		f	%	f	%	f	%
Number of respondents		996	100	500	-	496	-
Gender	Male	504	50.6	274	54.8	230	46.4
	Female	492	49.4	226	45.2	266	53.6
Age	18-25	317	31.8	161	32.2	156	31.5
	26-35	324	32.6	166	33.2	158	31.9
	36-45	189	19	93	18.6	96	19.4
	46-55	113	11.3	50	10	63	12.7
	56 and >	53	5.3	30	6	23	4.6
Occupation	Public Official	138	13.9	74	14.8	64	12.9
	Worker	172	17.3	82	16.4	90	18.1
	Retired	70	7	40	8	30	6
	Manager	58	5.8	34	6.8	24	4.8
	Tradespeople	96	9.6	59	11.8	37	7.5
	Self Employed	70	7	35	7	35	7.1
	Student	205	20.6	98	19.6	107	21.6
	Other	187	18.8	78	15.6	109	22

Education	Primary or Secondary	126	12.7	49	9.8	77	15.5
	High School	260	26.1	126	25.2	134	27
	Undergraduate	546	54.8	299	59.8	247	49.8
	Post graduate	64	6.4	26	5.2	38	7.7
Monthly Income	433 USD and <	183	18.4	72	14.4	111	22.4
	434- 866 USD	289	29	137	27.4	152	30.6
	867- 1299 USD	289	29	151	30.2	138	27.8
	1300- 1732 USD	127	12.8	79	15.8	48	9.7
	1733 USD and >	108	10.8	61	12.2	47	9.5

The details on the demographic characteristics of individuals receiving services at private and public hospitals are shown in Table 1. It can be seen that there are no considerable differences between the total sample (996 persons) and these two samples, and that the ratios are fairly similarly.

Assessment and refinement of measurement scales

A confirmatory factor analysis (CFA) was used for testing the measurement model, and then structural equation modelling (SEM) was utilised to test the theorised model (Figure 1). After the preliminary analyses, confirmatory factor analysis (CFA) was then employed to test the fit of the measurement model for scales of service personal values, service value, satisfaction, and loyalty, using the statistical package Lisrel 8.80. Because it is difficult to reach non-significant p value in terms of χ^2/df ratio in large samples, the researchers mostly refer to additional fit indices. As seen in Table 2, the ratios of the χ^2 value to degrees of freedom (χ^2/df =2.40, 2.19, 1.10, respectively) is less than the cut-off point of 3, as suggested by Bagozzi and Yi [40], but p values were significant (<0.05). Based on this approach, the goodness-of fit of the model was assessed with the normed fit index (NFI), the non-normed fit index (NNFI), the comparative fit index (CFI), and the root mean square error of approximation (RMSEA), goodness of fit index (GFI), adjusted goodness of fit index (AGFI), standardized root mean square residual (SRMR). Hu and Bentler [41] suggested 0.95 cut-off point for CFI and 0.09 for SRMR. According to Chiu and Wang [42], AGFI and NNFI should exceed 0.8, 0.9, respectively. Additionally, according to Brown and Cudeck, [43], RMSEA values higher than 0.10 indicate poor fit, values of 0.08 or less represent enough fit, and values of less than 0.06 indicate good fit. All measures of the goodness-of-fit suggested that the fit measurement of the model was acceptable for all of three samples, as shown in Table 2. Consequently, other fit indices were within the acceptance ranges, indicating a good of fit to the data. Based on these findings it can be concluded that the model of the service personal values, service values, satisfaction and loyalty was empirically supported.

Table 2 Fit values for samples

Estimates	Whole Sample	Private Hospitals	State Hospitals	Acceptance Levels
X²	358.67	327.61	313.86	-
df	149	149	149	-
p	0	0	0	>0.05
X²/df ratio	2.4	2.19	2.1	<3
Root Mean Square Error of Approx. (RMSEA)	0.038	0.069	0.047	<0.08
Std. Root Mean Square Residual (SRMR)	0.02	0.037	0.044	<0.08
Normed Fit Index (NFI)	0.99	0.97	0.98	>0.95
Non-Normed Fit Index (NNFI)	0.99	0.97	0.99	>0.95
Comparative Fit Index (CFI)	0.99	0.98	0.99	>0.95
Incremental Fit Index (IFI)	0.99	0.98	0.99	>0.95
Goodness of Fit Index (GFI)	0.97	0.88	0.94	>0.90
Adjusted Goodness of Fit Index (AGFI)	0.95	0.84	0.92	>0.90

Table 3 displays results of factor loadings, means, standard deviation, reliability, composite reliability (CR), and average variance extracted (AVE) regarding dimensions of service personal values, service value, satisfaction, and loyalty. Two items of service value scale, and five items in scale of service personal values were removed due to the low factor loadings or multi-factorial loading. In line with the literature, the factors in service value titled as outcome value and process value. Similarly, factors regarding service personal values names as peaceful life, social recognition, and social integration.

Table 3 Dimensions of service personal values, service values, satisfaction and loyalty

Variables	Std. Loads	Mean	SD
Outcome value (Alpha = 0.88 AVE=0.78 CR =0.91)	-	3.42	0.95
The benefits I receive from this hospital are good	0.89	3.51	1.05
The services I receive from this hospital are reasonable	0.87	3.32	1.06
This hospital provides me with the benefits I want	0.89	3.42	1.08
Process value (Alpha=0.91 AVE=0.72 CR=0.91)	-	3.05	1
This hospital makes me feel good during the time I use the service	0.89	3.2	1.15
This hospital gives me a positive experience during the time I use the service	0.83	3.14	1.09
I have an enjoying time during the time I use the service	0.89	3.12	1.16
I have a happy time during the time I use the service	0.78	2.76	1.15
Satisfaction (Alpha=0.90 AVE=0.75 CR=0.90)	-	3.28	1.06
I am satisfied with my decision to choose this hospital	0.8	3.29	1.19
I am sure it was the right thing choose this hospital	0.87	3.22	1.15
I have really enjoyed myself with this hospital	0.92	3.34	1.15
Loyalty (Alpha=0.92 AVE=0.81 CR=0.93)	-	3.26	1.07
I say positive things about services of this hospital	0.9	3.22	1.12
I recommend this hospital to others	0.93	3.21	1.16
I come back to this hospital when I need this service in the future	0.86	3.33	1.17
Value to a peaceful life (Alpha=0.70 AVE=0.65 CR=0.79)	-	4.49	0.63
more harmony and stability in life	0.74	4.51	0.67
a more pleasurable life	0.87	4.46	0.75
Value to social recognition (Alpha=0.71 AVE=0.45 CR=0.70))	-	4.22	0.69
more respect from others	0.69	4.4	0.79
more status and prestige	0.68	4.26	0.87
more stimulating and adventurous life	0.63	3.99	0.93
Value to social integration (Alpha=0.89 AVE=0.81 CR=0.90)	-	4.33	0.7
better relationships	0.9	4.33	0.74
to strengthen my friendship relationships	0.9	4.33	0.73

Measurement model was further evaluated for reliability and validity. We investigated convergent validity by computing all factor loadings, composite reliabilities, Cronbach's alpha and the average variance extracted (AVE). As shown in Table 3, all the factor loadings exceeded the recommended value of 0.70, composite reliabilities exceeded 0.7 and all AVEs exceeded 0.5 [44], which show a good convergent validity of the current research instrument [45]. All Cronbach's alpha values are higher than 0.7, which implies good reliability [46]. Discriminant validity is demonstrated if each item loads more strongly on its associated factor than on other factors. The items that did not load strongly on the intended factors were dropped for subsequent analysis. Furthermore, the correlations between factors related with service personal values and service value were significant (Table 4). This result is also considered as an indicator of discriminant validity. Internal consistency reliability was employed by computing the coefficient score for Cronbach's Alpha. The values of the reliability coefficient ranged from 0.70 to 0.89, indicating satisfactory values [46].

Table 4 Correlation matrix

Constructs	1	2	3	4	5	6	7
Outcome value	1	-	-	-	-	-	-
Process value	0.77**	1.00	-	-	-	-	-
Satisfaction	0.79**	0.78**	1	-	-	-	-
Loyalty	0.78**	0.77**	0.86**	1	-	-	-
Peaceful	0.05	0.01	0.07*	0.07*	1	-	-
Social recognition	0.08*	0.06	0.09**	0.09**	0.55**	1	-
Social integration	0.04	0.06	0.08*	0.05	0.40**	0.49**	1
* p<0.01; **p<0.01; 5=Strongly agree, 1=Strongly disagree							

Model estimations using three samples

Following the confirmation of the measurement model, the hypothesized research model was empirically tested using structural equation modelling (SEM). More precisely, the hypothesized model specifying the structural relationship among service personal values, service value, satisfaction and loyalty fit the data well. Table 4 indicates the results

of fit values and standardized path estimates for whole sample, private hospital, and state hospitals. Provided that it relates to the whole sample, SEM results revealed a good structural fit within the model (X^2/df=2.31, RMSEA and SRMR <0.036 and 0.022 respectively, CFI, IFI, NFI, NNFI, GFI, AGFI ≥0.95). Similarly, the goodness of model fit all proved a satisfactory structural model fit to the models of private and state hospitals.

The path coefficient estimates (standardized beta) of the models were summarized concisely in Table 5. In whole sample, the path analysis supports that all three hypotheses, except H1 and H3, were accepted. In other words, personal values affected satisfaction directly (β=0.04), and loyalty indirectly (by service value). Interestingly, service value had a negative effect on satisfaction and loyalty (β= -0.94, β= -0.20 respectively). As expected, the relation between satisfaction and loyalty was positive and significant. In terms of private hospitals, H1, H3, H4, H6, were accepted but H2 and H5 were rejected. The model of private hospitals implies that there were positive and significant relationships between personal values (β=0.23), and loyalty (β= -0.08). Furthermore, service value has a significant effect on satisfaction (β=0.95), but no effect on loyalty (β= -0.29). Rationally, positive relationship between satisfaction and loyalty (β=0.89) was strong. In state hospital model, there were no significant relationships between personal value and service value, satisfaction, and loyalty (β=0.07, β= -0.05, β= -0.00, respectively). However, relationships between service value and satisfaction (β=0.93), and loyalty (β= -0.34) were significant. As in the other two models, relationship between satisfaction and loyalty (β=0.63) was significant, moreover, this result is supported by many studies in the literature.

Table 5 Fit values for samples

Estimates	Whole Sample	Private Hospitals	State Hospitals	Acceptance Levels
Structural Model				
X^2	367.84	355.74	331.93	-
df	159	159	159	-
p	0	0	0	> 0.05
X^2/df ratio	2.31	2.23	2.08	< 3
RMSEA	0.036	0.07	0.047	< 0.08
Std. Root Mean Square Residual (SRMR)	0.022	0.044	0.044	< 0.08
Normed Fit Index (NFI)	0.99	0.96	0.98	> 0.95
Non-Normed Fit Index (NNFI)	0.99	0.97	0.99	> 0.95
Comparative Fit Index (CFI)	0.99	0.98	0.99	> 0.95
Incremental Fit Index (IFI)	0.99	0.98	0.99	> 0.95
Goodness of Fit Index (GFI)	0.96	0.87	0.94	> 0.90
Adjusted Goodness of Fit Index (AGFI)	0.95	0.83	0.92	> 0.90
Standardized path coefficients				
Personal values → service value	-0.05 ns	0.23	0.07 ns	-
Personal values → satisfaction	0.04	0.04 ns	-0.05 ns	-
Personal values → loyalty	0.00 ns	-0.08	0.00 ns	-
Service value → satisfaction	-0.94	0.95	0.93	-
Service value → loyalty	-0.2	-0.29 ns	-0.34	-
Satisfaction → loyalty	0.76	0.89	0.63	-
ns: not significant at 0.05 level				

DISCUSSION AND CONCLUSIONS

The aim of this study was to examine the relationships between service personal values, service value, satisfaction, and loyalty. The results of the present study provided an assessment of consumers using private hospitals, public hospitals, and both (i.e. the whole sample). It was observed that the validity and reliability values for the personal values, service value, satisfaction and loyalty criteria were above the acceptable levels. Confirmatory factor analysis (CFA) confirmed these results.

The results of the structural equation modelling, performed to demonstrate the relationship between these variables, indicated that the results varied for private hospitals, state hospitals and both. The model for private hospitals demonstrates that, as with many other services, there is a relationship in private health services between personal values and service value. These results of this study are in line with Hau and Thuy's study [1] demonstrating the relationships between personal values and service values in airline and health services. While there is no significant

relationship between personal values and satisfaction, the relationship between personal values and loyalty was significant. These results suggest that personal values have a direct effect on loyalty, and this effect is mediated through satisfaction. This finding is in line with the findings of another study on banking services [29]. On the other hand, this finding differs from the results of Hau and Thuy [1] on healthcare services. A significant relationship was found between service value and satisfaction in private hospitals, but no such relationship was found between service value and loyalty. These results indicate that satisfaction has a mediator role and function.

An evaluation of the general situation, based on the analysis for state hospitals and the whole sample, revealed no significant relationship between personal values and service values. Similar results were observed in Hau and Thuy's [1] findings of banking services. Differently from the private hospitals, no significant relationship was found between personal values and service value in the entire sample. Another interesting finding that can be reported is the negative and significant relationship of service value with satisfaction and loyalty. This finding can be explained by the fact that healthcare services, differently from other types of services, resolve around matters of life and death, and that their outcomes are potentially irreversible. A similar result was observed in public hospitals in the relationship between service value and loyalty. The quality of the services provided in public hospitals might be an indicator of this result. As expected, a positive relationship was identified in all sample groups between satisfaction with health services and loyalty.

In conclusion, it can be stated that the model recommended worked for all three of the samples. However, while most of the relationships in all three models were significant, some of them were not. In public hospitals, there was no significant relationship between personal values and the other variables. For public hospitals, the service value has an entirely mediating effect. While the same can be said for the sample including both private and public hospitals, the weak yet significant relationship between personal value and satisfaction stands out as an exception. One of the interesting findings of this study was the negative relationship of service value with satisfaction and loyalty. The findings of the present study for private hospitals were largely similar to the findings of other studies performed for many other services.

The findings from this study contribute to marketing theory of health services, and extend empirical insights into health marketing theory and practice by documenting the influence of personal service value and service value on satisfaction and loyalty. Furthermore, the research findings have important implications for not only private health service providers, but also for state hospital managers interested in health quality with health users. By analyzing both services personal value and service value, this study suggests a focus on the value areas of the health consumers, attitudes to their private lives, and the outcome dimensions such as satisfaction and loyalty.

LIMITATIONS AND FUTURE RESEARCH

There are several limitations in this study associated with the research context and research design. The sample of this paper was drawn from private hospitals and state hospitals in a single and mid-size city of Turkey, suggesting that the results of this study need to be validated in other metropolitan cities. Because this mid-size city does not represent health services in big cities, future research should expend to big cities (such as Istanbul and Ankara) in Turkey. The findings of this research might be context-specific and cannot be generalized beyond the health services in Turkey. Additionally, further research can be conducted in countries with different health systems in order to obtain more generalized results. This study focused only relationships between personal values, service value, satisfaction, and loyalty. Therefore, future research can investigate service quality in health and word-of-mouth as these are important areas in health care marketing.

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CONFLICT OF INTERESTS

There is no conflict of interest.

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