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THE INTERMEDIARY ROLE OF RECREATION IN SERVICE QUALITY IN CUSTOMER SERVICE: AN IMPLEMENTATION IN A FOUR-STAR HOTEL MANAGEMENT IN KARAMAN, TURKIYE

O PAPEL INTERMEDIÁRIO DA RECREAÇÃO NA QUALIDADE DO SERVIÇO NO ATENDIMENTO AO CLIENTE: UMA IMPLEMENTAÇÃO EM UM HOTEL QUATRO ESTRELAS EM KARAMAN, TURQUIA*

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Abstract: In this research, it was aimed to determine the relationship between recreation in service quality and the mediating role of Service Recovery in customer satisfaction. In this research study, the survey technique method was applied for obtaining data. The study group which was selected with the principle of accessibility and voluntary participation in the survey study, consists of a total of 395 customers, 266of whom are men(67%) and 129of whom are women(33%). In the analysis of the data, the SEM-based Maximum Likehood (ML) calculation method of the AMOS program was preferred to determine the impact of recreation on the service quality and the mediating role of Service Recovery in customer satisfaction in terms of the hotel guests and service recipients. In terms of the effect of recreation on the mediating role of Service Recovery in customer satisfaction on the service quality of those staying and receiving services in the hotel business, a study was conducted using the mediated structural model (path) analysis with implicit/latent variables. Following the research, it has been determined that recreation in service quality affects customer satisfaction negatively and insignificantly, recreation in service quality affects Service Recovery positively and significantly, and Service Recovery affects customer satisfaction in a positive and meaningful way.

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Keywords: Recreation. Service Quality. Service Recovery. Customer Satisfaction.

Resumo: Nesta pesquisa, o objetivo era determinar a relação entre a recreação na qualidade do serviço e o papel mediador da Recuperação do Serviço na satisfação do cliente. Neste estudo de pesquisa, o método da técnica de pesquisa foi aplicado para a obtenção de dados. O grupo de estudo que foi selecionado com o princípio de acessibilidade e participação voluntária no estudo da pesquisa, consiste de um total de 395 clientes, 266 dos quais são homens(67%) e 129 dos quais são mulheres(33%). Na análise dos dados, o método de cálculo do programa AMOS baseado no SEM Maximum Likehood (ML) foi preferido para determinar o impacto da recreação na qualidade do serviço e o papel mediador da Recuperação do Serviço na satisfação do cliente em termos dos hóspedes do hotel e dos destinatários do serviço. Em termos do efeito da recreação sobre o papel mediador da Recuperação do Serviço na satisfação do cliente na qualidade do serviço daqueles hospedados e recebedores de serviços no negócio hoteleiro, foi realizado um estudo utilizando a análise do modelo estrutural mediado (caminho) com variáveis implícitas/atentárias. Após a pesquisa, foi determinado que a recreação na qualidade do serviço afeta a satisfação do cliente de forma negativa e insignificante, a recreação na qualidade do serviço afeta a Recuperação do Serviço de forma positiva e significativa, e a Recuperação do Serviço afeta a satisfação do cliente de forma positiva e significativa.

Palavras-chave: Recriação. Qualidade do serviço. Recuperação do serviço. Satisfação do cliente.

1. INTRODUCTION

Service quality can be accepted as an indicator of profitability and the achievement of organizational goals (Hsieh et al., 2015). Improving service quality and performance has an increasing effect on revenues in touristic destinations. Tourism also has psychological benefits such as improving the quality of life and increasing personal happiness by meeting the needs of tourists at various levels (Su et al., 2015). Cultural differences in the tourism sector affectsdestination satisfaction, perceived value, service quality and return intention (McCleary et al., 2007).

Service quality is evaluated behaviorally due to three characteristics special to services i) abstractness, ii) heterogeneity, iii) the inseparability of production and consumption (Parasuraman et al., 1988).

The primary purpose of park and recreation agencies is to provide opportunities that can satisfy different users. As a result of this purpose, visitors who are satisfied with their experiences come back, loyal users are acquired, positive verbal communication is provided and users become supporters of the agency (Tian-Cole et al., 2002). Service quality can be defined as the comparison of customers' expectations about the service and their performance after using the service (Tosun et al., 2015, Chen et al.,2011).

All in all, customer satisfaction refers to customer loyalty, and customer loyalty refers to potential future income. Customer satisfaction and subsequent customer loyalty prevent the customer from leaving the business in cases where the business makes a mistake (for example, a service Failure) (Koç, 2017).

1.1. Service Failure and Service Recovery

As a concept, "service failure" can be expressed as the service performance of the business that does not meet the existing expectations of the consumer and therefore results in customer dissatisfaction (Zeithaml et al., 2018).

The processes carried out to eliminate possible faults are defined as "Service Recovery" and almost all consumers have an expectation that businesses will compensate for their mistakes (Bell and Zemke, 1987).

However, compensating for service Failures can enable consumers to feel a higher level of satisfaction than an Failure-free service, and this can add the non-negligible degree value to the service producing business (Bruhn and Georgi, 2006).

Service Failures inevitably occur in the service delivery process and require for compensating. There are basically three reasons for service failures to occur. These are i) need for coordination, ii) labor intensity, and iii) frequency of uncontrollable conditions.

In service businesses, the sub-services and processes that make up the service can be seen as the links of a chain. A problem to be experienced in any of the links in this chain may cause the service to be perceived negatively by the customer. In general, three basic strategies can be applied alone or in combination in Service Recovery. These three strategies consist of i) apologizing and acknowledging the existence of the problem, ii) helping (solving the problem), iii) compensating (paying the customer for the costs of the problem, providing free products and services) (Koç, 2017).

Even if businesses can improve the quality of the services they offer, service Failures can inevitably occur, which can lead to unhappy customers. It can be stated that this cycle is inherent in the service sector. In the simplest terms, the services offered (at least for the most part) are provided by people and people are often not perfect (Hoffman & Bateson, 2011).

1.2. Interaction of the Mediation Role of Service Recovery in Customer Satisfaction of Recreation in Service Quality

In addition to non-commercial recreational activities, there are also recreational activities seeking commercial purposes. Today, the number of entertainment organizations carried out by commercial enterprises is increasing and diversifying day by day. This diversity includes tourism travel (tours e.g., historical places, museums, theme parks, etc.), alternative sports travels (extreme sports, major sports events), concert travel (domestic/abroad), educational organizations (painting, music, handicrafts, pilates, yoga, dance, etc. course programs) and advertising and consumer-oriented entertainment organizations organized in shopping centers can be given as examples (Şimşek, 2013).

Service Recovery is necessary for improving service quality and customer satisfaction. Paid or free recreational activities can be used to increase the quality of service. The sense of renewal that can be achieved with recreational activities may cause an increase in customers' perception of service quality. The studies to be carried out in this context will help both the development and diversification of the sector and the finding of recreational service products that can meet the demands of different consumers.

2. METHODOLOGY

The aim of the research is to determine the effect of the perceptions of the customers staying or receiving service in a four-star hotel operating in Karaman regarding the recreation in service quality, through the mediating role of the Service Recovery, on the customer satisfaction.4 hypotheses related to our study were formed by constructing. The questionnaire, which was prepared in this context and consisting of *4* parts, was applied to a total of *414* customers who received service from the hotel and stayed at the hotel, with the help of the staff of the hotel management.

Questionnaire technique was preferred as a data collection tool in the research study. In the relevant research, the scale developed by Güven and Sarıışık (2014) to measure the dimensions of service quality that affect behavioral intention in accommodation services, the scale used by Demirel (2019) in his doctoral thesis to

measure the regulatory role of Service Recovery in the effect of customer satisfaction on verbal communication and the scale developed by Onaran et al., (2013) were used to measure their effects on customer satisfaction brand loyalty and customer relationship management performance.

The questionnaire form prepared for the purpose of the research study; consists of a total of three sections and *22* questions; a question about recreation in service quality (*4 items*), a question about Service Recovery (*13 items*) and a question about customer satisfaction (*5 items*) that should be answered by considering the current situation, not the situation that the customers receiving service from the hotel business should be. Moreover, the participants were asked to fill in the most appropriate option from the options from *1* to *5* in the *5*-point Likert-type indicator chart in the questionnaire that was requested to be filled on a voluntary basis. Evaluation options in the study questionnaire form are listed as follows.*"1=Strongly disagree", "2=Disagree", "3=Neutral", "4=Agree", "5=Strongly agree".*

In the four-star hotel management, which is operating in Karaman Province, the survey subject of the research continued for *44* days and was completed.Of the *450* questionnaires delivered to the volunteer participants by the hotel management employees, *414* of them were returned and the recycling rate was *92%*. However, *19* of the questionnaires were not included in our analysis due to both incomplete answers and over-marking on the same item.The remaining *395* questionnaires were used in the testing and analysis of the research.In the testing and analyzingof the measurement model of our research, SEM-based analysis of the IBM AMOS 24 program was used.

3. RESULTS

3.1. Determination and Drawing of the Research Model

Among the factors of our research model, recreation in service quality is establishedthat it affects Service Recovery and customer satisfaction, Service Recovery is established that it affects customer satisfaction. In the context of this editing, our research model, which shows the effect of service quality recreation, the effect of relationship between Service Recoveryand customer satisfaction, and the effect of relationship between Service Recovery and customer satisfaction, was drawn by hand using the data on the computer panel as shown in Figure 1 below.

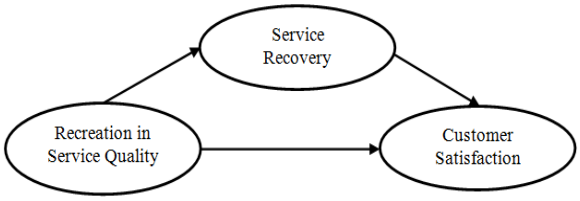

Figure 1. Research Model

Single factor measurement model, which includes the observed (measurable) variables of recreation in service quality, Service Recovery and customer satisfaction variables, and the Failure variances of these observed variables, among the factors of the research model consisting of three latent variables shown in Figure 1 above by drawing 1, 2 and 3 separately. One of the single factor measurement models in Figure 2; the implicit and independent variable service quality recreation measurement model has ***4 items***, the latent variable Service Recovery measurement model is ***13 items***, and the latent variable customer satisfaction measurement model is ***5 items***, drawn based on SEM of the AMOS program and presented as follows.

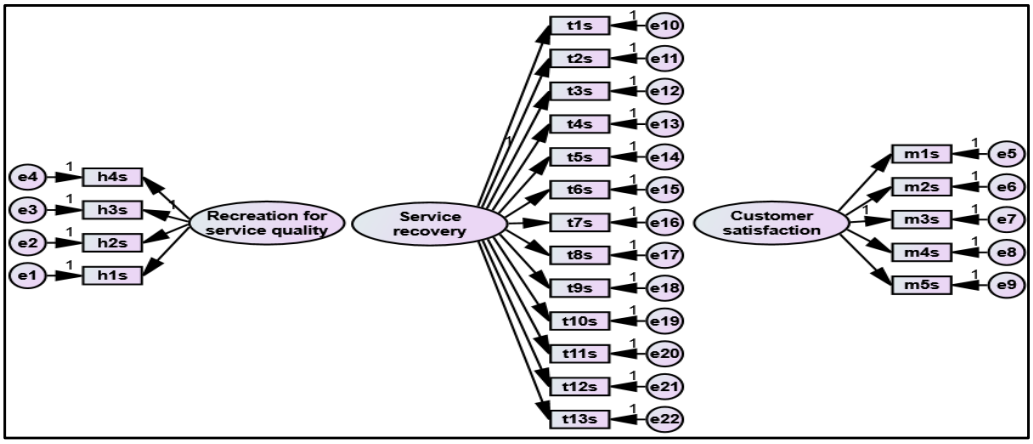

Figure 2. One-Factor Service Quality Recreation Measurement Model 1, One-Factor Service Recovery Measurement Model 2, and One-Factor Customer Satisfaction Measurement Model 3

3.2. Drawing of a First Level Multi-Factor Confirmatory Factor Analysis Model and Analysis of Goodness of Fit Index Values with Model Development Practices which Must Be Defined by Testing

For continuing the testing and analysis of research studies related to the measurement model, it is necessary to find a measurement model that has been defined

using the SEM-based analysis of the AMOS program. There are 3 types of model definitions in SEM and it can be done. These are expressed as over-defined, poorly defined, and under-defined models. In addition, to continue testing and analysis on the model in the light of the available data, the measurement model must be a well-defined model. It is stated that if the measurement model is incomplete or difficult to define, it will not be right to continue with the tests and analyzes.

Table 1. Absolute Fit Indices and Threshold Values Table

Indexes	***Good fit***	***Acceptably Compliant***
X²/df	*X²/df<3 well fit*	*3< X²/df<5 acceptable fit*
SRMR	*SRMR<.05 well fit*	*SRMR<.08 acceptable fit*
CFI	*CFI>.95 well fit*	*CFI >.90 acceptable fit*
NNFI/TLI	*NNFI/TLI>.95 well fit*	*NNFI/TLI>.90 acceptable fit*
IFI	*IFI>.95 well fit*	*IFI>.90 acceptable fit*

Using the SEM-based analysis of the AMOS program, the first level multifactoria

l (DFA) measurement model, which is formed by the combination of the single factor measurement model 1, 2 and 3 in figure 2, for which the model will be defined, 3 implicit (dependent and independent variables) variables are assigned to these implicit variables. The observed variables, Failure variances and 3 correlations were drawn based onSEM. The DFA measurement model, which was drawn, was tested, and analyzed on the basis of the SEM of the AMOS program. As a result of the test, the measurement model obtained as an output from the relevant program and figure 3, in which the values on the model are shown, are presented below.

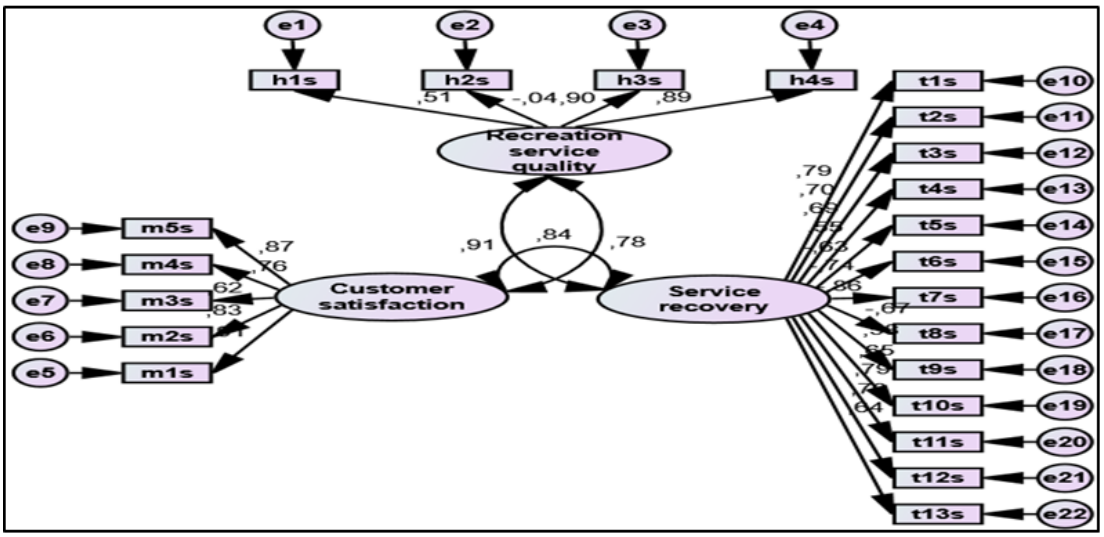

Figure 3. First Level Multi-Factor DFA Measurement Model Tested for Our Research Study

In terms of examining the goodness of fit indices of the DFA measurement model, which is the subject of the research and presented in Figure 3, it is thought that it will be sufficient to consider the goodness of fit index and threshold values presented in Table 1. Based on the SEM of the firstlevel multifactor DFA measurement model AMOS program presented in Figure 3, an examination was made on the goodness of fit index values obtained as an output from the program, under the title of Model Fit Summary. As a result of the investigation; goodness of fit index values of the measurement model are ***(X²[206 N=395] =1029.374;p<.01;X²/sd=4.997;SRMR=.06,*****CFI=.86,NNFI/TLI=.84, IFI=.86).** It was determined that the model's goodness of fit index and threshold values were not appropriate.

In the context of model development, the necessary deletion and covariances were drawn on the relevant DFA measurement model, and it was subjected to retest and analysis.As a result of the test performed based on SEM of the DFA measurement model AMOS program, it was determined that all the (p) values of the data in the tables, **covariance, and variance** tables, under the heading of **regression weights**, were significant.Goodness of fit index values under the title of summary of model fit are ***(X²[182 N=395] =657.155; p< .01; X²/sd=3.611; SRMR=.051, CFI=.919,NNFI/TLI=.906, IFI=.919*****).** As a result of these determinations, the relevant DFA measurement model was found to be in acceptable conformity with the

available data by reaching the goodness of fit index and threshold value presented in Table 1 above. As a result of the test, the DFA measurement model obtained as an output from the relevant program and Figure 4, in which the values on the model are shown, are presented below.

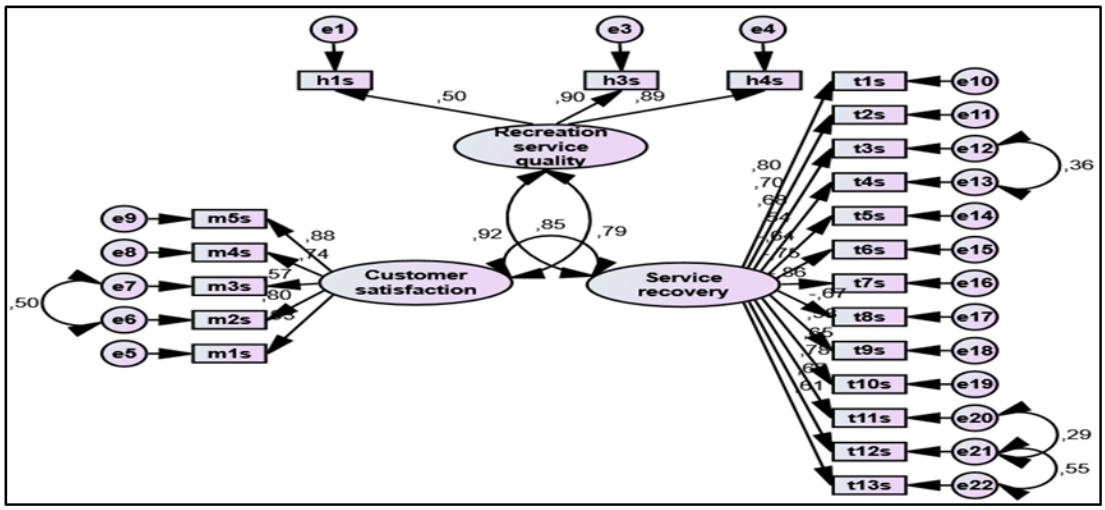

Figure 4. First Level Multifactor DFA Measurement Model Tested After Model Development and Correction Applications

After the DFA measurement model, which is the subject of the research, was completed by performing all the tests and analyzes in the light of the available data, the report of the results obtained in the tests and analyzes is summarized below:

As a result of the test performed following the deletion and covariance plots on the DFA measurement model in terms of model development and improvement;***(X²[182 N=395]=657.155; p< .01; X²/sd=3.611; SRMR=.051, CFI=.919, NNFI/TLI=.906, IFI=.919)***goodnessoffit index and threshold values were reached, it was determined that the three-variable measurement model had acceptable compatibility with the data. In the light of this obtained data, it has been determined that the measurement model with three variables ***(recreation in service quality, Service Recovery and Customer satisfaction)*** has been validated in terms of theoretical structure.

3.3. Identification and Analysis of the Existence of Combination and Convergent Validity of Factors in the First Level Multi-Factor CFA Measurement Model and Reporting

There are definition expressions of some values that should be considered in the calculation of ***CR, AVE, MSV*** and ***ASV***, which show the existence of structural

reliability, convergent and discriminant validity of the factors belonging to the first-level multi-factorial CFA measurement model. These are presented as follows (Gürbüz, 2021):

CR>.70: *The factor has structure reliability.****AVE>.50:*** *The factor has combination reliability*

CR>AVE MSV<AVE ASV<AVE √AVE> Correlation between factors CR *(Composite/construct reliability)*

AVE *(Average variance extracted)*

MSV *(Maximum squared variance)*

ASV *(Average shared square variance)*

Table 2. *Reliability, Validity, Correlation and √AVE Values Table of the factors in the DFA MeasurementModel*

Factors/Variables	CR	AVE	MSV	ASV	1	2	3
Customer Satisfaction	.89	.63	*.72*	.68	***(.79)***		
Recreation in Service Quality	.71	.62	*.85*	.74	***.79***	**(.79)**	
Service Recovery	.92	.48	*.85*	.78	***.92***	**.85**	**(.69)**

The combination of the factors in the first level multi-factor DFA measurement model is determined according to the structural reliability ***(CR, AVE)*** and divergence ***(AVE, MSV and ASV)*** values. As a result of the test, calculations were made based on the data values in the standardized regression weights and correlation values table obtained as the output of the program in the SEM based analysis of the AMOS program. As a result of the calculations, the determinations regarding the combination/structural reliability ***(CR, AVE)*** and divergence ***(AVE, MSV and ASV)*** values of the first level multifactorial DFA measurement model factors shown in Figure 4 are presented in Table 2.Adhering to the values determined in Table 2, the report of the results obtained in the analyzes related to the combination/construct reliability and discriminant validity of the factors in the relevant CFA measurement model is summarized below.

Since the ***AVE*** values of the variables were lower than the ***MSV*** and ***ASV*** values and ***MSV<AVE, ASV<AVE*** condition was not meet, it was determined that the variables did not have discriminant validity. Moreover, it was determined that the variables did not have discriminant validity because the correlation values between the

variables were lower than the ***√AVE*** values and did not meet the ***√AVE> Correlation between factors*** condition.

3.4. Determining and Drawing the Mediated Research Model and Determining the Hypotheses Regarding the Mediated Research Model

The three-variable mediated research model of our research study is presented as shown in Figure 5 below, drawn by hand using the data elements in the panel on the computer.

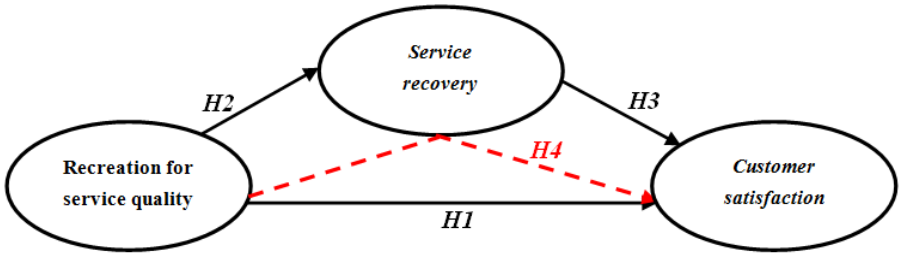

Figure 5. Mediated Research Model to be tested

In the mediated research model seen in Figure 5 above, the independent variable is; service quality recreation. The dependent variables are; Service Recovery (agent/mediator) and customer satisfaction. Previously above, under the title of research method and application, the subject of the study was expressed by explaining the importance, purpose and scope of the research. In this sense, our mediated research model in the context of fictions, which we want to reach by concluding the research of the study, is presented in figure 5. In the mediated research model to be tested, presented in Figure 5; the relationship between recreation in service quality and customer satisfaction in a hotel business and the effect of Service Recovery on the mediator role between these two variables are examined.

Based on the mediated research model, which is the subject of the research study; The hypotheses that we want to reach the meaningful or meaningless effects of the mediated research model as a result of tests and analyzes have been formed as follows:

In the study conducted by Öztürk and Seyhan (2005); the measurement of the service quality offered in accommodation establishments was carried out with the

servqual method. In the study conducted by Yıldız et al. (2018); the effect of service quality on customer satisfaction: it was analyzed with research on fitness centers. This supports the H1 hypothesis in the conducted impact analysis review;

H1: Recreation in Service Quality positively affects customer satisfaction.

H2: In Service Quality, recreation positively affects Service Recovery.

The research conducted by Demirel (2019); the regulatory role of Service Recovery in the effect of customer satisfaction on verbal communication: A study conducted in hotel businesses in Nevşehir was examined. Analysis of the regulatory role in this study and the analysis support the H3 hypothesis;

H3:Service Recovery positively affects customer satisfaction.

In our research in the literature, unlike the studies conducted, we want to carry out and conclude in the mediated research model related to our research study; we use hypothesis H4 to determine the effect of recreation in service quality (***only in the context of constructing our H4 hypothesis***) in the mediating role of Service Recovery on customer satisfaction;

H4:Service Recovery mediates the relationship between recreation in Service Quality and customer satisfaction.

3.5. Making Tests and Analyzes by Drawing the "c" Path Regarding the Mediated Research Model

The "c" path in the model we have presented in Figure 6 below shows the effect relationship of recreation in service quality only on independent variable, without dependent variable Service Recovery, which is the mediator between dependent variable customer satisfaction. At the same time, in the sense of our setup of the "c" path on the model; we would like to emphasize that it is expressed by ***H1***.

In the "c" path measurement model of the research study, as seen in Figure 6 below, the drawing was carried out using the SEM basis of the AMOS program, with the independent variable being recreation in service quality ***(3 items)*** and the dependent variable being customer satisfaction ***(5 items)***. The drawn measurement model was tested and analyzed based on SEM of the AMOS program. As a result of the test, the measurement model obtained as output from the relevant program and Figure 6, where the values on the model are shown, are presented below.

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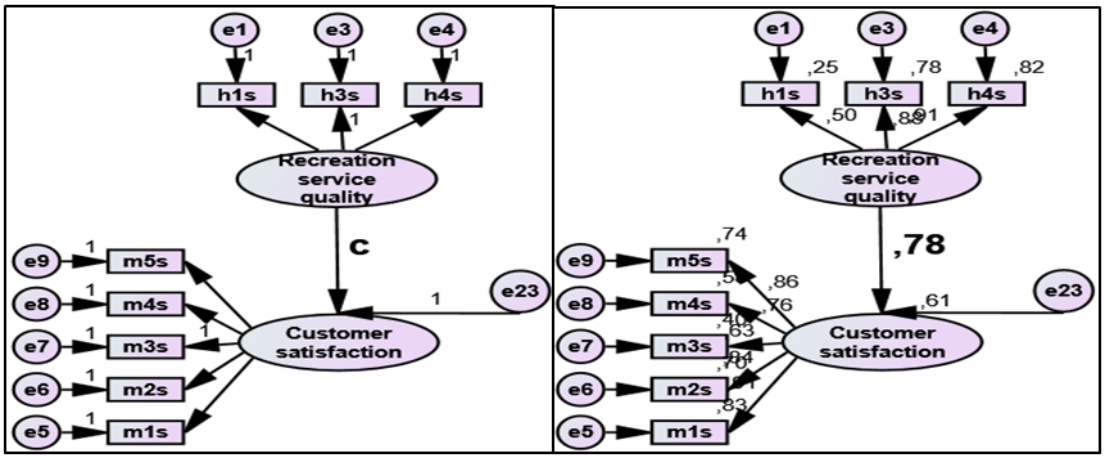

Figure 6. "**c**" Path and Standardized Path Diagram Representation of the Mediated Structural Model

For determining the effect between both latent variables ***(path c)***, analyzes were carried out on the values in the tables obtained as output from the relevant program. As a result of the analysis, it has been determined that the standardized estimated coefficient value ***(.78)*** of the measurement model shown in Figure 6 as the ***"c"*** path from the recreation in service quality factor to customer satisfaction. At the same time, it has been determined that the ***"c"*** path is significant in the Table 3 below, which shows the ***(p)*** value of the ***"c"*** path obtained as an output as a result of the SEMbased analysis of the AMOS program. In the context of these determinations, since the standardized coefficient value of the ***"c"*** path was determined as ***(β=.78;p<.01)***, it was determined that the independent variable recreation in service quality had a positive and significant effect on the dependent variable customer satisfaction.

Table 3. Status of **(p)** Values for the **"c" path** between recreation in service quality and customer satisfaction

		Factors/Variables	Estimate	S.E.	C.R.	P	Label
Customer Satisfaction	<---	Recreation in Service Quality	**1,884**	**,198**	**9,518**	***	**C**

In the following stages of model drawing and testing, all three variables are tested and analyzed in terms of the structural model mediated by the effect and relationship between them. In parallel with this explanation, the ***"c"*** path, which we have presented in the model in Figure 6 and mentioned in the analysis, will be expressed as the ***"c"*** path. In other words, the ***"c"*** path in Figure 6 is tested as the ***"c"*** path in the mediated

structural model. It should be kept in mind that the ***H1*** hypothesis in the research subject mediated research model expresses the way ***"c and c' "***, at the point of understanding the analyzes made.

3.6. Determining, Evaluating and Reporting the Values by Testing the "a, b and c' " Paths of the Mediated Structural Measurement Model of the Variables

Within the scope of **the SEM based analysis of the AMOS 24 program**, on the measurement model, previously constructed; to reach the results of the correctness or rejection of the hypotheses ***(H1, H2, H3, and H4)***, in terms of determining the mediating effect and role between all three variables, the mediated structural model of the independent variable recreation in service quality ***(3 items)***, dependent variable customer satisfaction ***(5 items)*** and dependent variable Service Recovery ***(13 items)*** factors was carried out on the basis of SEM. The mediated structural model, which was drawn, was tested and analyzed on the basis of SEM of the AMOS program. As a result of the test, on the measurement model obtained as output from the related program, ***" a. b and c' "*** paths are presented below in

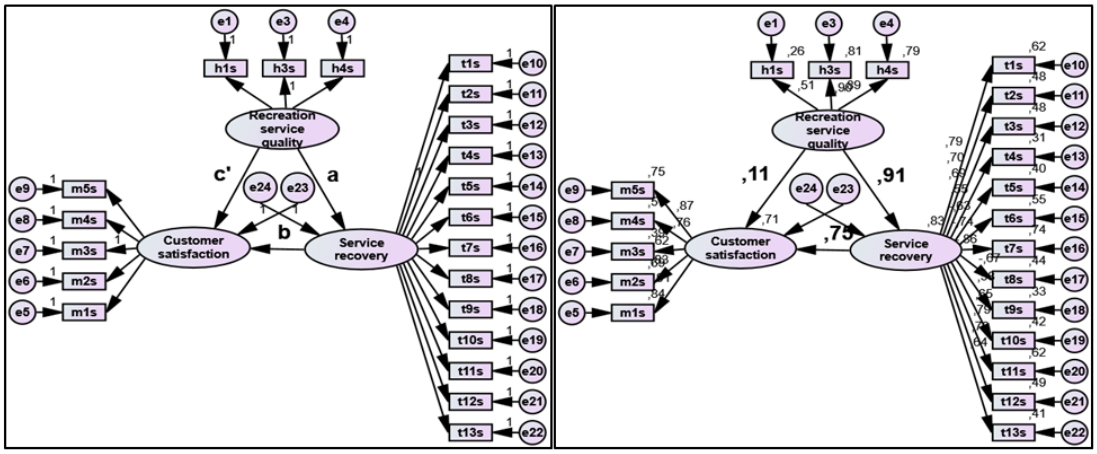

Figure 7. Path **"c', a and b"** and Standardized Path Diagram View of the Mediated Structural Model

As a result of testing the mediated structural model presented in Figure 7 above in the relevant program, Table 4 showing the significance of the ***(p)*** values of the ***"a, b, and c"*** paths obtained as output from the program is presented below to be used in analysis and evaluations.

Table 4. *Significance of Values of Paths* ***(p)*** *of* **"c', a and b"** *of Mediated Structural Model*

Factors/Variables	Estimate	S.E	CR	P	Label
Service Recovery<-- Recreation in Service Quality	1,169 **a**	,130	8,976	***	
Customer Satisfaction<-- Service Recovery					
Customer Satisfaction<-- Recreation in Service Quality	1,382 **b**	,222	6,216	*******	
	,250 c'	**,267**	**,936**	**,349**	

As a result of the tests and analyzes of the mediated structural model in Figure 7, the ***"a"*** path coefficient from the recreation factor in service quality to Service Recovery ***(path a: Recreation in service quality → Service Recovery)*** as can be seen from Figure 7 and Table 5; standardized path coefficient ***(β=.91; p< .01)*** and the ***(p)*** value in Table 4 had a positive and significant effect.

In the mediated structural model path diagram, the "b" path from the mediator (intermediary) variable state Service Recovery factor to the customer satisfaction factor ***(path b: in the situation where Service Recovery is not an intermediary/Service Recovery→customer satisfaction)*** as can be seen from Figure 7 and Table 5; it has been determined that there is a standardized path coefficient ***(β=.75; p< .01)*** and the ***(p)*** value in Table 4 has a positive and significant effect.

Table 5. Standardized Total, Direct and Indirect Effect Cases of the Mediated Structural Model

Effect States	**Standardized Total Effects**			**Standardized Direct Effects**			**Standardized Indirect Effects**		
Variables	**Rec. in Ser. Qua.**	**Ser. Com.**	**Cus. Sat.**	**Rec. in Ser. Qua.**	**Ser. Com.**	**Cus. Sat.**	**Rec. in Ser. Qua.**	**Ser. C.**	**Cus. Sat.**
Customer Satisfaction	**,784**	**,746**	,000	***,105 (c')***	***,746(b)***	,000	***,679(b)***	,000	,000
Service Recovery	**,910**	,000	,000	**,910** ***(a)***	,000	,000	,000	,000	,000

In addition, in parallel with the findings above Table 5, in the context of determining the mediator role of the Service Recovery factor, which is the mediator between the recreation in service quality variable and customer satisfaction, and shown in Figure 7, the test result outputs of the relevant program made on the mediated structural model. analyzed and evaluated. As a result of these examinations and evaluations, the confidence intervals obtained from the SEM basis of the AMOS

program (GA: Standardized Indirect Effects-Lower Bounds / Standardized Indirect Effects Upper Bounds) and standardized indirect path coefficients are presented in Table 6 below.

Table 6. *Standardized Lower and Upper CI Values* ***for the "b" path*** *of the Mediated Structural Model* ***(H4 hypothesis)***

Effect States	Standardized Indirect Effects (Group number 1-Default model			Standardized Indirect Effects-**Lower Bounds (PC)** (Group number 1-Default model			Standardized Indirect Effects **Upper Bounds (PC)** (Group number 1-Default model		
Variables	**Rec. in Ser. Qua.**	**Ser. Com.**	**Cus. Sat.**	**Rec. in Ser. Qua.**	**Ser. Com.**	**Cus. Sat.**	**Rec. in Ser. Qua.**	**Ser. Com.**	**Cus. Sat.**
Customer Satisfaction	**,679**	,000	,000	**,330**	,000	,000	**,945**	,000	,000
Service Recovery	,000	,000	,000	,000	,000	,000	,000	,000	,000

As a result of the examination on the data in Tables 5 and 6, the standardized indirect effect ***(.679)*** of recreation in service quality on customer satisfaction and the standardized indirect sub-effect value ***(Standardized Indirect Effects-Lower Bounds)(.330)*** of recreation in service quality. It was determined that the upper effect value (***Standardized Indirect Effects Upper Bounds)*** was ***(.945)***. In terms of whether Service Recovery acts as a mediator between recreation in service quality and customer satisfaction, the standardized indirect effect coefficient of the recreation variable in service quality on the customer satisfaction variable ***(.679)*** is in the ***95%*** confidence interval ***(β=.679, %95GA[.330, .945])*** was determined. Based on the valuesof this determined standardized indirect effect coefficient ***(.679)*** and ***(GA)***, the effect of recreation in service quality on customer satisfaction through Service Recovery ***(path b: in the situation where Service Recovery is mediated/recreation in service quality→Service Recovery→customer satisfaction)*** indirectly (it has been determined that the indirect) effect has a positive and significant effect. As a result of this determination, it was determined that the Service Recovery variable mediated between the recreation in service quality variable and customer satisfaction variable.

As a result of the SEM-based analysis of the mediated structural model AMOS program in Figure 7; Table 7, which is the output of the program related to the

explanation rates of the ***"a"*** path and ***"b"*** path, is presented below. In the examination and evaluation made on Table 7, it has been determined that the Service Recovery factor explains the change in customer satisfaction ***(R^2=71%)*** with recreation in service quality. It was determined that the recreation factor in service quality, which is the independent variable in our mediated structural model, explains the change in Service Recovery ***(R^2=83%)***.

Table 7. ***R^2*** *disclosure ratios where the Mediated Structural Model is the mediator of* ***path "a"*** *and* ***path "b"***

Factors/Variables	Estimate
Service Recovery	**,827**
Customer Satisfaction	**,711**

In the light of this information that we have evaluated and analyzed above, the findings of the research of our hypotheses ***(H1, H2, H3 and H4)***, which is the research subject in question, which is designed in the context of determining the effects of Service Recovery in the mediator role of the effect of recreation in service quality on customer satisfaction. The discussion of the results achieved regarding the issue is summarized below:

4. DISCUSSION

The hypotheses of the research were tested using the SEM-based analysis of the IBM AMOS 24 program. Considering the data obtained from the subjects, the Maximum Likehood*(ML)* calculation method was preferred and the drawings of the covariance matrices were carried out.

The accuracy of the firstlevel multifactor DFA measurement model, which consists of recreation, Service Recovery and customer satisfaction variables in service quality and shown in Figure 3. It has been determined that the goodness of fit index values of the accuracy test of the DFA measurement model are not well fitting or acceptable compliant as expected. In this context, covariance plots on the Failure variances of the observed variables of the service quality recreation variable, customer satisfaction and Service Recovery variables were drawn on the DFA measurement model in the context of model development. As a result of retesting the DFA measurement

model; *(X^2[182 N=395] =657.155; p< .01; X^2/sd=3.611; SRMR=.051, CFI= .919, NNFI/TLI=.906, IFI= .919)* goodness of fit index and threshold values It was determined that the three variable measurement model had acceptable compatibility with the data. In this context, it has been determined that the factors of *recreation in service quality, Service Recovery and customer satisfaction*, which constitute our measurement model, are confirmed in terms of theoretical structure.

After the accuracy of the mediated model, which is the subject of our research, was determined, our research hypotheses *(H1, H2, H3 and H4)*, which were built on the mediated structural model, were tested. First, we tested our *H1* hypothesis on the model in Figure 6. As a result of the SEM test and analysis results; since it was determined that recreation in service quality predicted customer satisfaction *(β=.78;p<.01)*, it was seen that *H1 hypothesis(c way: Recreation in Service Quality→Customer Satisfaction)was supported*. However, although it was seen that our *H1* hypothesis was supported in terms of the *"c"* path as seen in Figure 6 and Table 3, the path from the recreation factor in service quality to customer satisfaction was included in the mediated structural model as seen in Figure 7, as a result of the test *(p)*value was found to be meaningless, and the path coefficient was *(.11)*. In this determination, it has been determined that the *H1 hypothesis(c' path: Recreation in service quality → Customer satisfaction)* in the sense of *" c' "* path *is not supported (rejected)*.

For testing the other hypotheses *(H2, H3, and H4)*, a mediated structural model, which is presented in Figure 7 above, was created as a separate model in which the Service Recovery variable is the mediator. As a result of the analysis of the mediated structural model created, it was determined that recreation in service quality predicted Service Recovery*(β=.91; p< .01)*. In this sense, it was seen that the *H2 hypothesis(path a: Recreation in service quality → Service Recovery)was supported*. In addition, it was determined that the independent variable in the mediated structural model, the recreation factor in service quality, explained the change in Service Recovery*(83%)*.

As a result of the test analysis performed on the same model in Figure 7; it was found that Service Recovery predicted customer satisfaction *(β=.75; p< .01)*. In this context, it was seen that *hypothesis H3(path b: Service Recovery →Customer satisfaction)was supported*.

In the mediated structural model, path analysis was carried out in line with the bootstrap method to test whether Service Recovery acts as a mediator between recreation in service quality and customer satisfaction. In addition, in the analysis performed with the bootstrap method, *5000* sample options were selected and used. As a result of the test and analysis carried out, the standardized indirect effect value of the recreation variable in service quality on the customer satisfaction variable was determined as *(.679)*. Detected *(.679)* standardized indirect effect value; for supporting the relevant *H4* hypothesis in the mediating role effect status analysis performed using the bootstrap method, it should be among the *95% (GA)* values reached at the end of the test analysis. In this sense, it was determined that the standardized indirect effect value *(.679)* was between bootstrap confidence interval values *(β=.679, %95GA[.330, .945])*. Based on this determination, it has been determined that the indirect effect of recreation in service quality on customer satisfaction through Service Recovery has a positive and significant effect. In this sense, it has been determined that Service Recovery plays a mediator role between recreation in service quality and customer satisfaction. As a result of this determination, it has been seen that *H4 hypothesis* (path b: *in the situation where Service Recovery is mediated*/recreation in service quality → Service Recovery → customer satisfaction) *is supported*. In addition, it has been determined that the Service Recovery variable in the mediated structural model explains the change in customer satisfaction *(71%)* together with recreation in service quality.

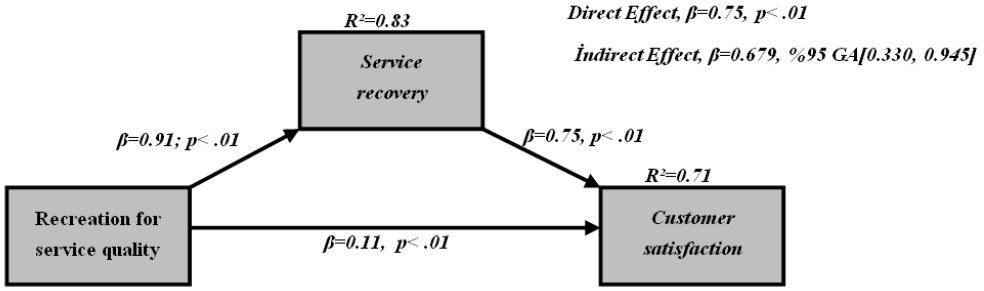

Figure 8. SEM Analysis Results

The hypotheses reached regarding whether the hypotheses ***(H1, H2, H3, and H4)***, which were formed in the context of the research study and presented in Figure 5 and constructed on the mediated research model, were supported (accepted/rejected) are presented in Table 8 below.

Table 8. *Status of Acceptance and Rejection Results of the* ***(H1, H2, H3 and H4)*** *Hypotheses Constructed Regarding the Research Study*

Hypotheses	***Impact (Relationship) Status Between Variables***	***Accept/Reject***
H1(path c / except structural model)	*Recreation in Service Quality →Customer Satisfaction*	*Accepted.*
H1(path c' /included in structural model)	*Recreation in Service Quality →Customer Satisfaction*	***Rejected.***
H2(path a)	*Recreation in Service Quality →Service Recovery*	*Accepted.*
H3(path b)	*Service Recovery →Customer Satisfaction*	*Accepted.*
H4(path b /in case of being mediation of structural model)	*Recreation in Service Quality →Service Recoveryi → Customer Satisfaction* ***(indirect/mediatoreffect status)***	*Accepted.*

5. CONCLUSION

In research, necessary tests and analyzes have been made regarding the intermediary role of Service Recovery in customer satisfaction of recreation in terms of service quality, which is especially important for businesses operating in the service sector.

In this study, our hypotheses *(H1, H2, H3, and H4)* were determined by creating a mediated measurement model related to our research. When the effect of recreation in service quality on customer satisfaction is examined; in our mediated measurement model, it has been determined that the Service Recovery, which is the mediator, is not included in the model and that the recreation in service quality, which is shown in Figure 6 and expressed as the *"c"* way, has a positive and significant effect on customer satisfaction *(cway: Recreation in service quality → Customer satisfaction)*. This finding is in parallel with the findings of previous studies in the literature (Şirin and Aksu, 2016; Bucak and Özarslan, 2016; Baştürk and Sağlık 2020).

When the effect of recreation in service quality on customer satisfaction is examined by including the Service Recovery, which is an intermediary/mediator between recreation in service quality and customer satisfaction, into the model; it has been determined that recreation in service quality, which is shown in Figure 7 and expressed as *"c'"* way, has a negative and meaningless effect on customer satisfaction *(c' way: Recreation in service quality → Service Recovery → Customer Satisfaction)*. In our previous

statement, we expressed that the recreational activities and activities offered in the context of service quality have a positive effect on the customer, as the *"c"* way. However, the inclusion of Service Recovery, which is an intermediary in our model, reduces the positive and significant effect of recreation on customer satisfaction in terms of service quality *(c' way / in the situation where Service Recovery is mediated / Recreation in service quality → Service Recovery → Customer satisfaction)*, resulting in customer satisfaction as a result of Service Recovery. It has been concluded that it has a more positive and significant effect.

When the effect of recreation in service quality is examined; it has been determined that recreation in service quality has a positive and significant effect on Service Recovery *(path a: Recreation in Service Quality → Service Recovery)*.

In addition, it was determined that the change in the service quality of the recreation in our related model explained the change in the Service Recovery *(83%)*.

When the effect of Service Recovery on customer satisfaction is examined; it has been determined that Service Recovery has a positive and significant effect on customer satisfaction *(path b: Service Recovery → Customer satisfaction)*. This finding is consistent with other research findings in the literature (Öztürk and Yılmaz, 2020; Tarakçı and Göktaş, 2020). Service Recovery provides customer satisfaction by creating a positive effect on customer satisfaction.

In the examination of the mediator role of the Service Recovery factor, which is the mediator between recreation in service quality and customer satisfaction; it has been determined that Service Recovery has a positive and significant effect by mediating the relationship between recreation in service quality and customer satisfaction *(path b: when Service Recovery is a mediator/recreation in service quality → Service Recovery → customer satisfaction)*. In addition, it was determined that Service Recovery explained the change in customer satisfaction *(71%)* together with recreation in service quality. It has been concluded that although recreation has a direct effect on customer satisfaction in the sense of "c" way, it does not have a direct effect in terms of *"c'"* way. This result has reached the conclusion that Service Recovery should be a tool to realize the effect of recreation in service quality on customer satisfaction. Because, in the case of recreation in service quality, it has been seen that the indirect effect on customer satisfaction is

positive and significantly higher, but the direct effect has a negative and insignificant effect.

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