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No Wind is Favorable Unless the Sailor is Participative: Customer Participation in Marina Services

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Abstract

Marinas are essential for tourism as a customized service, which, in turn, necessitates active customer cooperation. This study investigates the participation behavior of customers in marina service delivery and aims to determine the facilitating factors and consequences of customer participation (CP). A questionnaire survey was performed to evaluate the perception of marina users (i.e., boat owners or captains) who received service from full-service private marinas. The collected data were analyzed using the generalized linear model. The empirical results showed that customer self-efficacy and customer affective trust are significant facilitating factors, and actionable participation is the most essential dimension of CP substantially impacting customer cocreated value. Moreover, "experience at sea" and "marina region" are the factors with high control effects on the relationships between CP, self-efficacy, trust, and cocreated value.

Keywords: Marina services, Customer participation, Service-dominant (S-D) logic, Value cocreation, Generalized linear model (GLM)

1. Introduction

Marinas are the most significant infrastructure facilities of marine tourism, which are defined as facilities operated for commercial purposes by public institutions or private enterprises located on the shores, providing shelter primarily for recreational boats at sea or on land with a mooring fee [1]. The Yacht Harbor Association defines marinas as facilities that provide leisure and recreational yachts with berthing space, have walkways for direct access to each boat, always have a sufficient water depth (including tide times), and offer car parking, shower-toilet, and other service units [2]. At present, marinas are becoming facilities where a wide variety of services, such as social life opportunities, shopping, sports, and health, are also offered. Compared with other types of services, marina services have highly sophisticated specifications, which require the utmost professionalism. Meeting the expectations of customers in marina services is becoming more difficult day by day because the competition is rapidly escalating [3]. Consequently, the involvement of the customer in the service processes and understanding their needs and expectations in marinas are vital details to be able to offer qualified services, create value for customers, and sustain long-term customer relations [4,5].

Customers' involvement in the service processes, also known as customer participation (CP), has long been the focus of attention in service research as it is the source of significant and valuable results for both the users and providers of the service [6,7]. CP refers to the involvement of service users in service processes by adding effort, knowledge, time, and other inputs [8,9]. CP provides productivity gains, improved quality, and customer satisfaction [10,11]. Therefore, as service-dominant (S-D) logic indicates, the customer can be considered an active resource participating in value creation. Customers are value cocreators along with service providers, and the value they create together is mostly realized and becomes prominent during service usage [12,13]. Therefore, service users' participation behaviors need to be examined to establish long-term sustainable relationships and create a shared value. Although many

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studies on CP, particularly on tourism and accommodation businesses (e.g., [14-17]), have been conducted, research in the field of marine tourism and marinas, which are one of the most important accommodation facilities, is limited. Hence, this study attempts to explore the CP concept in the marina industry and investigates the enablers and consequences of the participation behaviors of marina users. Quantitative research including constructs, such as customer trust, customer self-efficacy, CP, and customer cocreated value, was conducted with controlled variables, such as the region of the marina, customers' boat type, and customers' total experience at sea. This study aims to shed a light on the CP concept in the context of marina service delivery and provide feasible suggestions for marina service providers to ensure the participation of customers and achieve a cocreated value through service provision.

The succeeding section presents the theoretical background focusing on the constructs and proposes several hypotheses. Then, the methodology of this study and the results of the hypotheses are introduced. Subsequently, the methodology and results are discussed, highlighting the implications for theory and practice. Finally, the limitations and future research directions are provided.

2. Theoretical Background and Hypotheses

2.1. CP and Customer Trust

Ensuring the participation behavior of customers is among the basic principles of S-D logic [13]. This concept is the main theory of this research. It is "a service-centered alternative to the traditional goods-centered paradigm for understanding economic exchange and value creation that has been identified as an appropriate philosophical foundation for the development of service science" (p. 32) [18]. According to this principle, the customer has a participatory role and contributes to the service encounter as a value creator [13,19,20]. CP has been the sphere of interest in this research concerning service encounters for a long time. Chan et al. [21] explained CP as "the extent to which customers provide/share information, make suggestions, and become involved in decision-making" (p. 49). Effective CP increases the likelihood of meeting customers' expectations and needs by enabling the customers to obtain the benefit they are looking for [22]. In addition to increased quality levels, higher customized service and desired benefits enable customers to realize higher cocreated value levels about the service delivery [6,23]. Chen and Raab [24] divide CP behavior into three groups, namely, informational, attitudinal, and actionable. Informational participation means that the customer makes an effort to obtain information about the services from several sources. Attitudinal participation involves the customer's behavior toward the service provider during service encounters, such as being cooperative and friendly. Actionable participation explains the customer's tendency to ask questions or intervene in the service delivery process [24].

Customer trust is a building block of relationships and plays an important part in relationship commitment [25]. If the customer is convinced that the service provider is truthful and candid, then they will be willing to participate in their service delivery and provide information about their expectations regarding their needs [26,27]. Consistent with S-D logic, tangible and intangible resources are exchanged between customers and service providers, and trust between these two parties is a necessary component of their relationship [28]. Trust enhances customers' willingness to participate and cooperate in the service delivery process [29,30]. Furthermore, Etgar [31] argued that, if the service provider does not exhibit opportunistic behavior according to customers' perception, then this will encourage the customers to participate more in coproduction processes. The study conducted by Luk et al. [26] showed that customer trust in service organizations encourages customers to become a part of service production/delivery processes and that customers also contribute to value creation and efficiency by using the service. Shen et al. [32] empirically demonstrated that trust enhances the perceived cocreated value of customers and their willingness to participate.

In marina marketing settings, customer relations and active contact with customers are substantial [4], and customer trust can be an important antecedent concept that leads marina users to increase their participation. For this reason, in this study, the effect of customer trust on the customers' tendency to participate in marina service delivery processes will be investigated. Customer trust is divided into two groups, namely, cognitive and affective. "Cognitive trust" in a firm might have its roots in the knowledge and competencies of the service provider [33], whereas "affective trust" is based on customer evaluations consistent with service experiences and represents emotion-driven confidence in a service organization [34,35]. The following hypotheses were proposed:

H1: Customer trust positively affects CP behavior.

H1a: Affective trust positively affects (1) attitudinal, (2) informational, and (3) actionable participation behaviors.

H1b: Cognitive trust positively affects (1) attitudinal, (2) informational, and (3) actionable participation behaviors.

2.2. CP and Customer Self-efficacy

Self-efficacy is "a judgment of one's capability to accomplish a certain level of performance" (p. 94) [36]. Self-efficacy represents the customers' judgments of their capabilities to

perform a task in service production and delivery processes [37,38]. Thus, while maintaining effective relationships and cocreating value consistent with S-D logic, these factors need to be considered during service exchanges [39,40]. This concept has also been empirically measured as an enabler of CP behavior. For instance, Chen and Raab [24] advocated that self-efficacy significantly influences customers' participation behaviors. Chen et al. [41] also measured the facilitating effect of customer self-efficacy on the dimensions of CP and empirically demonstrated that participation behavior is significantly facilitated by self-efficacy. According to Im and Qu [15], having a greater self-efficacy encourages customers to participate, and the link between customer knowledge and cocreation is mediated by self-efficacy. Zhao et al. [42] empirically demonstrated that customer self-efficacy enhances the perceived value of customers and their eagerness to voluntarily be a part of value creation activities. Moreover, marina services belong in the luxury service group, and most of their users already have extensive knowledge about these services, which may lead to an increase in their self-efficacy perceptions. This high perception of self-efficacy can lead service users to participate more. Therefore, the following hypotheses were proposed:

H2: Self-efficacy positively affects CP behavior.

H2a: Self-efficacy positively affects attitudinal participation behavior.

H2b: Self-efficacy positively affects informational participation behavior.

H2c: Self-efficacy positively affects actionable participation behavior.

2.3. Customer Participation and Customer Cocreated Value

From a customer-oriented approach, cocreated value refers to "a personal appraisal of the meaningfulness of a target (product or service, further referred to as service) based on what is contributed and what is realized through the process of cocreation" (p. 70) [43]. As a result of service experience and service usage, the value is perceived and cocreated by customers [26,44,45]. Prior studies have empirically demonstrated the facilitating effect of participation behavior from customers on cocreated value in service delivery [6,46]. The study conducted by Chan et al. [21] is among the pioneering research that evaluates the relationship between CP and customer value creation. They demonstrated the positive effects of CP on economic and relational values. Similarly, Chen and Wang [47] reported the positive effects of CP on both intrinsic (enjoyment) and extrinsic (relational and economic) value types. Taheri et al. [16] also proposed two different cocreated value concepts, i.e., economic and relational value, similar to the categories in the study conducted by Chan et al. [21], and demonstrated the influence of CP on the cocreated value of customers. Chen and Chen [48] also reported the influence of customers' participation behavior on relational value as a cocreated customer value in the service delivery process.

Marina services are expensive services; therefore, customers adopt a more participatory approach to obtain more economic value. Furthermore, given that the time spent in the marina is generally for leisure activities, customers need to enjoy themselves during that time and have a good relationship with the marina service providers. Thus, customers are more likely to participate in service delivery processes. In summary, the cocreated value of marina customers may be an outcome of their participation behavior, and this value probably includes economic benefits and relational bonds [21,49]. Thus, the following hypotheses were proposed:

H3: CP behavior positively affects customer cocreated value.

H3a: Attitudinal participation behavior positively affects (1) economic and (2) relational values.

H3b: Informational participation behavior positively affects (1) economic and (2) relational values.

H3c: Actionable participation behavior positively affects (1) economic and (2) relational values.

3. Methodology

3.1. Survey Development and Measures

To measure the research constructs, items were adopted from previous studies. The participation behavior of customers was measured according to the scale developed by Chen and Raab [24]. The scale is composed of three subdimensions, namely, informational participation, actionable participation, and attitudinal participation, with each subdimension having three items. The customer trust scale of Schumann et al. [50] was used to measure the trust of marina service users. Their scale has two subdimensions, namely, cognitive trust and affective trust. Each dimension has four items. Customer self-efficacy was borrowed from Chen and Raab [24] and measured with three items. Finally, the customer cocreated value was measured according to the scale used in the study conducted by Yim et al. [38]; the scale has 12 items and reflects the two components of cocreated value, namely, economic and relational (Figure 1).

All items were measured using a five-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (5). This study also has four control variables involving the region of the marina from which the customer obtains services, the customer's boat type, and the customer's total experience at sea. Ethical approval for this study was waived

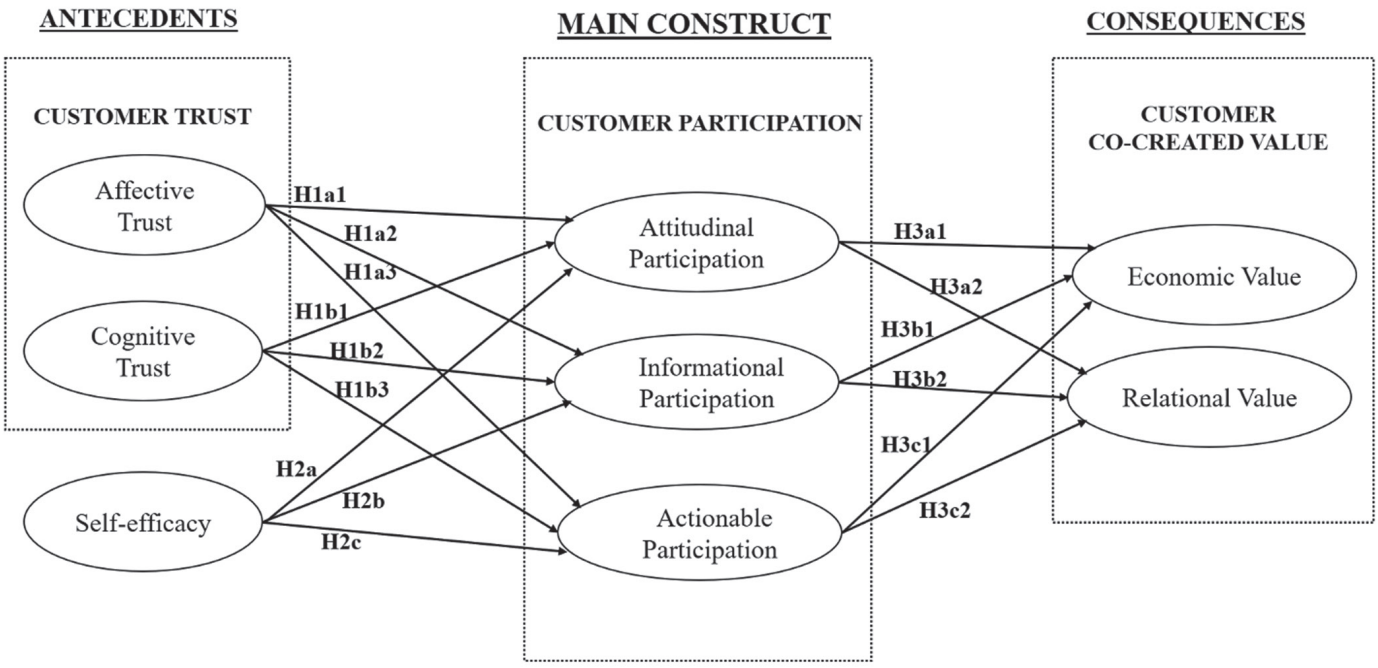

Figure 1. *Conceptual model of the main study*

by the Dokuz Eylül University Ethical Committee (approval number: 87347630/42104268/1079).

3.2. Sampling and Data Collection

The sample for this study consists of marina users (i.e., boat owners or captains) who received service from full-service private marinas on the Western Coast of Türkiye between Ayvalik and Fethiye. In 2021, approximately 70% of the 152,765 yachts and 60% of the yachtsmen and crew (a total of 1,231,254 people) arrived in the country and visited the marinas in this region [51]. A large number of marinas were visited for this study. However, the companies did not want to share any information about the number of yachts moored or the yachts with captains. Given that this information is not recorded anywhere, a judgmental (purposive) sampling technique, which is one of the non-probability sampling methods, was employed in this study. In this method, the researchers include elements with certain characteristics that they consider suitable for research purposes based on their observations [52,53]. Therefore, the most well-known regions where the most intense yachting activities occur in Türkiye between Ayvalık and Fethiye were visited. While walking around the marina area, the answers of the people identified as receiving services from the marina and determined to have a level of knowledge about the services were included in this study.

Most of the marinas visited are in Muğla, and the 14 largest marinas in the country are in the Marmaris, Bodrum, and Fethiye-Göcek districts of this province. This city has a capacity of approximately 7,000 yachts, whereas Türkiye has a total mooring capacity of 24,000 both onshore and at sea. Furthermore, the North and Middle Aegean Marinas located in the provinces of Aydın, İzmir, and Balıkesir, which are also visited, have become essential attraction centers for yachting activities, particularly with the recently opened facilities. This information also supports our purposive sampling method. Questionnaire collection was conducted in 12 marinas (Appendix 1). The first researcher visited these marinas between January and April of 2020 within the scope of her Ph.D. dissertation. The survey collection process was conducted face-to-face and online with the kind support of the marina managers and other employees. The survey was answered in approximately 10-15 min.

The listwise deletion (complete case analysis) technique is used to handle missing data [54,55]. Thus, 19 responses to the questionnaire collected from participants were removed, resulting in a total of 602 usable questionnaires in the final data set: 120 from Marmaris Marinas, 120 from Bodrum Marinas, 152 from Fethiye-Göcek Marinas, 210 from North and Middle Aegean Marinas (Aydın-İzmir-Balıkesir/Ayvalık).

Among the 602 respondents, 84.39% (n=508) are male and 15.61% (n=94) are female. A total of 511 respondents (84.88%) are Turkish, whereas 91 (15.12%) respondents are from other nationalities (i.e., British, Russian, and Italian). Of the respondents, 32.72% (n=197) declared that they are high school graduates, whereas 41.86% (n=252) graduated from a vocational higher school or university. Of the respondents, 19.44% (n=117) have Master's and

Doctorate degrees. In terms of age distribution, as shown in Table 1, the majority of the participants (46.35%) are over 46 years old.

4. Analysis and Results

Before hypothesis testing, reliability and validity analyses of the survey were performed. A normality test was performed using the Kolmogorov-Smirnov test to obtain the scale scores. Because the scale scores were not normally distributed, nonparametric analyses were conducted. Spearman's rho correlation was used for relational analysis. The generalized linear model (GLM), a nonparametric regression analysis, was also used to identify causality relationships between the constructs and test the hypotheses.

As mentioned previously, the parameters were distorted because of contradictory observations. Although outliers were excluded from this study, parametric methods did not produce an appropriate analysis, but nonparametric regression provided a solution [56]. This regression method, which is the opposite of the parametric approach, tried to analyze the relationships between dependent and independent variables without considering any functional form of the model [57]. This regression method was first introduced by Nelder and Wedderburn [58], and it is an extension of the GLM. Moreover, this regression method broadens the scope of linear statistics usage by "accommodating response variables with non-normal conditional distributions" [59]. GLM is a generalization of classical linear models. In other words, this model associates a nonlinear population with a linear predictor that has a link function. This model also ensures the exponential distribution of dependent variables [60]. Thus, GLM consists of three main components [58,59]:

Table 1. *Demographic characteristics of the sample*

Variable	Category	Frequency (N=602)	Percentage (%)
Age	18-24	29	4.82
	25-31	73	12.13
	32-38	110	18.27
	39-45	111	18.44
	46 and above	279	46.35
Gender	Female	94	15.61
	Male	508	84.39
Nationality	Turkish	511	84.88
	Other	91	15.12
Education	Elementary school	36	5.98
	High school	197	32.72
	Vocational higher school	73	12.13
	Undergraduate	179	29.73
	Postgraduate	117	19.44

(i) *A dependent variable* (random component or expected response) that has an exponential distribution (Y_i).

(ii) *A set of independent variables* called a linear predictor:

$\eta_i = \alpha + \beta_1 X_{i1} + \ldots + \beta_k X_{ik}$.

The expected value μ_i of Y_i depends on it. X denotes the transformation of predictors, such as polynomial terms and logarithmic alterations.

(iii) *A linking function* (*mean function*) that changes the expectation of the dependent variable to the linear predictor (independent variable):

$g(\mu_i) = \eta_i$.

Confirmatory factor analysis (CFA) was performed using AMOS 24.0. Other analyses were performed using SPSS 25.0 for Windows at a 95% confidence interval.

4.1. Assessment of Normality

The Kolmogorov-Smirnov test was used to assess the distributional adequacy of the collected data [61]. The normality test analysis results indicated that not all scale parameter distributions were normally distributed, as shown in Appendix 2 ($p<0.05$). The normality of the data is a requirement for the parametric tests. Thus, one of the nonparametric tests, i.e., generalized linear regression, was used in hypothesis analysis [62].

4.2. Reliability and Validity of the Scales

To measure reliability, Cronbach's alpha and composite reliability (CR) values were calculated in this study. The Cronbach's alpha values of the scales ranged from 0.654 to 0.925, indicating reliability that is within acceptable limits [63,64]. Moreover, the reliability of each item was revealed by item-total correlation. All of the values of the items in the questionnaire were not less than 0.3, which is the recommended cutoff value [65]. In the beginning, for the affective dimension of the trust scale, Cronbach's alpha level was 0.237, which was unacceptable for reliability. Scales of items with deleted results showed that item 2 in the affective dimension caused a reduction of internal consistency, as shown in Appendix 3. Thus, Item 2 for the affective scale dimension (AFT_2: "This marina pursues predominantly egoistic aims") was excluded from the scale; consequently, the value increased to 0.796. Furthermore, CR values were calculated to evaluate the internal consistency of the scales [66,67]. CR values ranging from 0.78 to 0.91 were also greater than the recommended threshold level of acceptance (i.e., 0.70) [68].

CFA and average variance extracted (AVE) calculations were performed to confirm the validity of the constructs [63]. As shown in Appendix 4, the fit indices of each variable have

acceptable values. Because of the lack of subdimensions, goodness-of-fit indices could not be calculated individually for the customer self-efficacy scale (Appendix 4) [69]. The CFA results of this study are presented in Table 2. The factor loadings ranged from 0.538 to 0.910 and provided an acceptable level, which is 0.5 [63]. The CFA findings also supported the decision to reduce the item of affective trust (Item 2). The factor weight of Item 2 (AFT2) was -553, which was less than the acceptable level. Moreover, the findings confirmed that all AVE values of the scales ranged from 0.55 to 0.72, which were greater than the cutoff value [66,68].

Table 2. *Confirmatory factor analysis results*

Constructs and items	Factor loading	S.E.	t value	p	Cronbach's alpha	CR	AVE
Customer trust					**0.908**		
Affective trust					0.796	**0.82**	**0.61**
AFT1	0.735	-	-	-			
AFT3	0.711	0.071	15.985	***			
AFT4	0.836	0.064	18.038	***			
Cognitive trust					0.925	**0.91**	**0.72**
COGT1	0.869	-	-	-			
COGT2	0.908	0.032	31.346	***			
COGT3	0.903	0.033	31.007	***			
COGT4	0.800	0.034	24.817	***			
Customer self-efficacy					**0.762**	**0.864**	**0.679**
SE1	0.649	-	-	-			
SE2	0.862	0.103	12.298	***			
SE3	0.657	0.074	12.899	***			
Customer participation					**0.756**		
Attitudinal participation					0.771	**0.85**	**0.66**
CPAT1	0.615	-	-	-			
CPAT2	0.910	0.089	13.812	***			
CPAT3	0.722	0.062	13.984	***			
Informational participation					0.713	**0.82**	**0.63**
CPINF1	0.548	-	-	-			
CPINF2	0.697	0.135	10.741	***			
CPINF3	0.785	0.152	10.657	***			
Actionable participation					0.654	**0.782**	**0.55**
CPAC1	0.538	-	-	-			
CPAC2	0.624	0.120	9.824	***			
CPAC3	0.737	0.107	9.594	***			
Customer cocreated value					**0.900**		
Economic value					0.830	**0.84**	**0.63**
ECOV1	0.799	-	-	-			
ECOV2	0.730	0.063	18.402	***			
ECOV3	0.852	0.053	21.641	***			
Relational value					0.892	**0.88**	**0.70**
RELV1	0.875	-	-	-			
RELV2	0.810	0.039	24.677	***			
RELV3	0.889	0.035	28.445	***			

*p<0.001

All items were measured using the five-point Likert scale (1= strongly disagree; 5= strongly agree). CR: Composite reliability, AVE: Average variance extracted

4.3. Hypothesis Testing

In this study, H1, H2, and H3 were analyzed. To test these hypotheses, the Wald test of the concentration parameter is used to estimate the (approximate) p value [70].

4.3.1. Influence of Customer Trust on CP Behavior

The GLM findings regarding H1 are shown in Tables 3 and 4. Affective customer trust significantly and positively affected attitudinal (*B*=0.260; p<0.01), informational (*B*=0.144; p<0.01), and actionable (*B*=0.193; p<0.01) participation behaviors. The regression coefficients also indicated that the greatest impact was on attitudinal participation behavior, followed by actionable and informational participation behaviors. Two categories of experience (i.e., 3-5 and 9-11 years) and one category of marina region (i.e., Marmaris) significantly influenced the relationship between affective trust and attitudinal participation (p<0.05). Furthermore, the first category of experience (i.e., 2 years and below) positively influenced the relationship between affective trust and informational participation (p<0.05).

The results also indicated that cognitive customer trust significantly and positively influenced the attitudinal (*B*=0.15; p<0.01) and actionable (*B*=0.12; p<0.01) dimensions of CP, whereas the effect on informational participation was insignificant (p>0.01). Moreover, the control variable results indicated that two categories of experience (i.e., 3-5 and 9-11 years) and two categories of marina region (i.e., Marmaris and Ayvalık) had significant

Table 3. *Generalized linear model (GLM) results for affective trust and subdimensions of customer participation (CP)*

Parameter	Attitudinal				Informational				Actionable			
	B	**Std. error**	χ^2	**p**	**B**	**Std. error**	χ^2	**p**	**B**	**Std. error**	χ^2	**p**
(Intercept)	10.86	0.34	993.323	0.000	9.434	0.5386	306.813	0.000	10.431	0.4128	638.389	0.000
[Experience 1] (2 years and below)	0.01	0.32	0.001	0.977	1.198	0.5013	5.711	**0.017**	-0.286	0.3842	0.555	0.456
[Experience 2] (3-5 years)	-0.58	0.20	8.284	**0.004**	-0.412	0.3124	1.740	0.187	-0.228	0.2395	0.909	0.340
[Experience 3] (6-8 years)	-0.10	0.20	0.249	0.617	0.461	0.3121	2.186	0.139	-0.155	0.2393	0.418	0.518
[Experience 4] (9-11 years)	-0.60	0.20	9.213	**0.002**	-0.053	0.3091	**0.029**	0.864	0.180	0.2369	0.578	0.447
[Experience 5] (12 years and above)	0[a]	.	.	.	0[a]	.	.	.	0[a]	.	.	.
[Type 1] (M/Y)	0.06	0.16	0.158	0.691	-0.023	0.2463	**0.009**	0.925	0.223	0.1888	1.393	0.238
[Type 2] (S/Y)	0[a]	.	.	.	0[a]	.	.	.	0[a]	.	.	.
[Region 1] (Bodrum)	0.09	0.20	0.210	0.647	0.232	0.3133	**0.546**	0.460	-0.212	0.2402	0.781	0.377
[Region 2] (Fethiye-Göcek)	0.25	0.19	1.687	0.194	0.027	0.2990	**0.008**	0.929	-0.408	0.2292	3.168	0.075
[Region 3] (Marmaris)	-0.51	0.20	6.591	**0.010**	0.092	0.3106	**0.087**	0.768	-0.065	0.2381	0.074	0.786
[Region 4] (Ayvalık)	0.39	0.25	2.425	0.119	0.565	0.3910	2.086	0.149	0.539	0.2997	3.236	0.072
[Region 5] (İzmir-Aydın)	0[a]	.	.	.	0[a]	.	.	.	0[a]	.	.	.
CT affective	**0.260**	**0.03**	**99.206**	**0.000**	**0.144**	**0.0400**	**12.937**	**0.000**	**0.193**	**0.0307**	**39.448**	**0.000**
(Scale)	2.583[b]	0.15			6.315[b]	0.3640			3.710[b]	0.2139		

Dependent variable(s): CP_Attitudinal, CP_informational, CP_actionable

Model: (Intercept), Experience, Position, Type, Region, CT_affective

[a]Reference category, [b]Maximum likelihood estimate

effects on the relationship between affective trust and attitudinal participation (p<0.05). One category of marina region (i.e., Ayvalık) also significantly influenced the relationship between cognitive trust and actionable participation (p<0.05). Consequently, sub-hypotheses H1a1, H1a2, H1a3, H1b1, and H1b3 were supported, whereas sub-hypothesis H1b2 was rejected.

4.3.2. Influence of Customer Self-efficacy on CP Behavior

Table 5 shows that self-efficacy significantly and positively impacted attitudinal (*B*=0.498; p<0.01), informational (*B*=0.294; p<0.01), and actionable (*B*=0.447; p<0.01) participation. The most significant effect was on attitudinal participation, followed by actionable and informational participation. The control variables indicated that the fourth category of experience (i.e., 9-11 years) and the second category of marina region (i.e., Fethiye-Göcek) significantly influenced the relationship between self-efficacy and attitudinal participation (p<0.05).

The first category of experience (i.e., 2 years and below) also significantly and positively influenced the relationship between self-efficacy and informational participation (p<0.05). Thus, the sub-hypotheses of H2 were supported.

4.3.3. Influence of CP Behavior on Customer Cocreated Value

The customer attitudinal participation and subdimensions of customer cocreated value results are shown in Table 6. Customer attitudinal participation was positively correlated with economic (*B*=0.414; p<0.01) and relational (*B*=0.545; p<0.01) dimensions of customer cocreated value. The regression coefficients proved that its influence on relational value is higher than that on economic value. Moreover, no categories of control variables affect the way attitudinal participation and customer cocreated value are related (p>0.05). Consequently, sub-hypotheses H3a1 and H3a2 were supported.

Table 7 shows the causality relationship between customer informational participation and subdimensions of customer cocreated value. Informational participation positively influenced the economic (*B*=0.164; p<0.01) and relational (*B*=0.216; p<0.01) dimensions of customer cocreated

Table 4. *GLM results for cognitive trust and subdimensions of CP*

Parameter	Attitudinal				Informational				Actionable			
	B	**Std. error**	χ^2	**p**	***B***	**Std. error**	χ^2	**p**	***B***	**Std. error**	χ^2	**p**
(Intercept)	11.49	0.35	1,073.285	0.000	10.28	0.54	366.706	0.000	10.86	0.41	693.096	0.000
[Experience 1] (2 years and below)	-0.03	0.33	0.008	0.929	1.18	0.51	5.484	0.019	-0.32	0.39	0.662	0.416
[Experience 2] (3-5 years)	-0.56	0.21	7.483	**0.006**	-0.39	0.32	1.512	0.219	-0.22	0.24	0.833	0.361
[Experience 3] (6-8 years)	-0.08	0.21	0.157	0.692	0.49	0.31	2.398	0.122	-0.14	0.24	0.346	0.556
[Experience 4] (9-11 years)	-0.66	0.20	10.474	**0.001**	-0.09	0.31	0.074	0.785	0.14	0.24	0.322	0.571
[Experience 5] (12 years and above)	0[a]	.	.	.	0[a]	.	.	.	0[a]	.	.	.
[Type 1] (M/Y)	0.00	0.16	0.001	0.981	-0.05	0.25	0.047	0.829	0.17	0.19	0.812	0.367
[Type 2] (S/Y)	0[a]	.	.	.	0[a]	.	.	.	0[a]	.	.	.
[Region 1] (Bodrum)	0.04	0.21	0.033	0.856	0.26	0.32	0.647	0.421	-0.26	0.24	1.117	0.291
[Region 2] (Fethiye-Göcek)	0.34	0.20	3.037	0.081	0.09	0.30	0.098	0.755	-0.34	0.23	2.145	0.143
[Region 3] (Marmaris)	-0.66	0.21	10.475	**0.001**	0.03	0.31	0.010	0.919	-0.18	0.24	0.581	0.446
[Region 4] (Ayvalık)	0.59	0.26	5.337	**0.021**	0.67	0.39	2.920	0.087	0.69	0.30	5.274	**0.022**
[Region 5] (İzmir)	0[a]	.	.	.	0[a]	.	.	.	0[a]	.	.	.
CT cognitive	**0.15**	**0.02**	**59.352**	**0.000**	**0.05**	**0.03**	**3.115**	**0.078**	**0.12**	**0.02**	**25.874**	**0.000**
(Scale)	2.739[b]	0.16			6.417[b]	0.37			3.790[b]	0.22		

Dependent Variable(s): CP_Attitudinal, CP_informational, CP_actionable

Model: (Intercept), Experience, Position, Type, Region, CT_cognitive

[a]Reference category, [b]Maximum likelihood estimate

Table 5. *GLM results for customer self-efficacy and subdimensions of CP*

Parameter	Attitudinal				Informational				Actionable			
	B	**Std. error**	χ^2	**p**	***B***	**Std. error**	χ^2	**p**	***B***	**Std. error**	χ^2	**p**
(Intercept)	6.986	0.5268	175.872	0.000	7.077	0.8651	66.914	0.000	6.920	0.6452	115.015	0.000
[Experience 1] (2 years and below)	0.120	0.3027	0.158	0.691	1.264	0.4970	6.463	**0.011**	-0.192	0.3707	0.269	0.604
[Experience 2] (3-5 years)	-0.132	0.1901	0.482	0.488	-0.153	0.3121	0.241	0.624	0.137	0.2328	0.344	0.557
[Experience 3] (6-8 years)	-0.037	0.1882	0.040	0.842	0.496	0.3091	2.574	0.109	-0.110	0.2305	0.228	0.633
[Experience 4] (9-11 years)	-0.578	0.1866	9.602	**0.002**	-0.039	0.3064	0.016	0.899	0.203	0.2285	0.791	0.374
[Experience 5] (12 years and above)	0[a]	.	.	.	0[a]	.	.	.	0[a]	.	.	.
[Type 1] (M/Y)	-0.082	0.1489	0.300	0.584	-0.107	0.2445	0.193	0.661	0.104	0.1823	0.328	0.567
[Type 2] (S/Y)	0[a]	.	.	.	0[a]	.	.	.	0[a]	.	.	.
[Region 1] (Bodrum)	0.154	0.1884	0.665	0.415	0.263	0.3094	0.721	0.396	-0.178	0.2308	0.594	0.441
[Region 2] (Fethiye-Göcek)	0.564	0.1802	9.807	**0.002**	0.209	0.2959	0.499	0.480	-0.156	0.2207	0.498	0.480
[Region 3] (Marmaris)	-0.357	0.1879	3.608	0.058	0.183	0.3086	0.350	0.554	0.066	0.2302	0.083	0.773
[Region 4] (Ayvalık)	0.297	0.2362	1.583	0.208	0.506	0.3879	1.702	0.192	0.447	0.2893	2.387	0.122
[Region 5] (İzmir)	0[a]	.	.	.	0[a]	.	.	.	0[a]	.	.	.
Self-efficacy	**0.498**	**0.0365**	**185.540**	**0.000**	**0.294**	**0.0600**	**23.938**	**0.000**	**0.419**	**0.0447**	**87.708**	**0.000**
(Scale)	2.300[b]	0.1326			6.204[b]	0.3576			3.451[b]	0.1989		

Dependent variable(s): CP_Attitudinal, CP_informational, CP_actionable

Model: (Intercept), Experience, Position, Type, Region, Self-efficacy

[a]Reference category, [b]Maximum likelihood estimate

value. Therefore, sub-hypotheses H3b1 and H3b2 were also supported. However, the control variables did not significantly impact the relationship between customer informational participation and customer cocreated value ($p>0.05$).

The results for actionable participation indicated its significant positive impact on the economic (B=0.522; $p<0.01$) and relational (B=0.505; $p<0.01$) cocreated values (see Table 8). The regression coefficients verified that the influence of actionable participation on relational value is lower than that on economic value. Furthermore, no categories of control variables affected the way actionable participation and customer cocreated value were related ($p>0.05$). Thus, H3c and its sub-hypotheses H3c1 and H3c2 were supported.

5. Discussions and Theoretical Implications

In this section, the findings will be discussed, and theoretical and managerial implications will be provided. Similar to that of a previous study [50], our findings showed that cognitive trust significantly and positively influences attitudinal participation and actionable participation. However, the findings emphasize that there is no causal relationship between cognitive trusting belief and informational participation. Thus, the cognitive trusting belief of marina users based on the knowledge and competencies of the marina service provider does not influence the tendency of the customer to share more information with the marina.

Our findings significantly confirmed that the emotion-based confidence of marina users led them to exhibit three types of participation behaviors. Affective trust has a positive impact on attitudinal, informational, and actionable participation. In summary, as previous studies also advocated [42,50], by obtaining the trust of their customers, marinas can attain CP in service delivery. For instance, Alves and Mainardes [71] demonstrated that customers' level of trust increases as customers become a part of service delivery more willingly. In the virtual brand community context, Zhihong et al. [72] proposed that customer trust positively affects the knowledge-sharing-related and coproduction-related behaviors of the customers. Schumann et al. [50] empirically demonstrated that cognitive trust directly affects the

Table 6. *GLM results for attitudinal participation and subdimensions of customer cocreated value*

Parameter	Economic value				Relational value			
	B	**Std. error**	χ^2	**p**	***B***	**Std. error**	χ^2	**p**
(Intercept)	5.734	0.8688	43.560	0.000	4.277	0.8303	26.532	0.000
[Experience 1] (2 years and below)	0.733	0.5055	2.102	0.147	0.643	0.4831	1.774	0.183
[Experience 2] (3-5 years)	0.591	0.3160	3.495	0.062	0.089	0.3020	0.087	0.768
[Experience 3] (6-8 years)	0.491	0.3145	2.437	0.119	0.214	0.3005	0.507	0.477
[Experience 4] (9-11 years)	-0.024	0.3141	0.006	0.940	-0.010	0.3001	0.001	0.975
[Experience 5] (12 years and above)	0[a]	.	.	.	0[a]	.	.	.
[Type 1] (M/Y)	0.216	0.2484	0.759	0.384	0.300	0.2374	1.598	0.206
[Type 2] (S/Y)	0[a]	.	.	.	0[a]	.	.	.
[Region 1] (Bodrum)	0.390	0.3149	1.536	0.215	0.200	0.3009	0.440	0.507
[Region 2] (Fethiye-Göcek)	0.219	0.3014	0.526	0.468	0.105	0.2881	0.133	0.715
[Region 3] (Marmaris)	0.272	0.3149	0.746	0.388	-0.050	0.3009	0.027	0.869
[Region 4] (Ayvalık)	0.074	0.3948	0.035	0.851	-0.151	0.3773	0.159	0.690
[Region 5] (İzmir)	0[a]	.	.	.	0[a]	.	.	.
CP attitudinal	**0.414**	**0.0595**	**48.224**	**0.000**	**0.545**	**0.0569**	**91.660**	**0.000**
(Scale)	6.423[b]	0.3702			5.866[b]	0.3381		

Dependent variable(s): CCrt economic value, CCrt relational value

Model: (Intercept), Experience, Position, Type, Region, CP attitudinal

[a]Reference category, [b]Maximum likelihood estimate

Table 7. *GLM results for informational participation and subdimensions of customer cocreated value*

Parameter	Economic value				Relational value			
	B	**Std. error**	χ^2	**p**	***B***	**Std. error**	χ^2	**p**
(Intercept)	9.611	0.5486	306.897	0.000	9.389	0.5361	306.689	0.000
[Experience 1] (2 years and below)	0.539	0.5212	1.069	0.301	0.388	0.5093	0.581	0.446
[Experience 2] (3-5 years)	0.451	0.3233	1.947	0.163	-0.095	0.3159	0.090	0.764
[Experience 3] (6-8 years)	0.403	0.3234	1.553	0.213	0.098	0.3160	0.097	0.756
[Experience 4] (9-11 years)	-0.280	0.3198	0.767	0.381	-0.347	0.3125	1.236	0.266
[Experience 5] (12 years and above)	0[a]	.	.	.	0[a]	.	.	.
[Type 1] (M/Y)	0.235	0.2549	0.852	0.356	0.325	0.2491	1.701	0.192
[Type 2] (S/Y)	0[a]	.	.	.	0[a]	.	.	.
[Region 1] (Bodrum)	0.456	0.3229	1.991	0.158	0.286	0.3156	0.822	0.365
[Region 2] (Fethiye-Göcek)	0.368	0.3084	1.426	0.232	0.302	0.3013	1.006	0.316
[Region 3] (Marmaris)	0.037	0.3215	0.013	0.908	-0.359	0.3141	1.303	0.254
[Region 4] (Ayvalık)	0.196	0.4047	0.235	0.628	0.011	0.3954	0.001	0.978
[Region 5] (İzmir)	0[a]	.	.	.	0[a]	.	.	.
CP informational	**0.164**	**0.0417**	**15.428**	**0.000**	**0.216**	**0.0408**	**27.947**	**0.000**
(Scale)	6.764[b]	0.3899			6.459[b]	0.3723		

Dependent Variable(s): CCrt economic value, CCrt relational value

Model: (Intercept), Experience, Position, Type, Region, CP informational

[a]Reference category, [b]Maximum likelihood estimate

participation behavior of financial service customers. Luk et al. [26] also demonstrated that customer trust in service organizations encourages customers to become a part of service production/delivery processes and that customers also contribute to value creation and efficiency using the service. Moreover, value cocreation can be developed after establishing trust between the parties [73,74].

Table 8. *GLM results for actionable participation and subdimensions of customer cocreated value*

Parameter	Economic value				Relational value			
	B	**Std. error**	χ^2	**p**	***B***	**Std. error**	χ^2	**p**
(Intercept)	4.834	0.6844	49.893	0.000	5.395	0.6779	63.335	0.000
[Experience 1] (2 years and below)	0.886	0.4831	3.363	0.067	0.792	0.4785	2.741	0.098
[Experience 2] (3-5 years)	0.474	0.3007	2.484	0.115	-0.093	0.2979	0.098	0.754
[Experience 3] (6-8 years)	0.532	0.3004	3.137	0.077	0.252	0.2975	0.720	0.396
[Experience 4] (9-11 years)	-0.367	0.2978	1.518	0.218	-0.436	0.2949	2.187	0.139
[Experience 5] (12 years and above)	0[a]	.	.	.	0[a]	.	.	.
[Type 1] (M/Y)	0.125	0.2375	0.278	0.598	0.216	0.2352	0.843	0.358
[Type 2] (S/Y)	0[a]	.	.	.	0[a]	.	.	.
[Region 1] (Bodrum)	0.543	0.3003	3.268	0.071	0.390	0.2974	1.721	0.190
[Region 2] (Fethiye-Göcek)	0.537	0.2873	3.497	0.061	0.473	0.2846	2.757	0.097
[Region 3] (Marmaris)	0.094	0.2993	0.099	0.753	-0.299	0.2964	1.019	0.313
[Region 4] (Ayvalık)	-0.043	0.3772	0.013	0.909	-0.184	0.3736	0.241	0.623
[Region 5] (İzmir)	0[a]	.	.	.	0[a]	.	.	.
CP actionable	**0.522**	**0.0496**	**110.663**	**0.000**	**0.505**	**0.0492**	**105.702**	**0.000**
(Scale)	5.860[b]	0.3378			5.749[b]	0.3314		
Dependent variable(s): CCrt economic value, CCrt relational value Model: (Intercept), Experience, Position, Type, Region, CP actionable [a]Reference category, [b]Maximum likelihood estimate								

Consistent with other studies [15,71], higher self-efficacy belief encourages customers to undertake more tasks, and their eagerness to be a part of cocreation increases accordingly. Our results confirmed that customer self-efficacy positively and significantly influences each subdimension of CP, i.e., attitudinal, actionable, and informational. This finding is partially contradictory to the results of Chen et al. [41]. They empirically demonstrated that self-efficacy significantly and positively influences attitudinal and actionable participation but does not significantly affect informational participation. Similarly, attitudinal participation was the most affected dimension in their findings. The findings of this research were also consistent with extant literature that propose that marina users with high confidence in their capabilities are more willing to participate in service delivery. Customers with higher self-efficacy beliefs are likely to undertake responsibilities, and their eagerness to participate in cocreation activities increases like other customer types [15,75]. To maintain effective relationships and cocreate values consistent with S-D logic, self-efficacy in service delivery needs to be considered [39,40]. Thus, mutual and interactive relationships between customers and marina organizations can be achieved, and they can cocreate values in service delivery interactions.

This study shows that CP behavior positively influences customer cocreated value. Our research findings indicate a positively significant causal relationship between all types of CP and subdimensions of customer cocreated value as economic and relational values. Attitudinal and actionable participation strongly influence the economic and relational value perceptions of customers, whereas informational participation affects the two value categories relatively less. This outcome is consistent with other findings. Prior studies emphasize the significant and positive influence of CP on the cocreated relational (e.g., [48]) and economic (e.g., [23,47]) values. In the marina service context, the findings showed that marina users do not tend to communicate with other customers or service providers in gathering additional information about service delivery and contributing to the cocreated value. Marina users tend to participate actionably when they think it is required and significantly expected to cocreate economic and relational values. They also behave respectfully and in a friendly manner to the marina staff, and this behavior reveals cocreated economic benefits and relational bonds.

The control variables that were observed to have significant effects on the relationships in the regression analysis are "experience at sea" and "marina region." Furthermore, the regression analysis results indicated that the Marmaris region is important for the relationship between affective

trust and attitudinal participation. The same result was observed between cognitive trust and attitudinal participation. The reason for this conclusion is that the Marmaris region has a wide variety of customer profiles and has a more cosmopolitan structure than other regions in Türkiye. Thus, both affective and cognitive trust in this region significantly influence the attitudinal participation of the customer in a positive and significant manner. Furthermore, the group of customers with the least sailing experience (i.e., 2 years or less) significantly influences the way affective trust and informational participation are related. In other words, the emotion-based trust of customers with less experience causes them to participate more informationally. The customers in this group try to obtain more information and experience regarding the marina services. Similarly, the same customer group (i.e., having the least sailing experience) also influences how self-efficacy and informational participation relates to each other. In other words, the perception of self-efficacy of marina users with less sea experience leads them to informational participation.

6. Managerial Implications

This study has several implications for marina service providers and marina managers. First, this study defines customer self-efficacy as a significant antecedent for managerial purposes and establishes that customer trust affects different types of CP behaviors. Moreover, consistent with S-D logic, trusting belief is a vital component for creating value jointly. Cocreating value can be achieved only after establishing trust between parties [74]. To establish trust-based relationships, marina firms may consider setting resources aside for training and communication to improve the skills of their employees, such as developing their ability to establish long-term and mutually trusting relationships with customers. Marina management can benefit from the knowledge-sharing culture of the marina industry and obtain essential information as a source of strategic decisions to cocreate value with customers. That is, close contact and social interaction that ensure their participation during service delivery are vital in this industry. Marinas are advised to develop new methods to motivate their customers to participate and be a part of service delivery. As proposed in prior studies [76,77], the higher self-efficacy of customers generally ensures higher technology acceptance. Therefore, digital means of communication can be a useful tool for the marinas to be in regular contact, thereby creating value together with customers during service delivery. Furthermore, big data that can be used to determine customer behavior accumulated through these digital platforms can be managed effectively, and these data can be used in decision-making processes. The management of big data is of great significance for the firm to make strategic decisions to gain a competitive advantage [10]. Social media platforms (e.g., Instagram, Twitter, and Facebook), mobile marketing tools (e.g., mobile applications), and other related technological trends need to be used actively to enhance the participation behavior of customers as it is realized in other types of ports [78]. These satisfactory interpersonal interactions may encourage the customers to participate in service delivery to obtain favorable consequences collaboratively.

7. Limitations and Future Research

This study was conducted in the Western Coast Regions of Türkiye, which are the most well-known regions where the most intense yachting activities occur. Future studies should focus on the marina users from the Marmara and Mediterranean regions of Türkiye. In this study, only two customer-related factors and an outcome were involved as antecedents and a result of CP, respectively. Some other factors should also be considered in future research. For instance, culture, which stands out as an antecedent of CP behavior, should be investigated. People from various cultures spend time at marina facilities and exhibit different participation behaviors. As reported by Yi and Gong [46], Koc et al. [79], and Paker and Gok [27], in future studies, the scope of the work can be expanded across borders, and the quantitative data in this study can be compared with future findings abroad. This research has approached CP from a customer-oriented viewpoint. However, other studies have examined the concept from an employee's viewpoint or a dyadic perspective (e.g., [21,80]), and further research may also involve the marina employees' perceptions to provide a similar dyadic perspective. The CP concept has also been analyzed from a positive viewpoint; however, it may sometimes cause value co-destruction (e.g., [81,82]) or employee job stress because of a large amount of work (e.g., [80,83]). Therefore, future research needs to investigate the issue from a negative perspective and evaluate the negative consequences of participation in marina service delivery.

This study was performed on a group of similar people, which caused the data to be less diversified. This study inferred that the non-normal distribution of the data can be attributed to the characteristics of the marina industry. Furthermore, not only did the data fail to meet the multivariate normality requirement but the subdimensions also restrained the emergence of existing relationships. Analyzes were performed with a variance-based structural equation model (i.e., PLS-SEM), which provides flexibility in the assumption of normality. However, on account of several subdimensions of the variables, the reliability and validity values did not exhibit acceptable levels. Thus, the relationships of variables

in the model were examined in a binary manner using the GLM although future studies may focus on diverse methods of analysis. In future studies, the mediating role of CP can be examined by determining the antecedent and outcome variables with fewer subdimensions. Furthermore, during survey collection, the number of female participants was increased as much as possible but could not be achieved. In particular, women who spent time in the marina were reluctant to answer the questionnaire. Considering this situation, in future studies, methods to encourage women's participation can be explored.

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Concept design: E. Koç, D.A. Deveci, C. Yıldırım; Data Collection or Processing: E. Koç, C. Yıldırım; Analysis or Interpretation: E. Koç, D.A. Deveci, C. Yıldırım; Literature Review: E. Koç; Writing, Reviewing, and Editing: E. Koç, D.A. Deveci, C. Yıldırım.

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Appendix 1. *Questionnaire items*

Customer trust
Cognitive trust
• This marina knows how to provide excellent service.
•This marina is competent and has considerable expertise.
•The quality of the marina's services is high.
•Overall, this marina is experienced.
Affective trust
•The intentions of this marina are benevolent.
• This marina pursues predominantly egoistic aims.
• This marina acts in my best interest.
• This marina aims to help me.
Customer self-efficacy
• I know how to use the services of the marina.
• I know how to deal with employees at the marina.
• I know what I expect to receive from the marina.
Customer participation
Attitudinal participation
• I tried to be cooperative with the marina staff.
• I am friendly to the marina staff.
• I respect the marina staff.
Informational participation
• I consider other customers' views about the marina.
• I spend time searching for information about the marina.
• I ask people I know for their opinions about the marina.
Actionable participation
• I intervene when I feel that something is not right when dining in the marina.
• I openly discuss questions and concerns with the marina staff.
• I ask if I do not know how to obtain service in the marina.
Customer cocreated value
Economic value
My participation in the service processes helps me to:
• Receive higher quality services.
• Receive more customized services.
• Receive more control over the service quality.
Relational value
My participation in the service processes helps me to:
• Build a better relationship with the service provider.
• Receive relational approval from the service provider.
• Connect better with the service provider.

Appendix 2. *Normality analysis results of the Kolmogorov-Smirnov test for scales*

	Mean	**Service-dominant**	**Kolmogorov-Smirnov**	**p**
Self-efficacy	13.57	1.75	0.246	0.000
CT affective	11.73	2.60	0.137	0.000
CT cognitive	16.05	3.60	0.149	0.000
CT total	27.78	5.68	0.107	0.000
CP attitudinal	13.67	1.80	0.263	0.000
CP informational	11.54	2.58	0.127	0.000
CP actionable	12.71	2.01	0.139	0.000
CP total	37.93	4.73	0.076	0.002
CCrt economic	11.81	2.67	0.144	0.000
CCrt relational	12.21	2.63	0.164	0.000
CCrt total	24.03	4.89	0.114	0.000
CP: Customer participation, CT: Customer trust, CCrt: Customer cocreation				

Appendix 3. *Reliability analysis results*

Constructs and items	Scale mean if the item is deleted	Scale variance if the item is deleted	Corrected item-total correlation	Cronbach's alpha	Cronbach's alpha if the item is deleted
Customer trust				**0.908**	
Affective trust				0.237	
AFT1	9.6395	2.990	0.392		-191[a]
AFT2	11.7259	6.772	-0.482		0.796
AFT3	10.3040	2.358	0.459		-0.423[a]
AFT4	9.8870	2.663	0.506		-0.386[a]
Cognitive trust				0.925	
COGT1	12.1561	7.327	0.819		0.905
COGT2	12.0498	7.389	0.865		0.889
COGT3	12.1346	7.185	0.857		0.891
COGT4	11.8140	8.039	0.763		0.922
Customer self-efficacy				**0.762**	
SE1	9.0781	1.523	0.558		0.724
SE2	9.0000	1.454	0.667		0.598
SE3	9.0581	1.609	0.561		0.717
Customer participation				**0.756**	
Attitudinal participation				0.771	
CPAT1	9.2625	1.429	0.544		0.792
CPAT2	9.0814	1.519	0.712		0.574
CPAT3	9.0050	1.845	0.600		0.710
Informational participation					

Appendix 4. *Results of the goodness-of-fit indices*

	Customer trust	Customer participation	Customer cocreated value	Recommended values
χ^2/df	3.859	4.672	4.708	≤5
RMSEA	0.069	0.078	0.079	≤0.08
GFI	0.977	0.960	0.980	≥0.80
AGFI	0.950	0.926	0.947	≥0.80
SRMR	0.029	0.044	0.022	≤0.10
	χ^2=50.172, *df*=13, p=0.000	**χ^2=112.132, *df*=24, p=0.000**	**χ^2=37.665, *df*=8, p=0.000**	