



# Relationship Between Online Shopping Service Recovery and Customer Behavior from the Perspective of Consumer Forgiveness

Jinxin Ge

Chinese Graduate School, Panyapiwat Institute of Management, Nonthaburi, Thailand.

E-mail: [0917760187annie@gmail.com](mailto:0917760187annie@gmail.com)

Received: 17 February 2023; Revised: 16 January 2024; Accepted 10 February 2024

© The Author(s) 2024

## Abstract

The Chinese online shopping environment is still in the stage of growth, the business mode of online retail is not so mature, the online consumers often will suffer failed service or product problems. The online retailer unavoidable to recover for the service to online consumers frequently, consequently, this study would make an empirical analysis of the relationship between service recovery and customer behavior in light of the characteristics of online shopping, which has great significance in enhancing service recovery performance. The study theoretically analyzes the relationship between service recovery, service fault attribution, consumer forgiveness, and customer behavior, and proposes the research hypothesis to build the theoretical mode of service recovery that affects customer behavior. This study makes the consumers who have experienced the fault services as the research target, and collects data by the method of the questionnaire, finally, it applied the SPSS23.0 to count and analyze whether the hypothesis is founded or not, also, there would be a discussion for the result of the empirical analysis. The result of the final empirical analysis indicates that service recovery would have a positive impact on the intention of the consumer's behavior, consumer forgiveness would have a partial mediation effect between the service recovery and the intention of the consumer behavior, at the same time, it also could mediate the relationship between the consumer forgiveness and the intention of the consumer behaviors, though, the fault service attribution has no significant moderating effect on the influence of psychological remedy on consumer forgiveness.

**Keywords:** Online-shopping; Service recovery; Consumer behavior; Consumer forgiveness

## 1. THE BACKGROUND OF THE RESEARCH

Dated to June 2022, the population of Chinese Internet users is up to 1011 million, contrary to December 2022, which increases by 21 million 750 thousand, the Internet penetration rate accounts for 71.6%. With the spurring development of Internet shopping, it

is widely spread for Internet service failure. From October 20 to November 16, 2022, the city's consumer protection commission system received 17342 online shopping complaints, compared with the last year, which has added up to 52.8%. The top complaints of online shopping commodities are clothing, shoes, and hats (2238 pieces), household goods (1135 pieces), and cosmetics (1027 pieces). The understanding complaints about online shopping services are express delivery (1383 pieces), membership card sales (707 pieces), catering, and accommodation (705 pieces).

It is inestimable to the loss of online sellers due to the frequent service failures, it not only brought about a decline in profits but resulted in image damage. Therefore, after the service failures, it is significant to carry out prompt and effective measures. In terms of the sellers, the cost of maintaining repeated customers and developing new customers is 2:1, and the proportion of E-commerce is 3:1. After service failure, the key to preventing customers from switching is to give them sincere commitment. The organization that could make the service recovery successful is not only to keep the old customer, and enhance benefits but strengthen the relationship with customers. Better customer relationship for enterprises is intangible resources and they could give a unique competitive edge to the organization.

## 1.2 Research purposes

The study based on the Attribution Theory tries to build a theoretical model of the relationship between service recovery, service failure attribution, and customer behavior intention, and empirically check the relationship between the three attributed to online shopping customer survey data. Given the S-O-R theory, which indicates that prompt and effective service recovery measures could initiate the perception of consumers, for example, consumers' forgiveness in this study, which could further affect the behavior intention of the object, that is to say, the intention of the consumer subsequent. Hence, the article based on the situation of online shopping failure explores how service recovery strategies affect consumer behavior intention, which introduces the intermediary mechanism of consumer forgiveness and discusses the role of forgiveness in this model, moreover, it also introduces the attribution of service failure as a moderator variable to explore the different effects of consumers "forgiveness" emotions in service recovery due to different reasons for online shopping businesses' failures.

## 2. RESEARCH HYPOTHESIS

The study may focus on the variables involved in this article: service recovery, consumer forgiveness, service fault attribution, and consumer behavior intention may spread out the definition of the concept, and according to the arrangement of relevant literature based on the above review, the relevant assumptions among variables, and constructs an impact model of service recovery strategies on consumer behavior intention from the perspective of forgiveness.

### 2.1 Service Recovery with the Consumer Behavior Intention

Customer churn can be said to be a mountain that hinders the sustainable and steady development of many companies. Zeithaml et al. (1996) found that appropriate and effective remedial measures can greatly increase the enthusiasm of consumers, and then promote the willingness to purchase again while improving consumers' perception of the enterprise's identity. Jin Liyin (2005) believes that in the process of service recovery, the role of front-line service personnel is very important. Service personnel immediately uphold a responsible attitude and sincere apology can effectively improve the effect of service recovery and increase

the willingness to repurchase. Zhang Shengliang & Zhang Wenguang (2009) pointed out that the initiative of enterprise service recovery can effectively stimulate the enthusiasm of consumers and effectively promote consumers to purchase again. Based on the above viewpoints, this study puts forward the following hypothesis:

- H1a: Tangible compensation positively affects repurchase intention
- H1b: Response speed positively affects repurchase intention
- H1c: Psychological remedy positively affects repurchase intention
- H1d: Remediation initiative positively affects repurchase intention

## **2.2 Service Recovery with Consumer Forgiveness**

Sun Naijuan & Sun Yuxin (2017) found that after a company's product crisis, giving economic compensation can lead to higher consumer forgiveness. After experiencing service failure, the most direct loss for consumers is the loss of economic interests. Consumers are more willing to exchange similar economic resources to make up for losses. Therefore, it can be inferred that tangible compensation can bring consumers forgiveness.

Fletcher & Hart (1990) found that enterprises can quickly respond to service recovery is very critical, the tolerance threshold of individual consumers is different, and they have their trade-offs for service recovery time, so the response speed is too slow and the recovery time is too long Will aggravate customer complaints and negative emotions of customers. This study speculates that response speed will have the same effect after a service failure occurs, so this study argues that response speed has a positive impact on consumer forgiveness.

Psychologically, an apology is considered to be one of the most effective ways to heal the injured and generate forgiveness, and an apology is considered to be the most powerful measure to bring about consumer forgiveness in the service recovery process. After a merchant experiences any service crisis, an apology is usually considered the first step in remedial action. From the perspective of consumers, the enterprise can consciously take the relevant responsibilities and feel sincere regret for its mistakes. Customers who feel hurt can feel the sincerity of the company and have empathy for the service quality of the company. Therefore, it can be said that an apology can weaken the impact of service failures. Based on this, this study argues that apology positively affects consumer forgiveness.

The study found that only 5%-10% of consumers will complain if they encounter a service failure, and the remaining consumers choose to bear it by themselves, and some serious behavior changes may occur. Therefore, businesses to be active and proactive. No matter whether they complain or not, the merchants who provide services take the initiative to remedy, so that consumers can see their attitude and determination to remedy. Therefore, this study believes that initiative has a positive impact on consumer forgiveness.

Based on the above viewpoints, this study puts forward the following hypothesis:

- H2a: Tangible compensation positively affects consumer forgiveness
- H2b: Response speed positively affects consumer forgiveness
- H2c: Psychological remediation positively affects consumer forgiveness
- H2d: Remedial initiative positively affects consumer forgiveness

## **2.3 Consumer Forgiveness with Customer Behavior Intention**

Tsarenko (2015) pointed out that if marketers can get a certain degree of forgiveness from customers, the number of repurchase customers may increase; if customers can forgive the service provider's service failure, they will continue to choose the service provider to provide

services in the future. Forster et al. (2020) found through research that consumer forgiveness can bring many substantial results, such as reconciliation between buyers and sellers, building a stronger relationship, and less negative word of mouth.

Therefore, merchants can provide timely and effective service remedies, and some consumers can eliminate their negative emotions, generate empathy, and finally give up the willingness to switch products and negative word-of-mouth communication, and replace them with continuous purchase intentions and positive word-of-mouth communication. Based on the above viewpoints, this study puts forward the following hypothesis:

H3a: Consumer forgiveness positively affects repurchase intention

H3b: Consumer forgiveness positively affects positive word-of-mouth communication

#### **2.4 The Mediation Role on Consumer forgiveness**

According to the S-O-R theory, the remedial strategy stimulates the consumer individual and stimulates the inner perception of the consumer subject, which will further affect the subject's behavioral intentions, such as purchase intentions.

Magnini et al. (2007) believe that consumer forgiveness is the key to service recovery, and any remedial measures taken by merchants are to make up for service failures and obtain forgiveness from consumers, to encourage them to purchase again. Tan Lian (2013) demonstrated through empirical research that consumer forgiveness plays a mediating role between the quality of online service recovery and customer loyalty. Customer repurchase and positive word-of-mouth communication are a form of customer loyalty. Tsarenko et al. (2019) believe that consumer forgiveness is an important motivation node for giving up retaliation after the service recovery process. Based on the above viewpoints, this study puts forward the following hypothesis:

H4a: Consumer forgiveness plays a mediating role in the impact of tangible compensation on repurchase intention

H4b: Consumer forgiveness plays a mediating role in the impact of response speed on repurchase intention

H4c: Consumer forgiveness plays a mediating role in the effect of psychological remediation on repurchase intention

H4d: Consumer forgiveness plays a mediating role in the effect of the remedial initiative on repurchase intention

H4e: Consumer forgiveness plays a mediating role in the impact of tangible compensation on positive word-of-mouth

H4f: Consumer forgiveness plays a mediating role in the effect of response speed on positive word-of-mouth

H4g: Consumer forgiveness plays a mediating role in the effect of psychological remediation on positive word-of-mouth

H4h: Consumer forgiveness mediates the effect of the remedial initiative on positive word-of-mouth

### **3. MODEL CONSTRUCTION**

Based on the above definitions of the four constructors and research assumptions, the research model of this article is constructed: according to S-O-R theory, people will have a definite psychological effect after being stimulated by the environment, when receiving positive stimulus, which will have intimate behavior. As an external stimulus (S), appropriate service recovery will stimulate the consumer's inner perception (O), that is, consumer forgiveness,

which would further influence the subject’s behavior intention (R), then, the consumer’s subsequent behavior intention.

4.RESEARCH METHODS

The empirical research tool used in this paper is SPSS23.0. Firstly, the pre-investigation small sample data reliability and model rationality test were carried out; then the empirical analysis was carried out on the final collected 500 effective samples, including descriptive statistics analysis, reliability analysis, individual and overall model validity analysis, verification of mediation effect, To verify the moderating effect, the hypothesis of variable relationship in the study is finally verified.

5.RESEARCH RESULTS

The study with the S-O-R theory and forgiveness theory as the theoretical basis defined consumer forgiveness as the research perspective, which builds the model of online shopping recovery, and introduces moderating variable service failure attribution to explore its impact before and after consumer forgiveness. During the stage of the survey, 500 valid samples were obtained through questionnaires survey, and the hypothesis relationship was formalized using correlation analysis and regression analysis.

All assumptions in this article are discussed according to the results of regression analysis, and the hypothesis test results are the following:

**Table 1** The analysis results of relevance

Variables	1	2	3	4	5	6	7
1Tangible compensaiton	1						
2 Reaction pase	.218* *	1					
3Psychological recovery	.230* *	.230* *	1				
4 Initiative	.248* *	.287* *	.220* *	1			
5 Consumer forgiveness	.402* *	.312* *	.387* *	.397* *	1		
6 repurchase intention	.403* *	.324* *	.386* *	.394* *	.553* *	1	
7 Positive public praise communication	.374* *	.322* *	.330* *	.333* *	.521* *	.463* *	1

\*\*There was significant correlation at the level of. 01 (bilateral).

Based on the relevant analysis table, the result shows: the relevant coefficient of tangible compensation, reaction pace, psychological recovery, initiative, consumer forgiveness, repurchase intention, and Positive public praise communication are respectively: the corresponding P values of 0.374, 0.322, 0.330, 0.333, 0.521 and 0.463 are all less than 0.01, with significant statistical importance, showing that tangible compensation, reaction pace, psychological recovery, initiative, consumer forgiveness, repurchase intention, and Positive public praise communication have an outstanding positive correlation.

**Table 2** Regression analysis of Internet service recovery on consumer forgiveness

Variables	Consumer Forgiveness
-----------	----------------------

	Model 1	Model 2	
Control variable	Sex	0.080	
	Age	0.053	
	Education	0.040	
	Occupation	0.032	
	Average monthly income	0.025	
	Online shopping experience	0.062	
	Tangible compensation		0.255***
Internet service recovery	Reaction pace		0.134**
	psychological recovery		0.243***
	Initiative		0.239***
R <sup>2</sup>	0.018	0.341	
After adjustment R <sup>2</sup>	0.005	0.326	
F	1.387	23.371***	

Note: \*\*\* (P<0.000) \*\* (P<0.01) \*(P<0.05)

The regression model is constructed by taking tangible compensation, reaction pace, psychological recovery, and initiative as independent variables and consumer forgiveness as dependent variables. The R-squared value of the model is 0.341, and the goodness of fit is 34.1%, greater than 20%, indicating that the goodness of fit is good and can explain the change in consumer forgiveness to a certain extent. In the F test, the F value is 23.371, and the significance value is 0.000<0.05, indicating that the model is effective. The standardized regression coefficient of the independent variable psychological recovery to consumer forgiveness is 0.243 (t=6.009, p=0.000), and the standardized regression coefficient of an independent variable initiative to consumer forgiveness is 0.239 (t=5.763, p=0.000), indicating that the independent variable tangible compensation, reaction pace, psychological recovery, initiative have significant positive effects on consumer forgiveness, so the hypothesis is valid.

**Table 3** Regression analysis of Internet service recovery on repurchase intention

variable	Repurchase intention		
	model 1	model 2	
control variable	Gender	0.029	0.003
	Age	0.043	0.016
	Education	0.059	-0.009
	Profession	0.074	0.035
	average monthly income	0.076	0.048
	online shopping experience	0.087	0.067
	tangible compensation		0.256***
Network Service Recovery	responding speed		0.150***
	psychological remedy		0.237***
	initiative		0.226***
R <sup>2</sup>	0.025	0.345	
Adjusted R <sup>2</sup>	0.013	0.331	
F	1.985	23.828***	

Note: \*\*\* (P<0.000) \*\* (P<0.01) \*(P<0.05)

The regression model is constructed by taking tangible compensation, reaction pace, psychological recovery, and initiative as independent variables and repurchase intention as

dependent variables. The R-squared value of the model is 0.345, and the goodness of fit is 34.5%, greater than 20%, which indicates that the goodness of fit is good and can explain the change of repurchase intention to a certain extent. In the F test, the F value is 23.828, and the significance value is  $0.000 < 0.05$ , indicating that the model is effective.

**Table 4** Regression analysis of consumer forgiveness on positive public praise communication

variable	Positive public praise communication		
	Model 1	Model 2	
Control variable	Sex	0.039	-0.002
	Age	0.085	0.058
	Education	0.074	0.054
	Occupation	0.030	0.013
	Average monthly income	0.079	0.066
	Online shopping experience	0.028	-0.004
Independent variable	Consumer forgiveness		0.514***
R <sup>2</sup>	0.023		0.282
After adjustment R <sup>2</sup>	0.01		0.271
F	1.763		25.553***

Note: \*\*\* (P<0.000) \*\* (P<0.01) \*(P<0.05)

The regression model is constructed by taking consumer forgiveness as the independent variable and Positive public praise communication as the dependent variable. The R-squared value of the model is 0.282, and the goodness of fit is 28.2%, greater than 20%, which indicates that the goodness of fit is good and can explain the change of Positive public praise communication to a certain extent. In the F test, the F value is 25.553, and the significance value is  $0.000 < 0.05$ , indicating that the model is effective.

**Table 5** The mediation role of consumer forgiveness in internet service recovery on repurchase intention

Variable	Repurchase intention		Consumer forgiveness	Join the Consumer Forgiveness	
	Model 1	Model 2	Model 3	Model 4	
Control variable	Sex	0.029	0.003	0.054	-0.015
	Age	0.043	0.016	0.025	0.008
	Education	0.059	-0.009	-0.029	0.000
	Occupation	0.074	0.035	-0.006	0.037
	Average monthly income	0.076	0.048	-0.004	0.049
	Online shopping experience	0.087	0.067	0.040	0.054
Independent variable	Tangible compensation		0.256* **	0.255***	0.174***

	Reaction pace	0.150*	**	0.134**	0.107**
	psychological recovery	0.237*	**	0.243***	0.158***
	Initiative	0.226*	**	0.239***	0.148***
Intermediary variable	Consumer forgiveness				0.324***
R <sup>2</sup>		0.025	0.345	0.341	0.414
After adjustment R <sup>2</sup>		0.013	0.331	0.326	0.400
F		1.985	23.828***	23.371***	29.024***

The independent variable tangible compensation, reaction pace, psychological recovery, and initiative can still significantly affect the dependent variable repurchase intention after adding the intermediary variable consumer forgiveness. Consequently, it can be concluded that consumer forgiveness has some mediating effects on tangible compensation, reaction pace, psychological recovery, and initiative on repurchase intention. Therefore, the assumption is valid.

**Table 6** The mediation role of consumer forgiveness in internet service recovery on customer behavior

Variable	Customer behavior			
	Model 1	Model 2	Model 3	
Control variable	Sex	0.040	0.010	-0.010
	Age	0.076	0.044	0.035
	Education	0.078	0.002	0.014
	Occupation	0.060	0.010	0.015
	Average monthly income	0.090	0.063	0.063
	Online shopping experience	0.067	0.052	0.033
Independent variable	Internet service recovery		0.631***	0.410***
Intermediary variable	Consumer forgiveness			0.387***
R <sup>2</sup>		0.031	0.418	0.518
After adjustment R <sup>2</sup>		0.018	0.409	0.509
F		2.401*	46.695***	60.873***

Note: \*\*\* (P<0.000) \*\* (P<0.01) \*(P<0.05)

The regression coefficient of the intermediary variable consumer forgiveness to the dependent variable customer behavior is ( $\beta = 0.387, p = 0.000$ ), and the independent variable internet service recovery can still significantly affect the dependent variable customer behavior after adding the intermediary variable consumer forgiveness. Therefore, it can be concluded that consumer forgiveness has a partial mediating effect on internet service recovery and customer behavior. Therefore, the assumption is valid.

## 6.CONCLUSION & DISCUSSION

The implementation of timely and effective remedial measures could build a systematic service recovery process and specification. Firstly, businesses could use big data and other technologies to establish a complete service recovery system to collect users'

information in advance, i.e. characteristics, preferences, consumption records, and other information, combined with the situation of relevant service failure to generate a reasonable and effective recovery plan at the first time, which can greatly improve the timeliness and accuracy of the remedy, thus causing consumers to forgive, reducing negative retaliation. It can also promote repurchase. For an organization that attaches significance to loyalty and reputation, consumer forgiveness is crucial. Secondly, in service recovery, adequate economic compensation should be given for customers' losses. With the results of this paper, the role of compensation in kind in service recovery is vital. Businesses can use big data and other technical means to provide targeted compensation in kind according to the user's individual preferences, and the compensation in kind should effectively cover the customer's losses. In addition to providing compensation in kind, it is also important to provide spiritual compensation (apology), respond positively and proactively, and deal with problems quickly.

#### Discussion

In the subsequent research, we can expand the scope of questionnaire distribution and distribution channels, such as offline paper questionnaire distribution, to expand the sample size, make the sample more consistent with the distribution of real users, and make the results more representative.

The questionnaire related to consumer forgiveness can be developed to make its measurement items closer to the consumer group. In empirical research, innovative research methods can also be used, the use of experimental methods, to let the interviewees experience the service failure situation and make judgments, to reduce the feeling lag and deviation caused by the post-review method.

In the e-commerce environment, there are many subjects and influencing factors involved in online shopping service failure. For example, the brand can be combined with the online platform to explore whether the store brand or the platform itself will have a greater impact on consumer forgiveness under the same remediation strategy. We can also explore whether different types of service failure will have an impact on consumer forgiveness under the same service recovery.

#### Reference

- Fletcher K, Hart S J. (1990). Marketing Strategy and Planning in the UK Pharmaceutical Industry: Some Preliminary Findings. *European Journal of Marketing*, 24(2):55-68.
- Forster, D. E., Billingsley, J., Russell, V. M., McCauley, T. G., Smith, A., Burnette, J. L., Ohtsubo, Y., Schug, J., Lieberman, D., & McCullough, M. E. (2020). Forgiveness takes place on an attitudinal continuum from hostility to friendliness: Toward a closer union of forgiveness theory and measurement. *Journal of Personality and Social Psychology*, 119(4), 861–880.
- Jin L.Y. (2005). Qualitative analysis of service failure reasons and remedial strategy effects based on critical event method. *Management Science*. (04): 63-70.
- Magnini, V. P., Ford, J. B., Markowski, E. P., & Honeycutt, E. D. (2007). The service recovery paradox: justifiable theory or smoldering myth?. *Journal of Services Marketing*.
- Newton, J. D., Tsarenko, Y., Ferraro, C., & Sands, S. (2015). Environmental concern and environmental purchase intentions: The mediating role of learning strategy. *Journal of Business Research*, 68(9), 1974-1981.
- Sun N.J. & Sun Y.X. (2017). Service recovery, empathy and consumer forgiveness: Model construction and empirical evidence from the perspective of attribution theory. *Forecast*. 3605:30-35.



- Tan L. (2013). *Research on the Influence of Online Shopping Service Remedial Quality on Customer Loyalty Based on Forgiveness Willingness*. (Doctoral dissertation, Huazhong University of Science and Technology).
- Tsarenko Y, Strizhakova Y, Otnes C C. (2019). Reclaiming the Future: Understanding Customer Forgiveness of Service Transgressions. *Journal of Service Research*. 22(2):139—155.
- Zeithaml V A, Berry L L, Parasuraman A. (1996). The Behavioral Consequences of Service Quality. *Journal of Marketing*, 60(2):31-46.
- Zhang S.I. & Zhang W.G. (2009). The impact of service recovery degree on consumer sentiment and behavioral intention. *Journal of Beijing Institute of Technology: Social Science Edition* (6), 8.