

Research on Mechanisms of Customer-Oriented Deviance on Brand Trust: The Mediating Roles of Perceived Benefit / Uncertainty and the Moderating Role of Customer Involvement

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Backgrounds and Aims: In the era of the service economy, the personalized needs of customers are increasing rapidly. It often occurs that frontline employees bend organizational rules to help customers. The study sought to explore the influence mechanism of specific dimensions of customer-oriented deviance on brand trust from the customer's perspective, examine the mediating role of perceived benefits and perceived uncertainty, and the moderating role of customer involvement in the process.

Methods: We conducted an online survey study in China from May 1 to 20, 2022. We use online survey questionnaire technique and random sampling method for data collection. Participants anonymously completed the measures of customer-oriented deviance scale, perceived benefits scale, perceived uncertainty scale, brand trust scale, and customer involvement scale.

Results: The results show that deviant service adaptation and deviant use of resources positively affect brand trust through the mediation of perceived benefits. In contrast, deviant service communication has a negative effect on brand trust through the mediation of perceived uncertainty. Furthermore, customer involvement plays a negative moderating role in the relationship between deviant service adaptation, deviant use of resources, and perceived benefits. Customer involvement plays a negative moderating role in the relationship between deviant service communication and perceived uncertainty.

Conclusion: Current results demonstrated that there is a double-edged sword effect of deviant customer-oriented behaviors on brand trust. Deviant service adaptation and deviant use of resources positively affect perceived benefits, and perceived benefits positively affect brand trust. Deviant service communication positively affects perceived uncertainty, and perceived uncertainty negatively affects brand trust. Customer involvement plays a negative moderating role in the above processes. This study enriches the study of customer psychological states of customer-oriented deviance, which helps managers use organizational resources rationally to guide and control different types of deviant customer-oriented behaviors effectively. It provides inspiration and references for management practice.

Keywords: customer-oriented deviance, perceived benefits, perceived uncertainty, brand trust, customer involvement

Introduction

In the era of the service economy, many businesses adhere to the motto “customer is God, customer-centric”, and understanding how to gain customers has turned into the key to an organization's competitiveness. Frontline employees are at the front line of service, and the service process influences customers' perception of the brand. Hence, companies advocate frontline employees to meet customers' needs and adopt customer-oriented behaviors. Customer orientation is the organization's and employees' commitment and responsibility to customers. The customer-oriented atmosphere can provide an autonomous and supportive work environment for employees, so employees will genuinely fulfill and assume their commitment and responsibility to customers and tap into and meet the diversified needs of customers.¹

However, in the face of customers' increasingly personalized needs, companies' normal service processes are sometimes unable to meet them. Frontline employees located at the organizational boundary interact with customers

frequently, have strong customer awareness and are more inclined to exhibit deviant behaviors in defense of customers' interests.² This kind of employee behavior to satisfy customer needs against organizational norms is called "customer-oriented deviance",³ which puts managers and employees in a dilemma. Managers must maintain the "iron rule" of the company while safeguarding the "goodwill" of the employees. On the one hand, employees must balance upholding organizational policies while also attending to the personalized needs of consumers on the other.

Customer-oriented deviance contains two contradictory qualities: a behavioral manifestation that undermines existing organizational norms and a behavioral motivation to defend customers' interests. Currently, scholars have different views on customer-oriented deviance. The affirmative view is that it can enhance customer consumption experience and increase customer satisfaction^{4,5} and improve service quality.^{6,7} The opposing view is that it can increase service costs and consume excessive organizational resources.^{8,9} Jung and Yoo¹⁰ found that customer-oriented deviance increases service friendship between employees and customers based on the principle of reciprocity. However, one study found that the probability of customer loyalty to employees translating into loyalty to the brand is less than 50%.¹¹ Hu et al¹² argued that customers who engage in customer-oriented deviance make positive comments about the service, which the potential risks have not been studied deeply enough. Some scholars also pointed out that deviant customer-oriented behaviors can cause customers to perceive unfairness and thus evaluate employees or companies negatively.¹³ Although scholars have elaborated their views from theoretical aspects, there are fewer empirical studies, and the discussion of customer response is still not enough.

Previous research on customer-oriented deviance has two limitations: first, research on the aftereffects of customer-oriented deviance has focused mainly on the internal aspects of the firm, with little attention paid to the reactions of customers and the external aspects of the market to this behavior. Secondly, research has focused on the constructive aspects of customer-oriented deviance and has not analyzed it in detail in specific dimensions. For customers as recipients of customer-oriented deviance, there is little evidence of how it affects their psychological states and subsequent behavioral responses to employees or organizations. Do employees' good intentions always result in good rewards? Customers' perception of "Present Buddha with borrowed flowers" should be considered.

This paper first scans the relevant articles to examine consumers' psychological states and behavioral reactions to customer-oriented deviance, exploring the mechanisms of the particular dimensions of customer-oriented deviance on brand trust. It examines the mediating role of perceived benefits and perceived uncertainty to explain the double-edged sword effect of customer-oriented deviance, and explores the moderating role of customer involvement in the process, which helps to comprehensively judge and distinguish the effects of different types of customer-oriented deviance.

Theoretical Background and Literature Review

Concept and Dimensions of Customer-Oriented Deviance

In early studies of deviant behaviors, employee deviance was often viewed as destructive and selfish negative behaviors, such as antisocial behaviors,¹⁴ workplace aggression,¹⁵ organizational retaliation.¹⁶ Many previous studies have argued that deviant behaviors reduce organizations' operational efficiency and disrupt firms' interpersonal harmony,^{17,18} so firms inhibit and avoid deviant behaviors. However, with the rise of positive organizational behaviors, researchers are increasingly focusing on the positive effects of deviant behaviors. Employees may commit some violations with positive intentions and also be able to bring positive effects to the firm, such as promoting innovation and change, creating an innovative organizational culture, and breathing new life into the organization.^{17,19,20}

Morrison²¹ first defined employee behavior that violates formal organizational rules or policies due to positive motivation as pro-social rule breaking and classified them into three types: rule breaking to perform one's responsibilities more efficiently, rule breaking to help a subordinate or colleague, and rule breaking to provide good customer service. Customer orientation refers to the behavior of frontline service workers to meet customer needs. Customer orientation can improve individual employee performance and increase customer satisfaction.^{22,23} However, frontline employees obsessed with customer benefits are likely to engage in behaviors that violate organizational regulations, such as offering excessive giveaways to customers and abusing discount privileges. Lam²⁴ referred to this behavior as excessive customer-oriented behavior, and Brady et al²⁵ affectionately referred to the behavior of frontline employees who offer

unauthorized free or discounted goods to friends or acquaintances as “service sweethearting”. On this basis, academics have begun to focus on the concept of “customer-oriented deviance” and explore this theoretically.

Based on the study of constructive deviance, pro-social rule breaking, and pro-customer behaviors in the workplace, Leo and Russell-Bennett³ first introduced customer-oriented deviance (COD) as a separate construct. Customer-oriented deviance was defined as “an out-of-role behavior exhibited by frontline employees who disregard supervisory expectations or rules through service adaptation, communication, or use of resources that primarily benefit the customer in interpersonal service encounters”. Leo and Russell-Bennett²⁶ used the critical incident technique method to explore three dimensions of customer-oriented deviance, which are deviant service adaptation(DSA), deviant use of resources(DUR), and deviant service communication(DSC) and developed a related scale.

(1) Deviant service adaptation is defined as “behaviors of frontline employees adapting service offerings or processes in ways they perceive defy expectations or rules of higher authority primarily to benefit customers”. For example, employees offer unofficial discounts to customers.²⁴

(2) Deviant use of resources is defined as “behaviors of frontline employees using their company’s human or physical resources to help customers in ways they perceive defy expectations or rules of higher authority”. Examples include employees spending extra time on customer matters and using company resources to meet customer needs.

(3) Deviant service communication is defined as “behaviors of frontline employees giving or sharing information with customers on products/services or the organization in ways they perceive defy expectations or rules of higher authority to primarily benefit customers”. It includes employees informing customers about the company’s inferior products or poor reputation and referring customers to its competitors.

Antecedents and Consequences of Customer-Oriented Deviance

Frontline employees adopt deviant customer-oriented behaviors based on multiple motivations, namely, “moral axiom drive”, “safeguarding organizational interests”, “interacting with customers”, “access to customer resources” and “gaining personal benefits”.²⁷ Previous research on customer-oriented deviance focused on the exploration of antecedent variables in four main categories: first, individual characteristics (empathy, risk-taking tendencies, values and beliefs, Etc.); second, job characteristics (job autonomy and role conflict, Etc.); third, organizational characteristics (industry categories and organizational climate); and fourth, customer factors (customer behaviors and interaction quality, Etc.).

Existing research on the aftereffects of customer-oriented deviance focuses on companies and employees, and there is a paucity of literature on customer reactions. From the customer’s perspective, customer-oriented deviance increases customer pleasure, enhances customer satisfaction, gives positive evaluations of the organization, and increases the business friendship between customers and employees.^{4,25,28,29} Whereas these studies focused on exploring the constructive aspects of customer-oriented deviance, the discussion of its potential risks and customer psychology remains insufficient. Customer-oriented deviance is still ultimately a deviant behavior.³⁰ This deviant behavior is still uncertain and risky, even if it is intended to benefit the customer.³¹ Noble motives do not necessarily lead to positive behavioral outcomes.³² Li³³ found that customers who engage in customer-oriented deviance have positive attitudes toward brands from the perspective of customer differentiation but do not provide a dimensional breakdown of customer-oriented deviance. Instead, this paper explores the dimensions of customer-oriented deviance to explore its impact mechanism on brand trust and introduces customer involvement as a moderating variable to explore its boundary conditions.

Research Model and Hypotheses

The Mediating Role of Perceived Benefits

According to social exchange theory, when one party provides benefits, the other party is incentivized to reciprocate by providing a benefit in return. Based on the principle of reciprocity, when an employee provides value or profit to a customer, the customer is more inclined to reward the employee or the organization.³⁴ Deviant service adaptation is the behavior of frontline employees who modify the service process or product in violation of organizational rules. Deviant use of resources refers to the behavior of frontline employees who use company resources to assist customers in violation of organizational rules. Both of these actions give benefits to customers beyond expectations. Perceived benefits are the

overall evaluation of the utility of a product or service when the perceived benefits are weighed against the costs paid to acquire the product or service.³⁵ Customers are concerned with whether their time and money have been maximized during service interactions and compare what they receive with others. Compared to other customers, engaged customers are supported by employees with resources that go beyond organizational regulations, and customers perceive benefits that exceed those of the average customer. Brand trust reflects consumers' attitudes about whether a product can perform its stated role and function. When frontline employees adopt deviant service adaptation and deviant use of resources, customers perceive benefits beyond their original expectations, increasing their trust in the brand by holding a positive attitude toward it. Therefore, the following hypothesis is proposed:

H1. Deviant service adaptation exerts a positive effect on perceived benefits.

H2. Deviant use of resources exerts a positive effect on perceived benefits.

H3. Perceived benefits positively affect brand trust.

The Mediating Role of Perceived Uncertainty

According to cognitive dissonance theory,³⁶ uncertainty can be described as an unbalanced and dissonant psychological experience that arises when an individual is unable to anticipate the outcome of an event or when there is a conflict between perception and experience.³⁷ Deviant service communication conveys negative information about the company or product to the customer, which may contradict the customer's existing perceptions of the organization. Inconsistent information will give consumers corresponding risk perceptions and increase customers' inner uncertainty. Von and Morgenstern³⁸ argued that consumers are disgusted with the uncertainty and risk factors that arise in the choice of earnings and tend to pursue certainty rather than uncertainty when consuming.³⁹ Brand trust is the consumers' recognition of the quality, behavioral tendencies, and competitive performance of a particular company's brand.⁴⁰ It is not easy for customers to evaluate the motivation of employees to make this deviant behavior. Customers will have a bad attitude toward both employees and the brand if they believe that employees are doing it to leak company secrets; however, if they believe that employees are doing it for the benefit of customers, they may maintain a good business friendship with them but have a distrustful attitude towards the brand. Based on the above theories, the following hypothesis is proposed:

H4. Deviant service communication exerts a positive effect on perceived uncertainty.

H5. Perceived uncertainty negatively affects brand trust.

The Moderating Role of Customer Involvement

Customer involvement refers to the level of customer engagement in service interactions and is an essential factor influencing the evaluation of consumer perceptions.⁴¹ Customer involvement reflects the time and effort invested by consumers in the purchase decision process.⁴² Customer-oriented deviance is essentially the interaction between frontline employees and customers, and the quality of the interaction affects the customer's evaluation of the employee and the brand.⁴³ When customers engage in deviant service adaptation and deviant use of resources, as the communication between customers and frontline employees continues to deepen, the more effort customers put into communication to obtain these services, they perceive the deviant services they receive as a result of the own efforts rather than the employee's proactive behavior, which weakens the level of perceived benefits. The higher the level of customer involvement in deviant service communication, the more information the employee tells the customer, the more comprehensive the information is, and the lower the customer's risk perception of uncertainty. Therefore, the following hypothesis is proposed:

H6a. Customer involvement negatively moderates the impact of deviant service adaptation on perceived benefits.

H6b. Customer involvement negatively moderates the impact of deviant use of resources on perceived benefits.

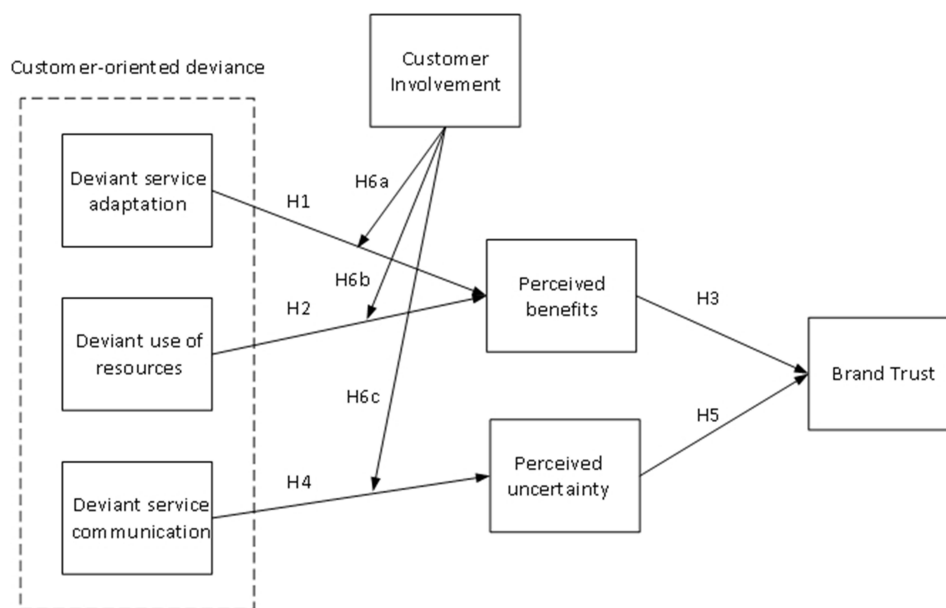


Figure 1 Research model.

H6c. Customer involvement negatively moderates the impact of deviant service communication on perceived uncertainty.

See [Figure 1](#) for the specific model.

Research Design

Questionnaire Development

The questionnaire is divided into two parts. The first part is the seven variables and their measurement items, referenced from established national and international scales and adapted to this study. The second part is the demographic characteristics.

Customer-oriented deviance referred to the designed scale of Leo and Russell-Bennett,²⁶ divided into three dimensions for measurement: deviant service adaptation (3 items), deviant use of resources (4 items), and deviant service communication (5 items). The representative item was “Service staff uses the company’s resources to help me even if the company may see this as a waste”. Perceived benefits scale referred to the research of Davis.⁴⁴ The scale consisted of 4 items, including “The service staff has given me practical benefits”. Perceived uncertainty scale referred to the revised scale of Zhang and Liu.⁴⁵ A sample item was “I feel difficult to determine whether the product is suitable for me”. Brand trust scale referred to the scale of Zhou and Lu.⁴⁶ The scale consisted of 4 items. The representative item was “This brand makes me feel safe and secure”. Among them, the moderating variable customer involvement adopts the two-category scale, the remaining variables adopt the 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). The specific contents of the scale and test items are shown in [Table 1](#).

Data Collection

This study complied with the Declaration of Helsinki. All participants were fully informed of the content and purpose of the survey before participating in the survey. All participants provided informed consent. Additionally, participants under 18 years of age were approved by the ethics committee to provide informed consent on their own behalf. All participants were anonymous, and their data was protected.

We conducted an online survey study in China from May 1 to May 20, 2022. We recruited all participants by online random sampling from Jiangsu, Shanghai, Zhejiang, Jiangxi and other regions. Therefore, the coverage of the survey area and participants is wide enough to ensure that the respondents are highly representative. We use the questionnaire star

Table 1 Reliability Test and Validity Analysis of Variables

Variable	Items	Factor Loading	CR	AVE
Deviant service adaptation $\alpha = 0.767$	Service staff makes informal changes to the service content.	0.661	0.532	0.772
	Service staff alters the products they provide in the service by bending the rules.	0.805		
	Service staff departs from company guidelines to change their product offerings.	0.715		
Deviant use of resources $\alpha = 0.838$	Service staff spends extra time assisting me even if it is not within the scope of duties.	0.758	0.567	0.839
	Service staff spends extra time on my matters even if the company may consider them irrelevant.	0.779		
	Service staff uses the company's resources to help me even if the company may see this as a waste.	0.726		
	Service staff uses the company's tools/equipment to solve my problems even if the company may consider them irrelevant.	0.747		
	Service staff tells me about problems with the company/product when they think it is necessary.	0.669		
Deviant service communication $\alpha = 0.844$	Service staff hints to me on the way the company works even if the company may prefer they not to.	0.755	0.524	0.846
	Service staff tells the truth about their products even if it turns me away.	0.736		
	Service staff provides me with the best advice about the product(s) even if losing their business.	0.660		
	Service staff provides me with honest advice about the company/product even if it is negative.	0.791		
	The service staff has given me practical benefits.	0.776		
Perceived benefits $\alpha = 0.805$	I think the service staff can meet my needs.	0.689	0.510	0.806
	Compared to what I got, the time and cost I spent on this purchase I think were worth it.	0.728		
	Overall I think this purchase was worth it	0.659		
	I am not sure the service staff's information is accurate.	0.822		
Perceived uncertainty $\alpha = 0.814$	I feel difficult to determine whether the product is suitable for me.	0.731	0.688	0.815
Brand trust $\alpha = 0.814$	This brand makes me feel safe and secure.	0.697		
	I know this brand will be responsible for its behaviors.	0.816		
	I think this brand is trustworthy.	0.662		
	This brand is actually performing as I expected.			

tool (<https://www.wjx.cn/>) and some social software (WeChat, Xiaohongshu) to send the questionnaire and collect the data of the participants. We collected 500 questionnaires. After eliminating invalid questionnaires with a high repetition rate and short filling time, 468 valid questionnaires were collected, and the effective rate of the questionnaire was 93.6%. Among them, men accounted for 51.71%, and women accounted for 48.29%. In terms of age, the number of people aged 18–25 is the largest, accounting for 35.04%, followed by 26–30 years old and 31–40 years old, accounting for 24.15% and 19.23%, respectively. In terms of education level, the number of college and undergraduate students is the largest, accounting for 68.38%, and the number of masters and above is 16.88%. Specific sample characteristics are shown in Table 2.

Results of Data Analysis

Reliability and Validity Analysis

In this study, Spss26.0 software was used to analyze the reliability of the questionnaire, and Cronbach ' α ' coefficient was used to evaluate the reliability of the data. According to Table 1, each variable's Cronbach ' α ' coefficient was above 0.7, indicating that the scale and data had high reliability. Amos24.0 was used for confirmatory factor analysis. The standardized factor loadings for each variable were above 0.65, the CR values were above the standard value of 0.7, and the AVE values were above the standard value of 0.5, indicating that the scale had good convergent validity.

Table 2 Demographic Characteristics of the Sample (N=468)

Variable	Category	Frequency	Percentage (%)
Gender	Male	242	51.71
	Female	226	48.29
Age	<18 years	16	3.42
	18–25 years	164	35.04
	26–30 years	113	24.15
	31–40 years	90	19.23
	41–50 years	56	11.97
	51–60 years	20	4.27
	>60 years	9	1.92
Occupation	Students	127	27.14
	The staff of enterprises	129	27.56
	The staff of institutions	85	18.16
	Individuals and merchants	69	14.74
	Freelancer	51	10.90
	Others	7	1.50
Education degree	High school or below	69	14.74
	Associate degree	78	16.67
	Bachelor's degree	242	51.71
	Master's degree or above	79	16.88
Monthly income	<2000¥	93	19.87
	2000–4000¥	104	22.22
	4000–6000¥	137	29.27
	6000–8000¥	82	17.52
	>8000¥	52	11.11

Table 3 Results of Discriminant Validity of Variables

	Deviant Service Adaptation	Deviant Use of Resources	Deviant Service Communication	Perceived Benefits	Perceived Uncertainty	Brand Trust
Deviant service adaptation	0.772					
Deviant use of resources	0.028***	0.839				
Deviant service communication	0.021*	0.024***	0.845			
Perceived benefits	0.027***	0.031***	0.022***	0.806		
Perceived uncertainty	0.034	0.04***	0.035***	0.036***	0.815	
Brand trust	0.028***	0.033***	0.023***	0.029***	0.041***	0.818
Square root of AVE	0.879	0.916	0.919	0.898	0.903	0.904

Notes: * $p < 0.05$; *** $p < 0.001$; The values on the diagonal represent the AVE of each variable.

The structural validity of the model was further tested, and the fitting indexes were as follows: (χ^2/df) = 1.707, RMSEA = 0.039, GFI = 0.940, CFI = 0.965, TLI = 0.958, indicating that the model was well fitted. The test of discriminant validity is conducted by comparing the relationship between the square root of AVE and the correlation coefficients between variables. As shown in Table 3, the correlation coefficients of all variables in this study are less than the square root of AVE, indicating that the scale has good discriminant validity.

Tests of Mediating Effect

This study uses Amos 24.0 to test the hypothesis. The results are shown in Table 4. The model structure validity test indexes all reached the standard: χ^2/df = 1.895, RMSEA = 0.044, GFI = 0.933, CFI = 0.954, TLI = 0.947, indicating that

Table 4 Basic Path Test of the Model

Path in the Model	Standardized Path Coefficient	Standard Error	T-value	Hypothesis	P-value
Deviant service adaptation → Perceived benefits	0.293	0.059	5.121	Supporting	0.000
Deviant use of resources → Perceived benefits	0.433	0.051	7.584	Supporting	0.000
Deviant service communication → Perceived uncertainty	0.369	0.096	5.988	Supporting	0.000
Perceived benefits → Brand trust	0.439	0.062	7.623	Supporting	0.000
Perceived uncertainty → Brand trust	-0.249	0.041	-4.666	Supporting	0.000

Table 5 Bootstrap Analysis of the Intermediate Effects Test (Standardized Coefficients)

Path in the Model	Effect	Boot SE	Bias-Corrected 95% CI		
			Boot LLCI	Boot ULCI	P-value
Deviant service adaptation → Perceived benefits → Brand trust	0.129	0.029	0.074	0.189	0.000
Deviant use of resources → Perceived benefits → Brand trust	0.190	0.036	0.123	0.265	0.000
Deviant service communication → Perceived uncertainty → Brand trust	-0.092	0.023	-0.144	-0.052	0.000

the data and the model fit well. Deviant service adaptation has a significant positive predictive effect on perceived benefits ($\beta = 0.293$, $t = 5.121$, $P < 0.001$), which verifies H1. Deviant use of resources has a significant positive predictive effect on perceived benefits ($\beta = 0.433$, $t = 7.584$, $P < 0.001$), leading support for H2. Deviant service communication has a significant positive predictive effect on perceived uncertainty ($\beta = 0.369$, $t = 5.988$, $P < 0.001$), that is, H3 is established; the positive predictive effect of perceived benefits on brand trust was significant ($\beta = 0.439$, $t = 7.623$, $P < 0.001$), which provides support for H4. Perceived uncertainty has a significant negative predictive effect on brand trust ($\beta = -0.249$, $t = -4.666$, $P < 0.001$). H5 is verified.

The Bootstrap method was used to test the mediating effect. The repeated sampling was 5000 times, and the confidence interval was 95%. The results are shown in Table 5. The indirect effect of deviant service adaptation on brand trust through perceived benefits is 0.129, 95% confidence interval does not contain 0. The indirect effect of deviant use of resources on brand trust through perceived benefits is 0.190, 95% confidence interval does not include 0. The indirect effect of deviant service communication on brand trust through perceived uncertainty is -0.092, 95% confidence interval does not contain 0.

The results show that there is a double-edged sword effect of deviant customer-oriented behaviors on brand trust. That is deviant service adaptation and deviant use of resources positively affect brand trust through the mediation of perceived benefits. In contrast, deviant service communication has a negative effect on brand trust through the mediation of perceived uncertainty. The mediating effect of perceived benefits and perceived uncertainty is verified. Similar to the purchase intention, the customer's attitude towards the brand depends largely on the customer perception in the process of service interaction. Customers will compare the psychological expectations before purchase with the actual experience perception. Deviant service adaptation and deviant use of resources make the customer experience exceed the psychological expectation, increase the perceived benefits level, and then have a positive attitude towards the brand. Deviant service communication will make it difficult for customers to evaluate their interests, increase their inner uncertainty and risk perception, and reduce their trust in the brand.

Tests of Moderating Effect

In this study, Model1 in Process, was used to test the moderating effect under the control of gender, age, and income. It can be seen from Table 6 that the interaction term of deviant service adaptation and customer involvement has

Table 6 Moderated Model Tests for Customer Involvement

Resulting Variables	Independent Variable	β	T	R ²	F
Perceived benefits	Gender	0.054	0.839	0.111	9.558
	Age	-0.031	-1.269		
	Income	0.007	0.262		
	DSA	0.259	6.754***		
	CI	-0.029	-0.480		
Perceived benefits	DSA*CI	-0.165	-2.144*	0.160	14.628
	Gender	0.039	0.629		
	Age	-0.019	-0.816		
	Income	0.004	0.153		
	DUR	0.350	8.733***		
Perceived uncertainty	CI	-0.001	-0.993	0.107	9.169
	DUR*CI	-0.180	-2.238*		
	Gender	-0.172	-1.812		
	Age	-0.019	-0.528		
	Income	-0.094	-2.362*		
Perceived uncertainty	DSC	0.364	5.647***	0.107	9.169
	CI	0.034	0.379		
	DSC*CI	-0.265	-2.035*		

Note: * and *** represent $P < 0.05$ and $P < 0.001$ respectively.

Table 7 Direct Effects at Different Levels of Customer Involvement

	Customer Involvement	Effect	SE	LLCI	ULCI
Direct action (DSA)	-0.509 (M-1SD)	0.343	0.051	0.242	0.444
	0.491 (M+1SD)	0.178	0.057	0.066	0.290
Direct action (DUR)	-0.509 (M-1SD)	0.442	0.055	0.334	0.550
	0.491 (M+1SD)	0.262	0.058	0.147	0.377
Direct action (DSC)	-0.509 (M-1SD)	0.499	0.083	0.335	0.662
	0.491 (M+1SD)	0.234	0.099	0.040	0.428

Abbreviations: DSA, deviant service adaptation; DUR, deviant uses of resources; DSC, deviant service communication.

a significant negative predictive effect on perceived benefits ($\beta = -0.165$, $t = -2.144$, $P < 0.05$). Hypothesis 6a is supported. The interaction of deviant use of resources and customer involvement significantly negatively affects perceived benefits ($\beta = -0.180$, $t = -2.238$, $P < 0.05$), meaning H6b is supported. The interaction of deviant service communication and customer involvement has a significant negative predictive effect on perceived uncertainty ($\beta = -0.265$, $t = -2.035$, $P < 0.05$), leading support for H6c.

The simple slope analysis in Table 7 shows that, at a low level of customer involvement (M-1SD), deviant service adaptation has a significant positive predictive effect on perceived benefits ($\beta=0.343$, $t=6.674$, $P<0.001$), while at a high level of customer involvement (M+1SD), deviant service adaptation has a significant positive predictive effect on perceived benefits ($\beta=0.178$, $t=3.128$, $P<0.01$), but its predictive effect decreases, indicating that the positive predictive effect of deviant service adaptation on perceived benefits tends to decrease as the customer involvement level increases. As shown in Table 7, at a low level of customer involvement (M-1SD), deviant use of resources has a significant positive predictive effect on perceived benefits ($\beta=0.442$, $t=8.025$, $P<0.001$). In contrast, at a high level of customer involvement (M+1SD), deviant use of resources significantly positively predicts perceived benefits ($\beta=0.262$, $t= 4.487$, $P<0.001$), but its predictive effect decreases, indicating that with the improvement of customer involvement, the positive predictive effect of deviant use of resources on perceived benefits gradually decreases. At a low level of customer involvement (M-1SD), deviant service communication has a significant positive predictive effect on perceived uncertainty ($\beta=0.499$,

$t=5.980$, $P<0.001$), while at a high level of customer involvement ($M+1SD$), deviant service communication has a significant positive predictive effect on perceived uncertainty ($\beta=0.234$, $t=2.366$, $P<0.05$), but its predictive effect decreases, indicating that the positive predictive effect of deviant service communication on perceived uncertainty tends to decrease as the level of customer involvement increases. The above test results support H6a, H6b, and H6c that customer involvement weakens the positive effects of deviant service adaptation and deviant use of resources on perceived benefits, and customer involvement weakens the positive effects of deviant service communication on perceived uncertainty (the moderating effects are shown in Figures 2-4).

Customer involvement reflects the time and energy invested by consumers in the process of service interaction. Customer involvement negatively moderates the impact of deviant service adaptation and deviant use of resources on perceived benefits. Customer involvement negatively moderates the impact of deviant service communication on perceived uncertainty. The moderating effect of customer involvement is verified. To be specific, in the process of deep interaction with front-line employees, customer's involvement continues to deepen, and they will take the initiative in this relationship. They believe that this relationship and vested benefits are attributed to the accumulation of self-worth, thus reducing the level of perceived benefits. At the same time, the more information employees tell customers, the more comprehensive the information is, and the lower the customer's risk perception of uncertainty.

Conclusion and Discussion

Conclusion

Customer-oriented deviance is divided into three dimensions: deviant service adaptation, deviant use of resources, and deviant service communication. Most previous studies have focused on the constructive aftereffects of customer-oriented deviance and less on its potential risks. In this paper, we examine the influence mechanism of specific dimensions of customer-oriented deviance on brand trust from the customer's perspective, explore the mediating role of perceived benefits and perceived uncertainty, and consider the moderating role of customer involvement in the process.

The conclusions of this paper are as follows: First, deviant service adaptation and deviant use of resources positively affect perceived benefits, and perceived benefits positively affect brand trust. It shows that deviant service adaptation and

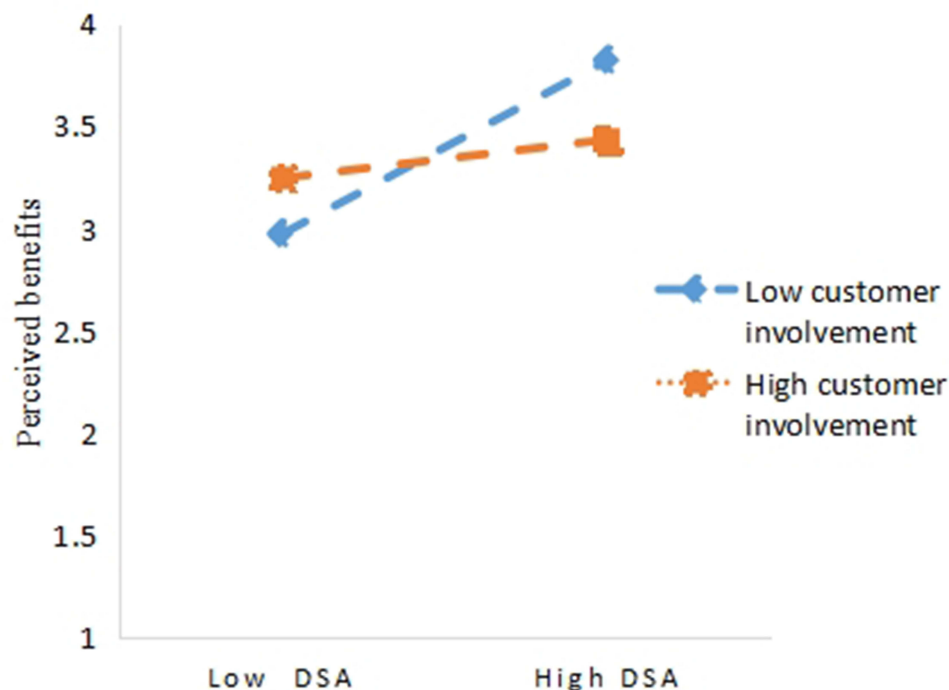


Figure 2 The moderating role of customer involvement in deviant service adaptation and perceived benefits.

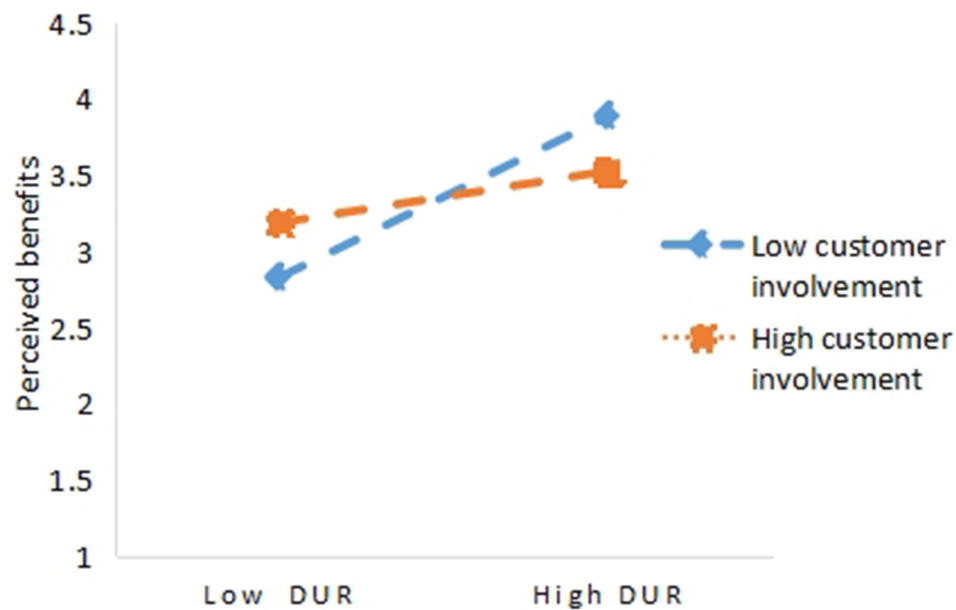


Figure 3 The moderating role of customer involvement in deviant use of resources and perceived benefits.

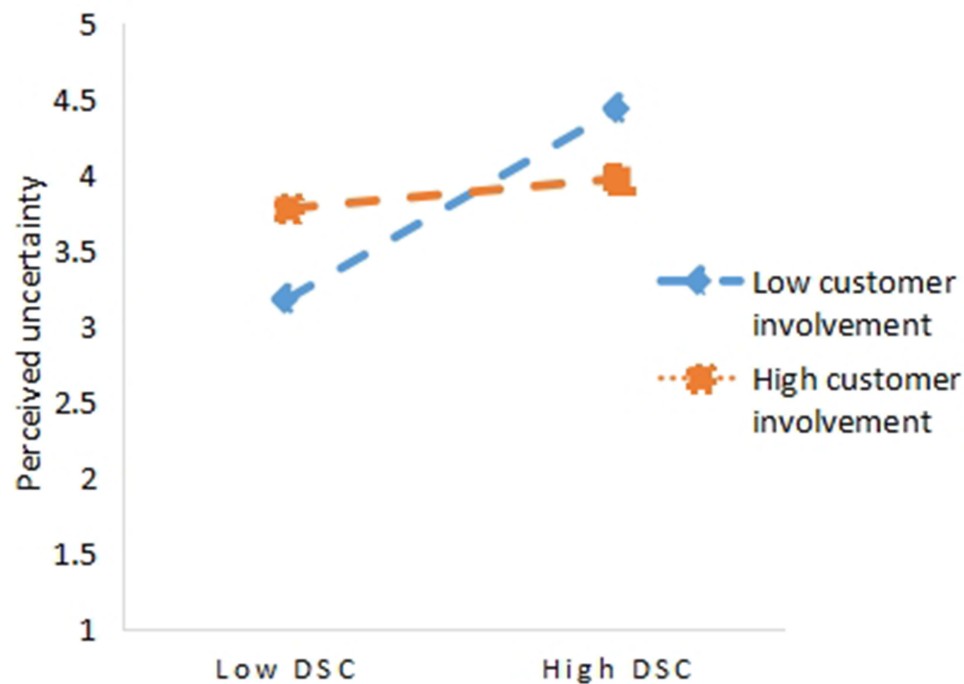


Figure 4 The moderating role of customer involvement in deviant service communication and perceived uncertainty.

deviant use of resources enhance service value, customers perceive more benefits than other customers, improve customer satisfaction. Employees provide a good experience to customers through flexible adaptation of services and use of resources. Customers believe that employees truly meet their needs and have a closer relationship with employees, and then hold a positive attitude towards the brand. Second, deviant service communication positively affects perceived uncertainty, and perceived uncertainty negatively affects brand trust. It indicates that deviant service communication

provides customers with negative company or product-related information that may contradict their current information about the organization, making it difficult for them to judge the most diagnostic information, increasing the risk perception of inner uncertainty, and then holding a negative attitude towards the brand, decreasing the trust in the brand. Third, customer involvement plays a negative moderating role in the relationship between deviant service adaptation, deviant use of resources, and perceived benefits. Customer involvement plays a negative moderating role in the relationship between deviant service communication and perceived uncertainty. As the main body of deviant customer-oriented behaviors, customers continue to deepen communication in the process of interaction with employees. In this case, the information that customers can receive mainly comes from the communication with front-line service personnel and the benefits they can obtain. Customers tend to attribute their benefits to the results of their own efforts, rather than the active behavior of employees, which reduces the level of perceived benefits. In the communication with front-line service personnel, the information is more comprehensive, and the customer's risk perception of uncertainty will be reduced. Therefore, in the process of service interaction, the proactive service behavior of employees will bring better consumption experience to customers.

Based on previous constructive aftereffects of customer-oriented deviance,^{4,6,10} this study found a double-edged sword effect of different dimensions of customer-oriented deviance on brand trust, which is different from the findings of Li,³³ who concluded that customers who engage in customer-oriented deviance have positive attitudes towards brands. The conclusion also fits Tu's³⁰ view that customer-oriented deviance has a double-edged sword effect on continued purchase intention. Hu et al¹² also elaborated from a moral-emotional perspective that pro-customer deviance can reinforce or expel customers' willingness to revisit, and this study also empirically validates this view.

Theoretical Implications

(1) It enriches the empirical research on customer reactions to customer-oriented deviance. The existing literature mainly explores the antecedent and outcome variables of customer-oriented deviance from the perspectives of both firms and employees and less explores customers' reactions to customer-oriented deviance.¹³ However, this paper aims to explore the effect of specific dimensions of customer-oriented deviance on brand trust from the customer's perspective and investigate its intrinsic mechanism of action, which helps managers comprehensively assess customer reactions to customer-oriented deviance.

(2) This paper explores the "double-edged sword" effect of specific dimensions of customer-oriented deviance on brand trust. Previous studies mainly focus on the constructive aspect of customer-oriented deviance and rarely discuss the aftereffect of customers from specific dimensions. As the recipient of customer-oriented deviance, customers will have a specific psychological response, thus forming a progressive and continuous process. This study introduces perceived benefits and perceived uncertainty as mediating variables. This study shows that deviant service adaptation and deviant use of resources enhance perceived benefits and positively affect brand trust. Deviant service communication increases the risk perception of customer uncertainty and then negatively affects brand trust, which helps to clarify the effect of customer-oriented deviance. The study also introduces customer involvement as a moderating variable. It shows that customer involvement plays a negative moderating role in employee service interactions, further clarifying the boundary conditions of the double-edged sword effect of customer-oriented deviance.

Practical Implications

According to our results, firstly, managers need to objectively evaluate customer reactions to customer-oriented deviance and use organizational resources wisely to guide and control different types of customer-oriented deviance effectively. Support and encourage deviant service adaptation and deviant use of resources, give employees appropriate discretion and control the frequency and intensity of employees' customer-oriented deviance to avoid excessive customer expectations. Be aware of the adverse effects of deviant service communication, which should be prevented and punished, such as revealing company secrets to customers and recommending customers to competitors.

Secondly, Enterprises should standardize and train the communication between employees and customers, and supervise them to prevent the loss of customers. Employees should avoid making negative statements about the company or its products. In the Internet economy, a company's negative impact spreads faster than the positive impact. Managers

need to make employees aware of the acceptable consequences and unintended negative effects of customer-oriented deviance and guide them to adopt it wisely to avoid bad effects on the brand's reputation.

Limitations and Further Research

This study has some limitations which deserve further examination. First, future research can discuss the antecedents and consequences of customer-oriented deviance in specific industries in the future. The industries currently explored in the research on customer-oriented deviance are mainly focused on the retail and hotel industries, as these two industries have a higher frequency of customer-employee interactions and a higher probability of employees adopting customer-oriented deviance. Each industry has different amounts of consumption, different levels of service exposure, and different behavioral costs involved in customer-oriented deviance, all of which affect consumers' cognitive evaluation and emotional responses to customer-oriented deviance.

Second, future research can explore the influencing factors of brand trust from various angles in the future. Brand trust depends on many factors. This paper explores the driving factors of brand trust from the perspective of customer-oriented deviance, and explores the influence mechanism of specific dimensions of customer-oriented deviance on brand trust. Therefore, factors such as customer commitment, reliability, reputation and retail environment are not included in the model. Scholars can explore this promising research direction in the future.

Third, future research can explore the "degree" of customer-oriented deviance in the future. In the short term, deviant service adaptation and deviant use of resources provide unexpected surprises to customers, increase their satisfaction with the organizational services, increase their willingness to repeat purchase, and thus positively impact the corporate brand. Repeated occurrences of these behaviors may make customers regard deviant behaviors as part of the expected service. In the long run, it will cause customers to have huge expectations. If the service of employees cannot meet customers' expectations, it is likely to make negative evaluations of employees and organizations. It suggests a "degree" problem in the frequency and intensity of customer-oriented deviance. Once the frequency and intensity of the behavior exceed a certain optimal critical point, it may have a negative impact. The grasp of this "degree" should be based on the characteristics of the enterprise and specific service scenarios. The long-term impact of customer-oriented deviance on organizational brand reputation needs further study from customers' perspective.

Data Sharing Statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics Statement

This paper belongs to a psychological research project and is funded by the National Social Science Foundation of China, Research on the International Cognitive Mechanism and Communication Strategy of Chinese Cultural Brand Image (NO.18BKS165) of Shanghai Institute of Technology. When writing the project application, we explicitly proposed to use the questionnaire survey method to collect data in the part of research methods, which was finally approved by the National Social Science Fund Committee. On the other hand, in the process of collecting the questionnaire online through third-party channels, we will first pass the preliminary examination of the third-party software, and only when they confirm that the content is secure can we be eligible to distribute it. Therefore, our research has been approved by the corresponding institutions. All participants provided informed consent. Additionally, participants under 18 years of age were approved by the ethics committee to provide informed consent on their own behalf. All participants were anonymous, and their data was protected.

Author Contributions

All authors made a significant contribution to the work reported, whether that is in the conception, study design, execution, acquisition of data, analysis and interpretation, or in all these areas; took part in drafting, revising or critically reviewing the article; gave final approval of the version to be published; have agreed on the journal to which the article has been submitted; and agree to be accountable for all aspects of the work.

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Disclosure

The authors declare that the research was conducted in the absence of commercial or financial relationships that could be constructed as a potential conflict of interest.

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