

Decoding the Mind in Service Encounters: A Psychological Insight Approach to Consumer Value and Loyalty

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Abstract. In this study, we focus on consumers' value perception and loyalty in service settings and decode the mental activities that happen when customers encounter employees. Emotional contagion, empathy, cognitive dissonance and consumers' perceived psychological safety are integrated into one comprehensive analytical model. The consumers from hospitality and retail industries were investigated and 312 valid questionnaires were collected. The structural equation modeling (SEM) was used for data analysis. The results indicate that emotional contagion and empathy have positive effects on consumers' perceived value, and cognitive dissonance has negative impacts on consumers' satisfaction and loyalty. In addition, satisfaction has a partial mediating effect in the relationship between perceived value and loyalty. This research contributes to the understanding of consumer psychology in service settings. Furthermore, several practical implications for business managers are also discussed: by designing services with psychological insights, managers can enhance customers' emotional connections and gain sustained loyalty.

Keywords: Service encounter; Consumer psychology; Emotional contagion; Empathy; Cognitive dissonance; Perceived value; Customer satisfaction; Customer loyalty.

1. Introduction

This study decodes the black box of the underlying psychological process that happens during service encounters and provides comprehensive understanding of how emotional contagion, empathy, cognitive dissonance and consumers' perceived psychological safety collectively influence consumers' perceived value, satisfaction and loyalty. By empirically testing an integrated psychological model, this study contributes to the literatures of both theory and practice. Firstly, this study extends service marketing literature by integrating psychological mechanisms into consumers' behaviour models, and then demonstrating that emotions and cognitions simultaneously influence loyalty formation. This study shows that positive emotional contagion and empathy have positive impacts on consumers' perceived value and satisfaction; cognitive dissonance has negative impacts on consumers' satisfaction and loyalty. This study enriches service marketing literature by providing deeper understanding of consumer psychology in service settings[1-2]. From a managerial perspective, this study provides practical implications for business managers: by designing services with psychological insights, business managers can enhance customers' emotional connections and gain sustained loyalty[3]. However, this study also has some limitations. Firstly, the samples used in this study were from the hospitality and retail industries, and the results might not be generalized

to other industries. Therefore, future studies could extend this study to other service industries, such as health and medical services, and financial services, where the employees' emotional contagion and empathy are also of interest[4]. Secondly, this study compared customers' responses across different cultural contexts to investigate the moderating effects of culture on the relationships among variables. Thirdly, future research could use experimental or longitudinal designs to better identify the causal mechanisms and track the time-lagged effects of emotional and cognitive influences on customers' loyalty in service relationships. Overall, this study enriches the understanding of the customer's service psychology by providing new insights that customer loyalty is not simply a behavioural outcome, but a emotional-cognitive understanding formed by human interaction dynamics in service settings..

2. Literature Review

2.1 Service Encounter and Consumer Experience

Service encounter occurs when customers encounter with the service provider during various aspects of service delivery (Bitner, 1990). These encounters whether physical, online or blended are "moments of truth" which create customer perceptions and ultimately satisfaction

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and loyalty (Parasuraman et al., 1988). Parasuraman et al. (1988) developed SERVQUAL model which identified the dimensions of reliability, responsiveness, assurance, empathy and tangibles which make service quality. However, service environment today focuses on emotional and psychological aspect more than functional attributes. According to Zeithaml (1988) and Holbrook (1999) research, consumers not only evaluate services based on what they gain from it but also how they feel during the process.

2.2 Psychological Mechanisms in Service Encounters

Recent studies emphasize that emotions, cognition, and interpersonal understanding drive customer experiences. Table 1 summarizes the major psychological mechanisms relevant to service encounters.

Table 1. Major AI Applications in Curation

Mechanism	Definition	Service Context Expression
Emotional Contagion	The automatic transmission of emotions between individuals (Barsade, 2002)	A smiling, enthusiastic employee induces positive customer emotions
Empathy	The ability to understand and share another's emotional state (Davis, 1983)	Staff showing empathy increase trust and perceived care
Cognitive Dissonance	Psychological discomfort arising from inconsistency between expectations and outcomes (Festinger, 1957)	When service outcomes fall short of expectations, satisfaction drops
Psychological Safety	A sense of comfort and freedom from threat during interaction (Edmondson, 1999)	Customers feel relaxed to express needs and provide feedback

These mechanisms jointly shape how consumers perceive the service process and assign value to it. Emotional contagion enhances affective alignment, empathy builds trust and relational warmth, while cognitive dissonance triggers dissatisfaction and reduced loyalty.

2.3 Consumer Perceived Value

Perceived value represents a consumer's holistic judgment of a service's worth, derived from the comparison between the benefits obtained and the resources expended (Zeithaml, 1988). It typically includes

three dimensions: functional value, reflecting practical utility; emotional value, associated with feelings of enjoyment or satisfaction; and social value, linked to self-image or social recognition. Prior studies have emphasized that in experiential service settings, emotional and social components tend to outweigh purely functional considerations when shaping customer evaluations (Sweeney & Soutar, 2001)[5].

2.4 Consumer Loyalty

Loyalty consists of both mindset and action aspects (Oliver, 1999). The attitudinal aspect reflects a customer's psychological attachment and confidence in a brand, whereas the behavioral aspect is expressed through repeated buying and positive recommendations. Customers with high loyalty tend to continue patronizing a brand, advocate for it, and show resilience against competitors[6].

2.5 The Gap in Current Research

Although service quality and satisfaction have been extensively studied, research rarely combines psychological factors—such as emotional contagion and cognitive dissonance—into a single framework explaining consumer loyalty. This study addresses this shortcoming by developing an integrated model that explores how emotional and cognitive mechanisms influence customer loyalty in practical service contexts[7-8].

3. Theoretical Framework and Hypotheses

3.1 Conceptual Model

The conceptual framework developed in this study suggests that psychological dynamics fundamentally influence how consumers form evaluations during service interactions. Emotional contagion, empathy, and cognitive dissonance are proposed as the main psychological precursors shaping perceived value. Emotional contagion refers to the subtle transfer of emotions between employees and customers, implying that a staff member's positive attitude can elevate the customer's mood and enhance their perception of the service. Empathy, on the other hand, represents the ability of service personnel to recognize and respond to customers' emotional states and individual needs, thereby strengthening interpersonal bonds and increasing both the functional and emotional components of perceived value. Conversely, cognitive dissonance—experienced when expectations conflict with actual outcomes—serves as a psychological obstacle that weakens value perception. These assessments of value subsequently determine overall satisfaction, which reflects customers' emotional evaluation of their service experience. Furthermore, satisfaction functions as an intermediary mechanism linking perceived value to loyalty behaviors and attitudes, illustrating how psychological understanding provides a

crucial bridge between consumer perception and long-term behavioral commitment within service environments.

3.2 Hypotheses Development

As presented in Table 2, the study’s hypotheses outline a series of directional links among the principal psychological and behavioral constructs. The framework is grounded in the assumption that emotional contagion (H1) and empathy (H2) exert positive influences on perceived value, encompassing both its emotional and functional facets. This reflects the notion that customers’ assessments of value are shaped not only by tangible outcomes but also by the emotional and interpersonal signals exchanged during service encounters. Conversely, cognitive dissonance (H3) is proposed to negatively affect perceived value, implying that when customers experience a mismatch between their expectations and the actual service performance, their evaluations tend to decline. Further along the causal chain, perceived value is expected to promote customer satisfaction (H4), which subsequently drives loyalty (H5). Moreover, satisfaction (H6) is theorized to serve as a mediating construct that channels the effect of perceived value toward enhanced loyalty. Taken together, these hypotheses depict an integrated psychological process that links emotional expression and cognitive evaluation within service interactions to enduring behavioral and attitudinal outcomes among consumers.

Table 2. Hypotheses Development

Mechanism	Definition	Service Context Expression
Emotional Contagion	The automatic transmission of emotions between individuals (Barsade, 2002)	A smiling, enthusiastic employee induces positive customer emotions
Empathy	The ability to understand and share another’s emotional state (Davis, 1983)	Staff showing empathy increase trust and perceived care
Cognitive Dissonance	Psychological discomfort arising from inconsistency between expectations and outcomes (Festinger, 1957)	When service outcomes fall short of expectations, satisfaction drops
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4. Methodology

4.1 Research Design

A cross-sectional quantitative study was conducted using a structured online questionnaire. The target respondents were consumers who had experienced service interactions in hospitality (e.g., hotels, restaurants) and retail sectors (e.g., fashion stores, electronics). A total of 350 responses were collected, with 312 valid after screening for completeness.

4.2 Measurement Scales

As presented in Table 3, the variables of this study adopted well-known and extensively validated scales that were extracted and adapted from previous scholars’ work to ensure reliability and construct validity. The items of Emotional Contagion (EC) were adopted from Barsade (2002) to reflect the emotional transfer that happened between service employees and consumers during interpersonal service contact. The measure of Empathy (EMP) was adopted from Davis (1983), which described the employees’ ability to recognize and respond to the emotional condition and needs of customers. Cognitive Dissonance (CD) adopted the theoretical work of Festinger (1957) and defined as the psychological unease that occurred when there was a gap between expected and actual service outcomes. To reflect the customers’ perceived worth, the items of Perceived Value (PV) were adapted from Zeithaml (1988) and measured consumers’ evaluation of service benefits relative to cost. Satisfaction (SAT) adopted from Oliver (1999) defined as customer’s emotional summary evaluation of his or her total service experience. Loyalty (LOY) adopted the theoretical work of Chaudhuri and Holbrook (2001) and defined as customer’s attitudinal commitment and intention to repurchase or recommend to others. All the responses were measured using a five-point Likert scale from “strongly disagree” (1) to “strongly agree” (5). Using these well-known measurement scales ensure the methodological rigor of the study and improve the validity, dependability and cross-study validity of the study findings.

Table 3. Measurement Scales and Sources

Construct	Items (sample)	Source
Emotional Contagion (EC)	Emotional Contagion (EC)	Emotional Contagion (EC)
Empathy (EMP)	Empathy (EMP)	Empathy (EMP)
Cognitive Dissonance (CD)	Cognitive Dissonance (CD)	Cognitive Dissonance (CD)
Satisfaction (SAT)	Satisfaction (SAT)	Satisfaction (SAT)
“Overall, I am satisfied with this service experience.”	“Overall, I am satisfied with this service experience.”	“Overall, I am satisfied with this service experience.”
Loyalty (LOY)	Loyalty (LOY)	Loyalty (LOY)

4.3 Sample Profile

As shown in Figure 1, the demographic composition of respondents indicates that the sample is balanced and representative of critical characteristics. In terms of gender, 47.4% of the participants were male and 52.6% were female, which means that the gender distribution of the sample reduces potential gender bias in perceptions of service experiences. In terms of age, most of the respondents were in the age group of 26–35 years old (39.1%), followed by the age group of 18–25 years old (31.4%) and 36–50 years old (23.7%), and 5.8% were over 50 years old. This result indicates that the sample consisted mainly of young and middle-aged consumers--an age group that is usually more sensitive and affected by service encounters in the hospitality and retail industries. Such demographic characteristics are significant because young consumers have been reported to be more sensitive to service quality, interpersonal communication, and psychological signals. In addition, the sample industry composition was equally divided into two parts: hospitality (50%) and retail (50%), which enabled us to make meaningful comparisons between two different service types: hedonic and utilitarian. This balanced industry composition increased the external validity of our research that included various customer experiences. In total, the demographic composition provided a robust basis for exploring how psychological processes, including emotional contagion, empathy, and cognitive dissonance, affect perceived value, satisfaction, and long-term loyalty among different service types.

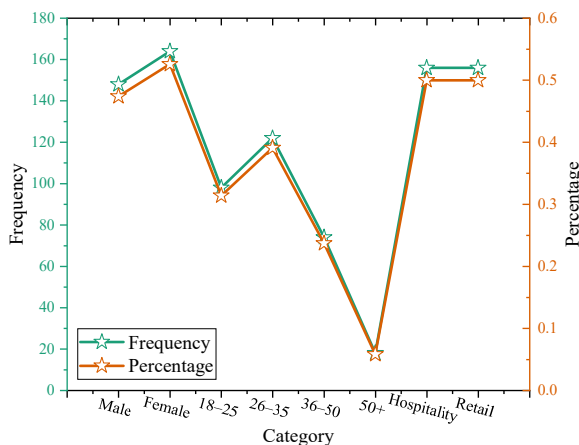


Figure 1. Demographic Characteristics

4.4 Reliability and Validity

Consistency of the measurement model’s internal validity was tested with Cronbach’s alpha and Composite Reliability (CR); Average Variance Extracted (AVE) was used to test the measurement model’s convergent validity. Results are summarised in Figure 2.

Cronbach’s alpha was between 0.82 and 0.91, which are much higher than the recommended threshold of 0.70 put forward by Nunnally (1978). These results provide evidence that the measurement items are highly consistent within each latent variable. The CR coefficients were between 0.84 and 0.92, which are also much higher than the recommended threshold of 0.84 (Bagozzi and Yi,

2012). This indicates that the measurement of these latent variables is stable and coherent.

For convergent validity, the AVE of all latent variables were between 0.61 and 0.73, which are higher than the recommended threshold of 0.50 (Fornell and Larcker, 1981). This means that there is a relatively high proportion of variance in all observed latent variables explained by their respective latent variables. Empathy and Loyalty were found to have the highest reliability and explained variance.

In summary, the results show that the scales used to measure emotional contagion, empathy, cognitive dissonance, perceived value, satisfaction and loyalty, display good internal consistency and have strong convergent validity. These psychometric properties provide a robust foundation for the hypothesis testing and evaluation of the structural model.

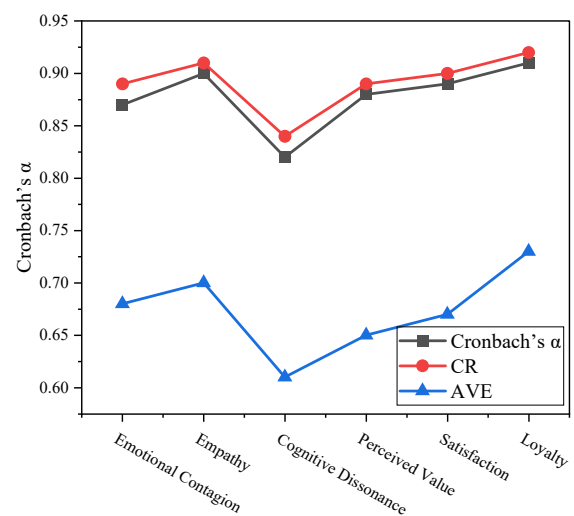


Figure 2. Reliability and Validity Statistics

5. Data Analysis and Results

5.1 Descriptive Statistics and Correlations

The correlation matrix displays strong relationships between the key constructs, offering preliminary empirical support for the hypothesized model. The means of all major variables vary from 2.18 (Cognitive Dissonance) to 4.15 (Satisfaction), indicating that respondents generally experienced high levels of positive psychological phenomena and behavioral intentions in service contact, while cognitive dissonance was relatively low, implying that respondents generally held positive evaluations of service experience. The correlation results also show that Emotional Contagion (EC) and Empathy (EMP) are highly and positively correlated ($r = 0.64, p < 0.01$), i.e. employees who can spread positive emotions to customers are perceived as more empathic. In addition, EC and EMP show significant positive correlations with Perceived Value (PV) ($r = 0.58$ and 0.62 , respectively) and Satisfaction (SAT) ($r = 0.52$ and 0.56 , respectively), further validating their positions as psychological antecedents of positive consumer evaluation. Furthermore, Cognitive Dissonance (CD) shows significant negative

correlations with other constructs, especially with PV ($r = -0.36$) and SAT ($r = -0.33$), i.e. higher cognitive dissonance would decrease perceived service value and satisfaction. The most strongly related pair of variables is Satisfaction and Loyalty ($r = 0.72$, $p < 0.01$), which is consistent with previous studies reporting that satisfied customers are more likely to stay loyal and provide positive word-of-mouth. Generally, these results preliminarily validate the interrelationships among the psychological and behavioral constructs above mentioned before SEM analysis.

5.2 Hypothesis Testing

As illustrated in Table 4, the results of the structural equation modeling (SEM) provide strong empirical support for the proposed research hypotheses. All hypothesized paths were found to be statistically significant and in the expected directions, confirming the robustness of the conceptual framework. Specifically, emotional contagion (H1) exhibited a significant positive effect on perceived value ($\beta = 0.42$, $t = 6.21$, $p < 0.001$), suggesting that positive emotional expressions from employees significantly enhance consumers' perceived value of the service. Similarly, empathy (H2) demonstrated a strong positive influence on perceived value ($\beta = 0.36$, $t = 5.87$, $p < 0.001$), highlighting the importance of emotional understanding and interpersonal sensitivity in shaping customers' cognitive and affective evaluations. Conversely, cognitive dissonance (H3) negatively affected perceived value ($\beta = -0.29$, $t = -4.28$, $p < 0.01$), confirming that psychological discomfort resulting from unmet expectations or inconsistencies in

the service experience reduces the overall perception of value.

Moving downstream in the structural model, perceived value (H4) exerted a substantial positive influence on satisfaction ($\beta = 0.55$, $t = 8.03$, $p < 0.001$), demonstrating that when customers perceive a service as valuable and fair, they are more likely to experience satisfaction. In turn, satisfaction (H5) was found to significantly predict loyalty ($\beta = 0.47$, $t = 7.26$, $p < 0.001$), supporting prior findings that satisfaction acts as a critical determinant of both behavioral and attitudinal loyalty. Furthermore, H6 tested the mediating role of satisfaction in the relationship between perceived value and loyalty. The results reveal a partial mediation effect ($\beta = 0.26$, $t = 4.12$, $p < 0.001$), indicating that perceived value directly and indirectly enhances customer loyalty through the emotional mechanism of satisfaction. This finding reinforces the notion that customer satisfaction serves as a psychological bridge linking value perception and long-term relational commitment.

In addition to the path analysis, the model fit indices indicate an excellent overall model fit ($\chi^2/df = 2.11$, RMSEA = 0.046, CFI = 0.962, TLI = 0.953). All indices fall within the recommended thresholds ($\chi^2/df < 3$, RMSEA < 0.08, CFI and TLI > 0.90), confirming that the hypothesized structural model accurately represents the observed data. These results collectively validate the proposed psychological framework, demonstrating that emotional contagion, empathy, and cognitive dissonance jointly shape perceived value, which, through satisfaction, drives enduring customer loyalty. The findings underscore the central role of psychological insight in explaining how consumers form affective and behavioral attachments within service encounters.

Table 4. Measurement Scales and Sources

Hypothesis	Path	β	t-value	p-value	Supported
H1	EC → PV	0.42	6.21	<0.001	Yes
H2	EMP → PV	0.36	5.87	<0.001	Yes
H3	CD → PV	-0.29	-4.28	<0.01	Yes
H4	PV → SAT	0.55	8.03	<0.001	Yes
H5	SAT → LOY	0.47	7.26	<0.001	Yes
H6	PV → LOY (indirect via SAT)	0.26	4.12	<0.001	Partial mediation

6. Conclusions

This study explores the psychological mechanisms underlying service encounters and clarifies how emotional contagion, empathy, and cognitive dissonance jointly influence perceived value, satisfaction, and loyalty. By validating an integrated model, it bridges service marketing and psychology, showing that both emotional and cognitive factors shape customer evaluations and loyalty behaviors. Positive emotional contagion and empathy strengthen perceived value and satisfaction, while cognitive dissonance undermines them, illustrating the dual nature of emotional and rational responses in

shaping loyalty. From a managerial standpoint, the findings suggest that firms should foster emotionally intelligent service environments by training employees in empathy and emotion regulation. The use of psychological analytics—such as emotion recognition and sentiment tracking—can further enhance customer experiences and long-term loyalty.

Despite its contributions, the research is limited to hospitality and retail sectors, suggesting future extensions to industries like healthcare or finance. Cross-cultural and experimental studies could deepen understanding of how emotional and cognitive processes interact over time. Overall, the study underscores that customer loyalty arises

not only from satisfaction but from a complex interplay of emotion and cognition within service relationships.

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