The Impact of Customer Perceived Support on Target-Based Customer Citizenship Behaviors: The Mediating Effects of Brand Reputation and Satisfaction

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Customers’ voluntary behaviors (i.e., customer citizenship behaviors, CCBs) are of ever-increasing interest, given that they produce extraordinary value for service providers. Whether customer perceived support (CPS) from service providers leads to CCBs has remained largely understudied in service marketing literature. Moreover, the underlying mechanisms through which CPS can result in CCBs receives even less attention in previous studies. Thus, the purpose of this research is to examine the influence of CPS on target-based CCBs (customer- and firm-oriented CCBs), and the mediating roles of two important relational factors (customer-based brand reputation (CBR) and customer satisfaction (CS)) in the relationship between CPS and CCBs in the context of after-sales service. Structural equation modeling using AMOS was employed to empirically test the hypotheses on survey data from 368 Chinese smartphone customers. The results showed that CPS positively influenced firm-oriented CCBs, while there was no direct link between CPS and customer-oriented CCBs. Furthermore, CBR and CS mediated the relationship between CPS and CCBs, respectively. This research contributed greater clarity and a better understanding of how CPS effectively boosts CBR and CS to encourage customers’ voluntary behaviors desired by service providers.

Keywords: Customer perceived support, customer satisfaction, customer-based brand reputation, target-based customer citizenship behaviors, marketing

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Customer citizenship behaviors (CCBs) have been offered as a new area of investigation in the service marketing (Jamak, 2015). CCBs, largely derived from the theory of organizational citizenship behavior (Porricelli \textit{et al.}, 2014), are defined as customers’ voluntary behaviors that go beyond the company’s expectations and are not necessary for customer value co-creation but increase the firm’s performance by producing extraordinary value (Groth, 2005). Empirical evidence has demonstrated that such customers’ voluntary behavior can be conducive to service organizations’ performance, value co-creation, favorable relationships with customers, and effective performance of marketing strategies (Choi and Lotz, 2018). Despite the positive effects of CCBs, largely recognized by academicians and practitioners, research on its antecedents remains limited.
This study makes several contributions to the marketing literature. First, among the limited number of studies on the antecedents to CCBs, company image, corporate social responsibility, customer justice perception, and perceived service quality (Aljarah, 2020; Aljarah and Alrawashdeh, 2021; Kim et al., 2020; Yi and Gong, 2008) have received a substantial amount of attention from scholars. In contrast, to the best of our knowledge, no previous research into the antecedents of CCBs has taken into account the fact that customer perceived support plays a crucial role in improving brand reputation, achieving customer satisfaction, and promoting customers’ voluntary behaviors. From the perspective of organizational support theory, employees’ perceived organizational support can become more passionate, creative, and enthusiastic in an atmosphere that includes such aspects as job discretion and managerial support, ultimately enhancing the company’s reputation (Hossin et al., 2021). In a similar vein, the theories of social exchange and organizational support can apply to the customer context (Cintamür, 2022; Keh and Wei, 2001). Therefore, the first purpose of this study is to examine whether customer perceived support (CPS) can lead to the desired customer citizenship behavior.

Second, the underlying mechanisms of how CPS enhances target-based CCBs in the after-sales service sector have not been researched, constituting another gap in the literature. Even though some studies have shown that improved customer-based brand reputation (CBR) (Cintamür, 2022) and customer satisfaction (CS) (Yi and Gong, 2008) are two critical effects of CPS, few studies have explored whether such relational constructs (i.e., CBR and CS) play significant mediating roles in the association between CPS and CCBs. Toward this end, the current study also investigates these neglected mediating roles of CBR and CS in the CPS–CCBs link. Moreover, the current study extends previous studies (Cintamür, 2022; Indah and Nizar, 2021) by including CS as a mediating variable between CBR and CCBs that might play an essential role in exploiting and assimilating CBR and utilizing them to promote customers’ voluntary behaviors. The current study is based on the interesting context of the smartphone after-sales service sector in China as customer care plays a crucial role in promoting customers’ voluntary behaviors. The current study is purported to address the following three research questions: (1) Does CPS directly influence target-based CCBs (customer- and firm-oriented CCBs)? (2) Do CBR and CS serve as the two critical underlying mechanisms between them? (3) Are there any chained mediation roles of CBR and CS on the link between CPS and target-based CCBs (customer- and firm-oriented CCBs)?

This study is structured as follows. The following section reports literature review which includes theoretical underpinnings and hypotheses development. Section 3 presents the study methodology. Section 4 reports the findings, while the findings are discussed in Section 5. Section 6 concludes the study whereas section 7 and 8 provide study implications, and limitations and future directions, respectively.
Theoretical Underpinnings

–The Stimulus–Organism–Response (SOR) Framework

SOR theory illustrates that the external stimuli (S) that people receive affect their internal states (O), which in turn influences their behavioral response (R) (Jacoby, 2002). The support a customer receives from the firm can be regarded as a stimulus. A prior study has demonstrated that social support (stimulus) can drive CCB (behavioral response) in a service establishment (Ning and Hu, 2022; Zhu et al., 2016). The current study is based on the S–O–R theory. It proposes that customers who receive support from the firm (stimulus) generate related psychological reactions (e.g., CBR and CS) (organism), resulting in participation in customer– and firm–oriented CCBs (response).

Customer Perceived Support (CPS)

CPS is an extension of the term “perceived organizational support” (POS) for employees (Bettencourt and Brown, 1997). By adapting the concept of POS to the consumer context, customers can think that the business in a relationship with them cares and supports them (Cintamür, 2022). Customers are frequently considered “partial employees” in service organizations, contributing their knowledge and skills to generating services (Bowen and Schneider, 1993). Voluntary activities or customer extra–role behavior could be examples of such participation (Bettencourt and Brown, 1997).

Customer–based Brand Reputation (CBR)

Brand reputation leads to achieving companies’ strategic objectives, such as charging high premium prices, gaining customer loyalty and satisfaction, and achieving competitive advantage (Islam et al., 2021). CBR is defined as a customer’s total assessment of a company depending on reactions to the company’s communication activities, services, and goods, and interactions with the company, its representatives, or known corporate activities. This evaluation could serve as a “quality promise,” motivating a business to concentrate on offering high–quality products and services while preserving ethics and honesty. If executed properly, a strong CBR can increase loyalty and lower transaction costs and customer perceived risk (Rose and Thomsen, 2004). Brand reputation has a strategic role in service markets, according to Wang et al. (2003), since the pre–purchase judgment of service quality is unavoidably ambiguous and incomplete. Because services are intangible, consumers may find it more challenging to assess their quality, and as a result, service organizations are more prone than other sorts of businesses to feel the importance of CBR (Kim and Choi, 2003).

Customer Satisfaction (CS)
According to several studies, satisfaction is described as the customer’s emotive judgment of the consumption experience (Verhoef et al., 2002). CS leads to perceptions of a social exchange relationship between the customer and the firm, such as courtesy to the firm and other customers and acceptance of extra–role behaviors (Morgan and Hunt, 1994; Rosenbaum and Massiah, 2007).

**Target–based Customer Citizenship Behaviors (Target–Based CCBs)**

CCBs are voluntary customer actions that go above and beyond the organization’s expectations (Groth, 2005). CCBs have been divided into two aspects depending on the intended target of the behavior: customer– and firm–oriented CCBs by Yi et al. (2013) and Aljarah (2020). First, customer–oriented CCB (CCCB) is categorized into two main types: (A) helping refers to customer attitudes aimed at helping other customers (Yi and Gong, 2013). (B) Consumers’ behaviors in suggesting the service supplier to other customers are known as advocacy (word of mouth) (Groth et al., 2004). Second, firm–oriented CCB (FCCB) is categorized into two main types: (A) Tolerance refers to consumer behavior that understands the service provider and is patient even when the service is below his/her expectations (Yi and Gong, 2013). (B) Feedback represents consumers’ behaviors to supply constructive thinking unsolicited and solicited to assist the service provider in enhancing service generation (Groth, 2005).

**Hypotheses Development**

–CPS and Target–based CCBs

The basic relationship between CPS and CCBs can be traced back to organizational support theory, which argues that when individuals perceive their needs are met by the organization, the individuals reciprocate with similar supportive behaviors (e.g., helping colleagues and providing constructive suggestions) (Molinillo et al., 2020), and thus go beyond their core task behavior. According to social exchange theory (Wayne et al., 1997), when one party receives a significant value, the other party is obligated to reciprocate (Bagger and Li, 2014). By extending the theories of organizational support and social exchange to customer behavior, we see that when customers perceive the firm values them and cares for their well–being, they will undoubtedly believe the firm is always acting in their best interests (Shumaker and Brownell, 1984), and customers will therefore be more willing to participate in voluntary behaviors (Ning and Hu, 2022).

Organizational behavior studies provide deep insights into POS, whereas consumer behavior or marketing studies provide only limited information regarding CPS, although the latter is valuable to companies (Cintamür, 2022). Previous studies on CPS and CCB in the consumer context have been limited to discussing CCB based on the overall CCB ( e.g., Ning and Hu, 2022) or in terms of its dimensions (Bettencourt and Brown, 1997). However, no effort has been made to examine the role of...
CPS in enhancing CCBs by separating CCBs based on their beneficiaries (customer– and firm–oriented CCBs), towards whom citizenship behavior is directed. Additionally, past research has been limited to different sectors, confining the results’ applicability to other service industries. The current study will consider the relationship between CPS and CCBs in the after-sales service industry. In keeping with the target–based conceptualization of CCB, the current study argues that the CPS affects CCBs towards both the customer and the firm. Based on the theories of organizational support and social exchange, along with previous studies, the current study proposes the following hypotheses:

- $H_{1a}$: CPS positively affects CCCBs.
- $H_{1b}$: CPS positively affects FCCBs.

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CPS and Customer–based Brand Reputation (CBR)

According to social exchange theory, individuals who feel appreciated, supported, and encouraged by their company feel obligated to make every effort to benefit that company (Blau, 1964). This results in individuals becoming more proactive and energetic, increasing the company’s reputation (Hossin et al., 2021). This notion can reasonably be expanded to include the consumer context, as customers who participate in their own service production are considered partial employees of the firm (Choi and Lotz, 2018). It is thus feasible to argue that customers sense support from an organization when it cares about their needs, appreciates their ideas, acts in their favor, and provides the best service (Cintamür, 2022). Customers who obtain support from the business may develop positive feelings which in turn affect their assessment of the service organization due to the reciprocity norm. Cintamür (2022) the relationship between CPS, and CBR confirmed that support from the firm affects the brand’s reputation. Thus, based on the social exchange theory, and previous studies, the current study proposes the following hypothesis:

- $H_{2}$: CPS positively affects CBR.

CBR and Target–based CCBs

It has been shown that good brand reputation positively influences a variety of behavior–related constructs and that customers may support companies with good reputations (Bartikowski and Walsh, 2011; Sung and Yang, 2009). According to signaling theory (Cintamür, 2022), in the presence of information asymmetry, people utilize visible signals to infer things they cannot see directly. Signaling theory is applied in the consumer context to evaluate service quality, customers would depend on the signals they can observe in service markets. As a result, customers consider a good reputation to be a
signal of lower perceived risk related to service quality and improved trust, therefore, a good reputation can lead to customers demonstrating supportive behaviors (volunteer behaviors) towards organizations (Aggarwal, 2014).

Previous studies (Indah and Nizar, 2021; Nguyen et al., 2016) have indicated CBR’s positive influences on CCBs. As a result, customers can help reputable firms by engaging in a variety of citizenship behaviors (Groth, 2005; Bove et al., 2009; Bartikowski and Walsh, 2011; Cintamür, 2022). Based on signaling theory and previous studies, the current study proposes the following hypotheses:

\[ H_{3a} : \text{CBR positively affects CCCBs.} \]
\[ H_{3b} : \text{CBR positively affects FCCBs.} \]

**The Mediating Role of CBR between CPS and Target–based CCBs**

Drawing on the SOR framework, CBR can play a mediating role between CPS and CCBs. In line with Mehrabian and Russell’s (1974) SOR theory, external stimuli (CPS) affect their internal states (CBR) which in turn influences their behavioral response (CCCBs and FCCBs). Prior research has shown that perceived support impacts brand reputation (Hossin et al., 2021). In addition, customers may demonstrate volunteer behaviors toward brands with a good reputation (Sung and Yang, 2009). Moreover, a recent study found that customers’ corporate reputation evaluation has a mediating role in the relationships between CPS and CBR (Cintamür, 2022). However, few studies have explored whether CBR plays a significant mediating role in the association between CPS and CCBs. This lack of attention may seriously hinder us from developing a complete picture of how CPS influences CCBs.

The current study argues that CPS induces CBR, evoking corresponding behavior depicted by target–based CCBs. Drawing on the above theories and previous research, the current study proposes the following hypothesis:

\[ H_{4} : \text{CBR mediates the relationship between CPS and target–based CCBs (CCCBs and FCCBs).} \]

**CPS and Customer Satisfaction (CS)**

The foundations of perceived organizational support (POS) are based on the social exchange theory (Blau, 1964), which was established to clarify interpersonal connections in the workplace. Individuals have a sense of obligation to the company when they believe the organization supports them, appreciates their contributions, and cares about their well–being. This commitment is manifested in greater job satisfaction (Ring, 2011). By expanding the concept of employee’s POS to the consumer context, it is reasonable that when a customer perceives the organization is supportive, they experience
a high level of satisfaction. Previous research has confirmed that CPS affects customer satisfaction in terms of service delivery (Chiu et al., 2015; Ning and Hu, 2022). Thus, based on the above prior studies, the current study proposes the following hypothesis:

\[ H_5: \text{CPS positively affects CS.} \]

**CS and Target-based CCBs**

A recent study obtained evidence regarding the impact of job satisfaction on organizational citizenship behaviors (Nurjanah et al., 2020). In the consumer context, Bettencourt (1997) confirmed that customer satisfaction is positively associated with CCBs. Furthermore, customers who have a positive impression of the exchange relationship are more inclined to participate in citizenship activities (e.g. offering feedback, word-of-mouth, and helping other customers) (Balaji, 2014; Garma and Bove, 2011). As a result, the current study argues that CS impacts CCBs towards both the customer and the firm. Thus, the following hypotheses are proposed:

\[ H_{6a}: \text{CS positively impacts CCCBs.} \]
\[ H_{6b}: \text{CS positively impacts FCCBs.} \]

**The Mediating Role of CS between CPS and Target-based CCB**

From the SOR theory standpoint, the external stimuli (CPS) customers receive affect their internal states (CS) which in turn influence their behavioral response (CCBs) (Ning and Hu, 2022). Previous studies have demonstrated that customers experience a high level of satisfaction when they obtain social support from other customers (Chiu et al., 2015). Rosenbaum and Massiah (2007), however, discovered that customers display CCBs after receiving social and emotional support from other customers. Additionally, Bettencourt (1997) discovered a positive relationship between perceived CS and CCBs.

Predicated on the SOR framework and the theoretical connections between CPS, CS, and CCBs (Ning and Hu, 2022), this study argues that CPS activates CS, leading to corresponding behavior represented by CCBs. To assimilate CPS and use them to enhance target-based CCBs, this study contends that the inclusion of CS as a mediating factor between CPS and target-based CCBs may be crucial. Consequently, the study proposes the following hypothesis:

\[ H_7: \text{CS mediates the relationship between CPS and target-based CCBs (CCCBs and FCCBs).} \]

**CBR and CS**
CBR is critical for customer satisfaction, according to previous studies (Lv et al., 2018). Similarly, Nguyen et al. (2016) and Rizwan et al. (2020) refer to the fact that CBR directly affects CS. To analyses the relationship between CBR and CS, the current study depends on the theory of cognitive dissonance (Festinger, 1957), which focuses on inconsistent cognitions within a person’s mindset and describes what people do to decrease inconsistency. According to Festinger, dissonance occurs when two cognitions that are relevant to each other are in a conflicting relationship. Two cognitions are incompatible if the second cognition flows from the first in a contrary manner. Dissonance causes unpleasant psychological tension, so individuals feel pressure to prevent or reduce it. Individuals who perceive dissonance can reduce this disequilibrium in various ways (Helm et al., 2009). To restore cognitive consistency, one could change or add cognitions, or change the importance of dissonant cognition (Festinger, 1957). Thus, the influence of reputation on customer satisfaction may be theoretically supported by the notion of cognitive dissonance. If the customer purchases a product made by a firm (assuming that a customer has a favorable opinion of that firm due to its good reputation) and is then asked how satisfied she/he is with the product, she will almost certainly respond that she/he is satisfied with the product (Helm et al., 2009). Therefore, the customer’s degree of satisfaction will be adjusted to reflect her/his favorable opinion towards the firm (Helm et al., 2009). Thus, drawing on the previous studies, the current study proposes the following hypothesis:

\[H_8: \text{CBR positively affects CS.}\]

**The Mediating Role of CBR between CPS and CS**

Prior literature confirmed the importance of perceived support as a vital factor in a direct relationship with a corporate reputation (Cintamür, 2022; Hussin et al., 2021). Recent research, however, has suggested that corporate reputation affects customer satisfaction (Helm, 2006). This relationship indicates the possible existence of a mediating effect of CBR in the CPS–CS relationship. To the best of the authors’ knowledge, this is the first study to test the mediating role of CBR in terms of the effect of CPS on CS. This study thus builds on earlier work by examining whether the postulated direct effects of CPS on CS are mediated by CBR. This study argues that including CBR as a mediating factor between CPS and CS might play an essential role in assimilating and exploiting CPS and using it to improve CS. Thus, the following is hypothesized:

\[H_9: \text{CBR mediates the relationship between CPS and CS.}\]

**The Mediating Role of CS between CBR and Target-based CCBs:**

Helm (2006) found that a company’s good reputation promotes customer satisfaction. In turn, customers
satisfied with a company’s performance are more willing to engage in citizenship behavior such as positive word-of-mouth, according to Nguyen et al. (2016). Additionally, current reputation literature shows that corporate reputation influences extra-role behavior (e.g. CCBs) (Agarwal et al., 2015), including assisting other customers and helping and offering feedback to the organization (Nguyen et al., 2016). In contrast, Shahsavari and Faryabi (2013) showed that CBR did not directly affect CCBs. The importance of mediator effects of relational variables such as satisfaction in accounting for variations in behavioral outcomes has been highlighted in services marketing research. The value of mediator variables stems from their ability to promote the understanding of causal linkages between variables (Wang et al., 2003). This relationship indicates the possible existence of a mediating effect of customer satisfaction in the CBR–CCBs relationship: an effect that has not yet been examined. Thus, the present study argues that the inclusion of CS as a mediating factor between CBR and target–based CCBs (CCCBs and FCCBs) may be crucial. Accordingly, the current study proposes the following hypothesis:

H10: CS mediates the relationship between CBR and target–based CCBs (CCCBs and FCCBs).

Our research model was established based on analysis of the theoretical literature discussed above. It comprises three parts: CPS as the independent variable; CBR and CS as mediator variables in the model, and target–based CCBs (CCCBs and FCCBs) as the dependent variables. The conceptual framework is presented in Figure 1.

\[ \text{Customer Perceived Support} \rightarrow \text{Customer Satisfaction} \rightarrow \text{Target-based CCBs} \]

Source: Authors’ Presentation

**Figure 1. Conceptual Framework**

**METHODOLOGY**

− Population and Sample
One of the world’s largest industries is China’s domestic mobile phone market. In October 2021, smartphone subscribers in China numbered around 1.6 billion, with a monthly growth rate of a few million subscribers (Daniel, 2022), which resulted in intense competition in this sector. Therefore, smartphone businesses today take customer relations and after-sales processes very seriously, as customer care plays a crucial role in improving brand reputation, achieving customer satisfaction, and promoting customers’ voluntary behaviors.

The authors collected data from customers of smartphone after-sales services in Chengdu, China using a professional online survey website, several Chinese social media platforms (WeChat, Weibo, and Baidu Tie Ba), and a randomly distributed link to the questionnaire to generalize the results, which were gathered between September 2021 and November 2021. The sample size was determined from the sampling units based on Thompson’s equation to calculate the sample size \( n \) \( (n = 384.144; \text{Confidence level at 95 percent}; \text{The population size} = 9306000; \text{Error Proportion (0.05); Probability 50%}) \) (Thompson, 2012: 59, 60). We collected 391 completed questionnaires. The authors used a strict screening process to eliminate the unusable questionnaires, and thus excluded 23 questionnaires. Therefore, 368 valid questionnaires were available for final analysis.

Study Design
Survey research design was selected to test the hypotheses of this study. Data were collected using online questionnaire. The respondents’ demographic data were covered in the first section, whereas the second section presented all the study variables measured on a 5-point Likert scale (1 = Strongly disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, and 5 = Strongly agree).

Instruments
The scales used to tap the study variables are as follows:
Customer perceived support (CPS): The authors adapted a 3-item scale, developed by Choi and Lotz (2018) to measure CPS.
Customer-based brand reputation (CBR): The authors adapted a 3-item scale developed by Dall’Olmo et al. (2014) to measure CBR.
Customer satisfaction (CS): The authors adapted a 3-item scale developed by Hennig-Thurau et al. (2002) to measure CS.
Target-based customer citizenship behaviors (Target-based CCBs) include: (a) Customer-oriented CCB (CCCB): The authors adapted a 7-item scale developed by Yi and Gong (2013) to measure CCCB. This scale consists of two dimensions: helping, and word-of-mouth. (b) Firm-oriented CCB (FCCB): The authors adapted a 6-item scale developed by Yi and Gong (2013) to measure FCCB. This scale consists
The survey was created in English and later translated into Chinese. To make sure all the questions were easy to understand, a group of respondents was shown the questionnaire’s pilot version. All their suggestions and observations were taken into account. The respondents were then shown the questionnaire’s modified version. Table 1 (see Appendix-I) shows the items for each measure.

- Analysis Techniques

The study used SPSS v.26 and AMOS v.24 statistical software to summarize and analyze the data. Structural equation modeling was employed to test the hypotheses empirically. The multiple mediation was tested using bootstrapping analysis using AMOS, as suggested by Preacher and Hayes (2008).

RESULTS

Measurement Model

The field study data of 368 respondents were analyzed in AMOS by using Structural Equation Modeling. In the first stage, confirmation factor analysis (CFA) was run to check the model fit and validity. The revised model demonstrated a good model fit for the data put through the analysis. The CFA model fit indices show \( p \)-value = .000; CMIN/DF = 2.70 < 3; GFI (goodness of fit index) = .91 ≥ .90; CFI (comparative fit index) = .94 ≥ .90; RMSEA (root mean square error of approximation) = .07 < .08; NFI (Normed Fit Index) = .91 > .90; TLI (Tucker–Lewis index) = .93 > .90; AGFI (adjusted goodness of fit index) = .88 > .80; RMR (Root Mean Square Residual) = .04 closer to 0) fit the data acquired with good accuracy.

- Common Method Bias (CMB)

In this research, CMB was addressed statistically. The unrotated factor solution was used to run Harman’s one-factor test. The results demonstrated that the issue of data’s CMB was not a serious one, with variance explained of 36.88 percent, less than 50 percent (Podsakoff et al., 2003).

- Reliability and Validity

In Table 1, the constructs’ factor loadings were evaluated, and the results showed that they were above 0.50. This exhibits convergent validity according to Gerbing and Anderson (1988). Cronbach’s alpha was used to evaluate the constructs’ reliability. As can be seen in Table 1, a satisfactory level of reliability was noted because all construct values were higher than \( \alpha = 0.70 \) (Fornell and Larcker, 1981). Table 1 also shows the variance inflation factor (VIF) and tolerance for the variables of this study. A checking for multicollinearity revealed that VIF values for all the constructs are good (VIF<10) (Hair et al., 1995).
Besides Tolerance values are good (Tolerance > 0.10) (Tabachnick and Fidell, 2006).

In Table 1, which summarizes the preliminary analysis, the constructs’ reliability and validity were calculated using the composite reliability (CR) method (Brunner and SÜβ, 2005). The constructs’ CR indicators are above the acceptable threshold of > 0.60. The average variance extracted (AVE) was also calculated to further ensure validity. Obtaining values higher than 0.50 indicates good construct validity, according to Hair et al. (2010).

Through two tests, discriminant validity is assessed. First, we contrast whether all correlations in the off-diagonal space are Less than the square root of a construct’s AVE on the diagonal, in accordance with Fornell and Larcker (1981). The findings show the squared AVE being higher than the squared correlation of the variables. A discriminant validity’s satisfactory level was supplied by the measurements. Second, Henseler et al. (2015) use the Heterotrait–Monotrait Ratio of the Correlations (HTMT) method. Predicated on the mean value of all item correlations across different constructs relative to the geometric mean value of all item correlations within the same construct, the HTMT was assessed. If the HTMT value is below the maximum value of 0.85, we can conclude that discriminant validity is established. All the HTMT values were less than 0.675, as shown in Table 2 (see Appendix–II), indicating adequate discriminant validity.

**Demographic Profile**

Participants were Chinese customers of different age groups. Gender in the current sample was nearly equally distributed: 56.25 percent male, 43.75 percent female. More than half of the respondents (67.39%) were between the ages of 21 and 40. The demographic profile is presented in Table 3.

**Structural Model**

The hypothesized model offered an acceptable fit to data (CMIN/DF = 2.695 < 3.00; p-value < .001; GFI= .913 ≥ .90; CFI= .943 ≥ .90; NFI= .913 > .90; TLI= .928 > .90; RMR= .047 closer to 0; IFI= .943 > .90; RMSEA= .068 < .08).

**Hypotheses Testing**

A structural equation modeling approach was used to examine the direct effects. Table 4 demonstrates the findings of the direct effects of the Hypotheses. The results showed the effect of CPS on FCCB is significant (\( \beta = 0.533, \ p < 0.01 \)). Therefore, \( H_{1b} \) is strongly supported. On the other hand, the findings found that CPS is not significantly related to CCCB Thus, \( H_{1a} \) is rejected. CPS on CBR showed statistical significance (\( \beta = 0.645, \ p < 0.01 \)), confirming \( H_2 \). \( H_{3a} \) stating the relationship between CBR and CCCB is confirmed (\( \beta = 0.429, \ p < 0.01 \)). But the findings found that CBR is not significantly related to FCCB.
Thus, $H_{3b}$ is rejected. The stating relationship between CPS and CS in $H_5$ is confirmed ($\beta = 0.183$, $p < 0.05$). The results found that CS is significantly related to CCBs (CCCB and FCCB) ($\beta = 0.298$, $p < 0.01$; $\beta = 0.332$, $p < 0.01$, respectively). Thus, $H_6a$ and $H_6b$ are fully supported. The effect of CBR on CS is significant ($\beta = 0.471$, $p < 0.01$). $H_8$ is supported.

### Table 3. Demographic Profile ($N = 368$)

| Characteristic | Category       | N  | %   |
|----------------|----------------|----|-----|
| Gender         | Male           | 207| 56.25|
|                | Female         | 161| 43.75|
|                | Total          | 368| 100 |
| Age range      | Under21        | 45 | 12.23|
|                | 21-30          | 183| 49.72|
|                | 31-40          | 65 | 17.66|
|                | 41-50          | 55 | 14.94|
|                | 50+            | 20 | 5.43 |
| Education      | High School    | 40 | 10.86|
|                | Undergraduate  | 230| 62.5 |
|                | Masters and PhD| 98 | 26.63|
|                | Total          | 368| 100 |
| Smartphone's brand | HUAWEI | 130| 35.32|
|                 | OPPO           | 30 | 8.15 |
|                 | Xiaomi or Redmi| 56 | 15.21|
|                 | iPhone         | 126| 34.23|
|                 | Others         | 26 | 7.06 |
|                | Total          | 368| 100 |

Source: Authors’ Computation

Testing Mediating Effects of CBR and CS

The mediation impacts of CBR and CS were examined utilizing AMOS’s bootstrapping procedures. As per Preacher and Hayes (2008), a rigorous test of mediation is conducted as part of the bootstrapping analysis, which also generates an empirical sample and examines indirect effects. The results of bootstrapping analysis with 2000 samples provided the effects, 95 percent confidence intervals (CI), and $p$-values for the indirect effects. Table 5 was specified to evaluate mediation effects. Statistically significant effect of CPS on Customer-oriented CCB mediated by CBR (CPS $\rightarrow$ CBR $\rightarrow$ CCCB) (0.176; $p < 0.01$). The effect of CPS on Customer-oriented CCB mediated by CS (CPS $\rightarrow$ CS $\rightarrow$ CCCB) showed statistical significance (0.035; $p < 0.05$). Besides, statistically significant effect of CPS on Firm-oriented CCB mediated by CS (CPS $\rightarrow$ CS $\rightarrow$ FCCB) (0.040; $p < 0.01$). The effect of CPS on CS mediated by the CBR (CPS $\rightarrow$ CBR $\rightarrow$ CS) showed statistical significance (0.202, $p < 0.01$). The indirect effect of
CBR on Target-based CCBs (CCCB and FCCB) through CS (CBR -> CS -> CCCB) (CBR -> CS -> FCCB) is a significant estimate (0.096, \( p < 0.01 \); 0.112, \( p < 0.01 \), respectively).

| H     | Relationship       | B    | C.R  | p-value | Comment         |
|-------|--------------------|------|------|---------|-----------------|
| H1    |                    |      |      |         |                 |
| H1a   | CCCB <- CPS        | .036 | .529 | .597 ns | Not supported   |
| H1b   | FCCB <- CPS        | .533 | 6.070| 0.01    | Supported       |
| H2    | CBR <- CPS         | .645 | 9.919| 0.01    | Supported       |
| H3    |                    |      |      |         |                 |
| H3a   | CCCB <- CBR        | .429 | 4.580| 0.01    | Supported       |
| H3b   | FCCB <- CBR        | -.090| -1.470| .142 ns | Not supported   |
| H5    | CS <- CPS          | .183 | 2.275| 0.01    | Supported       |
| H6    |                    |      |      |         |                 |
| H6a   | CCCB <- CS         | .298 | 3.964| 0.01    | Supported       |
| H6b   | FCCB <- CS         | .332 | 4.058| 0.01    | Supported       |
| H8    | CS <- CBR          | .471 | 4.981| 0.01    | Supported       |

Source: Authors’ Estimation  
Notes: ns, non-significant  
CPS, Customer Perceived support; CS, Customer Satisfaction; CBR, Customer-based Brand Reputation; CCCB, Customer-oriented CCB; FCCB, Firm-oriented CCB; CR, Composite reliability

**Table 4. Results of Hypothesized Effects**

| H     | Path               | Estimate | 95% CI | p-value | Comment          |
|-------|--------------------|----------|--------|---------|------------------|
|       |                    | Total    | Direct | Indirect| Lower | Upper |       |
| H4a   | CPS -> CBR -> CCCB| 0.176    | -      | .176   | .097 | .288 | .001  | Full mediation |
| H7a   | CPS -> CS -> CCCB | 0.035    | -      | .035   | .002 | .097 | .035 | Full mediation |
| H7b   | CPS -> CS -> FCCB | 0.573    | .533   | .040   | .004 | .104 | .028 | Partial mediation |
| H9    | CPS -> CBR -> CS  | 0.385    | .183   | .202   | .110 | .331 | .001 | Partial mediation |
| H10a  | CBR -> CS -> CCCB | 0.525    | .429   | .096   | .038 | .222 | .001 | Partial mediation |
| H10b  | CBR -> CS -> FCCB | 0.112    | -      | .112   | .042 | .261 | .001 | Full mediation |

Source: Authors’ Estimation  
Notes: CI, Confidence interval  
CPS, Customer Perceived support; CS, Customer Satisfaction; CBR, Customer-based Brand Reputation; CCCB, Customer-oriented CCB; FCCB, Firm-oriented CCB

**Table 5. Bootstrapped Mediation Results**
The present findings illustrate the positive effect of CPS on FCCBs (H₁b). This result can be explained in terms of the theories of social exchange and organizational support. By extending these theories to the consumer context, we find that customers who perceive their needs are being met by the organization participate in voluntary behaviors (Ning and Hu, 2022). The current findings are consistent with the research assumptions and literature. They also agree with the results of Bettencourt (1997). In contrast, the current findings do not find a significant effect of CPS on CCCBs (H₁a), a result that agrees with Choi and Lotz (2018). This finding may reflect opportunistic behaviors of customers who may favor discretionary behaviors that the service organization could observe (e.g., FCCBs) more than CCCB since they feel such acts could provide future benefits for them (Bartikowski and Walsh, 2011). Thus, the results of this hypothesis helped answer the first research question.

Results from testing H₂ find the positive effect of CPS on CBR. This result agrees with previous investigations demonstrating an association between CPS and CBR (Cintamür, 2022; Hossin et al., 2021). The present finding indicates that when a company cares about its customers’ requirements, values their ideas, and provides the best service, customers perceive support from the company, which in turn influences customers’ positive evaluation of the brand’s reputation (Keh and Wei, 2001).

The current study shows CBR positively affects CCCBs (H₃a). This outcome aligns with past research as well as the study’s objectives. Customers who believe the brand has a strong reputation are more likely to spread positive word-of-mouth, which means brands with good reputations would encourage positive word-of-mouth (Sundaram et al., 1998). The results are in line with the idea that a positive reputation represents a quality signal and promise, increasing the possibility of customers engaging in voluntary behaviors (Helm et al., 2009; Walsh et al., 2009). Furthermore, according to Bartikowski and Walsh (2011), a brand with a good reputation would positively affect CCB in the form of customers supporting other customers. However, contrary to expectations, the current study does not reveal a direct influence of CBR on FCCBs (H₃b). That finding is consistent with Shahsavari and Faryabi (2013), which find no evidence of CBR directly impacting CCBs. The current findings refer to the fact that customers who have a positive evaluation of brand would not be patient with service failures and would not provide feedback to the company to promote service delivery.

One objective of this study was to test the mediating role of CBR between CPS and target-based CCBs (H₄). The results show that CBR fully mediates the association between CPS and CCCBs (H₄a). This result is partially consistent with the finding of Cintamür, (2022) that CBR mediates the relationship between CPS and dimensions of CCBs. The current finding implies that when customers realize their organization is supportive and encouraging, they make every effort to benefit the organization in return,
in a sense of gratefulness. As a result, this process impacts their assessment of brand reputation due to the reciprocity norm (Cintamür, 2022; Hossin et al., 2021) resulting in positive effects on CCB in the form of customers helping other customers. This relationship creates emotional relations between customers (Bartikowski and Walsh, 2011). Contrary to predictions, this research demonstrates no CBR mediating influence between CPS and FCCBs (H4b), emphasizing the need for more research. Thus, the results of this hypothesis helped answer the second research question.

The present study shows that CPS positively affects CS (H5), which agrees with social exchange theory (Ring, 2011) and findings from prior studies (Yi and Gong, 2008; Zhao et al., 2014) whereby when customers obtain more support from companies, they experience greater satisfaction. Moreover, the findings show that CS has a significantly positive effect on target-based CCBs (CCCBS and FCCB) (H6). This result agrees with previous investigations demonstrating an association between CS and CCBs (Bettencourt, 1997). Additionally, this finding demonstrates that customers are more likely to engage in CCBs such as word-of-mouth, assisting other customers, and offering feedback when they feel satisfied with the organization (Nguyen et al., 2016; Yi and Gong, 2008).

Another significant contribution of this research is ascertaining the mediating role of CS between CPS and target-based CCBs (H7). The findings showed that CS has a full mediation effect between CPS and CCCBS (H7a). CS also has a partial mediating effect between CPS and FCCB (H7b). These results are consistent with prior studies and SOR theory. Based on that theory, CPS stimulates CS, eliciting corresponding behavior represented by target-based CCBs (Mehrabian and Russell, 1974). This finding implies that when customers receive support from a company, they experience a high level of satisfaction, resulting in encouragement to engage in voluntary behaviors (Yi and Gong, 2008; Zhao et al., 2014). Thus, the results of this hypothesis also helped answer the second research question.

The findings also show that CBR has a significantly positive impact on CS (H8), which means that a positive brand reputation enhances customers’ satisfaction and experiences (Helm, 2006). This finding is in line with earlier research regarding the impact of CBR on CS (Rizwan et al., 2020). Moreover, this finding is rational, according to the theories of cognitive dissonance and self-perception (Bem, 1967; Festinger, 1957). Thus, a customer’s opinion of his experiences with an organization’s services are influenced by brand reputation, prompting him to reassess his or her perception and impacting satisfaction (Helm, 2006).

The findings also illustrate that CBR has a partial mediating effect between CPS and CS (H9), consistent with the present research assumption and prior studies. Thus, according to the theories of organizational support and social exchange, when customers realize the organization is supportive and encouraging, they feel obligated to benefit the organization out of a sense of gratefulness, and as a result, customers become more proactive and enthusiastic, leading to affecting their evaluation of brand
reputation (Cintamūr, 2022; Hossin et al., 2021). A positive brand reputation can promote customer satisfaction scores (Helm, 2006). Thus, the results of this hypothesis helped answer the third research question.

Finally, one of the valuable results of the current study is that CS mediates the relationship between CBR and target-based CCBs (H_{10}). Mediation analysis shows that CS has a full mediation effect between CBR and FCCBs (H_{10b}) but partially mediates the effect of CBR on CCCBs (H_{10a}). Therefore, to encourage customers to engage in FCCBs, a positive brand reputation must first influence customer satisfaction. Thus, the results of this hypothesis also helped answer the third research question.

CONCLUSION

The present research explores the relationship between CPS and target-based CCBs (CCCBs and FCCBs) in the smartphone after-sales service context. Moreover, it tries to uncover factors that could explain such a relationship by examining the mediating roles of CBR and CS. Consistent with theories of social exchange and organizational support, this research establishes that CPS does indeed have a significant effect on FCCBs. Additionally, consistent with the SOR framework and the theories of cognitive dissonance and signaling, the findings indicate that the relationship between CPS and CCCBs is fully mediated by CS. While the findings indicate that the relationship between CPS and FCCBs is partially mediated by CS, the relationship between CPS and CCCBs is fully mediated by CBR.

IMPLICATIONS

Theoretical Implications

The results of our research contribute to the after-sales service marketing literature in several ways. First, the study confirms the positive association between CPS and CBR. Most of our earlier research had focused on the relationship between POS and corporate reputation in the employee’s perspective (Hossin et al., 2021) while limited effort had been made to investigate the role of CPS in enhancing CBR in the customer context. Consequently, these results contribute to the context of the CPS and CBR literature related to smartphone after-sales service.

Additionally, this study confirms that CBR and CS act as integration mechanisms in the association between CPS and CCBs. Our findings show that CBR mediates the positive association between CPS and CCCBs. Moreover, CS mediates the positive relationship between CPS and target-based CCBs (CCCBs and FCCBs). Therefore, promoting CPS, CBR, and CS enables firms to enhance generating more CCBs.
The current study significantly contributes to the customer behavior literature by demonstrating that CBR influences the association between CPS and CS. Furthermore, the current findings confirm that CS mediates the relationship between CBR and target-based CCBs.

Finally, the results contribute to customer behavior literature by showing the vital role played by the theories of social exchange, organizational support, cognitive dissonance, self-perception, and signaling in predicting the relationships between CPS, CBR, CS, and CCBs in the smartphone after-sales service industry.

Managerial Implications
The return on CPS is one of the most critical managerial implications of this study’s findings. Results show that CPS promotes FCCBs and positively affects brand reputation and customer satisfaction. The CPS–FCCB link is noteworthy to practitioners. Based on these findings, after-sales service companies should focus more managerial attention on boosting CPS.

There are several innovative ways and channels to improve customer support. Live chat is the most convenient and provides users with complete support and answers to their inquiries in real-time. Customer support through email and technical support services. Moreover, support software is an essential tool for improving brand reputation as it is able to quickly determine and expedite the resolution of issues customers may encounter.

The results also reveal the role of CBR in increasing target-based CCBs through customer satisfaction. Thus, brand reputation must be considered a strategic issue and not a tactical one (Davies et al., 2005). As a result, service firms should constantly monitor and strive to improve their reputation. Furthermore, businesses should focus on customer support and provide higher-quality services to improve their brand reputation.

Finally, based on the empirical findings, we conclude that the CPS–CS link can be further strengthened by CBR. Therefore, the smartphone after-sales service organizations should support their customers to promote brand reputation leading to customer satisfaction.

LIMITATIONS AND FUTURE DIRECTIONS
Although both FCCBs (i.e., tolerance and feedback) and CCCBs (i.e., helping and advocacy) are critical components of CCBs, the current study finds that CPS significantly affects only FCCBs without any direct influence over CCCBs. Thus, future studies could reveal the reason for explaining why there is no significant relationship between CPS and CCCBs by considering several moderating variables such as the collectivism/individualism cultural orientation as the most useful in the study of consumer behavior.
Since the present study only focuses on analyzing the impact of overall CBR on customer citizenship behaviors (CCBs), future research could investigate in more depth the impact of CBR dimensions (e.g., customer orientation, reliability, service quality, social and environmental responsibility) (Maria et al., 2017) on CCBs. This study provides vital results in the smartphone after-sales service context. To generalize the results in other contexts, it would be valuable to study the current model in other vital service sectors, such as retail banking, tourism, and the hospitality industry. Finally, the overall generalizability of the findings was restricted given this study was conducted only in China. The research model could be further tested and verified in countries with different social, cultural, and economic contexts than China.

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### Appendix I

#### Table 1. Construct Validity and Reliability

| Items                                      | M     | Std   | FL >0.50 | α >0.70 | CR    | AVE   | Tolerance >0.10 | VIF < 10 |
|--------------------------------------------|-------|-------|----------|---------|-------|-------|-----------------|----------|
| **Customer Perceived Support:**            |       |       |          |         |       |       |                 |          |
| Q1. The service provider really cares about my well-being. | 3.37  | .864  | .803     | .878    | .881  | .711  |                 |          |
| Q2. The service provider values my contribution to its well-being. | 3.22  | .865  | .889     |         |       |       |                 |          |
| Q3. The service provider cares about my opinions. | 3.35  | .894  | .835     |         |       |       |                 |          |
| **Customer Satisfaction:**                 |       |       |          | .747    | .761  | .518  | .650            | 1.540    |
| Q4. I am always delighted with the after-sales services of this brand. | 3.75  | .838  | .706     |         |       |       |                 |          |
| Q5. Overall, I am satisfied with the after-sales services of this brand. | 3.85  | .776  | .804     |         |       |       |                 |          |
| Q6. I feel good about using this brand.    | 4.03  | .793  | .639     |         |       |       |                 |          |
| **Customer-based Brand Reputation:**       | .781  | .789  | .556     | .627    |       |       |                 |          |
| Q7. In my opinion, my mobile phone brand is one of the best on the market. | 3.39  | .978  | .686     |         |       |       |                 |          |
| Q8. My mobile phone brand is well established. | 3.91  | .795  | .744     |         |       |       |                 |          |
| Q9. My mobile phone brand is well respected on the market. | 3.76  | .851  | .803     |         |       |       |                 |          |
| **Customer-oriented CCB:**                 | 3.60  | .902  | .542     | .861    | .873  | .640  | .587            | 1.703    |
| Q10. I have given advice to other customers. | 3.69  | .970  | .843     |         |       |       |                 |          |
| Q11. I have encouraged friends and relatives to use this mobile phone brand. | 3.85  | .891  | .928     |         |       |       |                 |          |
| Q12. I have recommended this brand to others. | 3.91  | .855  | .833     |         |       |       |                 |          |
| Q13. I have said positive things about this brand to others. | 3.20  | .928  | .554     | .794    | .808  | .518  | .765            | 1.307    |
| **Firm-oriented CCB:**                     |       |       |          |         |       |       |                 |          |
| Q14. I have adapted to the situation when I have waited longer than I expected to receive the after-sales services. | 3.45  | .878  | .837     |         |       |       |                 |          |
| Q15. When I had a useful idea on how to improve after-sales services, I let the staff of this brand know. | 3.68  | .763  | .702     |         |       |       |                 |          |
| Q16. When I experienced a problem, I let the staff of this brand know about it. | 3.49  | .880  | .758     |         |       |       |                 |          |

Source: Authors’ Calculation  
α, Cronbach’s alpha; FL, Factors loading; CR, composite reliability; AVE, average variance extracted; VIF, variance inflation factor; M, Mean; Std, Standard deviation; Cronbach’s alpha for the whole scale = 0.907
### Appendix II

| Variables | 1   | 2   | 3   | 4   |
|-----------|-----|-----|-----|-----|
| 1. CPS    |     |     |     |     |
| 2. CS     | 0.516 |     |     |     |
| 3. CBR    | 0.674 | 0.653 |     |     |
| 4. CCCB   | 0.513 | 0.641 | 0.669 |     |
| 5. FCCB   | 0.644 | 0.511 | 0.454 | 0.519 |

Source: Authors' Computation

Notes: CPS, Customer Perceived support; CS, Customer Satisfaction; CBR, Customer-based Brand reputation; CCCB, Customer-oriented CCB; FCCB, Firm-oriented CCB; HTMT, Heterotrait-Monotrait ratio discriminate at (HTMT <0.85)

*Table 2. HTMT Results*
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AUTHORS’ CONTRIBUTIONS

Ahmed Hassaan Mohammed Ali: Research design, data collection, theoretical framework development, collected data from respondents, data analysis, manuscript revision, discussed the results and contributed to the final manuscript.

Jing Song: Supervision.

Min Zhang: Translated the English questionnaire into Chinese.