

The Impact of Perceived Procedural Justice on Dimensions of Customer Citizenship Behaviours: The Mediating Effect of Customer Perceived Support

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Abstract. *The present study examines the influence of perceived procedural justice (PPJ) on four fundamental dimensions of customer citizenship behaviours (helping other customers, advocacy, customer tolerance, and feedback) and the mediating role of customer perceived support (CPS). Our research setting is the smartphone after-sales service sector in China. Structural equation modeling (SEM) using AMOS is employed to empirically test our hypotheses on the basis of survey data from 368 smartphone customers. We find that PPJ significantly contributes to the customer citizenship behaviours of helping other customers, advocacy, and feedback. Surprisingly, we do not find a significant relationship between PPJ and customer tolerance. Our evidence indicates that CPS partially mediates the relationships between PPJ and helping other customers, advocacy, and feedback, but fully mediates the effect of PPJ on customer tolerance. This research contributes to managers' understanding of how voluntary behaviours can be effectively managed by enhancing PPJ and CPS. Further, it enriches our theoretical understanding of key antecedents of customer citizenship behaviours.*

Keywords: *perceived procedural justice, customer citizenship behaviours, customer tolerance, customer perceived support, smartphone after-sales service, China*

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1. Introduction

The smartphone sector has witnessed growth in the Chinese market. According to the statistics announced in the first two months of 2022, China's smartphone production volume was approximately 212.7 million units. Furthermore, China produced about 1.5 billion smartphones in 2020. China's domestic mobile phone industry represents one of the largest industries in the world, and it is expected to continue to grow gradually. In October 2021, smartphone subscribers in China numbered around 1.6 billion, with a monthly growth rate of a few million subscribers (Daniel, 2022). In terms of software systems, iOS and Android maintained their market dominance, with over 21% and 78% of the mobile phone operating system market share in China, respectively (Daniel, 2022), which resulted in intense competition in this sector. Thus, smartphone businesses today take customer relations and after-sales service very seriously, as a great customer experience increases the return rate of the customers.

Services differ from products in that they need consumer interaction throughout service delivery, are more intangible and heterogeneous, and are generated and consumed at the same time (Groth & Gilliland, 2001). As a result, the service experience, or the customer's perception of service delivery, is frequently a critical standard (Bitner et al., 1990). Consequently, when evaluating the quality of a service, customers pay more attention to delivery-related aspects like procedural justice (Fisk et al., 1993). Moreover, customers experience numerous 'moments of truth' when dealing with service organisations. These are times when customers interact with a representative of the service organisation and assess the interaction in terms of the justice of the service delivery and the manner in which they were treated (Fisk et al., 1993).

There has been much discussion in the literature about 'perceived procedural justice' (PPJ) and its effect on marketing outcomes such as behavioural intentions, customer emotions, satisfaction, customer affection, and relationship quality, and research has identified a strong influence on reactions to the service delivery process (Ali et al., 2022; Chang et al., 2012; Choi & Choi, 2014; La & Choi, 2019; Namkung & Jang, 2010; Nikbin et al., 2016; Ortiz et al., 2017; Singh & Crisafulli, 2016). Further, Chebat and Slusarczyk (2005) reveal that people's perceptions of justice affect their emotional reactions, such as happiness, and anger, which in turn affect loyalty.

On the other hand, a growing number of studies have investigated the effect of PPJ on employee citizenship behaviour (Lim & Loosemore, 2017; Rahman & Karim, 2022; Seth et al., 2022; Song et al., 2012; Van Dijke et al., 2012), relying on theories of social exchange (Blau, 1964) and equity (Adams, 1965). However, few studies have examined the effect of customer perceived justice (CPJ) on customer citizenship behaviours (CCBs) (Choi & Lotz, 2018; Cintamür, 2022; Kim et al., 2018; Tonder & Petzer, 2022; Yi & Gong, 2006). Although prior studies of CPJ and CCBs are valuable, they have numerous significant limitations. First, there is still debate over the direct effect of PPJ on the various dimensions of CCBs. For example, most studies of CPJ and CCBs (Kim

et al., 2018; Tonder & Petzer, 2022; Yi & Gong, 2006) address overall CCB. Yi and Gong (2013) propose that the fundamental dimensions of CCB are helping, advocacy, tolerance, and feedback. Further, of the three types of justice (interactional, procedural, and distributive) the direct effect of PPJ on the dimensions of CCBs has not been sufficiently examined in the services marketing literature.

Second, whereas in the context of employment there is conceptual awareness of the role of perceived support in the relationship between PPJ and organisational citizenship behaviour (Dominic et al., 2021; Moorman et al., 1998), no empirical studies in the marketing literature have investigated the role of customer perceived support (CPS) in the PPJ–CCBs relationship. Recent research has shown that CPS is positively impacted by overall CPJ (Choi & Lotz, 2018), and CPS is considered a vital antecedent of customer voluntary performance (i.e., citizenship behaviours) (Bettencourt & Brown, 1997; Ning & Hu, 2022; Rosenbaum & Massiah, 2007), which implies a possible mediating effect of CPS in the PPJ–CCBs relationship—an effect that has not yet been investigated.

Finally, despite the significance of PPJ as a key antecedent of CCBs, this relationship has not yet been tested in the context of the smartphone after-sales service industry. The current research addresses this deficit by experimentally investigating the role of PPJ in enhancing CCBs in China's smartphone after-sales service. The present research addresses three research questions as follows: (1) Does PPJ directly influence the four fundamental dimensions of CCBs (helping, advocacy, tolerance, and feedback)? (2) Does CPS directly influence the dimensions of CCBs? (3) Does CPS have any mediating effects between PPJ and the dimensions of CCBs (helping, advocacy, tolerance, and feedback)?

This research is organized as follows: The following section gives a succinct overview of the theoretical underpinnings, and Section 3 discusses the study hypotheses. Section 4 presents the study's methodology. Section 5 reports the findings, while the findings are discussed in Section 6. Section 7 reports the theoretical and managerial implications. Finally, Section 8 offers limitations and recommendations.

2. Theoretical Underpinnings

2.1 *Perceived Procedural Justice (PPJ)*

During the delivery of services, customers regard justice as an issue of whether a service organization has met its responsibility to achieve the outcomes and benefits it promised to provide (Yi & Gong, 2008). Customers' expectations are focused on both the promised advantages and the way in which these benefits are offered (Bowen et al., 1999). Procedural fairness in a service delivery setting describes the perceived justice of the organization's policies and procedures (Voorhees & Brady, 2005; Yi & Gong, 2008). In addition, Tax et al. (1998) identified procedural fairness as a relevant and critical

component in the context of customer-service provider exchanges for service organizations. According to Gokmenoglu and Amir (2021), procedural fairness is related to the justice of procedures used to provide a result; consequently, it is associated with the actions performed by service providers. Procedural justice involves issues such as the helpful behaviour of service staff, the duration of waiting for the service, the efficiency of service, and the handling of unusual requests (Bowen et al., 1999; Cintamür, 2022). Leventhal (1980) argued that PPJ is enhanced when consumers perceive that the procedures necessary for the desired result are accurate and consistent.

Hence, in line with the arguments preceded above, the authors define PPJ as consumers' perceptions of justice relating to the procedures and policies of the after-sale services provided by smartphone organizations.

2.2 Customer Perceived Support (CPS)

CPS is an adaptation of the concept of perceived organisational support for employees, applied to the interactions between an organisation and its customers (Bettencourt & Brown, 1997). It is founded on organisational support theory (Eisenberger et al., 1986), which holds that employees construct opinions about how much a firm values their contributions and cares about their well-being to evaluate whether the company will reward additional employee effort (Eisenberger et al., 1997). Similar to employees, customers may also construct opinions about the organisation's support. Customers may experience improved service delivery as a result of knowing that the firm recognises and appreciates their performance (Im & Qu, 2017; Keh & Wei Teo, 2001). According to Yi and Gong (2009), CPS is 'the degree that a firm values the contributions of its consumers and cares about their well-being'. Customers perceive the organisation's support via various factors, such as its policies on responsiveness to customers' needs, employees' fair and honest behaviour, and staff voluntarism (Im & Qu, 2017).

2.3 Customer Citizenship Behaviours (CCBs)

Because CCBs play a crucial role in generating competitive advantage, they have attracted the interest of academics, and an increasing number of studies are being carried out (Zhu et al., 2021). The term CCBs is derived from organisational citizenship behaviour. Customers are increasingly being viewed as 'partial employees of the firm' by academics (Bowen et al., 2000). As defined, CCBs are voluntary and discretionary behaviours that are not required for the effective production and/or delivery of the service but that, generally, assist the service firm (Groth, 2005; Zhu et al., 2016). CCBs are voluntary (extra-role) actions that customers take during or after the service delivery phase (Nguyen et al., 2014).

Yi and Gong (2013) have demonstrated that CCBs consist of the following four aspects: (1) Helping refers to 'customer behaviours aimed at helping other customers to search for service information and clarify how to utilise it in a correct manner' (Yi &

Gong, 2013). Rosenbaum and Massiah (2007) contend that by being helpful, customers show empathy for other consumers. Help from prior customers decreases the time and effort put in by new customers and enhances the value they get from services (Liao et al., 2023; Thompson et al., 2016). (2) Advocacy refers to consumers actively recommending services to friends, colleagues, or other individuals (Groth, 2005). Customers are a cheap source of recommendations and may be experts on other customers' perspectives (Bettencourt, 1997). Organisations should therefore make the most of this vital information source (Keh & Wei Teo, 2001). (3) Tolerance denotes the willingness of the customer to remain flexible when the service does not match their expectations of service quality, like in the instance of delays (Yi & Gong, 2013). (4) Feedback refers to consumers offering the organisation suggestions for service improvements to assist the firm in enhancing the way services are delivered (Groth, 2005; Hui & Wenan, 2022; Yi & Gong, 2008).

3. Hypotheses Development

3.1 *Perceived Procedural Justice (PPJ) and Customer Citizenship Behaviours (CCBs)*

Organisational behavior literature reveals that procedural fairness perception influences the behavioral responses of individuals (Cohen-Charash & Spector, 2001). An increasing number of organisational studies have investigated the effect of PPJ on employee citizenship behaviour and have identified a link between procedural justice and citizenship behaviour (Nguyen & Tran, 2022; Ramdeo & Singh, 2019). The theories of social exchange (SET) and equity provided strong support for explaining the relationship between them. According to SET, individuals seek to reciprocate with those who have helped them. One type of behaviour that employees display to reward those who benefit them is organisational citizenship behaviour (Tansky, 1993). In addition, equity theory posits that individuals will feel stress in the presence of injustice and will seek to resolve it (Adams, 1965). Masterson (2001) claims that if employees believe they are treated fairly in the workplace, they will be loyal to the company and feel obligated to reciprocate by giving something of value in return. By adopting this logic to the context of the consumer, it becomes clear that if customers feel that a firm treats them fairly, they will prefer to express their gratitude by displaying CCB in order to maintain the social exchange. Some prior empirical investigations examined the vital role of perceived justice and its influence on customer citizenship behaviours in various industries. Earlier studies have adopted the justice theory to seek the antecedents of CCBs. The empirical findings (Yi & Gong, 2008; Zoghbi-Manrique-de-Lara et al., 2015) demonstrate that guests' perceptions of the fairness of the treatment they received from hotel staff during the service interaction prompt them to participate in citizenship behaviours. Besides, Ortiz et al. (2017) confirmed that a customer's perception of justice might affect their psychology and could lead to behavioural responses from customers towards the organization.

In contrast, most marketing studies focus on the connection between overall perceived justice or interactional justice and CCBs (Choi & Lotz, 2018; Yi & Gong, 2006). Therefore, attention has not been placed on the influence of PPJ on the dimensions of CCBs in the context of customers. Drawing on the theories of SET and equity, our investigation argues that when customers perceive the policies and procedures of the smartphone after-sales service as fair, this leads them to reciprocate towards this organisation with increased citizenship behaviours (e.g., helping other customers, advocacy, customer tolerance, and feedback). Thus, the following hypotheses are proposed:

H1a. *PPJ positively affects helping other customers.*

H1b. *PPJ positively affects advocacy.*

H1c. *PPJ positively affects customer tolerance.*

H1d. *PPJ positively affects feedback.*

3.2 PPJ and Customer Perceived Support (CPS)

Research indicates that fair treatment enhances the creation of social exchange relationships (Cropanzano & Mitchell, 2005). More specifically, how fairly firms treat their staff members (i.e., organisational justice) might indicate the extent to which individuals perceive that the corporation cares about their welfare and supports them (i.e., perceived organisational support, POS) (Herda & Lavelle, 2011). Several scholars in organisational behaviour have proven that PPJ affects POS positively and have regarded it as a vital antecedent of POS (e.g., DeConinck, 2010; Dominic et al., 2021; Loi et al., 2006; Masterson et al., 2000; Rhoades & Eisenberger, 2002). In keeping with the organisational support theory (Eisenberger et al., 1986; Shore & Wayne, 1993), the POS of individuals might be influenced by the corporation's actions based on how the staff members perceive organisational procedures. By expanding this logic to the consumer context, researchers in consumer behaviour studies (Choi & Lotz, 2018) have revealed that customers' perceptions of fairness through service providers boost their perceptions of support from those firms. Furthermore, a recent investigation in the tourism marketing field demonstrates even more evidence that PPJ influences perceived support. A survey of a sample of 453 Gulangyu Island inhabitants in China confirmed that PPJ positively impacts perceived community support (Su et al., 2019). The following hypothesis can therefore be made in light of the theoretical discussion and study data shown above:

H2. *PPJ positively affects CPS.*

3.3 CPS and CCBs

According to organisational support theory (OST), workers act in line with the reciprocity principle (Chen et al., 2009). In a similar manner, OST can be applied to the

customer context, to posit that when an organisation cares about the requirements of its customers, values their opinions, acts in their best interests, and provides the best service it can, leading customers to perceive support from the organisation, customers who perceive organisational support may cultivate positive thoughts and feelings that may influence their assessment of the organisation because of the reciprocity principle (Keh & Wei Teo, 2001). Bettencourt (1997) and Rosenbaum and Massiah (2007) provided evidence that organisational support impacts consumer feedback, suggestions, and word-of-mouth recommendations. Crocker and Canevello (2008) demonstrated the perceived support from others leads people to reciprocate with similar supportive behaviours. In accordance with social exchange theory, customers exhibit positive behaviours when they believe that businesses offer good social support during the consumption process (Ning & Hu, 2022). Similarly, theories of organisational climate and social support predict that supportive climates enhance customer voluntary behaviours (Liao et al., 2022; Schneider, 1990), and Ning and Hu (2022) demonstrate that social support has a significant effect on consumer citizenship behaviour.

Previous studies on CPS and CCB have been limited to discussing overall CCB (e.g., Ning & Hu, 2022) or focussing on particular dimensions of CCBs (e.g., Bettencourt & Brown, 1997). The current study examines the correlations between CPS and various dimensions of CCBs in the after-sales service industry. Based on the above theories and studies, the authors propose the following hypotheses:

H3a. *CPS positively affects helping other customers.*

H3b. *CPS positively affects advocacy.*

H3c. *CPS positively affects customer tolerance.*

H3d. *CPS positively affects feedback.*

3.4 The Mediating Role of CPS

In the organisational literature, prior studies have demonstrated that POS mediates the relationship between organisational justice and organisational citizenship behaviour (Noruzy et al., 2011). More specifically, Moorman et al. (1998) and Dominic et al. (2021) have revealed that POS mediates the relationship between procedural justice and organisational citizenship behaviour. However, prior studies have not investigated the role of CPS in the PPJ–CCBs relationship in the customer context, although the marketing literature shows that customer perceived justice positively affects CPS (Choi & Lotz, 2018) and CCBs (Tonder & Petzer, 2022) and that CPS positively affects CCBs (Ning & Hu, 2022). Consequently, both PPJ and CPS are vital elements for enhancing CCBs. Therefore, we suggest that CPS may be an underlying mechanism by which PPJ affects the various dimensions of CCBs. Thus, the authors propose the following hypotheses:

H4a. CPS mediates the relationship between PPJ and helping other customers.

H4b. CPS mediates the relationship between PPJ and advocacy.

H4c. CPS mediates the relationship between PPJ and customer tolerance.

H4d. CPS mediates the relationship between PPJ and feedback.

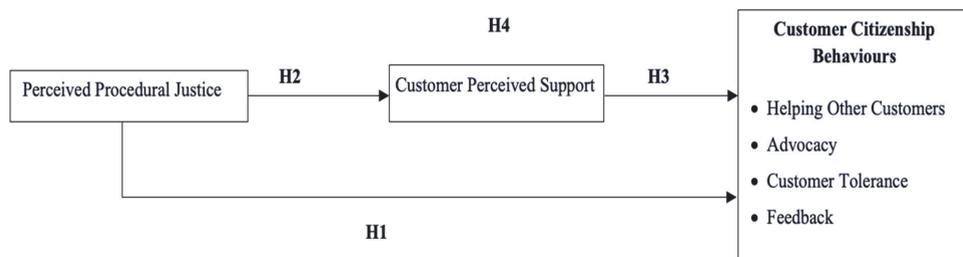
4. Methodology

4.1 Conceptual Framework

Our research model is based on an analysis of the theoretical literature discussed above. It comprises three parts: PPJ is the independent variable; CPS is the mediator in our model; and the dimensions of CCBs (helping other customers, advocacy, customer tolerance, and feedback) are dependent variables. The conceptual framework is presented in Figure 1.

Figure 1

Conceptual Framework



4.2 Population and Sample

We used a specialised online survey website (e.g., Credamo) and some Chinese social media platforms (Weibo, WeChat, and Baidu Tie Ba) to collect data from users of smartphone after-sales services in Chengdu, China. In total, 391 completed questionnaires were collected between September and November 2021. We employed a strict screening procedure to remove questionnaires with blatant regularity or brief response times, and so we excluded 23 questionnaires. Therefore, 368 valid questionnaires are included in our analysis. The sample size was determined based on Thompson's equation ($n = 384.144$; probability 50%; confidence level 95%; error proportion (0.05); population size = 9,306,000) (Thompson, 2012, pp. 59–60).

4.3 Study Design

The primary method of gathering data is the online questionnaire. We used scales that had high confidence and validity ratings based on prior studies. The first section re-

quested respondents' demographic data. The second section used a Likert scale with a 5-point range from 1 (strongly disagree) to 5 (strongly agree).

4.4 Study Instruments

The scales for the six types of variables used in this study are as follows:

Perceived Procedural Justice (PPJ): We adapted a three-item scale developed by Maxham and Netemeyer (2002) and Voorhees and Brady (2005) to measure PPJ. We obtained a Cronbach's alpha of 0.846. A sample item is "The mobile phone brand has fair practises and policies for dealing with users".

Customer Perceived Support (CPS): We adapted the three-item scale of Choi and Lotz (2018) to measure CPS. We obtained a Cronbach's alpha of 0.878. A sample item is "The service provider really cares about my well-being".

Helping Other Customers (HC): We adapted the four-item scale of Yi and Gong (2013) to measure HC. We obtained a Cronbach's alpha of 0.875. A sample item is "I have helped other customers when they seemed to have problems".

Advocacy: We adapted the three-item scale of Yi and Gong (2013) to measure advocacy. We obtained a Cronbach's alpha of 0.897. A sample item is "I have said positive things about this brand to others".

Customer Tolerance: We adapted the 3-item scale of Yi and Gong (2013) to measure customer tolerance. We obtained a Cronbach's alpha of 0.768. A sample item is "I have put up with the situation when the after-sales services were not delivered as expected".

Feedback: We adapted the three-item scale of Yi and Gong (2013) to measure feedback. We obtained a Cronbach's alpha of 0.813. A sample item is "When I experienced a problem, I let the service provider of this brand know about it".

The questionnaire was developed in English and then translated into Chinese. A pilot version of the survey was exhibited to a group of participants to ensure that all questions were clear, and all of their suggestions and observations were taken into consideration.

4.5 Analysis Techniques

We summarised and analysed the data via AMOS v. 24 and SPSS v. 26 statistical software. The hypotheses were empirically examined through structural equation modeling (SEM). As proposed by Preacher and Hayes (2008), the mediation model was also evaluated utilising bootstrapping analysis via AMOS.

5. Results

5.1 Measurement Model

The 368 questionnaire responses were analysed in AMOS using SEM. In the first stage, confirmatory factor analysis (CFA) was run to check the model fit and validity, and the

CFA indices showed good model fit (p-value = .000; minimum discrepancy divided by degrees of freedom (CMIN/DF) = 2.221 < 3; goodness of fit index (GFI) = .922 ≥ .90; comparative fit index (CFI) = .959 ≥ .90; TLI (Tucker-Lewis's index) = .948 > .90; root mean square error of approximation (RMSEA) = .058 < .08; normed fit index (NFI) = .928 > .90; adjusted goodness of fit index (AGFI) = .890 > .80; root mean square residual (RMR) = .040 closer to 0).

5.2 Common Method Bias (CMB)

CMB was statistically examined in the current investigation. Harman's one-factor test was conducted utilising the unrotated factor solution. The findings revealed that the CMB issue with the data was not serious, with a variance explained of 35.90% (< 50%) (Podsakoff et al., 2003).

5.3 Reliability and Validity Analysis

Table 1 shows constructs' factor loadings, which are all above 0.50. Therefore, the results exhibit convergent validity, in line with Gerbing and Anderson (1988). The reliability of the constructs was evaluated using Cronbach's alpha (α). As illustrated in Table 1, an acceptable degree of reliability was achieved since all construct values are greater than 0.70 (Fornell & Larcker, 1981). The reliability and validity of the constructs were estimated through the composite reliability (CR) approach (Brunner & Sub, 2005), as seen in Table 1. The constructs' CR values are higher than the required level of > 0.60. To further confirm the validity, the average variance extracted (AVE) was computed. In accordance with Hair et al. (2010), obtaining values > 0.50 demonstrates good construct validity.

Table 1
Construct Validity and Reliability

Q	M	SD	FL	α	CR	AVE
PPJ				.846	0.853	0,662
Q1	3.75	.827	.701			
Q2	3.78	.766	.831			
Q3	3.84	.752	.897			
CPS				.878	0.880	0.711
Q4	3.37	.864	.800			
Q5	3.22	.865	.888			
Q6	3.35	.894	.839			

Q	M	SD	FL	α	CR	AVE
HC				.875	0.871	0.633
Q7	3.59	.813	.893			
Q8	3.63	.795	.877			
Q9	3.78	.885	.743			
Q10	3.60	.902	.686			
Advocacy				.897	0.903	0.757
Q11	3.69	.970	.839			
Q12	3.85	.891	.939			
Q13	3.91	.855	.828			
Tolerance				.768	0.770	0.528
Q14	3.13	.951	.737			
Q15	3.33	.900	.739			
Q16	3.20	.928	.703			
Feedback				.813	0.815	0.595
Q17	3.45	.878	.823			
Q18	3.68	.763	.724			
Q19	3.49	.880	.763			

Note. PPJ = Perceived Procedural Justice; CPS = Customer Perceived Support; HC = Helping other Customers; M = Mean; SD = Standard deviation; FL = Factors loading; α = Cronbach's alpha; CR = composite reliability; AVE = average variance extracted.

Two methods were used to evaluate discriminant validity. First, in line with Fornell and Larcker (1981), we tested whether all the off-diagonal correlations for a given construct are less than the square root of the AVE for that construct on the diagonal. The outcomes reveal the squared AVE is larger than the squared correlations for all variables, indicating a satisfactory level of discriminant validity. Second, we employed the heterotrait-monotrait (HTMT) method (Henseler et al., 2015). The value of HTMT below the maximum threshold of 0.85 indicates satisfactory discriminant validity. As seen in Table 2, all HTMT values fall below 0.62, demonstrating good discriminant validity.

Table 2

HTMT Results

	1	2	3	4	5	6
1. PPJ						
2. CPS	0.497					
3. HC	0.467	0.532				
4. Advocacy	0.392	0.469	0.581			
5. Tolerance	0.271	0.614	0.457	0.467		
6. Feedback	0.461	0.596	0.502	0.410	0.592	

Note. PPJ = Perceived Procedural Justice; CPS = Customer Perceived Support; HC = Helping other Customers; HTMT = Heterotrait-Monotrait ratio. Source: calculated by the authors using AMOS v. 24.

5.4 Demographic Profile

Respondents in this study were different-aged Chinese customers. The distribution of gender was nearly equal: 43.75% female, 56.25% male. Around two-thirds of the participants were between the ages of 21 and 40 (67.39%). Table 3 shows the demographic profile.

Table 3

Demographic Profile

Variable	Type	N	%
Gender	Male	207	56.25
	Female	161	43.75
Age	Under 20	45	12.23
	20-30	183	49.72
	31-40	65	17.66
	41-50	55	14.94
	Above 50	20	5.43
Education	Under High School	9	2.44
	High School	31	8.42
	Bachelor's	230	62.5
	Master's and Higher	98	26.63
Brand of smartphone	HUAWEI	130	35.32
	OPPO	30	8.15
	Xiaomi or Redmi	56	15.21
	iPhone	126	34.23
	Others	26	7.06

Source: Calculated by the authors.

5.5 Structural Model

The hypothesised model offered an acceptable fit to data (CMIN/DF = 2.560 < 3.00; p-value < .001; GFI = .907 \geq .90; CFI = .945 \geq .90; NFI = .914 > .90; TLI = .934 > .90; RMR = .062 closer to 0; IFI = .945 > .90; RMSEA = .065 < .08).

5.6 Hypotheses Testing

The SEM approach was used to examine direct effects. Table 4 reports results for hypothesised direct effects. We find a statistically significant impact of PPJ on HC (Std. β = 0.230, p < 0.01), confirming H1a. PPJ statistically significantly affects advocacy (Std. β = 0.188, p < 0.05), confirming H1b. PPJ also statistically significantly affects feedback (Std. β = 0.201, p < 0.05), confirming H1d. However, the results show that PPJ is not significantly related to customer tolerance. Thus, H1c is rejected. A statistically significant impact of PPJ on CPS is observed (Std. β = 0.474, p < 0.01), supporting H2. The effects of CPS on both customer-oriented dimensions of CCBs, helping other customers and advocacy, are significant (Std. β = 0.454, p < 0.01; Std. β = 0.387, p < 0.01, respectively); thus, H3a and H3b are supported. CPS is also significantly related to firm-oriented dimensions of CCBs, customer tolerance, and feedback (Std. β = 0.659, p < 0.01; Std. β = 0.538, p < 0.01 respectively); therefore, H3c and H3d are supported.

Table 4

Test Results for Hypothesized Direct Effects

Hypothesis	Path	Std. β	CR	P	Supported / not supported
H1					
H1a	PPJ -> HC	.230	3.940	.007**	Supported
H1b	PPJ -> Advocacy	.188	3.079	.033*	Supported
H1c	PPJ -> Tolerance	.004	-.502	.757 <i>ns</i>	Not supported
H1d	PPJ -> Feedback	.201	3.333	.014*	Supported
H2	PPJ -> CPS	.474	8.046	.001**	Supported
H3					
H3a	CPS -> HC	.454	7.439	.001**	Supported
H3b	CPS -> Advocacy	.387	6.118	.001**	Supported
H3c	CPS -> Tolerance	.659	8.914	.001**	Supported
H3d	CPS -> Feedback	.538	8.186	.001**	Supported

Note. * = p -value < 0.05; ** = p < 0.01. PPJ = Perceived Procedural Justice; CPS = Customer Perceived Support; HC = Helping Other Customers; *ns* = Non-Significant; CR = Composite Reliability. Source: Calculated by authors by using AMOS v.24.

5.7 Testing Mediating Effect of CPS

The mediating effect of CPS is tested using the bootstrapping procedures in AMOS v.24. According to Preacher and Hayes (2008, p. 883), “the bootstrapping analysis testing indirect effects gives a rigorous test of mediation and generates empirical evidence”. The findings of our bootstrapping analysis with 2,000 samples identify the effects, 95% confidence intervals (CI), and p-values for indirect impacts in our model. To obtain a bias-correlated confidence interval and execute significance tests, the bias-correlated percentile approach is utilised. Results are reported in Table 5.

We find a statistically significant effect of PPJ on helping other customers that is partially mediated by CPS (PPJ -> CPS -> HC) (0.226; $p < 0.01$). The effect of PPJ on advocacy partially mediated by CPS (PPJ -> CPS -> advocacy) is statistically significant (0.221; $p < 0.01$). The effect of PPJ on tolerance fully mediated by CPS (PPJ -> CPS -> tolerance) is statistically significant (0.337; $p < 0.01$). Finally, the effect of PPJ on feedback partially mediated by CPS (PPJ -> CPS -> feedback) is also statistically significant (0.270; $p < 0.01$).

Table 5

Bootstrapped Mediation Results

H	Path	Estimate			95% CI		P-value	Relationship
		Total	Direct	Indirect	Lower	Upper		
H4a	PPJ -> CPS -> HC	0.456	.230	.226	.145	.328	.001**	Partial mediation
H4b	PPJ -> CPS -> Advocacy	0.409	.188	.221	.136	.347	.001**	Partial mediation
H4c	PPJ -> CPS -> Tolerance	0.337	-	.337	.231	.491	.001**	Full mediation
H4d	PPJ -> CPS -> Feedback	0.471	.201	.270	.184	.381	.001**	Partial mediation

Note. ** = p -value < 0.01 . PPJ = Perceived Procedural Justice; CPS = Customer Perceived Support; HC = Helping other Customers; CI = Confidence Intervals. Source: Calculated by authors by using AMOS v.24.

6. Discussion and Conclusion

Results from testing H1 reveal that PPJ has a positive effect on three of the four dimensions of CCBs (helping other customers, advocacy, and feedback). This finding can be explained by social exchange theory (Blau, 1964), which argues that individuals desire to reciprocate to people who have helped them. Thus, an organisation’s efforts to meet customers’ needs for procedural justice make customers more inclined to engage in citizenship behaviours (Yi & Gong, 2006). Our findings are consistent with existing

literature, such as Choi and Lotz (2018), who similarly find that customers' perceived justice impacts their citizenship behaviours. On the other hand, we find that PPJ does not have a significant relationship with customer tolerance, which suggests that customers seek to receive their service as expected, regardless of their level of PPJ. That result is consistent with Yi and Gong (2008), who found no evidence that perceived justice directly impacts CCBs.

We also find that PPJ positively affects CPS (H2). This result agrees with organisational support theory, which claims that perceived organisational support increases when individuals receive positive treatment from a firm (Eisenberger et al., 1986; Shore & Wayne, 1993). Extending this theory to the customer context, when customers receive positive procedural justice from a firm, they perceive greater levels of organisational support. This finding also aligns with past research such as the study by Su et al. (2019), which similarly finds that perceived justice impacts CPS.

Our findings also illustrate the positive effects of CPS on the dimensions of CCBs (H3). Our results can be explained by the theories of organisational support (Chen et al., 2009) and social exchange (Blau, 1964). Customers who recognise the support provided by a firm are more motivated to engage in voluntary behaviours that show their citizenship towards that firm by helping other customers, advocacy, tolerance, and feedback (Keh & Wei Teo, 2001). Further explanation of these results is found in organisational climate theory (Liao et al., 2022; Schneider, 1990; Shumaker & Brownell, 1984), which argues that supportive climates enhance customer citizenship behaviours. This result is consistent with prior studies (Bettencourt & Brown, 1997; Ning & Hu, 2022) revealing the positive effects of CPS on dimensions of CCBs. Thus, high levels of CPS are thought to create feelings of obligation in customers to exhibit more voluntary behaviours.

The existing marketing literature has not examined the mediating role of CPS in the relationship between PPJ and CCBs. Thus, an important contribution of the current study is verifying the mediating role of CPS in relationships between PPJ and dimensions of CCBs (H4). We observe that CPS partially mediates the relationships between PPJ and helping other customers, advocacy, and feedback. This finding is consistent with the organisational literature, such as Moorman et al. (1998) and Dominic et al. (2021), who show that organisational support mediates the relationship between procedural justice and organisational citizenship behaviour. On the other hand, CPS fully mediates the relationship between PPJ and tolerance, implying that PPJ in the after-sales service causes customers to perceive support from the company, which causes customers to display tolerance behaviour.

7. Contribution and Implications

7.1 Theoretical Contribution

This paper's findings have several significant theoretical implications for the literature on customer citizenship behaviours. The current research claims its novelty in investi-

gating CCBs from the perspectives of perceived procedural justice and customer perceived support in the after-sales services field. Our investigation confirms the vital roles of PPJ and CPS in improving CCBs (helping other customers, advocacy, customer tolerance, and feedback).

The research expands the studies on perceived procedural justice in the smartphone after-sales service context and enriches the studies on the factors that drive customer citizenship behaviour. At present, existing studies on the effect of perceived justice on CCBs mainly focus on overall customer perceived justice (Choi & Lotz, 2018) and interactional justice (Yi & Gong, 2006). Thus, this paper sheds light on PPJ and how it could impact each one of the CCBs' dimensions individually.

Furthermore, drawing on the theories of social exchange and organisational support, the present analysis extends knowledge of the crucial role of CPS in the after-sales services context by exploring the effect of PPJ on the dimensions of CCBs through the mediation mechanism of CPS. Hence, these results provide a comprehensive answer to how PPJ influences CCBs. This contributes to extending the existing literature on CCBs, which thus enriches the research context of PPJ and the existing theories on the factors that boost customer citizenship behaviours.

Lastly, the present findings contribute to the customer behaviour literature by confirming the relevance of the theories of organisational support, equity, social exchange, and organisational climate in predicting the links between PPJ, CPS, and dimensions of CCBs.

7.2 Managerial Contribution

This study offers practical implications for managers of smartphone after-sales services to enhance effective strategies to improve customer citizenship behaviours. According to the present investigation results, customers reward organisations that care about procedural fairness and customer support by helping other customers, engaging in advocacy, tolerating the organisation if its service fails to meet their expectations, and providing constructive feedback. Thus, after-sales service managers should reinforce procedural fairness in order to improve CCBs. When customers perceive the service delivery procedures and policies as fair, that will motivate them to participate in citizenship behaviours towards their organisation. Therefore, managers of after-sales service should clearly explain the procedures and make certain the process is fair and clear, with the aim of enhancing CPS, which in turn boosts CCBs.

Based on the present results, after-sales service managers should pay more attention to increasing customer support to enhance customer voluntary behaviours since these factors are positively associated with CPS. Thus, smartphone firms should establish a mechanism for encouraging after-sales service individuals to provide higher levels of support to customers.

Finally, the present analysis shows a vital result that customers become more tolerant of smartphone organisations that care about customer support. Hence, to improve CPS (Cintamür, 2022), service managers should create communication programmes that convey that the service corporation cares about the customers' suggestions and well-being and is ready to solve every problem related to service delivery.

8. Limitations and Recommendations

This research makes a vital contribution to the growing literature on the use of PPJ as a marketing tool that contributes to creating competitive advantage by affecting customers' voluntary behaviours (i.e., citizenship behaviours) and to investigating the mechanism behind such direct effects. Specifically, we introduce CPS as a mediating variable. This research, however, is subject to several limitations, which suggest avenues for future investigation. First, our conceptual framework does not include any moderating effects. Future research may extend the present study model by testing potential moderating variables such as relationship duration, contact frequency, and the collectivism/individualism cultural orientation, which may affect the strength or even the direction of the impact of PPJ on dimensions of CCBs. Second, we only studied the impact of overall PPJ on CCBs. Future research could investigate, in a more granular way, the impact of dimensions of PPJ (e.g., perceived wait time, waiting procedures, and efficiency) (Groth & Gilliland, 2001) on CCBs. The relative importance of each dimension of PPJ may also vary depending on the nature of the service setting. Third, the present research is a cross-sectional study. Future research may test the present model using a longitudinal research method. Finally, our research context is China, potentially restricting the generalizability of our findings to non-Chinese markets. Thus, the research model could be further tested and verified in other countries with different social, cultural, and economic contexts.

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