

## **An Empirical study on the implementation of S-OCB, Servqual, Satisfaction, Loyalty and CCB in Banking Industries**

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**Abstract.** This study aims to examine the effect of service-oriented organizational citizenship behavior (S-OCB) and service quality (servqual) on satisfaction, the effect of satisfaction on loyalty and customer citizenship behavior (CCB), and the effect of loyalty on CCB. Furthermore, this study also examines the mediating effect of satisfaction on the relationship between S-OCB and loyalty and CCB, the mediating effect of satisfaction on the relationship between service quality and loyalty and CCB, and the mediating effect of loyalty on the relationship between satisfaction and CCB in the banking industry. This study uses SEM-Partial Least Squares to test the conceptual model and the proposed hypotheses. Sampling is carried out using a purposive sampling technique with a total sample of 301 bank customers and 30 bank employees. The results show that S-OCB and service quality have a positive effect on satisfaction. Satisfaction has a positive effect on loyalty and CCB. Loyalty has a positive effect on CCB. Satisfaction mediates not only the relationship between S-OCB and loyalty, but also the relationship between service quality and CCB. Loyalty mediates the relationship between satisfaction and CCB in the banking sector. The implication of this research is that to increase loyalty and customer citizenship behavior (CCB), the banking industry needs to manage Service-Oriented Organizational Citizenship Behavior (S-OCB), service quality, and satisfaction. This research examines the direct and complex mediating relationships identified between SOCB, service quality, satisfaction, loyalty, and customer citizenship behavior (CCB). The novelty of this research is to synthesize studies on voluntary behavior in the context of customer behavior to contribute voluntarily towards achieving organizational goals. The limitation of this research lies in the selection of respondents/customers, where the customers that bank employees are looking for are only customers who are familiar with the bank's employees so that it can lead to a less objective assessment.

**Keywords:** S-OCB, Service Quality, Satisfaction, Loyalty, CCB

## 1. Introduction

The large number of banks in Indonesia has created intense competition. In addition to competition between fellow state-owned banks or national private banks, competition is increasingly fierce with the presence of foreign banks and non-banking financial institutions. In order to win the competition, banks must have a good competitive strategy. From the customers' point of view, they are faced with many choices of banks or non-banking institutions that can provide better services.

Customer loyalty increases customer citizenship behavior (CCB), but interestingly the strength of the relationship does not significantly influence customer loyalty. The implication is that an increase in the exchange of utility can increase customer loyalty, and customer utility can increase customer citizenship behavior (CCB) through customer loyalty (Kim, Sang-Duck et al., 2019). Opportunities for joint production and use of value are used not only to increase intention to revisit and repurchase, but also to benefit from manifestations of customer citizenship behaviors, such as customer feedback, advocacy, customer to customer assistance and tolerance for unsatisfactory future services (Assiouras, Ioannis et al., 2019). Public self-awareness (PSA) has an effect on affective satisfaction and customer citizenship behavior (CCB), and affective satisfaction has a positive effect on CCB (Hwang, Kumju, and Bora Lee., 2019). Service quality dimensions (tangible and intangible resources of aviation services) indirectly affect consumer citizenship behavior (CCB) through perceived value (Woo, Mina, 2019).

Service quality is one of the main elements in creating satisfaction. According to Grönroos, Christian (1984), there are two qualities in service technical quality and functional quality. Technical quality refers to what customers get, while functional quality refers to how customers get. Meanwhile, according to Parasuraman et al. (1988), there are five dimensions of service quality: tangibility, reliability, responsiveness, assurance, and empathy. The factors that influence Muslim customers to be willing to accept services from Islamic banking are the reliability and types of products provided by the bank and the easy access to the bank outlets. (Jalil, Md Abdul & Muhammad Khalilur Rahman, 2014).

In addition to service quality, OCB (organizational citizenship behavior) is also an element that can create satisfaction. OCB refers to the behavior of employees working in the company. They are willing to carry out their work as well as possible not only because of their obligations and responsibilities assigned to them, but also because of the will that arises from within them. They are willing to do more without expecting anything in return from the company. This is done solely for the goodness of the company. OCB is an important aspect that supports marketing in the service sector and plays a role in improving the quality of service to customers and increasing customer satisfaction (Fernández-Sabiote, Estela & Sergio Román, 2005; Kumar, 2014). Thus, OCB contributes to managing the good relationship between the company and its customers, shaping customer perceptions of excellent service quality, and creating customer loyalty.

According to Jain, Ajay K, Naresh K Malhotra & Chong Guan (2012), the behavior beyond the role is called Service-Oriented Organizational Citizenship Behavior (S-OCB) with dimensions of customer facilitation, organizational involvement, and sportsmanship. The S-OCB of employees of Bank Pembangunan Daerah (BPD) has the most significant influence on service quality, followed by the S-OCB of employees of Bank Perkreditan Rakyat (BPR). S-OCB of employees of BPD and BPR has a significant positive influence on service quality (Harsono et al., 2020).

This study aims to examine the effect of service-oriented organizational citizenship behavior (S-OCB) and service quality (servqual) on satisfaction, the effect of satisfaction on loyalty and customer citizenship behavior (CCB), and the effect of loyalty on CCB. Furthermore, this study also examines the mediating effect of satisfaction on the relationship between S-OCB and loyalty and CCB, the mediating effect of satisfaction on the relationship between service quality and loyalty and CCB, and the mediating effect of loyalty on the relationship between satisfaction and CCB in the banking industry.

The novelty of this study is that it analyzes the integration of customer citizenship behavior (CCB) in the service-oriented organizational citizenship behavior (S-OCB).

## 2. Literature Review

In an effort to create satisfaction, companies will always encourage their employees to have high commitment and integrity. Employee commitment is a key factor that can make an extra contribution to the company. By having a high commitment, employees are willing to carry out extra tasks. For example, they are willing to serve customers outside of working hours, carry out tasks outside of working days and regular working hours without expecting anything in return, and carry out promotional activities that can increase company profits. These all are called the Organizational Citizenship Behavior (OCB). The new concept of OCB put forward by Williams and Anderson in 1991 consists of two dimensions: (1) organizational citizenship behavior directed to individuals (OCBI) which refers to behaviors that are beneficial to individuals in organizations to a larger scale, including helping colleagues who have heavier tasks; and (2) organizational citizenship behavior directed to organization (OCBO) which refers to behaviors that are conducive to the organization as a whole, having a positive attitude, and always doing good to the organization. According to Yen, Chang-Hua, & Hsiu-Yu Teng (2013), OCBO tends to be a direct feedback on what employees think about the characteristics of their work, while OCBI reflects the natural expression of employee affection at work. Complementing the results of previous studies, Chen, Chien-Cheng & Su-Fen Chiu (2008) prove that organizational support and supervisory support will increase OCB intentions.

According to Yoon, Mahn Hee & Jaebeom Suh (2003), although OCB is applied and emphasized regardless of industry type, service-oriented employee behavior requires more focus. Furthermore, according to Borman, Walter C, & S M Motowidlo (1993), the service industry will have more specific requirements in employee behavior when facing customers and representing organizations to outsiders because of the rapid growth of the service industry. Wu, Po-Hsuan and Jui-Fan Liao (2015) argue that S-OCB refers to positive behavior of employees in the workplace to provide maximum satisfaction to customers. In an effort to create maximum customer satisfaction, they are willing to do work outside the roles, functions and working hours set by the company. They always assume that customer satisfaction is a top priority. Furthermore, Wu, Po-Hsuan & Jui-Fan Liao, 2015 conclude that S-OCB has an effect on perceived service quality. The employee's S-OCB leads to the customer's assessment of the perceived service quality. Therefore, in order to increase the quality of service provided to customers, companies must be able to instill S-OCB in employees.

To be able to survive and develop, companies in the banking sector must be able to adapt in accordance with world technological developments. For this reason, banking companies need to provide employees with training and education on technology which is related to banking products and services. According to Deng, Xuefei & Tawei Wang (2014), technology-based S-OCB has an effect on individual task efficiency. Customer-oriented OCB theory needs to be studied more, specifically in relation to the service behavior of individuals working in the field of information technology. In today's information technology, banking companies must be able to develop S-OCB which can build good relations between employees and customers by utilizing existing technology. Leaders have an obligation to develop S-OCB for employees, especially frontline employees, because this section deals directly with customers. S-OCB can also be built by empowering and creating a climate of learning about customers. Employee empowerment will provide space and flexibility for employees to be able to serve customers well and exceed standards, which ultimately leads to customer satisfaction. Therefore the hypotheses put forward are:

- H1: S-OCB has a positive effect on satisfaction
- H2: S-OCB has an effect on loyalty mediated by satisfaction
- H3: S-OCB has an effect on CCB mediated by satisfaction

To create customer loyalty, management must be able to maintain service quality well and consistently. Some long studies have identified dimensions to measure service quality including technical quality and functional quality (Grönroos, Christian, 1984); performance, features, reliability, conformance, durability, serviceability, aesthetics and perceived quality (Garvin & David A, 1984); responsiveness, assurance, empathy, tangibility and reliability (Parasuraman et al., 1988); service performance (Rust, Roland T & Richard L Oliver, 1993); and interaction quality, environment quality and outcome quality (Brady, Michael K & J Joseph Cronin, 2001). The studies above tend to link the dimensions of service quality with satisfaction and loyalty. However, what attracts attention in the research on service is that service quality is conceptualized as a hierarchy and is constructed multi-dimensionally (Yilmaz et al., 2018; Mittal, et al., 2015).

So far, the dimensions of service quality have always been the subject of debate among researchers. However, they agree that the quality of service provided from one company to another will vary due to differences in operational aspects and cultural aspects of each company. In addition, the differences are also due the scope, whether local, domestic, or international (Harsono., 2019). According to Boonlertvanich, (Karin., 2019) the service quality perceived by customers directly and indirectly has an influence, through satisfaction and trust, on attitudes and behavioral loyalty. Service quality affects fewer customers' loyalty if the customer holds the status of a major bank. According to Osayawe Ehigie, Benjamin (2006) and Bapat, Dhananjay (2017), in addition to customer satisfaction, service quality is an antecedent of customer loyalty.

The results of research conducted by Tara Khonglumtan and Parinya Srisattayakul (2022) show that service quality has a positive effect on customer satisfaction and customer loyalty. In addition, customer satisfaction also has a positive effect on customer loyalty. Therefore, the hypotheses proposed are:

H4: Service quality has a direct effect on satisfaction

H5: Service quality has a positive effect on loyalty mediated by satisfaction

H6: Service quality has a positive effect on CCB mediated by satisfaction

Customer citizenship behavior (CCB) is discretionary activities, by customers, exceeding and above the normal exchange requirements, which benefit the company (Christian et al., 2011). According to Johnson, et al (2010), customer citizenship behavior (CCB) is a customer policy and behavior with an extra role that benefits the organization. The concept of customer citizenship behavior is inseparable from the role of (Ford, Wendy S Zabava (1995) and (Boonlertvanich, Karin., 2019) who think that if employees can do work outside their main job, customers can do it, too. The point is that the basis of CCB is derived from OCB concept by (Organ, Dennis W., 1988), so in this case (Bettencourt, Lance A., 1997) defines customer citizenship behavior as the freedom of customer behavior that supports the company's ability to provide service quality. According to (Ford, Wendy S Zabava., 1995), effective organizational functions require employees to be willing to perform various spontaneous behaviors that are not specified in their job descriptions. Like employees, customers are also involved in various citizenship behaviors, such as reporting problems to employees, recommending business places to friends, or displaying bumper stickers that advertise their support for an organization. (Bettencourt, Lance A., 1997) states that like employees, customers can do free behavior, including sharing positive experiences they perceive with other customers and treating employees in a pleasant way.

Customer citizenship behavior (CCB) is a voluntary behavior and discretion that is not necessary for the success of production and / or service delivery, but in the aggregate, helps the service (Groth, Markus., 2005). Furthermore, expanding research into organizational citizenship behavior (OCB) to customers can help gain valuable insights on how customer value creation behavior contributes to the overall success of service organizations. Customers are valuable sources for new business strategy ideas, help train other customers, and share service experiences they meet with management.

According to Bove et al. (2009), customer citizenship behavior (CCB) is voluntary behavior beyond the role required by customers for service delivery, which aims to provide assistance for effective

organizational functions. Furthermore, similar to organizational citizenship behavior, customers positively influence the performance of employees, organizations, and other customers and help create the desired arrangements for parties in service meetings.

The results of research conducted by Jae Woo Shin (2022) show that customer satisfaction and loyalty to DB and TB are related to the customer's overall assessment after experiencing bank products or services. This empirically supports the expectation disconfirmation theory. Therefore, the hypotheses proposed are:

- H7: Satisfaction has a positive effect on loyalty
- H8: Satisfaction has a positive effect on CCB
- H9: Loyalty has a positive effect on CCB
- H10: Satisfaction has a positive effect on CCB mediated by loyalty

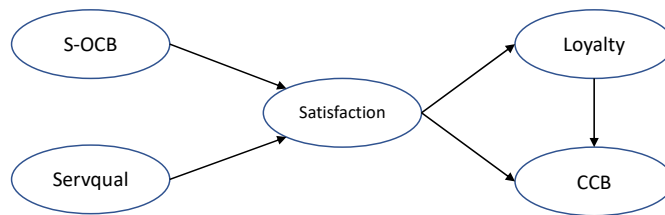


Fig.1: Research Model and Hypotheses

### 3. Methodology

The data used in this study were collected through a self-administered survey questionnaire by adopting the service quality dimensions (Parasuraman et al., 1988) with 22 statement items, the S-OCB dimensions (Fernández-Sabiote, Estela & Sergio Román., 2005) with 42 statement items, CCB dimensions with 19 statement items, satisfaction with 8 statement items, and loyalty with 6 statement items. The research instrument was measured using a six-point Likert scale consisting of strongly disagree (score 1), disagree (score 2), slightly disagree (score 3), slightly agree (score 4), agree (score 5), and strongly agree (score 6). The research population was the customers of Bank Pembangunan Daerah (BPD) Indonesia and the sample was the customers of BPD in 6 branch offices. The sampling was done using a non-probability approach with a purposive sampling technique. Questionnaires were distributed to 30 selected BPD employees who had attended the S-OCB training and to 301 customer respondents who rated the employees. For the purpose of finding out the general description and distribution of research data, this study used descriptive analysis.

The collected data were examined using SPSS 22.0 and SEM-PLS model analysis assisted by the WarpPLS program. First, the validity and reliability test of the instrument was carried out using SPSS with a Pearson correlation value of <0.05 and a Cronbach Alpha value of >0.60. Second, confirmatory factor analysis (CFA) using maximum likelihood estimation was performed to confirm the unidimensional measurement scale of each factor. CFA was also performed to test construct reliability, convergent validity, and discriminant validity of each factor. Third, a structural equation model (SEM) was performed to test the conceptual model.

### 4. Research Results

The description of the characteristics of customer respondents is shown in Table 1 and Table 2 below. Table 1 shows that based on the gender, of the total 301 respondents, 152 (50.5%) respondents are male and 149 (49.5%) respondents are female.

Based on age limit, 125 (44.9%) respondents are > 25-35 years old, 65 (21.6%) respondents are > 35-45 years old is, 38 (12.6%) respondents are 17-25 years old, 34 (11.3%) respondents are > 45-55 years old, 24 (7.97%) respondents are > 55-65 years old, and 5 (1.66%) respondents are > 65 years old. The largest percentage of respondents aged > 25-35 years shows that most of the respondents are customers of productive age who interact a lot with bank activities in their daily activities

Table 1: Characteristics of respondents (gender, age, and latest education)

Gender		Age			Latest Education			
Male	152	50.5%	17-25	38	12.6%	High School	124	41.2%
Female	149	49.5%	>25-35	125	44.9%	Associate's degree	30	9.97%
			>35-45	65	21.6%	Bachelor's degree	130	43.2%
			>45-55	34	11.3%	Master's degree	17	5.65%
			>55-65	24	7.97%	Doctorate degree	0	0%
			> 65	5	1.66%			
Total	301	100%	Total	301	100%	Total	301	100%

Based on the latest education, of the total 301 respondents, 130 (43.2%) respondents are Bachelor's degree (in the first place), 124 (41.2%) respondents are High school graduates (in the second place), 30 (9.97 %) respondents are Associate's degree (in the third place), and 17 (5.65%) respondents are Master's degree (in the fifth place). The largest composition of respondents from educational backgrounds is Bachelor's degree. This shows that most of the respondents have a good understanding about service quality of bank.

Table 2 shows that, based on the current profession, 133 (44.18%) respondents are private employees, 65 (21.6%) respondents are other professions, 40 (13.29%) respondents are entrepreneurs, 38 (12.62%) respondents are civil servants, 12 (3.98%) respondents are SOE employees, 9 (2.99%) respondents are housewives, 3 (0.99%) respondents are professionals, and 1 (0.33%) respondent is a farmer. Most of the respondents are active at work, so that most of them have experienced and can evaluate the quality of bank services.

Table 2: Characteristics of respondents based on current profession.

Current profession		
Entrepreneur	40	13.29%
Private employee	133	44.18%
SOE' employee	12	3.98%
Professional	3	0.99%
Army / Police	0	0%
Housewife	9	2.99%
Civil servant	38	12.62%
Farmer/Fisherman	1	0.33%
Others	65	21.6%
Total	301	100%

The following is the description of each variable indicator.

First, based on the respondents' responses to the S-OCB variable, positive responses are given to 41 (forty-one) statement indicators studied. The average value of S-OCB is 5.03 on a scale of 6. Referring to the predetermined average value of the S-OCB variable, the customer respondents' assessment is in the category of "agree" with the S-OCB indicator perceived as they were interacting with the bank.

Second, based on the respondents' responses to the Service Quality (Servqual) variable, positive responses are given to the 22 (twenty-two) statement indicators studied. The average value of Servqual

is 5.06 on a scale of 6. Referring to the predetermined average value of the Service Quality variable, the customer respondents' assessment is in the category of "agree" with the Servqual indicator perceived as they were interacting with the bank.

Third, based on the respondents' responses to the customer citizenship behavior (CCB) variable, positive responses are given to the 19 (nineteen) statement indicators studied. The average value of customer citizenship behavior (CCB) is 5.02 on a scale of 6. Referring to the predetermined average value of the CCB variable, the customer respondents' assessment is in the category of "agree" with the customer citizenship behavior (CCB) indicator perceived as they were interacting with the bank.

Fourth, based on the respondents' responses to the satisfaction variable, positive responses are given to the 9 (nine) statement indicators studied. The average value of satisfaction is 5.05 on a scale of 6. Referring to the predetermined average value of the satisfaction variable, the customer respondents' assessment is in the category of "agree" with the satisfaction indicator perceived as they were interacting with the bank.

The following are model fit and quality fit in Bank Pembangunan Daerah (BPD).

Table 3: Model Fit and Quality Indices of BPD Customer

Model Indicator	Value	Note
Average Path Coefficient (APC)	0.384	P < 0.001 (Significant)
Average R-Squared (ARS)	0.415	P < 0.001 (Significant)
Average Adjusted R-Squared (AARS)	0.412	P < 0.001 (Significant)
Average block VIF (AVIF)	2.150	acceptable if $\leq 5$ , ideally $\leq 3.3$
Average Full Collinearity VIF (AFVIF)	3.080	acceptable if $\leq 5$ , ideally $\leq 3.3$
Tenenhaus GoF (GoF)	0.465	small $\geq 0.1$ , medium $\geq 0.25$ , large $\geq 0.36$
Sympson's Paradox Ratio (SPR)	1.000	acceptable if $\geq 0.7$ , ideally = 1
R-squared contribution ratio (RSCR)	1.000	acceptable if $\geq 0.9$ , ideally = 1
Statistical Suppression Ratio (SSR)	1.000	acceptable if $\geq 0.7$
Non-Linear Bivariate Causality Direction Ratio (NLBCDR)	0.800	acceptable if $\geq 0.7$

Based on the results of model fit in Table 3, it can be described that the model has a fairly good fit, where the P value for the Average Path Coefficient (APC) is 0.384, with p value of < 0.001. The average R-squared (ARS) value is 0.415, with p value of < 0.001. The average adjusted R-square (AARS) value is 0.412, with p value of < 0.001. The average block VIF (AVIF) value of 2.150 is accepted because it is  $\leq 5$ . The average full collinearity VIF (AFVIF) value of 3.080 is accepted because it is  $\leq 5$ . The GoF tennhaus (GoF) value = 0.465 is included in the large category because  $\geq 0.36$ . The Sympson's paradox ratio (SPR) of 1.000 is categorized as ideal. The R-square contribution ratio (RSCR) of 1.000 is also categorized as ideal = 1. The Statistical suppression ratio (SSR) of 1.000 is also accepted because it is  $\geq 0.7$ . And the nonlinear bivariate causality direction ratio (NLBCDR) of 0.800 is accepted because it is  $\geq 0$ .

Figure 2 below shows the results of full model testing for this study illustrating the direct and indirect effects and can be explained as follows:

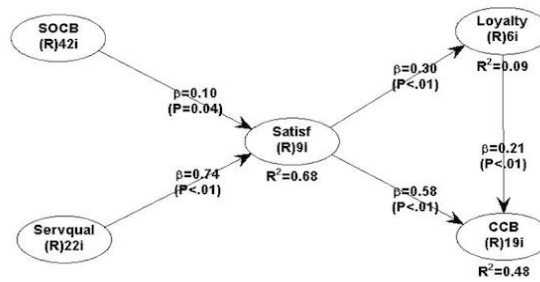


Fig.2: Full Model

Based on the output in Figure 2, it can be concluded that the direct effect of S-OCB on satisfaction is shown by  $\beta = 0.10$  and  $P = 0.04$ ; the direct effect of service quality on satisfaction is shown by  $\beta = 0.74$  and  $P < .01$ ; the direct effect of satisfaction on loyalty is shown by  $\beta = 0.30$  and  $P < .01$ ; the direct effect of satisfaction on CCB is shown by  $\beta = 0.58$  and  $P < .01$ ; and the direct effect of loyalty on CCB is shown by  $\beta = 0.21$  and  $P < .01$ . The results of the hypotheses proposed in this study related to direct and indirect effects are shown in Table 4.

Table 4: Hypotheses Test Results (direct and indirect effects)

Hypothesis	Relationship between variables	$\beta$	P Value	Category
1	Satisfaction < ----- SOCB	$\beta = 0.10$	$= 0.04$	Significant
2	Loyalty < -- Satisfaction < -- SOCB	$\beta = 0.10$	$= 0.04$	Mediate
3	CCB < --- Satisfaction < --- SOCB	$\beta = 0.30$	$< .01$	Mediate
		$\beta = 0.58$	$< .01$	
4	Satisfaction < --- Service Quality	$\beta = 0.74$	$< .01$	Significant
5	Loyalty < --- Satisfaction < --- Service Quality	$\beta = 0.74$	$< .01$	Mediate
		$\beta = 0.30$	$< .01$	
		$\beta = 0.58$	$< .01$	Mediate
7	Loyalty < --- Satisfaction	$\beta = 0.30$	$< .01$	Significant
8	CCB < --- Satisfaction	$\beta = 0.58$	$< .01$	Significant
9	CCB < --- Loyalty	$\beta = 0.21$	$< .01$	Significant
10	CCB < -- Loyalty < --- Satisfaction	$\beta = 0.30$	$< .01$	Mediate
		$\beta = 0.21$	$< .01$	

## 5. Discussion

Based the results of hypotheses testing in Table 4, it can be explained that S-OCB has a positive effect on satisfaction. This is evidenced by a coefficient value of 0.10 and a probability of significance P value of 0.04. This value is smaller than the level of significance (P) value of 0.05. Therefore, hypothesis 1 which states that S-OCB has a positive effect on satisfaction is supported. The result of this study implies that when the bank can increase S-OCB, this will also increase customer satisfaction. The result of this study confirms the results of the previous studies conducted by (Wu, Po-Hsuan & Jui-Fan Liao., 2015), (Fernández-Sabiote, Estela & Sergio Román., 2005), and (Auh, Seigyoung, Bulent Menguc & Yeon Sung Jung., 2014). This result also confirms some of the customers' notes and messages when they fill open questions on the questionnaire regarding how they feel when interacting with the bank.

S-OCB has a positive effect on satisfaction (coefficient value = 0.10 and P value = 0.04) and satisfaction also has a positive effect on loyalty (coefficient value = 0.30 and P value < .01). Therefore, hypothesis 2 which states that S-OCB has an effect on loyalty mediated by satisfaction is supported. In other words, satisfaction mediates the relationship between S-OCB and loyalty. This result is in line with the results of previous studies conducted by (Wu, Po-Hsuan & Jui-Fan Liao., 2015), (Deng, Xuefei & Tawei Wang (2014), and (Auh et al., 2014). S-OCB is also validated as an antecedent of satisfaction



as proposed in previous studies by (Yen, Chang-Hua & Hsiu-Yu Teng., 2013; Yoon, Mahn Hee & Jaebeom Suh, 2003; Borman, Walter C & S M Motowidlo, 1993; Fernández-Sabiote, Estela & Sergio Román, 2005; Kumar, Y L N, 2014). This finding is also in line with the results of previous studies conducted by (Boonlertvanich, Karin, 2019; Osayawe Ehigie, Benjamin, 2006; Bapat, Dhananjay, 2017) that satisfaction is an antecedent of loyalty.

S-OCB has an effect on satisfaction (coefficient value = 0.10 and P value = 0.04) and satisfaction has a positive effect on CCB (coefficient value = 0.58 and P value < .01). Therefore, hypothesis 3 which states that S-OCB has an effect on CCB mediated by satisfaction is supported. In other words, satisfaction mediates the relationship between S-OCB and CCB. The result of this study confirms the results of previous studies conducted by (Wu, Po-Hsuan & Jui-Fan Liao, 2015; Deng, Xuefei & Tawei Wang, 2014; Auh et al., 2014). In addition, this finding also confirms the results of previous studies conducted by (Bettencourt, Lance A, 1997; Groth, Markus, 2005; Bove et al., 2009) that satisfaction is an antecedent of CCB. The novelty in this study confirms that satisfaction mediates the relationship between S-OCB and CCB.

Service quality has a significant positive effect on satisfaction (coefficient value = 0.47 and P < .01). Therefore, hypothesis 4 which states that service quality has a positive effect on satisfaction is supported. Service quality is confirmed in this study as an antecedent of satisfaction. This result is in line with the results of previous studies conducted by (Osayawe Ehigie, Benjamin, 2006; Bapat, Dhananjay, 2017; Harsono, 2019). The finding of this study also supports some popular findings of previous research in marketing that service quality is the antecedent of satisfaction.

Service quality has an effect on satisfaction (coefficient value = 0.74 and P value < .01) and satisfaction has a positive effect on loyalty (coefficient value = 0.30 and P value < .01). Therefore, hypothesis 5 which states that service quality has an effect on loyalty mediated by satisfaction is supported. In other words, satisfaction mediates the relationship between service quality and loyalty. The result of this study confirms the results of previous studies conducted by (Osayawe Ehigie, Benjamin, 2006; Bapat, Dhananjay, 2017; Harsono, 2019; Boonlertvanich, Karin, 2019) that service quality is an antecedent of satisfaction. In addition, the result of this study is also in line with the results of previous studies conducted by (Jalil, Md Abdul & Muhammad Khalilur Rahman, 2014; Mittal et al., 2015; Yulmaz. et al., 2018) that satisfaction is an antecedent of loyalty, and satisfaction mediates the relationship between service quality and loyalty.

Service quality has an effect on satisfaction (coefficient value = 0.74 and P value < .01) and satisfaction has a positive effect on CCB (coefficient value = 0.58 and P value < .01). Therefore, hypothesis 6 which states that service quality has an effect on CCB mediated by satisfaction is supported. In other words, satisfaction mediates the relationship between service quality and CCB. The results of this study confirm the results of previous studies conducted by (Osayawe Ehigie, Benjamin, 2006; Bapat, Dhananjay, 2017; Harsono, 2019; Boonlertvanich, Karin, 2019). In addition, the results of this study are also in line with the results of previous studies conducted by (Wu, Po-Hsuan, & Jui-Fan Liao, 2015; Deng, Xuefei & Tawei Wang, 2014; Auh et al., 2014) that satisfaction is the antecedent of CCB (Bettencourt, Lance A., 1997; Groth, Markus, 2005; Bove et al., 2009). The novelty in this study is that satisfaction mediates the relationship between service quality and CCB.

Satisfaction has a significant positive effect on loyalty (coefficient value = 0.30 and P value < .01). Therefore, hypothesis 7 which states that satisfaction has a positive effect on loyalty is supported. The result of this study confirms some popular findings of the previous studies in marketing conducted by (Wu, Po-Hsuan & Jui-Fan Liao, 2015; Assiouras, Ioannis et al., 2019) that satisfaction is an antecedent of loyalty.

Satisfaction has a significant positive effect on CCB (coefficient value = 0.58 and P value < .01). Therefore, hypothesis 8 which states that satisfaction has a positive effect on CCB is supported. The result of this study is in line with the results of previous studies conducted by (Bettencourt, Lance A,

1997; Groth, Markus, 2005; Bove et al., 2009; Assiouras, Ioannis et al, (2019; Hwang, Kumju & Bora Lee, 2019; Woo, Mina, 2019).

Loyalty has a significant positive effect on CCB (coefficient value = 0.21 and P value <.01). Therefore, hypothesis 9 which states that loyalty has a positive effect on CCB is supported. This finding supports some popular findings of previous studies in the field of relationship marketing conducted by (Bettencourt, Lance A, 1997; Groth, Markus, 2005; Bove et al., 2009; Kim, Sang-Duck et al., 2019).

Satisfaction has an effect on loyalty (coefficient value = 0.30 and P value < .01) and loyalty has a positive effect on CCB (coefficient value = 0.21 and P value < .01). Therefore, hypothesis 10 which states that satisfaction has an effect on CCB mediated by loyalty is supported. In other words, loyalty mediates the relationship between satisfaction and CCB. By confirming hypothesis 7 and hypothesis 9, hypothesis 10 is a novelty of findings that is worthy of attention especially in the banking sector.

## **6. Conclusion**

The conclusions that can be drawn from the discussion above are as follows: S-OCB and service quality have a positive effect on satisfaction. Satisfaction has a positive effect on loyalty and CCB. Loyalty has a positive effect on CCB. The major contribution of this research is that satisfaction mediates not only the relationship between SOCB and loyalty, but also the relationship between service quality and CCB. Loyalty mediates the relationship between satisfaction and CCB in the banking sector. The results of this study also confirm the implementation of training on 30 bank employees. It is evidenced by an increase in the understanding of S-OCB scores and banking service quality. The findings of this study also address the gap between assessments made by bank customers and assessments made by bank employees (Harsono et al., 2020; Harsono, 2019).

The findings of this study contribute to the discussion of direct relationship and complex mediation between SOCB, service quality, satisfaction, loyalty and customer citizenship behavior (CCB). The results of this study provide empirical evidence about the relationship between variables as proposed in the research model. Therefore, it is recommended that the bank's management develop employee development programs related to the formation of employee voluntary behavior in serving customers as well as increasing and updating knowledge about employee ethics and behavior which are important assets of the bank. This is reflected in S-OCB which has an impact on internal marketing to customers.

In addition, tangibility and empathy, as dimensions of service quality, need to be improved considering that in this study many customers interact directly with the bank. It is suggested that further researchers conduct research on several banks with different operations and scope and add several factors including the value expected by customers. Ignoring S-OCB and service quality by bank management will have an impact on satisfaction, loyalty, and customer citizenship behavior which will eventually make customers switch to other competitors. The limitation of this study lies in the respondents used. Because the respondents/customers were selected by bank employees who had attended training, there was a tendency that only familiar customers were selected as respondents. This can lead to a less objective assessment. Further research is suggested to use several different types of banks in terms of ownership and activity

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