



## Exploratory Factor Analysis of Customer Voluntary Behaviour in Indian Retail Sector – An Empirical Study

### KEYWORDS

Retail, Discretionary, Customer citizenship behaviour

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**ABSTRACT** Retail industry is heavily people-based, requiring interaction and coordination of customers and service providers. Due to those unique characteristics of services, customer's role in organization has become indispensable. The present study examines the factors of customer citizenship behaviour (CCB). To analyse the factors, exploratory factor analysis (EFA). The findings of the article provide insight into multiple helping behavior of customers which are though discretionary in nature, but help in the overall functioning of the organization.

### 1. Introduction

Considering the importance of positive behavior of customers in company's growth and performance it is necessary to investigate what promotes the citizenship behavior in customers. Customers act as productive resources, as contributors to quality, satisfaction and value and as competitors to the organization (Song and Adams 1993; Bitner 1995; Romero and Molina 2011). They make suggestions for service improvement, cooperate during the service encounter, engage in positive word-of-mouth, buy additional services, make recommendations to others and increase price tolerance (Lengnick-Hall 1996; Bettencourt 1997; Fang, Palmatier and Evans 2008; Schmitt 2011). It is positive, voluntary, helpful and constructive behaviors enacted towards the firm and other customers (Bove et al. 2009; Gruen, 1995; Godwin and Kalpana 2013). A series of studies recognize the role of positive customer functions and proposes concepts such as customer citizenship behavior and voluntary performance.

However, researchers have paid little attention to what are the factors that affect customer citizenship behavior. There is lack of censuses among researchers and academics regarding dimensions of citizenship behavior. Against this background, this study attempts to study extends by embedding the dimensions of citizenship behavior.

Customer citizenship behaviour (CCB) is based on theory of social exchange where customer reciprocates positive behavior from a sense of personal obligation or gratitude. Yi, Gong and Lee (2013) argued that when customers engage in citizenship behaviour, they foster citizenship behavior among other customers. CCB is a form of customer extra-role behavior, and is helpful, kind, considerate or thoughtful acts voluntarily performed. Groth (2005) defines customer citizenship behavior as "voluntary and discretionary behavior by individual customer that is not directly or explicitly expected or rewarded, but that aggregates into higher service quality and promotes the effective functioning of service quality and promotes the effective functioning of service organisations (e.g., helping another customer or providing suggestions to the service organization)".

Hsieh, Yen and Chin (2004) deem such helpful behaviours which are performed by customers as customer voluntary performance (CVP). According to Rosenbaum and Massiah (2007) customers who display CVP by exhibiting instances of loyalty, participation or cooperation are actually indulging in organisational citizenship behavior. Therefore customers' citizenship is in which customer spreads positive word of mouth about a firm, acts as a firm's partial employee and co-oper-

ates with the firm's employees. These include act of cooperation, helpfulness and similar gestures of kindness which are often only indirectly related to the organization's core work activities (Lengnick-Hall, Claycomb and Inks 2000).

Bettencourt (1997) suggested three dimensions of OCBs-participation, loyalty and cooperation. Various researchers have mentioned conceptually distinct dimensions of CCB from the organizational behaviour and marketing literature (Groth 2005; Keh and Teo 2001; Bove et al. 2009). These dimensions which are directed towards other customers, service workers and firm are positive word-of-mouth, display of relationships affiliation, participation in firm's activities, benevolent acts of service facilitation, flexibility, suggestion for service improvements, voice, policing of other customers (Bove et al. 2009).

### 2. Objective of the Study

The present study is planned with following research objective to determine the factors affecting customer citizenship behaviour.

### 3. Research Methodology

The present study has been carried out to know the dimensions of customer citizenship behaviour and role of commitment on customer citizenship behaviour. A sample of 558 customers who visits supermarkets for their daily needs were taken. Table 1 provide description of sample. A pre-tested structured questionnaire was used to collect primary data which contained question regarding customer citizenship behaviour and commitment. Each statement was measured on a 7-point Likert scale ranging from 'Very Strongly Agree to 'Very Strongly Disagree'. Exploratory Factor analysis has been used to determine the factor affecting customer citizenship behaviour and then confirmatory factor analysis has been applied to conform the factors. Structural equation modeling has been applied to know the impact of commitment on customer citizenship behaviour dimensions.

**Table 1: Sample characteristics**

Gender	
• Male	297 (53.2%)
• Female	261 (46.8%)
Age (years)	
• 18-25	162(29%)
• 26-40	225(40.3%)
• 41-56	108(19.4%)
• Above 56	63 (11.3%)
Education	
• Undergraduate	30 (5.4%)

- Graduate 95 (17%)
- Postgraduate 259 (46.4%)
- Postgraduate and above 174 (31.2%)

**4.1 Analysis and Discussion of Results**

To explore the dimensions of citizenship behaviour, consumers of supermarkets were asked 13 statements on 7 point Likert scale ranging from 7 (very strongly agree) to 1 (very strongly disagree). Factor analysis has been employed to using PASW statistics 18.0. Reliability analysis has been conducted and the Cronbach alpha is determined as 0.845 which indicate the reliability of the scale. Further factor analysis is applied to 11 variables. Table 2 shows the Kaiser – Meyer – Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity.

**Table 2. KMO and Bartlett's Test**

Kaiser - Meyer - Olkin Measure of sampling adequacy 0.847

Bartlett's test of Sphericity	Approx. Chi Square	4084.770
	df	55
	Significance	0.000

Source: Authors' Calculations

The value of KMO is determined as 0.847 and the Bartlett's test of sphericity as 4084.770 (significant at 1 per cent, p< 0.000) that justify the usage of factor analysis. Factor analy-

**Table 3: Dimensions of Customer Citizenship Behaviour**

S. No	Factor-wise Dimensions	Factor Loading	Eigen Value	Percentage of Variance Explained	Cumulative Percentage of Variance Explained
<b>F1</b>	<b>Providing the Feedback</b>			<b>4.591</b>	<b>27.202</b>
a.	Providing the Feedback to organization	0.865			
b.	Inform Org. about the great service	0.820			
c.	Provided information when surveyed	0.820			
d.	Fill consumer survey	0.786			
<b>F2</b>	<b>Helping the Company</b>			<b>2.650</b>	<b>26.184</b>
a.	Observe the rules and policies	0.838			
b.	Go out of way to treat	0.826			
c.	Employee get full cooperation	0.825			
d.	Keep the store clean	0.757			
<b>F3</b>	<b>Helping the Customers</b>			<b>1.326</b>	<b>24.493</b>
a.	Explain others to use service correctly	0.947			
b.	Helps other in shopping	0.943			
c.	Assist others in finding the products	0.942			

Source: Authors' Calculations

**4. Limitations and Future Directions**

Although the study yields significant insights, some limitations are worth addressing, and some promising areas arise for future research. First, the present research utilized a cross sectional study in a single industry. This study is limited only to supermarkets. This single-sector study raises some concerns about the generalizability of the findings. Future studies could consider to what extent the measures proposed in this study are valid in different service industries and what modifications need to be made in the scale items across different samples and contexts. Future studies replicating this research across multiple industries and sectors would increase the understanding of customer citizenship behavior. Second, the sample selection was based on a convenience sampling, which is often used for exploratory work, rather than a random probability sample. Additional research could be conducted using a random probability sample. Third, the sample represented a limited number of supermarkets in retail industry. The study is based on a self-reported questionnaire. It is possible that respondents, may have, at least to some extent, biased the results by responding how they felt when the event occurred. Thus the results of this study should be considered indicative rather than definitive and future research should address this limitation by examining actual behavior instead of self-reported and behavior intentions.

sis has been performed using the principal component extraction method with varimax rotation, on the basis of Eigen value not less than 1 for any factor. Table 3 shows the results of the factor analysis by depicting rotated values of factor loadings, Eigen values, percentage of variance explained by factors extracted and cumulative percentage of variance explained. Nomenclature of the factors extracted has been given on the basis of highest factor loadings of the variables onto a particular factor.

Table 3 demonstrates the results of factor analysis by documenting the three factors. Three items have loaded on 'Providing the Feedback' factor with the variance of 27.202 per cent. 'Helping the Company' with four items contributes a variance of 26.184 per cent. 'Helping Customer' contributes a variance of 24.493 with three items, altogether explaining the cumulative variance of 77.878 per cent. This finding is in line with Bartikowski and Walsh (2011) who found that customers engage in extra-role behaviors, such as helping other customer, improving the service delivery and providing the feedback. This finding confirms that of Yi, Natarajan and Gong (2011) customer citizenship behaviour influence employees indirectly by enhancing role clarity and fostering a sense of clarity. This findings are in consonance with Johnson and Rapp (2010) and Yi and Gong (2012) who argued that customer citizenship behaviour is multi-dimensional construct.

Having identified the limitations of the study, this section then provides some suggestions for future research to extend the current body of knowledge in the literature on citizenship behaviour. Four directions for future research can be identified. This research has been applied to examine the retail industry. However, this whole process of theoretical building can be applied to other contexts of study such as another industry or another country, for digging in depth regarding the issue in different contexts. Future research can be structured in a similar way to the theoretical building of this research. Future research as a comparative study, possibly with more than two different industries or countries is recommended in order to understand this theoretical structure more thoroughly. Thus, there is a need to replicate and extend this study to other contexts either in other industries or countries. Future studies could consider to what extent the measures proposed in this study are valid in different service industries and what modifications need to be made in the scale items across different samples and contexts.

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