

A Perspective of Service-Dominant Logic on Customer Participation: A Meta-Analysis Approach

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Abstract

Customer participation (CP) has received a special interest in service research. It is one of the most important aspects of services which can improve outcomes for customers and service providers. Through their participation, customers play a significant role on the service process and its outcomes. Different studies have investigated CP issues from different angles. Specifically, most of previous studies has focused on the influential factors of CP, the consequential and moderating factors are largely ignored. However, previous studies have yet to explore an integrative framework of customer participation with multiple antecedents, consequences and moderators. In this study, meta-analysis was conducted by collecting data from previous studies using customer participation as its main topic. The results from meta-analysis suggested that customer participation has a positive effect on customer citizenship behaviors (i.e., recommendation, helping customers, and providing feedback), while service-dominant orientation, personality and subjective has positive effect on customer participation. Eleven hypotheses are proposed in this study. It is expected that the results of this research can enable us to get better understanding about antecedents and consequences of customer participation. The results could be very helpful for academicians to further validate the research model and could also be very useful for professionals to design and implement their service strategies.

Keywords: Service-dominant logic; Customer participation; Customer citizenship behaviors; Role identification; Perceived benefit of participation.



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1. Introduction

Customer participation (CP) has been received a special interest in service research. CP refers to the degree to which a customer contributes effort, preference, knowledge, or other inputs to service production and delivery (Chan *et al.*, 2010; Dong *et al.*, 2014). It is a basic aspect of services and a source of positive outcomes for customers and service providers (Mustak *et al.*, 2013). Through their participation, customers influence the service process and its outcomes such as customer satisfaction, service quality, etc. (Bitner *et al.*, 1997; Dong *et al.*, 2014); (Aarikka-Stenroos and Jaakkola, 2012). According to the previous literature, CP has become an important tool for firms to improve their performance in terms of efficiency and productivity (Hsieh *et al.*, 2004) and to enhance customer relationships (Chan *et al.*, 2010).

Although previous studies have widely examined the antecedents of customer participation (e.g., (Dong *et al.*, 2014; Gallan *et al.*, 2013; Kang *et al.*, 2014; Parrado *et al.*, 2013; Wang *et al.*, 2013; Yen *et al.*, 2011), there is still a lack of studies which examine the multiple antecedents of customer participation at the same time (Mustak *et al.*, 2016).

First, the firm factor that will influence customer participation is service-dominant (S-D) orientation of a firm (Karpen *et al.*, 2012; Karpen *et al.*, 2015). S-D orientation refers to “a co-creation capability, resulting from a firm’s individuated, relational, ethical, empowered, developmental, and concerted interaction capabilities” (Karpen *et al.*, 2012). S-D logic reflects an understanding of meaningful interaction and reciprocal resource integration with customers (Karpen *et al.*, 2015). Service is a value co-creating process (Vargo and Lusch, 2008), therefore, interaction is an important aspect of resource integration effort and value-driving experiences (Prahalad and Ramaswamy, 2004). This study proposes that the higher the S-D orientation that a firm has, the higher will be the likelihood of customer to participate in service delivery process.

Second, the customer factors that will influence customer participation are personality traits and perceived ability. Personality traits are a structure of emotional, rational, behavioral, and mental traits that portrayed an individual character (Nassiri-Mofakham *et al.*, 2009). The Big Five Personality model (Costa and McCrae, 1992) is one of the most widely applied personality instruments in psychology and consumer behavior literature (Marbach *et al.*, 2016). Furthermore, perceived ability refers to the customers’ perceived knowledge and skills that enable them to participate effectively in service delivery (Meuter *et al.*, 2005). Typically, a level of customer participation needs greater knowledge and skills from a customer (Yim *et al.*, 2012). A high CP design will also enable customers with

high ability to leverage their expertise to co create value (Dong *et al.*, 2014). Therefore, this study proposes that the greater the personality traits and the higher the perceived ability that a customer has, the higher will be the likelihood of customer to participate in service delivery process.

Third, the social factor that will influence customer participation is subjective norms (Ajzen and Fishbein, 1970). Subjective norms reflect the impact of expectations from other people, which are largely based on the need for approval (Bagozzi and Dholakia, 2006). This mode of social influence may also be termed as compliance (Kelman, 1974). Subjective norms are identified as the social pressure that influences the individual behavior intention (Ajzen, 1991). The subjective norms might help individual decision making when individual has little experiences (Aarts *et al.*, 1997; Pahlila and Warsta, 2010). This study proposes that the greater the subjective norms, the higher the likelihood will be the customer to participate in service delivery process.

Although the above three antecedents have been investigated extensively, their composited effects on customer participation has never been studies. Therefore, this study focuses on the composited effects of CP and tries to find out the relative importance of these antecedent variables. Furthermore, although customer citizenship behaviors have been widely discussed in organizational behaviors, it is rarely been discussed in CP. This study proposes that customer citizenship behaviors which consist of recommendation, helping customers, and providing feedback are the consequences of customer participation. Customer citizenship behavior refers to the voluntary behavior which is essential to successful production or useful to the whole service organization (Groth, 2005).

Based on the above research background, since customer participation has become an important service practices and a comprehensive research framework is yet to be established, the objectives of this study are as follows:

1. To develop a comprehensive research framework that encompasses antecedents, consequences and moderators of customer participation.
2. To examine the effects of firm factor, customer factors, and social factor on customer participation.
3. To examine the effect of customer participation on customer citizenship behaviors (i.e., recommendation, helping customers, and providing feedback).

2. Literature Review

2.1. Service-Dominant Orientation

In this study, service-dominant (S-D) orientation is regarded as one of important antecedents of customer participation. S-D orientation was first developed by Karpen, Bove, and Lukas in 2012. It represents a set of strategic capabilities from service-dominant logic perspective. Based on S-D logic, strategy is about choosing the best way to facilitate and enhance value co-creation with network partners (e.g., customers, suppliers, etc.) for mutual and long-term benefit (Karpen *et al.*, 2012; Karpen *et al.*, 2015). Specifically, S-D orientation refers to “a co-creation capability, resulting from a firm’s individuated, relational, ethical, empowered, developmental, and concerted interaction capabilities” (Karpen *et al.*, 2012). S-D orientation enables a company to co-create value in service exchanges with customers. Value co-creation can be defined as assisting customers to co-construct and engage in superior experiences (Vargo and Lusch, 2008).

According (Karpen *et al.*, 2012), S-D orientation consists of six strategic themes such as value-in-context, relation focus, values focus, co-production focus, operant resource focus, and process flow focus. A definition and measurement of each of these themes will be discussed in Methodology Section. It reflects an understanding meaningful interaction and reciprocal resource integration with customers (Karpen *et al.*, 2015). Service is a value co-creating process (Vargo and Lusch, 2008), therefore, interaction is an important aspect of resource integration effort and value-driving experiences (Prahalad and Ramaswamy, 2004). Interaction requires that all co-creative processes be enabled and supported by interaction capabilities (Karpen *et al.*, 2012; Ramaswamy, 2009).

2.2. Personality Traits

Srivastava *et al.* (2008), had noted that the term “Big Five” was coined by Lewis Goldberg in 1976 and was originally associated with studies of personality traits used in natural language. While, the term “Five-Factor Model” has been more commonly associated with studies of traits using personality questionnaires. The two research traditions yielded largely consonant models (in fact, this is one of the strengths of the Big Five/Five-Factor Model as a common taxonomy of personality traits), and in current practice the terms are often used interchangeably. Roccas *et al.* (2002), stated in their introduction that this five factor personality model is a dominant approach for representing the human trait structure today. Similarly, empirical evidences by Digman (1990), Goldberg (1993), McCrae and Costa Jr (1997), and O’Connor (2002) have all supported that the Big Five Personality Dimensions represents the taxonomy to describe human personality in a very orderly manner.

The Big Five personality dimensions implies that personality consists of five separate dimensions that altogether provide a comprehensive taxonomy for the study of human behavior. According to this emerging consensus, the Big Five personality dimensions consists of extraversion, emotional stability/neuroticism, agreeableness, conscientiousness, and openness to experience (Costa and McCrae, 1985; Mount and Barrick, 1995). Extraversion is a broad dimension which encompasses traits such as being active, gregarious, sociable, assertive, talkative and energetic. People who are high in extroversion are usually very jovial, vocal and interactive people. They naturally seem to have a good deal of social interaction. Emotional stability is the tendency to experience positive emotional states. People who are high in emotional stability would feel secure, relaxed, calm and confident. Agreeableness has the characteristics of being courteous, tolerant, forgiving, soft-hearted and caring. Being high in agreeableness would

mean that they are the kind of people who can get along easily with others on any occasion (Neuman and Wright, 1999). Conscientiousness includes the characteristics of being persevering, organized, responsible, dependable, thorough and industrious. Individuals with this dimension are naturally hard working, result oriented, and ambitious. No doubt this dimension is highly valued by all organizations. Openness to experience reflects the extent to which a person has broad interest and the urge to take risks in dealings. Some of its traits include broad-mindedness, being imaginative, intelligent, curious and flexible.

2.3. Perceived Ability

Perceived ability refers to the customers' perceived knowledge and skills that enable them to participate effectively in service delivery (Meuter *et al.*, 2005). Typically, a level of customer participation needs greater knowledge and skills from a customer (Yim *et al.*, 2012). A high CP design also enables customers with high ability to leverage their expertise to co-create value (Dong *et al.*, 2014). According to Auh *et al.* (2007), high level of customers' ability is likely to increase their participation in service delivery because first, as customers gain more knowledge and skills, they are better in assessing where they might make a contribution and they are better in evaluating various attributes of different service offerings, second, customers with better knowledge and skills typically perceive lower decision-making risk. Third, they likely have a greater need for control in the service delivery process.

2.4. Subjective Norms

According to Theory of Planned Behavior (TPB), there is one type of social determinant of intentions and behaviors which is subjective norms (Ajzen, 1991). Subjective norms reflect the impact of expectations from other people, which are largely based on the need for approval (Bagozzi and Dholakia, 2006). This mode of social influence may also be termed as compliance (Kelman, 1974). This is only one type of social influence that is relevant for consumer participation (Bagozzi and Dholakia, 2006) since the operation of subjective norms in many situations may be problematic because it describes norms in terms of the context to which people perceive that others want them to perform the behavior, yet for behaviors that do not influence other people or behaviors that are not so directly associated with outcomes, such pressures may be latent and may not be perceived (Terry and Hogg, 1996).

2.5. Customer Participation

The definitions of customer participation employ many forms and degrees, from firm production to joint production to customer production (Meuter and Bitner, 1998). Because our purpose is to understand the value creation process when customers participate and interact with employees in services, we do not consider firm and customer production (e.g., self-service technologies). This study defined CP as a behavioral construct that measures the extent to which customers provide or share information, make suggestions, and become involved in decision making during the service co-creation and delivery process (Auh *et al.*, 2007; Bettencourt, 1997; Bolton and Saxena-Iyer, 2009; Hsieh *et al.*, 2004).

Researchers identified different roles that customers could assume in the service process, for example, partial employee (Johnston, 1989), co-producer (Kelley *et al.*, 1990), decision maker (Bitner *et al.*, 1997), and quality evaluator (Ennew and Binks, 1999). Customer participation was considered to comprise various behaviors, such as preparation, relationship building, information exchange, quality assurance, and assessment behaviors (Kellogg *et al.*, 1997; Youngdahl *et al.*, 2003). Several authors suggested that customer participation actually extends beyond the service process, involving customers' inclination to learn and experiment, and to engage in active dialogue, collaboration, and codevelopment with sellers (Prahalad and Ramaswamy, 2004; Wikström, 1996). The concept of participation was gradually extended to apply to both product and service offerings (Vargo and Lusch, 2004; Wikström, 1996), and to cover a broader scope of activities, such as customer interactions with providers or other actors (Tether and Tajar, 2008), as well as participation in product development (Wikström, 1996) or innovation (Magnusson *et al.*, 2003; Von, 2001).

2.6. Customer Citizenship Behaviors

Customer citizenship behaviors have been increasingly discussed in management and marketing literature (e.g., (Ahearne *et al.*, 2005; Bettencourt, 1997; Groth, 2005; Lengnick-Hall *et al.*, 2000). Bowen (1986) argues that customers seldom get involved in the process of production. However, in service organizations, both customers and employees are regarded as human resources. Customers take part in service delivery activities; it is therefore possible that customers replace employees in service-based organizations (Halbesleben and Buckley, 2004). Previous studies suggest that service based organizations should, in some cases, consider customers at least as organizational members or even as employees (Kelley *et al.*, 1990). Based on these descriptions, it can be claimed that service customers may display citizenship behavior the same way as employees themselves do. Thus, we can apply findings of citizenship behavior studies to the customers.

In management literature, customer citizenship behavior is formally defined as "the voluntary individual behavior which is not explicitly or directly recognized by means of formal reward system and generally strengthens the effective efficiency of the organization" (Organ, 1988). Similarly, customer citizenship behavior is defined as "the voluntary behavior which is not essential to successful production or to introduction of services but totally useful to the whole service organization" (Groth, 2005). Several terms can be used to explain customer citizenship behavior among which the following are considerable: customer voluntary behavior, customer's voluntarily

performance, and “extra-role” behaviors of customer. Groth (2005), has identified three aspects of customer citizenship behavior: 1) introducing feedbacks to the organization which means the presentation of applicant's information to the organizations with an aim to help them improve their service providing process; 2) helping other customers parallel to the philanthropy aspect in organizational citizenship behavior; and 3) giving commercial recommendations to friends or family members. In addition, Ford (1995) suggests that customers who display citizenship behavior may show their commitment to the service organization and report potential protective issues to the employees. Keh and Teo (2001), have claimed that the customer's resistance against the failure of a service is another aspect of customer citizenship behavior. They state the case as a customer's tendency to accompany the services they encounter while these services are not executed as expected. Such an attitude results in permanent customization and does not publish negative word-of-mouth marketing (advertisements).

3. Research Design and Research Methodology

3.1. Meta-Analysis Procedure

To have a thorough literature review on each the research hypotheses, meta-analysis is adopted. This meta-analysis searched the empirical studies from different scientific database. The data was collected electronic in management, psychology, social science, business, marketing, health, and organizational behavior. First of all, this research looked for the coefficient correlations of the most important determinants of service dominant orientation, personality traits, perceived ability, subjective norms, customer participation and customer citizenship behaviors by using ProQuest, JSTOR, SAGE, Emerald, ScienceDirect, and Google Scholar. This research used them with multiple keywords to identify relevant journals, thesis, and dissertations. Correlations of each research hypothesis were collected for further analysis. After completing the research process, it obtained 42 studies which were usable for this meta-analysis. These results are showed in the last part of this meta-analysis research. Furthermore, in the reference part, the meta-analysis' data sources are showed below.

3.2. Selection of Studies

Table 1 shows the studies included in the meta-analysis. This meta-analysis evaluated all previous studies for measuring the relationships between antecedents and customer participation and its consequences

Table-3.1. Studies Used in Meta-Analysis

Studies Alphabetically by Source and Codes for Hypotheses Tests^{a,b}	
Anaza & Zhao, 17, (CP-F; CP-R; CP-H), 2013	Han & Kim,6, (PA-CP; SN-CP), 2010
Anaza, 22, (A-CP; E-CP; CP-F; CP-R; CP-H) 2014	Han & Yoon,6 (PA-CP; SN-CP), 2015
Anh & Thuy, 25, (SD-CP) 2017	Han et al, (PA-CP; SN-CP), 2010
Auh et al, 15, (SD-CP), 2007	He et al, (A-CP; O-CP), 2015
Bagozzi & Dholakia, 8, (SN-CP), 2006	Hsu et al, (PA-CP; SN-CP), 2017
Banerjee,1, (A-CP; C-CP; O-CP), 2016	Ida, (CP-F; CP-H), 2017
Barrutia et al,3, (PA-CP), 2016	Iwasaki & Fry, (SD-CP), 2016
Buonincontri et al,27, (SD-CP), 2017	Joshi & Rahman, (PA-CP; SN-CP), 2017
Chalabaey et al, 23, (PA-CP), 2009	Kadic-Magljalic et al, (SD-CP), 2017
Chen & Tung,6, (SN-CP), 2014	Kude et al, (A-CP, E-CP, C-CP, O-CP), 2017
Chiu et al, 14, (CP-F; CP-R; CP-H), 2015	Kumar et al, (PA-CP), 2017
Cho & Auger, 24, (A-CP, E-CP; C-CP; ES-CP; O-CP), 2017	Mechida & Patterson, (A-CP, E-CP, C-CP, ES-CP, O-CP), 2011
Cossio-Silva et al,9, (SD-CP), 2016	Merz et al, (PA-CP), 2018
Curth et al,17, (CP-F, CP-R; CP-H) 2014	Mishra & Vaithianathan, (SD-CP; E-CP; C-CP; ES-P), 2015
Custers & Van den Bulck, 21, (PA-CP), 2011	Niehoff, (E-CP; C-CP; E-CP), 2006
Freiberger et al, 19, (PA-CP), 2012	Orji et al, (A-CP; C-CP; ES-CP, O-CP), 2017
Greaves et al, 12, (PA-CP; SN-CP), 2013	Paul et al, (PA-CP), 2016
Grissemann & Stokburger-Sauer, 27, (SD-CP), 2012	Tews et al (E-CP; C-CP; PA-CP), 2011
Groth, 13 (CP-F; CP-R), 2005	Ul Islam et al, (A-CP, E-CP; O-CP; ES-CP; C-CP), 2017
Han, 27, (PA-CP, SN-CP), 2015	Yadav & Pathak (PA-CP; SN-CP), 2016
Han & Hwang, 6, (PA-CP, SN-CP), 2016	Zhu et al, (CP-F; CP-R, CP-H), 2016

^aCodes in parentheses: CP= Customer Participation, SD= Service-Dominant Orientation, A= Agreeableness; E=Extraversion; C=Conscientiousness; ES= Emotional Stability; O=Openness to experience; PA= Perceived Ability; SN= Subjective Norm; R=Recommendation; H= Helping customers; F= Providing feedback

^bJournals are footnoted in order: (1) Asia Pacific Journal of Marketing and Logistic; (2) Career Development International; (3) European Journal of Marketing; (4) International Journal of Bank Marketing; (5) International Journal of Business and Economics Research; (6) International Journal of Hospitality Management; (7) International Journal of Operations and Production Management; (8) International Journal of Research in Marketing; (9) Journal of Business Research; (10) Journal of Cleaner Production; (11) Journal of Competitiveness; (12) Journal of Environmental Psychology; (13) Journal of Management; (14) Journal of Physical Education and Sport; (15) Journal of Retailing; (16) Journal of Retailing and Consumer Services; (17) Journal of Services Marketing; (18) Journal of Vocational Behavior; (19) Learning and Individual Differences; (20) Marketing Intelligence and Planning; (21) Poetics; (22) Psychology and Marketing; (23) Psychology of Sport and Exercise; (24) Public Relations Review; (25) Service Business; (26) Sustainable Production and Consumption; (27) Tourism Management.

The following 11 research hypotheses were identified in this meta-analysis.

H1: S-D orientation has a positive effect on customer participation

H2a: Agreeableness has a positive effect on customer participation

H2b: Extraversion has a positive effect on customer participation

- H2c: Conscientiousness has a positive effect on customer participation
- H2d: Emotional stability has a positive effect on customer participation
- H2e: Openness to experience has a positive effect on customer participation
- H3: Perceived ability has a positive effect on customer participation
- H4: Subjective norm has a positive effect on customer participation
- H5a: Customer participation has a positive effect on recommendation
- H5b: Customer participation has a positive effect on helping customer
- H5c: Customer participation has a positive effect on providing feedback

Two criteria were used for the inclusion of this meta-analysis: (1) correlation studies had to present the correlation coefficient (r) or the standardized regression coefficient for each of the research hypotheses, (2) studies of group contrasts had to present the related statistic (t -test, F -ratio with one df in the numerator) for the above research hypotheses (De Matos *et al.*, 2007). Then, all of the criteria should convert to r coefficients using CMA software. Since O'Connor (2002), Bhaskar-Shrinivas *et al.* (2005) and Hechanova *et al.* (2003) have explained that correlation coefficient r was easier to interpret and most of data-analytical review user as a criteria, this research used it for the further analysis. All identified studies were then examined in term of following relevant variables: authors, year, journals, total sample size, variable and effect size. Furthermore, based on Lipsey and Wilson (2001) study, the magnitude of effect size (r) can be categorized as small ($r < 0.1$), medium ($r > 0.25$) and high ($r > 0.4$).

After integrating the correlation coefficient (r) of each study, a confidence interval is presented for each effect size and its significant. Rosenthal (1979), stated that when the mean effect size is significant, a fail N is calculated. Then, it estimates the number of non-significant and unavailable studies that would be necessary to bring the cumulative effect size to a non-significant value (known as the "file drawer" problems). This statistic analysis is an indication of the difficulty of the result. Confidence interval were also analysis. The criterion of 95% confidence interval was adopted to prove whether the hypothesis is accepted.

Moreover, Lipsey and Wilson (2001) explained about another Q -statistic which is an analysis of homogeneity of the effect size distribution. It is distributed as a Chi-square with degree of freedom = $n-1$, where n = number of studies. This test has assumed that all of the effect sizes are estimating the same population mean is a reasonable assumption. The criterion for Q -statistic is Q -value should be higher than Chi-square. It means the null hypothesis of homogeneity is accepted. Then, the variability across effect size does not exceed what would be expected based on sampling. If the null hypothesis of homogeneity is rejected, differences in effect size maybe attributed to factor other than sampling, therefore, the heterogeneity between the variance is exist.

4. Results

4.1. The Effects of Antecedents on Customer Participation

The table 4-1 shows the meta-analysis results for the influence of antecedents on customer participation. Using the mean value of correlation coefficients among previous studies, the results show that variables of service dominant orientation have positive influence on customer participation ($r = 0.522$). Based on the criteria as stated Lipsey and Wilson (2001), the relationship has high effect size. These results are also supported by 95% confidence interval with non-zero values. Therefore, hypothesis 1 is supported. Furthermore, the Q -value is higher than Chi-Square value, it means that the effect is heterogeneous.

In term of the relationship between personality traits and customer participation. Using the mean value of correlation coefficients among previous studies, the results that the variable of agreeableness ($r=0.341$), extraversion ($r=0.204$), conscientiousness ($r=0.193$), emotional stability ($r=0.128$), and openness to experience ($r= 0.279$) have positive influence on customer participation. Based on the criteria as stated Lipsey and Wilson (2001), the relationships have medium effect size. These results are also supported by (5% confidence interval with non-zero values. Therefore, hypotheses H2a, H2b, H2c, H2d, H2e are supported. Furthermore, the Q -value is higher than Chi-Square value, it means that the effect is heterogeneous.

For the influence of perceived ability on customer participation. Using the mean value of correlation coefficients among previous studies, the results show that the variable of perceived ability value has positive influence on customer participation ($r= 0.336$). Based on the criteria as stated Lipsey and Wilson (2001), the relationship has medium effect size. These results are also supported by 95% confidence interval with non-zero values. Therefore, hypothesis 3 is supported. Furthermore, the Q -value is higher than Chi-Square value, it means that the effect is heterogeneous.

Finally, for the influence of subjective norm on customer participation. Using the mean value of correlation coefficients among previous studies, the results show that variable of subjective norm value has positive influence on customer participation ($r= 0.316$). Based on the criteria as stated Lipsey and Wilson (2001), the relationship has high effect size. These results are also supported by 95% confidence interval with non-zero values. Therefore, hypothesis 4 is supported. Furthermore, the Q -value is higher than Chi-Square value, it means that the effect is heterogeneous

Table 4-1.The Effects of Antecedents on Customer Participation

Hyps	Variables		k	Total	Effect size & 95% confidence Interval			Heterogeneity			
	Independent	Dependent	Studies	n	r	LCI	UCI	p-value	Chi-square	Q-value	I-squared
H1	S-D Orientation	Customer participation	8	3409	0.522	0.497	0.546	0.000	24.32	102.290	93.157
H2a	Agreeableness	Customer Participation	8	3400	0.341	0.311	0.370	0.000	24.32	252.225	97.225
H2b	Extraversion	Customer Participation	8	2317	0.204	0.165	0.243	0.000	24.32	75.195	90.691
H2c	Conscientiousness	Customer Participation	9	3033	0.193	0.158	0.227	0.000	26.13	311.528	97.432
H2d	Emotional Stability	Customer Participation	5	2123	0.128	0.086	0.169	0.000	18.47	60.907	93.433
H2e	Openness to experience	Customer Participation	8	3597	0.279	0.249	0.309	0.000	24.32	68.862	89.808
H3	Perceived Ability	Customer Participation	17	7131	0.336	0.315	0.357	0.000	39.25	199.284	91.971
H4	Subjective Norm	Customer Participation	11	4442	0.316	0.289	0.342	0.000	29.59	46.683	78.579

4.2. The effect of Customer Participation on Customer Citizenship Behaviors

The table 4-2 shows the relationship between customer and its consequences. Using the mean value of correlation coefficients among previous studies, the results show that variables of customer participation have positive influence on recommendation ($r=0.394$). Moreover, the results also show that customer participation have positive influence on helping customer ($r=0.484$) and providing feedback ($r=0.415$). Based on the criteria as stated [Lipsey and Wilson \(2001\)](#), the relationships have medium effect size. This result is supported by 95% confidence interval with non-zero values. Therefore, hypothesis H5a, H5b and H5c are supported. Furthermore, the Q-value is higher than Chi-Square value, it means that the effect is significantly heterogeneous.

Hyps	Variables		k	Total	Effect size & 95% confidence Interval			Heterogeneity			
	Independent	Dependent	Studies	n	r	LCI	UCI	p-value	Chi-square	Q-value	I-squared
H5a	Customer participation	Recommendation	7	1961	0.394	0.356	0.431	0.000	22.46	60.644	90.106
H5b	Customer Participation	Helping Customers	6	1622	0.484	0.446	0.521	0.000	20.52	171.802	97.090
H5c	Customer Participation	Providing Feedback	6	1773	0.415	0.376	0.453	0.000	20.52	70.962	92.954

5. Conclusion and Suggestion

This study intends to contribute to the current literatures from the following three aspects. First, this study examines multiple antecedents of customer participation at the same time which has yet to be done by previous studies. Those antecedents consist of firm factor (i.e., service-dominant orientation), customer factors (i.e., personality traits and perceived ability), and social factor (i.e., subjective norm).

Second, this study identifies customer citizenship behaviors such as recommendation, helping customers, and providing feedback as the consequences of customer participation. Third, this study identifies role identification as the moderator of the relationship between customer participation and its antecedents. Finally, this study also identifies perceived benefit of participation as the moderator of the relationship between customer participation and its consequences.

Since a comprehensive research model to identify the antecedents, consequences, and moderators of customer participation is yet to be developed, this study tried to fill this research gap and adopt meta-analysis approach to identify more insightful information of the research issue. Although a plenty of studies have conducted to understand of customer participation, none of the previous studies have integrated those antecedents, consequences, and moderators into a more comprehensive framework like this study. It is expected that the results of this study can be provided as an important reference for academicians to conduct further empirical validations on the research of customer participation; the results can also be very useful for professionals to identify their strategies of customer participation management and to enhance the profitability of the firm.

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