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When Does Customer Participation Matter?

The Role of Customer Empowerment in the Customer Participation–Performance Link

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When Does Customer Participation Matter? An Empirical Investigation of the Role of Customer Empowerment in the Customer Participation–Performance Link

Abstract

Research on customer participation (CP) has focused on its benefits for customers. However, recent research suggests CP is beneficial to both customers and firms. The literature is also sparse on the economic (e.g., profitability) and customer (e.g., retention) impact of CP. This research introduces the concept of customer empowerment and develops and tests a model of customer empowerment as a parallel mediator, along with customer satisfaction, to explain the linkage between CP and bank branch performance. Furthermore, the authors draw on a broader set of moderators beyond customer characteristics to examine when CP matters more or less to empowerment and satisfaction. Using triadic matched data from a multiwave design and a three-level model in which customers are nested within employees, who are, in turn, nested within bank branches, the authors show that empowerment and satisfaction fully mediate the effect of CP on branch performance. The findings also show that CP results in more empowerment and satisfaction when there is fit between participation and the context in which it is used. The authors discuss implications for advancing CP research as well as actionable steps for reaping the economic and customer benefits of CP.

Keywords: customer participation, customer empowerment, customer satisfaction, social bonding, feedback, customer orientation

Customer participation (CP) is widely used by organizations to bring customers closer to the brand. For example, HSBC Bank invites customers who have Expat and Premier bank accounts to participate in further improving service offerings and the delivery process. HSBC encourages CP by stating the following:

> We believe that your input is key to improve and develop our products and services…. We sincerely want to hear from you. We will then do our best to make relevant improvements and aim to improve our products and/or services further. (HSBC 2012)

Customer participation varies widely, from requiring customers' mere physical presence or information provision to customers as active co-producers (Dong and Sivakumar 2017). Drawing on the service-dominant logic of marketing (Vargo and Lusch 2004), we define CP as customers' involvement in the service co-creation and delivery process by sharing information, making suggestions, providing information about personal needs, and participating in decision-making processes (Chan, Yim, and Lam 2010). This definition underscores the notion that CP is a behavioral construct with a utilitarian focus that captures customers' investments of time, effort, and decision making in improving service delivery processes and outcomes (e.g., Auh et al. 2007). Thus, we view CP as a voluntary behavior (Dong and Sivakumar 2017) and as an information resource and an act of co-development (Fang 2008).

Despite the attention CP has received in the literature, the current understanding of CP is limited in three important ways. First, drawing on the intersection of CP and customer innovation, CP results in positive outcomes to customers (e.g., customer satisfaction) because CP leads to customer-related benefits, such as economic and relational value (Chan, Yim, and Lam 2010) or participation enjoyment (Yim, Chan, and Lam 2012). However, given that CP involves an interactive process between a customer and an employee or firm (Vargo and Lusch 2004), CP

can also benefit the firm (Dong and Sivakumar 2017). Few studies have examined this latter perspective, let alone the relationship between CP and the benefits of CP to customers and firms simultaneously in the same model. As the literature suggests, "customers want their participation to generate benefits—for themselves, other customers and the company" (Merlo, Eisingerich, and Auh 2014, p. 87). Second, extant research has viewed contingency factors mainly as customer characteristics (e.g., customers' self-efficacy, customer readiness), even though CP involves an interactive exchange process between two parties. Absent from the literature are contingencies that are not directly associated with the customer but can nonetheless shape the consequences of CP such as employee or firm related contingencies. Third, the economic (e.g., profitability, sales growth) and customer (e.g., customer retention) benefits of CP are poorly understood. A thorough review of the CP literature suggests that a paucity of studies examine the CP–economic benefit link (Dong and Sivakumar 2017). This research examines the link between CP and branch performance and the mediating mechanisms through which this occurs in the banking industry.

We have designed this study to address these identified gaps in the CP literature. We expand on Ramani and Kumar's (2008) work on customer empowerment and define it as a higher-order construct in terms of two dimensions: (1) the extent to which CP provides worth to the organization and (2) the degree to which CP makes an impact on the organization. The customer empowerment concept shifts the focus from how CP helps the customer to how CP assists the organization by assessing customers' perceptions of CP's worth and impact on the organization. This distinction regarding the "specificity" of focus is important because CP involves two parties that benefit from the interaction. We find that customer empowerment and

satisfaction are parallel mediating links between CP and branch performance, with empowerment capturing CP's benefit to the firm and satisfaction capturing CP's benefit to the customer.

We also broaden the boundary conditions that shape when CP is more or less effective. The extant literature has taken a narrow view of moderators, focused primarily on the cognitive state of customers, thus preventing a complete and more accurate picture of when CP works and hindering the theoretical and practical progression of CP research. Therefore, we examine the conditioning roles of customer-related (e.g., the importance customers place on social bonding with employee), employee-related (e.g., employees' customer orientation), and systems-related (e.g., CP feedback, CP formalization) moderators.

Our study contributes to the CP literature by showing that CP has a positive effect on branch performance that is fully mediated by customer empowerment and satisfaction. We also show that CP's impact on customer empowerment and satisfaction is conditioned by customer-, employee-, and systems-related moderators. In the sections that follow, we introduce our conceptual framework, including CP and customer empowerment. We then develop a three-level model in which customers are nested within service employees, who are, in turn, nested within branches, using triadic data (matched pairs of customers, service employees, and managers) from the banking industry to test our hypotheses. We conclude with a discussion of the theoretical and practical implications of our findings and suggestions for advancing CP research.

CONCEPTUAL BACKGROUND

Customer Participation

We distinguish CP from other similar constructs, such as coproduction, cocreation, and customer engagement (see Web Appendix A). Customer participation is different from co-

production and co-creation in that "CP is a more inclusive term than coproduction" (Dong and Sivakumar 2017, p. 958). Co-production and co-creation imply that the customer is involved in production or value creation together (hence, the use of "co") with the service provider, whereas CP does not have such constraints. Customer participation is inclusive of the domain of coproduction but not vice versa. That is, coproduction is a subset of CP in that activities that can be regarded as coproduction are CP but activities that involve CP may not necessarily be coproduction. For example, self-serving technologies (e.g., self-checkout and self-checkin at groceries and airports, respectively) are considered customer participation but not coproduction (Dong and Sivakumar 2017). That is, customer participation can occur when a customer is alone (e.g., self-assembly with IKEA) or interacting with the service provider (e.g., co-creating a diet plan with a dietitian or a fitness plan with a fitness trainer). Customer engagement is "a psychological state, which occurs by virtue of interactive customer experiences with a focal agent/object within specific service relationships" (Brodie et al. 2011, p. 260). Therefore, the literature regards CP as an antecedent or consequence of customer engagement, depending on the dynamic nature of the model (feedback loop over time) (Brodie et al. 2011).

Customer participation captures the proactive role of customers as partial employees (Mills and Morris 1986) who take on the role of co-creators of value (Ranjan and Read 2016; Vargo and Lusch 2004). The locus of core competencies shifts from companies to enhanced networks that include customers (Prahalad and Ramaswamy 2000). We propose that the CP construct can partially address the interplay between customers and employees and how the changing role of customers can be leveraged as the "next frontier in competitive advantage effectiveness" (Bendapudi and Leone 2003, p. 14). Customer participation implies a shift in the

power balance from employees to customers as customers take increasing control in the employee–customer relationship by providing input in the form of information and feedback. Nevertheless, it has long been discussed how customers need to be managed as human resources by inviting them into the creation and delivery of services in organizations (Bowen 1986) as a means of increasing productivity and improving service operations (Lovelock and Young 1979).

Customer Empowerment

The core tenet of our customer empowerment conceptualization draws on the community psychology literature (e.g., Speer et al. 2013) and is based on the argument that participation and empowerment are intrinsically related. In essence, empowerment is a "process by which individuals gain mastery or control over their own lives and … participation in the life of their community" (Zimmerman and Rappaport 1988, p. 726). The concept of empowerment has found its place in a variety of disciplines. In the health care management literature, patient empowerment has been conceptualized and empirically validated as a construct that also includes patient participation (Ouschan, Sweeney, and Johnson 2000). The organizational psychology literature views empowerment as a psychological state that reflects an intrinsic motivation to work due to a sense of autonomy and ability to perform meaningful tasks that can make an impact (Spreitzer 1995).

In marketing, customer empowerment has been defined as "the extent to which a firm provides its customers avenues to (1) connect with the firm and actively shape the nature of transactions and (2) connect and collaborate with each other by sharing information; praise; criticism; suggestions; and ideas about its products, services, and policies" (Ramani and Kumar 2008, p. 28). Customer empowerment plays a critical function as customers' roles shift from

passive receiver to active participant in the creation and delivery of services. Customers appreciate a sense of control and, through participation, perceive that their involvement provides worth and is impactful in shaping the process and outcome of services.

We extend Ramani and Kumar's (2008) conceptualization of customer empowerment to the context of CP. Drawing from the community psychology literature (e.g., Speer et al. 2013), we capture customer empowerment as a higher-order construct with two dimensions: perceived worth and perceived impact. Accordingly, we define customer empowerment as the degree to which customers perceive that their participation has worth and is impactful to organizations. CP worth is defined as the degree to which customers perceive that the organization cares, appreciates, and respects their opinions and input in improving the service process and delivery. CP impact refers to the extent to which customers perceive that their participation makes a difference and benefits the organization. Therefore, customer empowerment reflects customers' perceptions of how CP is appreciated by and beneficial to the organization. To this end, our study is first to introduce customer empowerment into the marketing literature in the CP context.

PROPOSED MODEL AND HYPOTHESES

Our conceptual model (see Figure 1) delineates the process by which CP influences branch performance (e.g., profit, sales growth, customer retention) through customer empowerment and customer satisfaction and the contingencies between CP and the two mediators. We chose branch performance as our dependent variable because we wanted (1) to show that there is accountability in using CP because customer empowerment assesses the impact of CP to firms and (2) to expand the scope of dependent variables used in the extant

literature beyond customer-side variables (e.g., satisfaction, behavioral intention, service quality) to tangible economic and customer-related outcomes.

[Insert Figure 1 here]

Mediating Roles of Customer Empowerment and Customer Satisfaction

We propose two parallel mediating mechanisms between CP and branch performance: one through customer empowerment and one through customer satisfaction. Our discussion focuses primarily on the customer empowerment path because the CP–customer empowerment–branch performance chain has received sparse attention while the CP–customer satisfaction link (e.g., Bendapudi and Leone 2003 Chan, Yim, and Lam 2010; Dong et al. 2015; Yim, Chan, and Lam 2012) and the customer satisfaction–financial performance link (e.g., Anderson and Mittal 2000; Gruca and Rego 2005; Morgan and Rego 2006) in the CP–customer satisfaction–branch performance chain have been well documented. Although the CP–customer satisfaction–branch performance link has received broad support, we still add this path in our model for the sake of completeness because the inclusion of both mediators is consistent with the argument that CP involves customer innovation for both customers and firms (Dong and Sivakumar 2017).

According to the community psychology literature (e.g., Speer et al. 2013), participation elevates a sense of empowerment. People feel more empowered when they participate because they believe that their voice will be heard and appreciated, leading them to feel that they can help shape the future (Zimmerman and Rappaport 1988). Therefore, CP will result in improved branch performance because customers will sense that firms appreciate their investment in CP and that their participation will make a difference in improving the service process and outcome. As research suggests, “if [customers] are going to invest time, they want to think that their

involvement can make a difference and that the company will actually listen to their input" (Merlo, Eisingerich, and Auh 2014, pp. 87–88). When customers perceive that participation is worthwhile and have an impact on the firm, this should drive economic (e.g., profit, sales growth) and customer-related (e.g., customer retention) benefits for the firm because firms will be able to increase their efficiency and deliver more personalized service and better outcomes.

Research has shown that CP has a positive effect on customer satisfaction through economic and relational value (Chan, Yim, and Lam 2010) and functional service quality (Gallan et al. 2013). According to Dong and Sivakumar (2017), customer satisfaction is the most frequently studied consequence of CP. Moreover, given that the customer satisfaction–branch performance link has also been well established in the marketing literature (e.g., Eisingerich, Auh, and Merlo 2014), we propose that CP has a positive effect on branch performance and that this link is mediated by customer satisfaction. Formally, we propose the following:

H_1: CP has a positive effect on branch performance (i.e., profitability, sales growth, and customer retention), which is mediated by (a) customer empowerment and (b) customer satisfaction.

Moderating Effects

We draw on contingency theory (Zeithaml, Varadarajan, and Zeithaml 1988) to advance the view of CP from a deterministic approach to a contingency perspective, thus broadening the theoretical and practical boundaries of CP research. In developing the interaction hypotheses, we use a "fit as moderation" argument such that "the fit between the predictor and the moderator is the primary determinant of the criterion variable" (Venkatraman 1989, p. 424). The core premise is that customer empowerment and customer satisfaction are enhanced (diminished) when there is fit (misfit) between participation and the CP context.

Drawing on the service-dominant logic, which underscore the importance of customer orientation, interactivity, connectivity, and relationships (Vargo and Lusch 2004), we posit that employees' customer orientation, the importance customers place on social bonding, employee feedback on CP, and the formalization of CP are key elements that can shape the effectiveness of CP. Based on in-depth interviews with managers and customers, we were able to confirm the previous four strategically important moderators in a private banking context. From a theoretical perspective, these four moderators cover a broader range of contingencies than customer characteristics (e.g., ability, role identification, self-efficacy, benefit of participation to customers), which have been the primary focus in the extant literature (Dong et al. 2015). Furthermore, with respect to the importance of social bonding to customers and employees' customer orientation, we develop rival hypothesis as a way to acknowledge that there can be competing arguments.[1]

The importance customers place on social bonding with employees. We define the importance of social bonding as the degree to which a customer desires to engage in a personal relationship (i.e., friendship) with an employee (Grayson 2007; Rodríguez and Wilson 2002). Social bonding captures the personal connection dimension of rapport (Gremler and Gwinner 2000). Relationships grounded in social bonding are affective, emotional, based on friendship, and personal. Therefore, in the context of social bonding between a customer and an employee, the customer views the employee in the context of friendship and understands the relationship as a social exchange rather than the typical utilitarian economic exchange that governs many

[1] We thank an anonymous reviewer for this suggestion.

transactions, including CP.

On the one hand, the importance of social bonding can be viewed as a detractor. Customers with a stronger focus on personal relationships are less calculative and utilitarian and tend to show less interest in economic benefits that deliver instrumental value, which diminishes CP's impact on empowerment. For such customers, CP's effect on empowerment will be attenuated because there will be a misfit between their interest in personal relationships and the calculative economic exchanges (i.e., utilitarian focus) of CP. When customers place more importance on social bonding, they are less able to differentiate emotional elements from the worth and impact of CP (i.e., empowerment), which are more utilitarian. Therefore, customers who place a high (low) importance on social bonding will find it more difficult (easier) to separate personal relationships from business transactions. Accordingly, when customers view social bonding less important, there will be less misfit between CP as a utilitarian focused transaction and the diminished significance of social bonding, resulting in a greater impact of CP on empowerment and satisfaction.

Further, building on the dark side of friendship in business transactions that underscore the role conflict that can occur when mixing friendship with business relationships (Grayson 2007; Price and Arnould 1999), we argue that when customers place more importance on personal relationships with employees, the impact of CP on satisfaction will be diminished because personal relationships will interfere with how CP is perceived. Friendship and business transactions are typically viewed as incompatible that can create discordant expectrations, leading to sub-optimal outcomes (Grayson 2007).

The results from our interviews support the view that the desire for social bonding may

not be as important and relevant as one might expect. For example, we learned that although customers viewed forming and maintaining a personal relationship with the private banker as helpful, this was not a top priority, and they did not necessarily expect this when engaging in CP activities. Many customers took the position that as long as they could share input and the bank took it seriously and used it to improve service processes and outcomes, they were satisfied and felt it was worth their time. Thus, we propose the following:

H_{2a}: The importance of social bonding negatively moderates the CP–customer empowerment relationship such that the positive effect of CP on customer empowerment will be attenuated as the importance of social bonding increases.

H_{2b}: The importance of social bonding negatively moderates the CP–customer satisfaction relationship such that the positive effect of CP on customer satisfaction will be attenuated as the importance of social bonding increases.

On the other hand, social bonding might be viewed as an enhancer. Customers who place more importance on social bonding may perceive that CP is easier, less of a chore, and requires less effort, because friendship and personal relationships can make the participation process more enjoyable and less of a laborious activity (Chan, Yim, and Lam 2010). Therefore, when customers engage in participation, they will be more satisfied and sense that their participation is benefiting the organization more. Thus, the importance of social bonding can augment the effect of CP on empowerment and satisfaction. For example, in our interviews, some customers expressed that the quality of the interpersonal relationships played an important role in how they interpreted the outcomes of CP. Thus, a rival argument can be made that the importance of social bonding strengthens the impact of CP on empowerment and satisfaction leading to the following set of competing hypotheses:

H_{2c}: The importance of social bonding positively moderates the CP–customer empowerment relationship such that the positive effect of CP on customer

empowerment will be accentuated as the importance of social bonding increases.

H_{2d}: The importance of social bonding positively moderates the CP–customer satisfaction relationship such that the positive effect of CP on customer satisfaction will be accentuated as the importance of social bonding increases.

Employees' developmental feedback on CP. We define developmental feedback on CP as timely and regular feedback that employees provide to customers to keep the customers informed about how their participation is being used to improve service operations (Kohli and Jaworski 1991). Following recent developments in the job characteristics literature that emphasize the importance of feedback as a social and relational source of motivation (Oldham and Hackman 2010), we suggest that CP's effect on customer empowerment and satisfaction will be accentuated when customers receive more feedback on their CP. Timely and regular feedback on how customer input helps improve the service process and operation keeps customers up-to-date about the progression of whether and how CP positively impacts the organization. Thus, we expect employees' feedback to positively moderate the effect of CP because the more customers participate, the more valuable and diagnostic feedback will be, thus strengthening the effect of CP on empowerment and satisfaction.

For example, postsurvey interviews indicated that receiving feedback on participation shows that employees care about customers' time and effort and strengthens customers' belief that their participation matters and can make a positive difference. We learned from many customers that receiving feedback was critical, and they felt extremely discouraged when banks solicited their participation only to fail to inform them of how they were using this participation. They shared the sentiment that "keeping customers in the dark" is frustrating and ultimately hinders further participation.

Kanter (1989, p. 5) argues that empowerment occurs when organizations "make more information more available to more people at more levels through more devices." We propose that CP feedback provides important information to customers and reinforces their perception that CP leads to worthwhile and impactful outcomes to the organization (Ashford and Cummings 1983). The instrumental value of feedback (Ashford and Cummings 1983) complements CP, which has a utilitarian orientation; this strengthens the fit between CP and feedback, thus elevating customer empowerment. Therefore, we hypothesize the following:

H_{3a}: Developmental feedback from employees positively moderates the CP–customer empowerment relationship such that the positive effect of CP on customer empowerment will be accentuated as developmental feedback increases.

H_{3b}: Developmental feedback from employees positively moderates the CP–customer satisfaction relationship such that the positive effect of CP on customer satisfaction will be accentuated as developmental feedback increases.

Employees' customer orientation. We define employee customer orientation as a mindset focused primarily on providing value to customers and satisfying their needs (Kennedy, Lassk, and Goolsby 2002). On the one hand, customer orientation can be viewed as a detractor. According to the job characteristic model (Oldham and Hackman 2010) and the empowerment literature (Seibert, Wang, and Courtright 2011; Spreitzer 1996), people feel more empowered when they are able to take action in challenging conditions because being empowered in an adverse situation provides a greater sense of control and perception of enactive attainment than might otherwise be possible. This is consistent with the community and political participation literatures, which posit that participation matters more to people when it takes place under impoverished conditions that are less conducive to participation (e.g., Zimmerman and Rappaport 1988). For example, people take more pride and feel more empowered when they can

exercise their rights under disadvantaged institutional environments because participation is perceived to be that much more precious and valuable (Zimmerman 1990). Although participation that occurs with an employee who is more customer oriented might be considered an opportunity-rich environment, based on the foregoing reasoning, we submit that empowerment will actually be elevated under a more constrained environment because customers will realize that their participation is an opportune chance to voice their opinions and become a source of counsel.

Further, based on the job satisfaction and enrichment literature (e.g., Oldham and Hackman 2010), we also predict that CP's effect on customer satisfaction will be stronger when interacting with an employee with low (vs. high) customer orientation. When customers participate as providers of information and co-developers with the expectation that their involvement will result in improved services, customers will be appreciative and content when the fruits of their labor manifest after navigating through and overcoming adverse conditions (i.e., interacting with an employee who is less customer oriented). Therefore, we propose the following:

H_{4a}: Employees' customer orientation negatively moderates the CP–customer empowerment relationship such that the positive effect of CP on customer empowerment will be attenuated as an employee's customer orientation increases.

H_{4b}: Employees' customer orientation negatively moderates the CP–customer satisfaction relationship such that the positive effect of CP on customer satisfaction will be attenuated as an employee's customer orientation increases.

On the other hand, customer orientation might also be viewed as an enhancer. Working with an employee who is customer oriented can strengthen the impact of CP on empowerment because customers will perceive that their participation benefits the organization and will feel

more appreciated when working with an employee who understands the needs of customers and provides value to customers. That is, there will be enhanced fit in value between the employee and the customer, resulting in a greater sense of empowerment. This was echoed by customers who believed that employees should treat customers with respect because participation is voluntary, and banks should not take this for granted. Furthermore, because the employee is the face and brand ambassador of service organizations by embodying the firm's values (Morhart, Herzog, and Tomczak 2009), the impact of CP on satisfaction will be strengthened when the employee cares for and is concerned about the needs of customers. This line of reasoning leads to the following competing set of hypotheses:

H_{4c}: Employees' customer orientation positively moderates the CP–customer empowerment relationship such that the positive effect of CP on customer empowerment will be accentuated as an employee's customer orientation increases.

H_{4d}: Employees' customer orientation positively moderates the CP–customer satisfaction relationship such that the positive effect of CP on customer satisfaction will be accentuated as an employee's customer orientation increases.

Customer participation formalization. We define CP formalization as imposed rules and procedures that customers must adhere to when they engage in participation. Formalization is "the degree to which rules define roles, authority relations, communications, norms, sanctions, and procedures" (Jaworski and Kohli, 1993, p. 56). Following Bettencourt (1997), Eisingerich, Auh, and Merlo (2014) refer to CP as customers' voluntary performance, a type of behavior that is helpful and discretionary in assisting an organization in providing service quality.

Given that CP is a voluntary behavior, we argue that when CP is formalized, such rigidity will diminish the effect of CP on customer empowerment and satisfaction (Bowen and Lawler 1992; Hartline, Maxham, and McKee 2000). We argue that CP formalization (e.g., participating

only through certain predetermined modes, such as verbally in face-to-face interactions with an employee as opposed to online) can be a hindrance because formalization can be perceived as a burden that impedes flexibility, control, and autonomy in terms of how to share information. In exchange for sharing information as partial employees, customers may demand more discretion and leeway in the mechanisms used to participate. Therefore, CP will lead to less empowerment and satisfaction when customers are bound by rules, procedures, and regulations imposed by the firm.

For example, several managers expressed that in the past, only face-to-face sharing was allowed, but this restrictive mode of participation was being revisited due to the increasingly widespread use of technology. Similarly, many customers thought that there should be diverse mechanisms for them to participate, not just one narrow way that the bank imposes on them. Thus, we offer the following hypotheses:

H_{5a}: CP formalization negatively moderates the CP–customer empowerment relationship such that the positive effect of CP on customer empowerment will be attenuated as CP formalization increases.

H_{5b}: CP formalization negatively moderates the CP–customer satisfaction relationship such that the positive effect of CP on customer satisfaction will be attenuated as CP formalization increases.

RESEARCH METHOD

Sample and Data Collection Procedure

The research setting was 110 branches of a bank operating in South Korea. We conducted a multirespondent and multiwave (i.e., time lag, temporal ordering) data collection procedure to minimize method bias (Podsakoff et al. 2003) and to control for reverse causality. Our sample consisted of branch managers, private bankers, and customers (triadic data) who were offered

specialized services (e.g., financial planning and investment strategies, insurance, total wealth management, mortgages) by private bankers. We sampled 3,300 customers who were served by 302 private bankers in all branches. We prepared surveys in English and translated them into Korean using translation–back translation procedures (Brislin, Lonner, and Thorndike 1973).

The Role of CP in the Private Banking Context

Customer participation in the private banking context involves clients that typically hold at least $100,000 in cash deposits. Banks have realized that these segments of customers have high purchasing power and are ideal targets to cross-sell and up-sell different types of financial services. Due to their wealth and need for personalized and customized service, private bankers, who are highly trained in wealth and asset management and customer service, solicit customers with personalized services to fit their financial needs, which range from insurance, to real estate investment, to retirement planning, to tax consultation. When customers share the short- and long-term goals that they desire to achieve by working with private bankers, the private bankers then develop a customized and personalized investment strategy that is specifically tailored to the customer's unique needs. This customer participation context allows private bankers to provide concierge banking to certain segments of customers that can deliver profitability and growth to banks.

The context of private banking is ideal for studying CP because Korean banks have given private bankers a significant amount of autonomy and flexibility in designing unique financial solutions that address needs that are different for every customer. Whereas the financial solutions and products offered in retail banking are "off-the-shelf" types of products, private banking allows customers to share information that can be used to develop service solutions that cater to

their specific needs differently. The positioning that Korean banks use for private banking is "Total Life Care" for each customer by providing total asset management services that, at times, go beyond financial services to include an integrated package of customer services (e.g., valet parking at branches; offering tea, coffee, and light snacks in separate rooms decorated with fine art and furnished with plush leather sofas) and cultural immersion experiences (e.g., invitations to art galleries, culinary experiences).

Based on our interviews with bank managers, banks benefit from CP in the following four ways: higher customer loyalty and more cross- and up-selling, more personalized services that result in positive word of mouth, the generation of competitive information that can be used to develop effective strategies to counter and respond to competitive actions, and improved performance, which we model as the final dependent variable in our model.

Branch manager and private banker surveys. We approached the bank through a contact person and requested permission to collect data. After permission was granted, we sent survey packages to the contact person, who then arranged for the surveys to be delivered to the branches. Each package contained a survey, an introductory letter, a consent form, and a return envelope allocated for branch managers and private bankers. Each survey was coded to identify the private banker and the branch. The introductory letter explained the purpose of the study and informed respondents about the confidentiality of their responses and the voluntary nature of their participation in the survey. Private bankers responded to the measures of customer orientation and psychological empowerment and provided demographic information. Branch managers responded to the measures of customer service quality and branch performance and provided information about branch size. The surveys were completed during business hours and

were returned to the contact person in sealed envelopes. We received 209 usable surveys from private bankers (a response rate of 69.2%) and 110 usable surveys from branch managers.

Customer survey. For customers, we employed a similar sampling and data collection procedure to that of Yim, Chan, and Lam (2012). In our case, every private banker manages approximately 70 customers. From this customer base, we selected customers who had transactions with the private banker within the last three months. This reduced the sampling frame from approximately 17,000 customers to 12,000 customers. For the purpose of survey manageability (i.e., cost and time), we chose every third customer on the list. This sampling process resulted in 3,300 customers. We conducted our survey to collect data from 3,300 customers of 209 private bankers in three waves.[2] In the first wave, we measured CP, the importance of social bonding, developmental feedback from employees, CP formalization, CP initiation, and the control variables. We measured customer empowerment (i.e., perceived impact and perceived worth) in the second wave, and customer satisfaction in the third wave. After the third wave was complete, we had 891 usable surveys (a response rate of 27%).[3] We received at least three customer surveys per private banker.

Matched data. We matched the customer surveys with those of the private bankers and branch managers in each branch to obtain triadic data. The final sample consisted of 891

[2]Podsakoff et al. (2003, p. 888) point out that "although time lags may help reduce common method biases because they reduce the salience of the predictor variable or its accessibility in memory, if the lag is inordinately long for the theoretical relationship under examination, then it could mask a relationship that really exists." In line with Haumann et al. (2015), the time lag between the three waves of the customer survey was six weeks.

[3]We conducted a post hoc test to assess the quality of the customers' reports. We asked customers about their knowledge of the range of services offered (1 = "very limited knowledge," 7 = "very substantial knowledge") and their involvement in deciding how services should be provided (1 = "very limited involvement," 7 = "very extensive involvement"). The mean scores of the knowledge (6.34) and involvement (6.41) scales indicated a high level of informant quality.

customer–private banker–branch manager matched pairs from 110 bank branches (891 customers, 209 private bankers, and 110 managers). Private bankers' demographics are as follows: male = 66%, average age = 43 years, average tenure with branch = 2.55 years, and average tenure with bank = 13.29 years. Customers' demographics are as follows: male = 60%, average age = 55 years, average experience with branch = 7.74 years, and average experience with bank = 13.31 years. The average branch size was 8.5 employees.

Measures

Whenever possible, we used or adapted previously developed and established scales to measure the study's constructs. We report the scales in Table 1 and the descriptive statistics and intercorrelations of the constructs in Table 2. We provide additional details about the measures in Web Appendix B.[4]

[Insert Tables 1 and 2 here]

Analytical Approach

The analytical approach encompassed two steps. First, we conducted confirmatory factor analyses to assess the reliability, validity, and unidimensionality of the measures to which the customers, private bankers, and branch managers responded (Table 1). Second, we estimated the model by (1) accounting for causal, observed, and unobserved heterogeneity, (2) addressing the simultaneity issue, (3) correcting for sample selection and endogeneity biases, (4) using fixed-effects modelling to control for unobserved private banker- and branch-specific heterogeneity

[4]Because most scales we used in the customer survey are either new or adopted from relevant scales (i.e., customer empowerment), it is not certain whether the scales are valid and reliable in other service contexts. Therefore, we tested the reliability, validity, and unidimensionality of the measures in other service contexts (291 responses from insurance, legal consulting, travel and tourism, health care [i.e., diet], and physical fitness) by conducting an online data collection procedure through Amazon Mechanical Turk (MTurk). We report the results in Web Appendix C ("Additional Tests for Measure Validation").

(e.g., Germann, Ebbes, and Grewal 2015; Sridhar and Sriram 2015), and (5) performing Bayesian estimation to test mediation and moderation effects (see Web Appendix C for details).

Correcting for endogeneity. The premise of our model is that CP is a voluntary behavior driven largely by customers' expectations of achieving both customer- and firm-related benefits. Yet CP might also be driven by other factors that are excluded (or omitted) from the model. Omitted variables that correlate with customer empowerment and customer satisfaction might cause endogeneity bias. Therefore, we correct for endogeneity bias with two approaches: selection on observables and selection on unobservables (see Gill, Sridhar, and Grewal 2017).

First, there might be unobserved factors that not only drive CP but also correlate with the outcome variables. The selection-on-observables approach offers a remedy for this type of endogeneity bias, assuming that all possible factors that drive CP are observed in the model. As we stated previously (i.e., the observed heterogeneity), we control for customer-, private banker–, and branch-level observable covariates when estimating customer empowerment and satisfaction. Accordingly, we estimate the outcome models by considering all the factors that provide alternative explanations for CP. Second, regarding the selection-on-unobservables approach, Gill, Sridhar, and Grewal (2017, p. 51) argue that "the assumption that we can observe all the important variables is a strong one, so we also need to account for unobservable variables." Although we consider an exhaustive number of covariates that account for observed heterogeneity in the outcome variables, CP may be endogenous to other variables that are excluded (or omitted) from the model, which are likely to be correlated with the error term in the outcome variables. This is a typical case for endogeneity bias.

Following Germann, Ebbes, and Grewal (2015), we corrected for endogeneity bias with the two-stage control function approach (Petrin and Train 2010; Wooldridge 2010). In the first stage, we estimated the correction term by regressing CP on a set of exogenous variables. Accordingly, we included customer-, private banker–, and branch-level covariates and the customer- and private banker–level moderating variables in the first-stage model. This also enables us to account for the fixed effects of branch-level variables and incorporate private banker–level variability. However, the control function approach requires an instrument for CP that meets the requirements of relevance (i.e., significant correlation with CP) and the exclusion restriction (i.e., uncorrelated with the error term in the outcome variables) (Wooldridge 2010).

We introduced age and gender similarity of other customers (which exclude the focal customer) and the private banker as dyads for the instrumental variables. The rationale is that private bankers may use surface-level attributes such as age and gender as categorization cues when interpreting their social interactions with customers (Turner et al. 1987). Consistent with the similarity-attraction paradigm (Byrne 1971), age and gender similarity of all other customers–private banker dyads is likely to yield higher-quality relationships, more interpersonal attraction and confidence, frequent communication, and strong emotional attachment, which will strengthen the private banker's perceived social integration and identification with the customers. Because social identification generates a sense of common goals between two parties, private bankers who identify with similar customers are more likely to invest their time and effort in delivering high quality service outcomes. Because the focal customer shares the same private banker with other customers based on social identification, the focal customer will also benefit from high quality service offered by the private banker. Therefore, the instrumental variables

will influence the level of focal customer's CP, satisfying the relevance criterion. However, because the relationship between a private banker and other customers is not observable by the focal customer, the instrumental variables will not influence the focal customer's level of empowerment and satisfaction, satisfying the exclusion restriction criterion[5]. We corrected for endogeneity bias by entering the residual values into the model as additional covariates.

RESULTS

We took a hierarchical approach in testing our model. First, we estimated the direct effects–only model. Second, we added the interaction effects to the direct effects model to estimate the hypothesized model. Next, we report the results[6].

Mediated Effects

We hypothesized that customer empowerment and customer satisfaction mediate the CP–branch performance relationship (H_{1a} and H_{1b}). We first tested the main effects–only model (Table 3, Model 1) and then added the path from CP to branch performance. We find that CP is positively related to empowerment ($b = .132$, $p < .01$) and satisfaction ($\gamma = .064$, $p < .05$). Furthermore, empowerment and satisfaction are related positively to profitability (empowerment: $\gamma = .089$, $p < .01$; satisfaction: $\gamma = .055$, $p < .05$), sales growth (empowerment: $\gamma = .058$, $p < .05$; satisfaction: $\gamma = .072$, $p < .05$), and customer retention (empowerment: $\gamma = .100$, $p < .05$;

[5]The instruments satisfied the relevance and exclusion restriction requirements. First, the instruments are correlated significantly with CP ($r_{age–CP} = .087$, $r_{gender–CP} = .098$) but not with the outcome variables ($r_{age–empowerment} = .006$, $r_{age–satisfaction} = .008$, $r_{gender–empowerment} = –.003$, $r_{gender–satisfaction} = .002$). Second, the Sargan test indicates that the instruments were exogenous (age similarity: $\chi^2 = 1.01$, $p > .10$, gender similarity: $\chi^2 = 1.11$, $p > .10$). We also computed the residual for CP by regressing it against the instrument along with all exogenous variables. In turn, CP became uncorrelated with the error term in the outcome variables. The Anderson–Rubin test revealed that the instruments were strong ($F_{age–empowerment} = 4.24$, $p < .05$; $F_{age–satisfaction} = 5.01$, $p < .05$; $F_{gender–empowerment} = 4.39$, $p < .05$; $F_{gender–satisfaction} = 5.19$, $p < .05$).

[6]We also estimated a model without endoegeneity correction of customer participation (see Table 3, Model 3).

satisfaction: $\gamma = .120$, $p < .05$). However, the direct effect of CP on profitability, sales growth, and customer retention is not significant. We computed the coefficients and the 95% bootstrap confidence interval (CI) for the indirect effects of CP on branch performance through empowerment (profitability: $\gamma = .014$, $p < .01$, CI [.006, .026]; sales growth: $\gamma = .016$, $p < .01$, CI [.008, .031]; customer retention: $\gamma = .013$, $p < .01$, CI [.005, .030]) and satisfaction (profitability: $\gamma = .006$, $p < .01$, 95% bootstrap CI [.001, .012]; sales growth: $\gamma = .006$, $p < .01$, CI [.001, .012]; customer retention: $\gamma = .004$, $p < .01$, CI [.001, .009]. Therefore, empowerment and satisfaction fully mediate the (indirect) effect of CP on branch performance, in support of H_{1a} and H_{1b}.

[Insert Table 3 here]

Interaction Effects

Table 3 (Model 2) reports the findings for the interaction effects. The interaction effect of CP and the importance of social bonding is related negatively to customer empowerment ($\gamma = -.052$, $p < .05$) and customer satisfaction ($\gamma = -.117$, $p < .01$). The CP–empowerment relationship is more positive at low importance of social bonding ($\gamma = .166$, $p < .01$) than at high importance of social bonding ($\gamma = .098$, $p < .01$). The CP–satisfaction relationship is positive and significant at low importance of social bonding ($\gamma = .141$, $p < .01$) but not at high importance of social bonding ($\gamma = -.012$, not significant [n.s.]). Thus, the results support H_{2a} and H_{2b}.

The interaction effect of CP and developmental feedback is related positively to customer empowerment ($\gamma = .080$, $p < .01$) and customer satisfaction ($\gamma = .103$, $p < .01$). The CP–empowerment relationship is more positive at high levels of feedback ($\gamma = .183$, $p < .01$) than at low levels of feedback ($\gamma = .080$, $p < .01$). The CP–satisfaction relationship is positive and

significant at high levels of feedback ($\gamma = .131$, $p < .01$) but not at low levels of feedback ($\gamma = –.003$, n.s.). Thus, the results support H_{3a} and H_{3b}.

The interaction effect of CP and customer orientation is related negatively to customer empowerment ($\gamma = –.142$, $p < .01$) and customer satisfaction ($\gamma = –.200$, $p < .01$). The CP–empowerment relationship is more positive at low customer orientation ($\gamma = .197$, $p < .01$) than at high customer orientation ($\gamma = .066$, $p < .05$). The CP–satisfaction relationship is positive and significant at low customer orientation ($\gamma = .156$, $p < .01$) but not at high customer orientation ($\gamma = –.028$, n.s.). Thus, the results support H_{4a} and H_{4b}.

The interaction effect of CP and CP formalization is related negatively to customer empowerment[7] ($\gamma = –.056$, $p < .05$) and customer satisfaction ($\gamma = –.109$, $p < .01$). The CP–empowerment relationship is more positive at low formalization ($\gamma = .170$, $p < .01$) than at high formalization ($\gamma = .093$, $p < .01$). The CP–satisfaction relationship is positive and significant at low formalization ($\gamma = .140$, $p < .01$) but not at high formalization ($\gamma = –.011$, n.s.). Thus, the results support H_{5a} and H_{5b}. Figures 2 and 3 show the significant interaction effects.

[Insert Figures 2–3 here]

Additional Analyses and Robustness Check

Objective performance metrics. It was not possible to gather objective performance data from the branches directly due to confidentiality reasons. Therefore, we measured branch performance metrics by asking managers to respond to their branch's current performance

[7]As an anonymous reviewer suggested, formalization may act as a nonlinear moderator in the CP–customer empowerment relationship. That is, the relationship may increase at low levels of formalization but decrease at high levels of formalization (i.e., an overemphasis on formalization). We tested this assumption by entering the squared term of formalization and its interaction term with CP in the original model. However, the interaction term (CP × formalization-squared) was not significant ($\gamma = .020$, n.s.). We thank the anonymous reviewer for this suggestion.

relative to their branch's stated objectives in terms of profitability, sales growth, and customer retention. However, to mitigate concerns about using perceptual performance measures, we were able to obtain branch-level objective sales growth and profit figures for a subset of the branches (n = 29). The simple correlation between the perceptual and objective measures (r_{profit} = .34, $p < .05$; $r_{sales\ growth}$ = .37, $p < .05$) was positive and significant. Consequently, a positive, significant correlation between the two types of measures mitigates concerns about using perceptual performance metrics.

Endogeneity check for customer empowerment and customer satisfaction. We checked the robustness of model estimation by instrumenting for the endogeneity of customer satisfaction and empowerment (see Web Appendix D). The direction and significance of the re-estimated coefficients remained the same as reported in Table 3 (Model 2 vs. Model 4).

Re-estimating the model. We re-estimated the model to verify the internal validity of our initial findings (see Web Appendix D). First, we re-estimated the customer empowerment and satisfaction models by introducing random effects. We found that the estimation results are consistent with those of the fixed effects model (see Table 3, Model 2 vs Model 5). Second, as in Shi et al. (2017), we employed a variety of matching techniques to estimate the model by matching branches, private bankers, and customers. Overall, the results confirmed the original regression-based findings that customers with a high level of participation in the service design and process exhibit a higher sense of empowerment and satisfaction than those with a low level of participation (see Table 4).

Alternative models. It is possible that the effects of customer empowerment and satisfaction on the performance metrics are not linear. For example, sales may grow at a

decreasing rate as the level of customer empowerment and satisfaction increases, but profitability may decrease at very high levels of empowerment and satisfaction. In other words, the marginal increase in performance may be modest or even decrease at high levels of empowerment and satisfaction. Thus, we ran three alternative models to re-estimate the performance effect of empowerment and satisfaction: quadratic, square root, and logarithmic. The results verified the robustness of the proposed model and our original findings (see Web Appendix D).

(Un)conditional total effect of CP on branch performance. We tested the direct, indirect, and total effects of CP on the branch performance metrics at low/high levels of the moderators. We found that the total (i.e., direct + indirect) effect of CP on the branch performance metrics (i.e., profitability, sales growth, and customer retention) was higher at low levels of importance of social bonding, CP formalization, and customer orientation but higher at high levels of developmental feedback (see Web Appendix D, Table D1).

DISCUSSION

The contributions of this study are twofold. The first lies in showing the accountability of CP by demonstrating that CP influences branch performance (in terms of profitability, sales growth, and customer retention) through customer empowerment as a parallel mediator along with customer satisfaction. For a subset of the branches (n = 29), we were also able to show similar parallel full mediation effects with objective branch performance metrics (i.e., sales growth and profit). The inclusion of customer empowerment in the CP model addresses a long-standing gap in the literature, which has primarily focused on the benefits of CP to the customer. However, because CP involves an interactive exchange between a customer and a service

employee, our model offers a more complete perspective by empirically examining the benefit of CP to the organization in addition to the benefit of CP to the customer.

The second contribution is the expansion of the scope of moderators used in CP models to include contingencies that capture a more holistic picture ranging from the customer (i.e., the importance of social bonding), to the service employee (i.e., customer orientation), to the organization (i.e., feedback and formalization). Our model, therefore, is able to paint a more comprehensive picture of the conditions under which CP unfolds. In this section, we elaborate the theoretical and managerial implications of our findings.

Theoretical Implications

Does CP have any economic or customer-related consequences? Academics and managers alike have embraced CP because it leads to greater customer satisfaction (e.g., Bendapudi and Leone 2003; Chan, Yim, and Lam 2010; Gallan et al. 2013; Yim, Chan, and Lam 2012), higher service quality (e.g., Dong et al. 2015), elevated new product financial performance (e.g., Chang and Taylor 2016), and improved new service development (e.g., Melton and Hartline 2010). Some of the more widely studied consequences of CP have been limited to customer satisfaction, behavioral intention, service quality, and willingness to pay, among others (e.g., well-being), with customer satisfaction and behavioral intention taking the top two most researched single outcome variables of CP (Dong and Sivakumar 2017, p. 958). Less concerted efforts have been made to connect how CP is linked to organizational performance, especially from a financial perspective. This is a critical gap in the literature that merits attention because evidence of such a linkage provides greater confidence in using CP as a strategic endeavor insofar as it validates the return on CP. This study provides empirical

evidence that CP positively affects branch performance in terms of higher profitability, sales growth, and customer retention (perceptual and objective), a finding that adds credence to the marketing accountability argument that CP can deliver economic and customer-related benefits to a service organization.

Customer empowerment as the pathway. The prevailing evidence suggests that the main advantage of CP is associated with benefits to customers such as experiential value (e.g., participation enjoyment) (Yim, Chan, and Lam 2012), utilitarian gains (e.g., functional service quality) (Gallan et al. 2013), and greater economic value (e.g., higher quality, more customization) (Chan, Yim, and Lam 2010). We extend and broaden the literature on the underlying process of how and why CP leads to improved branch performance by simultaneously modeling customer empowerment and customer satisfaction as parallel mediators.

The role of customer empowerment as an intervening variable is important because it captures customers' perceptions of how much the organization values, appreciates, and cares about CP and the degree to which CP makes a difference to the organization's service delivery processes and outcomes. That is, with customer empowerment, the target referent of the consequences of CP shifts from the customer, as is the case with customer satisfaction, to the organization. The CP–customer empowerment–branch performance route complements the customer-centric route, CP–customer satisfaction–branch performance, that has dominated the extant CP literature. Our linkage from CP to branch performance via customer empowerment illustrates a path that can occur when customers believe that CP benefits not only the customer but also the organization. The CP construct recognizes that customers have dual roles as both

customers and partial employees, and accordingly our findings reveal a dual mediating pathway, showing that not only does customer satisfaction matter to customers but so does their role as partial employees insofar as they can take part in decision making about service delivery processes through empowerment (Mills and Morris 1986; Spreitzer 1996).

Boundary conditions between CP and empowerment (and satisfaction). We begin our discussion of boundary conditions by reviewing the negative moderating effects we found. Despite CP being an interactive process, little research has examined the moderating role of employee characteristics. In business contexts that involve high contact and frequent face-to-face interactions between customers and employees, as in private banking, a model that excludes social contextual moderators related to employees appears incomplete. To address this gap, our model considers the conditioning role of private bankers' customer orientation. Although we used a competing hypothesis perspective for the moderating effect of customer orientation, our data clearly supported customer orientation as a detractor rather than an enhancer. As customers engage in participation, higher levels of customer orientation actually weaken the effect of CP.

Although these findings may seem counterintuitive, our results suggest that engaging in CP leads to a greater sense of empowerment and satisfaction when CP takes place in less favorable, more challenging environments because customers understand that their participation is more impactful, has more worth, and yields greater rewards. Conversely, when CP takes place with an employee who is highly customer oriented, customers may perceive that CP will have less of an impact, less worth, and less satisfaction because the already positive pro-customer environment leaves less room for CP to make a difference and deliver increased satisfaction. Our simple slope analysis shown in Figures 2 and 3 confirm these findings.

As with customer orientation, we also propose a rival hypothesis for the importance of social bonding. Similarly, the importance of social bonding proved to be a detractor rather than an enhancer. The negative moderating role of the importance of social bonding is consistent with the literature examining business friendships, which has suggested that friendship can be distracting and interfere with business growth (Grayson 2007). Our results can also be explained using attentional resource theory (Kanfer and Ackerman 1989). That is, when there are distractions that draw on one's finite resources, fewer resources can be used toward goal accomplishment (Kanfer and Ackerman 1989). We maintain that a strong desire for social bonding with an employee serves as a distraction and thus interferes with the core task of CP, in turn curbing CP's effect on customer empowerment and satisfaction. These results support the view that CP and importance of social bonding are incompatible and imply that when customers engage in CP but with the desire to form friendships and personal connections with private bankers, customer satisfaction and empowerment are compromised.

Regarding the negative interaction between CP and CP formalization, we argue that institutionalizing feedback to customers and requiring CP to take place only through prespecified rules and procedures can stifle empowerment and satisfaction. Our findings attest to the nature of CP being a volitional and discretionary behavior and that customers appreciate flexibility and control with regard to how they engage in CP. Making customers feel that they are in control and not forcing them to provide feedback in a particular way is an effective strategy (Merlo, Eisingerich, and Auh 2014). In contrast, enforcing a standardized procedure that breeds rigidity strengthens neither empowerment nor satisfaction from CP. This implies that striving for efficiency by conforming to a routine and mechanistic CP process mitigates CP's effect on

empowerment and satisfaction. Our results indicate that giving customers the latitude and autonomy to choose different ways to participate is more likely to pay dividends.

Next, we turn our discussion to positive moderating effects. In our interviews with customers, one of the most significant and pressing issues that required attention was keeping customers informed and "in the loop" in terms of how their input was being processed and evaluated. Customers noted that providing greater transparency and feedback enhances a sense of justice and fairness and ensures that their labor is not being taken for granted or wasted. Our results are consistent with equity theory (Folkes 1984), which asserts the importance of balancing inputs and outputs. When customers make an effort to participate, they expect to be rewarded in an equitable manner from an outcome perspective by receiving feedback. Thus, feedback can be regarded as complementary to CP by strengthening the effect of CP on empowerment and satisfaction.

It is worth mentioning that although the sign of the moderators was consistent regardless of whether the consequence of CP was empowerment or satisfaction, according to the simple slope analyses (Figures 2 and 3), the patterns are clearly different. For empowerment, regardless of whether the moderators were low or high, the effect of CP was positive, with only the magnitude of the slopes being more or less positive. For example, the effect of CP on empowerment was positive under conditions of both low and high feedback, with the difference in the slope being more positive for high feedback than for low feedback. This pattern was repeated for the other moderators (Figure 2).

However, for customer satisfaction, a different pattern emerged. The effect of CP on satisfaction was positive and significant at one level of the moderator but nonsignificant at the

other level. Again, using feedback as the moderator, we observe that the effect of CP on satisfaction was positive when feedback was high but flat and nonsignificant when it was low. These results indicate that although the moderators led to similar conditioning roles, the magnitude of the moderating roles seems to be stronger for satisfaction than for empowerment. That is, low feedback mitigated the effect of CP on satisfaction more than it did for empowerment. A possible explanation for this finding is that while satisfaction is a benefit to the customer, empowerment is a benefit to the firm, and customers are more sensitive to conditions in which CP ultimately affects them as opposed to the firm.

Finally, one of the strengths of this study from a design perspective is that we measured different constructs at three different times and with multiple respondents (i.e., customers, private bankers, and managers). This design reduced the concern for reverse causality and common method bias. For example, the longitudinal design bolstered the cause–effect relationship between constructs in our model from CP to empowerment (satisfaction) to branch performance. The assurance that CP did not occur because customers were more satisfied or felt more empowered minimizes the potential for reverse causality. Furthermore, employing a three-level modeling approach in which customers are nested within private bankers who are, in turn, nested within branches enabled us to avoid violating the independence of customers and private bankers, thus improving the accuracy of model estimation through the separation of within- and between-branch variance. Last, we were able to confirm the validity of our perceptual branch performance measures by showing a positive correlation of .34 and .37 for profit and sales growth, respectively, between perceptual and objective profit and sales growth from 29 branches.

Managerial Implications

CP does not directly influence performance. Our study shows that CP pays off from both economic and customer-related perspectives by elevating profitability, sales growth, and customer retention. However, the return on CP is more complicated than originally thought because returns can be achieved only by increasing customer empowerment and customer satisfaction. That is, without enhanced empowerment and satisfaction, CP efforts will be limited in improving performance. Accordingly, our results reveal that CP does not have a direct effect on branch performance. Although CP has been linked to individual (customer and employee) attitude and behavior, such as employee performance (e.g., Chan, Yim, and Lam 2010), customer satisfaction, perceived service quality (e.g., Dong et al. 2015), and customer loyalty (e.g., Auh et al. 2007), the effect of CP on unit-level (i.e., the branch or organization) performance has received sparse attention, especially with regard to financial performance (e.g., profits). However, from a strategic perspective, establishing a linkage between CP and financial performance in terms of profit and sales growth at the unit level is critical from a marketing accountability perspective. To this end, our research should provide managers the needed confidence and incentive to use CP to improve unit performance and as a conduit to work with other areas of the firm that may question the need for allocating resources to establish CP as a strategic priority in driving financial performance.

The impacts of empowerment and satisfaction on the three performance metrics were both linear and significant. There was no non-linear effect of empowerment and satisfaction on branch performance, suggesting that even at high levels of empowerment and satisfaction, diminishing returns was not a concern. Further, when branch performance was profitability and

customer retention, the impact of empowerment was greater than the effect of satisfaction whereas the reverse was true when branch performance was sales growth.

When comparing the indirect effects through empowerment and satisfaction, we find that when performance is profitability and/or customer retention, CP's indirect effects are both significant via empowerment and satisfaction. However, when performance is sales growth, only the indirect effect through satisfaction is significant. Further, the indirect effect through empowerment was greater than that through satisfaction for profitability and retention, while the indirect effect through satisfaction was greater than that through empowerment for sales growth (as was the case between empowerment/satisfaction and branch performance) (Web Appendix D, Table D1). Therefore, if a manager's goal is to use CP to increase profitability and retention, the focus should be on customer empowerment, while if the objective is to improve sales growth, the emphasis should be on customer satisfaction (Anderson and Mittal 2000).

Know when CP is beneficial and detrimental to satisfaction and empowerment. Customer, employee, and organizational contingencies shape the impact of CP on branch performance by either accentuating or mitigating the role of empowerment and satisfaction. The total effect of CP on branch performance is maximized when the importance of social bonding, formalization of CP, and customer orientation is low and feedback is high (Figures 2 and 3 and Web Appendix D, Table D1). Such a combination delivers the highest return on CP because each contingency elevates the impact of CP on empowerment and satisfaction. This implies that if managers desire to get the most out of their CP efforts, several conditions need to be met, most of which are under their control. First, managers should target customers who place a low importance on social bonding. Second, for low-CP customers, a customer-oriented employee can

bolster perceptions of empowerment and satisfaction from participation, but for high-CP customers, a less customer-oriented employee will be more effective (Figures 2c and 3c). Thus, managers should take care to assign employees with different levels of customer orientation that match target customers' level of CP, such that employees with low customer orientation should serve high-CP customers while employees with high customer orientation should serve low-CP customers. Third, formalizing CP does not help; instead, it mitigates the effect of CP on empowerment and satisfaction. Customers desire discretion, control, and autonomy in how they participate. Imposing a "firm's way" undermines CP's influence on customers' sense of how their efforts benefit the firm and their satisfaction. Fourth, firms should offer more feedback by keeping customers informed about the status and progress of how their participation is being used to improve service processes and outcomes. Feedback should be viewed as giving back in return for what customers have shared. Collectively, these results provide important boundary conditions that managers can use to effectively get the most out of their CP strategy in terms of increasing firm performance.

Limitations and Future Research Directions

Our study has several limitations that warrant and guide future research. First, we tested our model in a high-contact, high-involvement service context. The mediating role of customer empowerment may be especially pronounced in such environments, but for generalizability purposes, future research should examine the extent to which customer empowerment remains a focal mediator in services for which customer contact and involvement are not as high, such as in online retailing, grocery shopping, courier services, or transportation. Second, our measure of the importance of social bonding captures only the customer's desire for establishing personal

relationships and friendships in their interactions with private bankers, but not the banker's desire to establish a relationship with customers. Future studies might measure the desire for social bonding from both perspectives and examine the moderating role of fit and misfit with regard to the importance of social bonding. Third, given that Korea is a high-power-distance society, the need to feel empowered by being reassured that CP is making a difference may have played a more important role. Empowerment should be tested in other cultural settings where power distance is lower. Finally, although we used an overall measure of customer satisfaction with service, future studies should use satisfaction with CP for specificity purposes.

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Table 1
MEASURES AND FACTOR LOADINGS

	Factor Loading
Customer-Reported Measures	
(χ^2 = 1,442.79, d.f. = 377; GFI = .893; TLI = .942; CFI = .950; RMSEA = .056)	
Customer Participation	
I spend a lot of time sharing information about my needs and opinions with my PB during the service process.	.636
I put a lot of effort into expressing my personal needs to my PB during the service process.	.668
I always provide suggestions to my PB for improving the service outcome.	.794
I have a high level of participation in the service process.	.858
I am very much involved in deciding how the services should be provided.	.838
Importance of Social Bonding	
Establishing a personal relationship between my PB and myself is very important to me.	.892
Sharing personal advice or support with my PB is very important to me.	.881
Developing friendship with my PB is very important to me.	.827
Developmental Feedback on Customer Participation	
The timely and regular feedback provided by my PB helps me learn how the bank improves customer service operations.	.791
My PB provides me with regular and timely feedback on how my participation in the service process benefits the bank to improve its operations.	.894
My PB provides me with regular and timely feedback on how customers' suggestions are used to improve service operations.	.850
Customer Participation Formalization	
I am formally involved in the customer participation process.	.839
There is a system of formal rules imposed regarding involvement in customer participation.	.932
I follow formal procedures on how to engage in customer participation.	.874
Customer–Branch Identification	
I strongly identify with this bank branch.	.697
I feel good to be a customer of this bank branch.	.834
I like to tell that I am a customer of this bank branch.	.743
This bank branch fits well with me.	.847
I feel attached to this bank branch.	.846
Perceived Customer Participation Impact	
I am very well aware of the positive impact that my participation in the service process has on this bank branch.	.851
I am very well aware of the ways in which my participation in the service process is benefiting this bank branch.	.816
I have a positive impact on this bank branch through my participation in the service process.	.746
Perceived Customer Participation Worth	
This bank branch cares about my participation in the service process.	.841
This participation in the service process is very important to this bank branch.	.841
This bank branch appreciates my participation in the service process.	.919
This bank branch values my participation in the service process.	.899
Customer Satisfaction	
I am satisfied with the services provided by this bank branch.	.852
This bank is a good bank branch to do business with.	.903
The service of this bank branch meets my expectations.	.870
Overall, I am satisfied with the service provided by this bank branch.	.882
Private Banker–Reported Measures	
(χ^2 = 505.19, d.f. = 237; GFI = .835; TLI = .885; CFI = .901; RMSEA = .074)	
Customer Orientation	

I must understand the needs of my customers.	.755
It is critical to provide value to my customers.	.824
I can perform my job better if I understand the needs of my customers.	.756
Understanding my customers will help me do my job better.	.730
I am primarily interested in satisfying my customers.	.768
Psychological Empowerment	
Meaning	
My work is very important to me.	.687
My job activities are personally meaningful to me.	.698
I care about what I do here at this branch.	.532
Self-efficacy	
My job is well within my scope of my abilities.	.795
I am confident about my ability to do my job.	.837
I have mastered the skills to do my job.	.748
Autonomy	
I have significant autonomy in determining how I do my job.	.899
I can decide on my own how to go about doing my job.	.845
I have considerable opportunity for independence and freedom in how I do my job.	.844
Impact	
My opinion counts in work group decision–making.	.689
My impact on what happens in this branch is large.	.901
I have a great deal of control over what happens in this branch.	.843
Service Performance	
Being friendly and helpful to customers	.669
Approaching customers quickly	.742
Asking good questions and listening to find out what a customer wants	.760
Being able to help customers when needed	.741
Pointing out and relating service features to a customer's needs	.759
Suggesting items customers might like but did not think of	.668
Explaining a service's features and benefits to overcome a customer's objections	.677
Branch Manager–Reported Measures	
(χ^2 = 2.76, d.f. = 5; GFI = .990; TLI = 1.0; CFI = 1.0; RMSEA = .00)	
Customer Service Quality	
My branch meets its goals regarding the delivery of customer service.	.618
The number one goal of my branch is to provide customers with the best service possible.	.729
My branch works hard to send customers home in a better state than when they arrived.	.776
One way my branch tries to improve customer service is by keeping private bankers close to the customer.	.788
The customers we care for usually appreciate the effort of our branch.	.681
Branch Performance (Formative Scale)	
Profitability	
Sales growth	
Customer retention	

Notes: All factor loadings are significant at p < .01 level. PB = private banker. GFI = goodness-of-fit index, TLI = Tucker–Lewis index, CFI = comparative fit index, RMSEA = root mean square error of approximation.

Table 2
DESCRIPTIVE STATISTICS, INTERCORRELATIONS, AND RELIABILITIES

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1. Customer gender																						
2. Customer age	.130**																					
3. Customer education	–.067*	.102**																				
4. Branch experience (ln)	.003	.329**	.232**																			
5. Feedback frequency	–.056	–.036	.019	.006																		
6. CP initiation	.086*	–.113**	–.112**	–.121**	–.074*																	
7. Doing business	.052	.083*	–.110**	.076*	.019	.141**																
8. Customer identification	.008	.198**	.110**	.158**	–.137**	–.111**	–.061															
9. CP	–.049	.114**	–.038	.087**	–.148**	–.070*	–.012	.507**														
10. Customer empowerment	–.023	.137**	.010	.069*	–.135**	–.092**	–.018	.689**	.599**													
11. Customer satisfaction	–.052	.170**	.077*	.128**	–.089**	–.119**	–.053	.694**	.455**	.681**												
12. Importance of social bonding	–.056	.143**	.032	.139**	–.062	–.122**	–.052	.560**	.535**	.533**	.580**											
13. Developmental feedback	–.003	.111**	–.018	.069*	–.145**	–.071*	–.074*	.540**	.604**	.591**	.467**	.412**										
14. CP formalization	.025	.060	–.050	–.003	–.243**	.015	–.016	.412**	.484**	.488**	.348**	.276**	.483**									
15. Customer orientation	–.039	–.008	–.020	–.015	–.032	.086*	.103**	.016	.029	.048	.066	–.010	.050	.049								
16. Psychological empowerment	–.025	.016	–.126**	–.066*	–.080*	.020	.043	.090**	.081*	.122**	.097**	–.012	.122**	.106**	.394**							
17. Service performance	–.019	.014	–.155**	–.039	–.108**	.019	.033	.053	.083*	.112**	.072*	–.033	.142**	.148**	.366**	.520**						
18. Branch customer service quality	–.028	–.056	–.067*	–.059	–.058	.017	–.039	.078*	.036	.099**	.065	.080*	.055	.077*	.094**	.090**	–.008					
19. Branch size (ln)	.066*	–.050	–.212**	–.244**	–.027	.051	–.024	–.033	–.014	.002	–.059	–.092**	.044	.093**	.136**	.131**	.002	.305**				
20. Profitability	–.039	–.007	.058	.038	–.084*	–.082*	–.050	.094**	.079*	.139**	.117**	.101**	.097**	.081*	.087**	.156**	.027	.303**	.173**			
21. Sales Growth	–.030	–.022	.088*	.026	–.091**	–.042	–.086*	.126**	.074*	.140**	.152**	.059	.079*	.087**	.090	.034	.015	.112**	.103**	.557**		
22. Customer Retention	–.044	.050	.034	.102**	–.101**	–.032	–.094**	.051	.071*	.171**	.102**	.055	.023	.057	–.036	.051	.116**	.183**	–.037	.491**	.474**	
M	.40	54.95	.90	5.32	2.85	.31	.60	3.92	3.70	3.86	4.19	3.83	3.66	3.43	4.56	4.30	4.37	4.58	2.16	4.49	4.73	4.55
SD	.49	11.36	.20	.28	1.11	.52	.52	.69	.77	.61	.71	.81	.81	.91	.46	.45	.50	.41	.31	.49	.40	.56
Cronbach's alpha	—	—	—	—	—	—	—	.89	.88	.88	.93	.90	.88	.91	.87	.89	.87	.83	—	—	—	—
Composite reliability	—	—	—	—	—	—	—	.90	.87	.89	.93	.90	.88	.91	.88	.89	.88	.84	—	—	—	—
Average variance extracted	—	—	—	—	—	—	—	.63	.59	.71	.77	.75	.72	.78	.58	.53	.52	.52	—	—	—	—

*p < .05 (two–tailed test).
**p < .01 (two–tailed test).

Table 3
RESULTS

	Model 1: Fixed Effects (Direct Effects Model with Endogeneity Correction of CP)					Model 2: Fixed Effects (Full Model with Endogeneity Correction of CP)					Model 3: Fixed Effects (Full Model without Endogeneity Correction of CP)					Model 4: Fixed Effects (Full Model with Endogeneity Correction of CP, CEMP and CSAT)					Model 5: Random Effects				
	CEMP	**CSAT**	**PROF**	**GROW**	**CRET**	**CEMP**	**CSAT**	**PROF**	**GROW**	**CRET**	**CEMP**	**CSAT**	**PROF**	**GROW**	**CRET**	**CEMP**	**CSAT**	**PROF**	**GROW**	**CRET**	**CEMP**	**CSAT**	**PROF**	**GROW**	**CRET**
Constant	1.283**	.851*	2.502**	3.759**	3.623**	1.272**	.845*	2.502**	3.759**	3.623**	1.334**	.918*	2.502**	3.759**	3.623**	1.271**	.845*	2.567**	3.735**	3.779**	1.189**	.906*	2.502**	3.759**	3.623**
	(.372)	(.426)	(.184)	(.155)	(.220)	(.369)	(.417)	(.184)	(.155)	(.220)	(.362)	(.410)	(.184)	(.155)	(.220)	(.370)	(.419)	(.190)	(.162)	(.229)	(.383)	(.429)	(.184)	(.155)	(.220)
Main Effects																									
Customer participation (CP)	.122**	.054*				.132**	.064*				.132**	.064*				.132**	.064*				.145**	.065*			
	(.027)	(.031)				(.027)	(.031)				(.027)	(.031)				(.027)	(.031)				(.027)	(.031)			
Customer empowerment			.128**	.080**	.160**			.128**	.080**	.160**			.128**	.080**	.160**			.126**	.076*	.148**				.128**	.080**	.160**
			(.035)	(.029)	(.042)			(.035)	(.029)	(.042)			(.035)	(.029)	(.042)			(.034)	(.029)	(.041)				(.035)	(.029)	(.042)
Customer satisfaction			.100*	.136**	.080*			.100*	.136**	.080*			.100*	.136**	.080*			.112**	.136**	.070*				.100*	.136**	.080*
			(.030)	(.025)	(.036)			(.030)	(.025)	(.036)			(.030)	(.025)	(.036)			(.029)	(.025)	(.035)				(.030)	(.025)	(.036)
Moderating Variables																									
Customer orientation	–.015	.048				–.017	.048				–.012	.054				–.017	.048				–.012	.046			
	(.033)	(.037)				(.032)	(.037)				(.032)	(.036)				(.032)	(.037)				(.038)	(.039)			
CP formalization	.113**	.068**				.113**	.071**				.113**	.071**				.113**	.071**				.116**	.079**			
	(.023)	(.026)				(.023)	(.026)				(.023)	(.026)				(.023)	(.026)				(.024)	(.026)			
Importance of social bonding	.076**	.039				.071**	.024				.071**	.024				.071**	.024				.065**	.017			
	(.021)	(.025)				(.022)	(.025)				(.022)	(.025)				(.022)	(.025)				(.020)	(.024)			
Developmental feedback	.017	.008				.023	.016				.023	.017				.023	.016				.030	.011			
	(.026)	(.030)				(.026)	(.030)				(.026)	(.030)				(.026)	(.030)				(.029)	(.033)			
Cross–Level Interaction Effect																									
CP × Customer orientation						–.142**	–.200**				–.142**	–.199**				–.142**	–.200**				–.112**	–.172**			
						(.049)	(.055)				(.049)	(.055)				(.049)	(.055)				(.045)	(.075)			
Within–Level Interaction Effects																									
CP × Imp. of social bonding						–.052*	–.117**				–.051*	–.116**				–.052*	–.117**				–.058**	–.112**			
						(.027)	(.030)				(.027)	(.030)				(.027)	(.030)				(.023)	(.030)			
CP × Developmental feedback						.080**	.103**				.079**	.102**				.080**	.103**				.077**	.096**			
						(.031)	(.035)				(.031)	(.035)				(.031)	(.035)				(.031)	(.034)			
CP × Formalization						–.056*	–.109**				–.055*	–.108**				–.056*	–.109**				–.055*	–.101**			
						(.029)	(.033)				(.029)	(.033)				(.029)	(.033)				(.029)	(.032)			
Covariates (Branch Level)																									
Size (ln)	.039	–.029	.207**	.120**	–.124*	.044	–.017	.207**	.120**	–.124*	.041	–.021	.207**	.120**	–.124*	.044	–.017	.255**	.115**	–.077	.058	–.029	.207**	.120**	–.124*
	(.046)	(.052)	(.051)	(.043)	(.060)	(.045)	(.051)	(.051)	(.043)	(.060)	(.045)	(.051)	(.051)	(.043)	(.060)	(.045)	(.051)	(.052)	(.045)	(.063)	(.053)	(.054)	(.051)	(.043)	(.060)
Customer service quality	.010	–.032	.234**	.064**	.184**	.007	–.037	.234**	.064**	.184**	.006	–.039	.234**	.064**	.184**	.007	–.037	.233**	.064**	.182**	.018	–.038	.234**	.064**	.184**
	(.023)	(.026)	(.027)	(.022)	(.032)	(.023)	(.026)	(.027)	(.022)	(.032)	(.023)	(.026)	(.027)	(.022)	(.032)	(.023)	(.026)	(.026)	(.022)	(.032)	(.026)	(.025)	(.027)	(.022)	(.032)
Covariates (PB Level)																									
Psychological empowerment	.039	.032				.042	.036				.056	.052				.043	.036				.065	.052			
	(.039)	(.045)				(.039)	(.044)				(.036)	(.041)				(.039)	(.044)				(.046)	(.038)			
Service Performance	.063*	.008				.062	.005				.062	.004				.062	.005				.061	.004			
	(.032)	(.037)				(.032)	(.036)				(.032)	(.036)				(.032)	(.036)				(.044)	(.029)			
Covariates (Customer Level)																									
Gender	–.033	–.081**				–.028	–.076*				–.028	–.077*				–.028	–.076*				-.022	–.069*			
	(.027)	(.031)				(.027)	(.031)				(.027)	(.031)				(.027)	(.031)				(.023)	(.031)			
Age	.001	.002				.001	.002				.001	.002				.001	.002				.001	.002			
	(.001)	(.001)				(.001)	(.001)				(.001)	(.001)				(.001)	(.001)				(.001)	(.002)			
Education	–.054	–.027				–.057	–.033				–.058	–.034				–.057	–.033				–.030	–.031			
	(.031)	(.035)				(.031)	(.035)				(.031)	(.035)				(.031)	(.035)				(.040)	(.035)			
Branch experience (ln)	–.045	.031				–.043	.039				–.044	.038				–.043	.039				–.027	.036			
	(.052)	(.059)				(.052)	(.058)				(.052)	(.058)				(.052)	(.058)				(.048)	(.070)			
Feedback frequency	–.005	.019				–.007	.015				–.006	.016				–.007	.015				–.008	.015			
	(.012)	(.014)				(.012)	(.014)				(.012)	(.014)				(.012)	(.014)				(.011)	(.012)			
Doing business with another PB	.015	–.027				.004	–.044				.006	–.042				.004	–.044				.015	–.040			
	(.026)	(.030)				(.026)	(.030)				(.026)	(.030)				(.026)	(.030)				(.024)	(.030)			
CP initiation	–.036	–.040				–.037	–.039				–.037	–.039				–.037	–.038				–.042	–.049			
	(.026)	(.030)				(.026)	(.030)				(.026)	(.030)				(.026)	(.030)				(.024)	(.028)			
Customer–branch identification	.350**	.357**				.342**	.344**				.341**	.343**				.342**	.344**				.331**	.350**			
	(.028)	(.032)				(.028)	(.031)				(.028)	(.031)				(.028)	(.031)				(.031)	(.038)			
Inverse Mills ratio	–.211**	–.413**				–.215**	–.413**				–.216**	–.414**				–.215**	–.413**				–.185**	–.397**			
	(.026)	(.030)				(.026)	(.029)				(.026)	(.029)				(.026)	(.029)				(.030)	(.031)			
Endogeneity Correction (CP)	.019	.017				.023	.027									.023	.027				.015	.021			
	(.026)	(.030)				(.026)	(.029)									(.026)	(.029)				(.024)	(.025)			
Endogeneity Correction (CEMP)																		.024	–.001	–.016					
																		(.017)	(.015)	(.021)					
Endogeneity Correction (CSAT)																		–.070**	.007	–.050*					
																		(.021)	(.018)	(.025)					
Branch/PB fixed effects	Yes	Yes				Yes	Yes				Yes	Yes				Yes	Yes								
R^2	.589	.604	.146	.100	.106	.597	.621	.146	.100	.106	.597	.621	.146	.100	.106	.597	.621	.138	.046	.054	.312[a]	.459[a]	.146	.100	.106

Notes: CEMP = Customer empowerment; CSAT = Customer satisfaction; PROF = Profitability; GROW = Sales growth; CRET = Customer retention; PB = Private Banker. Robust standard errors are reported in parenthesis.

[a]Total $R^2 = R^2_{within-group} \times (1 - ICC1) + R^2_{between-group} \times ICC1$.

*p < .05; **p < .01 (two-tailed test for control variables; one-tailed test for the hypothesized, directional relationships)

TABLE 4
MATCHING RESULTS

	Model 1: Nearest Neighbor Matching (1)		Model 2: Nearest Neighbor Matching (2)		Model 3: Kernel Matching		Model 4: Mahalanobis Distance Matching	
	CEMP	**CSAT**	**CEMP**	**CSAT**	**CEMP**	**CSAT**	**CEMP**	**CSAT**
Constant	1.627**	1.171**	1.726**	1.138**	1.745**	1.145**	1.883**	1.126**
	(.384)	(.438)	(.392)	(.444)	(.392)	(.446)	(.401)	(.457)
Main Effects								
Treatment Effect (TE)	.090**	.080**	.101**	.092*	.100**	.091*	.111**	.101**
	(.058)	(.034)	(.039)	(.041)	(.037)	(.042)	(.042)	(.044)
Moderating Variables								
Customer orientation	-.220*	.078	-.091	.065	-.144*	.069	-.121	.065
	(.102)	(.116)	(.076)	(.086)	(.087)	(.099)	(.083)	(.095)
CP formalization	.096	.109	.025	.074	.075	.067	.105*	.017
	(.069)	(.079)	(.054)	(.061)	(.060)	(.068)	(.056)	(.064)
Importance of social bonding	.053	.107*	.056	.007	.037	.044	.002	.017
	(.054)	(.062)	(.048)	(.055)	(.052)	(.059)	(.054)	(.061)
Developmental feedback	.136*	.115	.118*	.020	.126*	.061	.124*	.047
	(.075)	(.086)	(.063)	(.072)	(.069)	(.079)	(.070)	(.080)
Cross–Level Interaction Effect								
TE × Customer orientation	-.196*	-.220*	-.158*	-.172*	-.163**	-.208**	-.156*	-.232**
	(.088)	(.101)	(.069)	(.078)	(.078)	(.089)	(.076)	(.087)
Within–Level Interaction Effects								
TE × Importance of social bonding	-.131**	-.132**	-.199**	-.123*	-.145**	-.124*	-.125*	-.117*
	(.050)	(.057)	(.044)	(.050)	(.048)	(.055)	(.050)	(.057)
TE × Developmental feedback	.154*	.141*	.111*	.139*	.135*	.150*	.141*	.169*
	(.073)	(.084)	(.059)	(.067)	(.066)	(.075)	(.066)	(.075)
TE × Formalization	-.141*	-.149*	-.133**	-.128*	-.131**	-.135*	-.140**	-.127**
	(.065)	(.074)	(.048)	(.055)	(.055)	(.063)	(.052)	(.059)
Covariates (Branch Level)								
Size (ln)	.074	.008	.048	-.036	.061	-.015	.060	-.018
	(.050)	(.057)	(.047)	(.053)	(.048)	(.055)	(.048)	(.054)
Customer service quality	.006	-.037	.012	-.032	.008	-.035	.006	-.036
	(.024)	(.027)	(.023)	(.026)	(.024)	(.027)	(.024)	(.027)
Covariates (PB Level)								
Psychological empowerment	.065	.033	.035	.012	.047	.023	.041	.023
	(.042)	(.047)	(.041)	(.046)	(.042)	(.047)	(.042)	(.048)
Service Performance	.058	.036	.044	.027	.047	.039	.038	.054
	(.035)	(.040)	(.034)	(.039)	(.035)	(.040)	(.036)	(.041)
Covariates (Customer Level)								
Gender	-.046	-.075*	-.032	-.078*	-.037	-.075	-.032	-.073*
	(.029)	(.034)	(.028)	(.032)	(.029)	(.033)	(.029)	(.033)
Age	-.001	.001	.000	.001	.000	.001	.000	.001
	(.001)	(.002)	(.001)	(.002)	(.001)	(.002)	(.001)	(.002)
Education	-.035	.007	-.051	-.011	-.042	-.008	-.040	-.021
	(.033)	(.037)	(.032)	(.036)	(.032)	(.037)	(.032)	(.037)
Branch experience (ln)	-.058	-.029	-.058	.005	-.061	-.008	-.067	-.001
	(.055)	(.063)	(.055)	(.062)	(.055)	(.063)	(.056)	(.064)
Feedback frequency	-.008	.012	-.010	.014	-.011	.015	-.015	.018
	(.013)	(.015)	(.013)	(.014)	(.013)	(.014)	(.013)	(.014)
Doing business with another PB	.021	-.027	.019	-.039	.018	-.041	.015	-.056
	(.028)	(.032)	(.027)	(.031)	(.028)	(.032)	(.028)	(.032)
CP initiation	-.049	-.070	-.042	-.050	0.042	-.052	-.036	-.036
	(.028)	(.032)	(.028)	(.032)	(.028)	(.032)	(.029)	(.033)
Customer–branch identification	.326**	.337**	.312**	.351**	.312**	.340**	.299**	.333**
	(.031)	(.036)	(.030)	(.034)	(.031)	(.035)	(.031)	(.035)
Inverse Mills ratio	-.199**	-.368**	-.205**	-.389**	-.199**	-.380**	-.192**	-.383**
	(.029)	(.033)	(.027)	(.031)	(.028)	(.032)	(.028)	(.032)
Endogeneity Correction (CP)	-.004	.031	.010	.028	.006	.030	.013	.030
	(.027)	(.031)	(.027)	(.030)	(.027)	(.031)	(.027)	(.031)
Branch/PB fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Total R^2	.490	.502	.526	.539	.509	.519	.507	.510

Notes: CEMP = Customer empowerment; CSAT = Customer satisfaction; PB = Private Banker. Robust standard errors are reported in parenthesis.
*p < .05; **p < .01 (two-tailed test for control variables; one-tailed test for the hypothesized, directional relationships

Figure 1
Conceptual Model

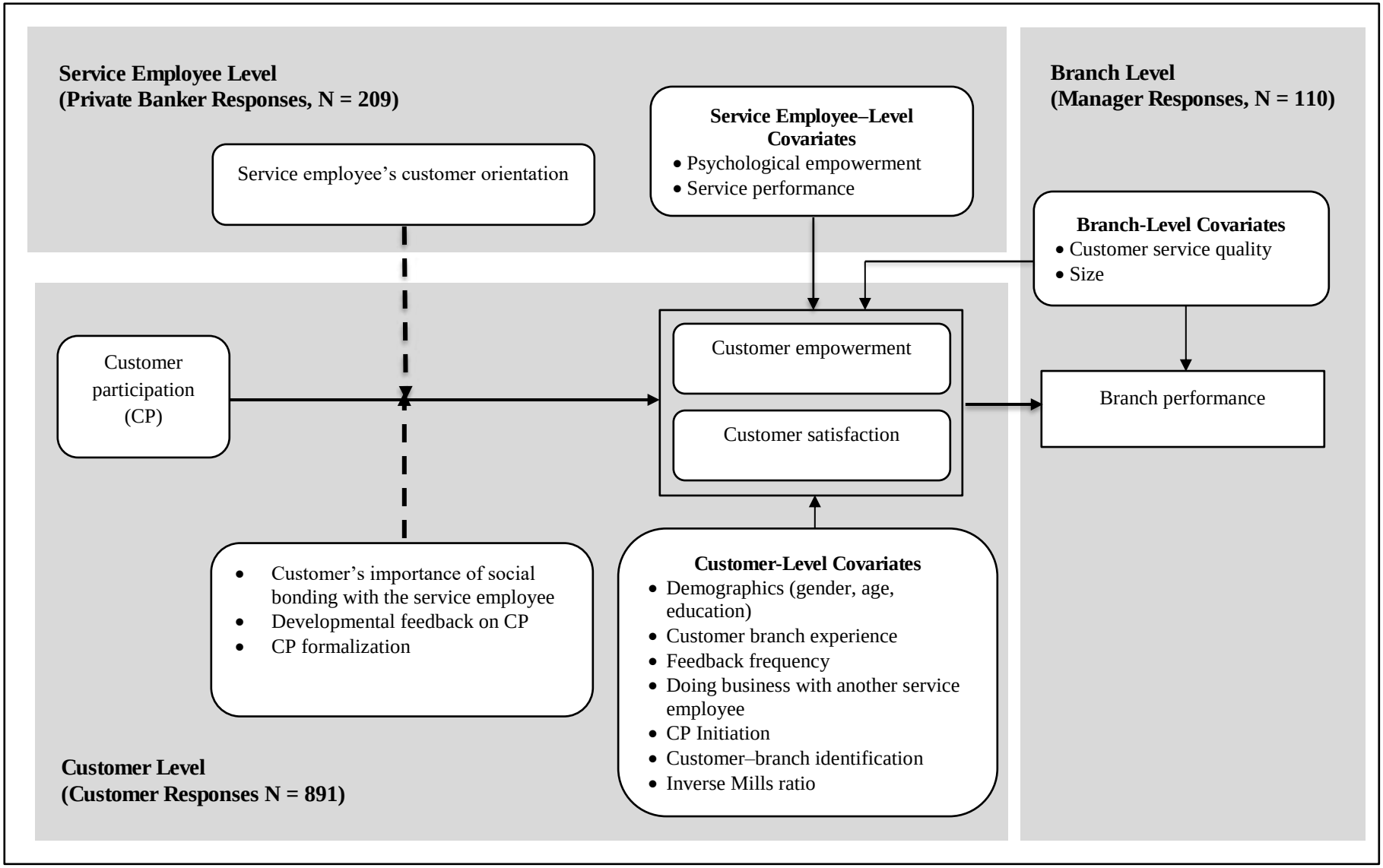
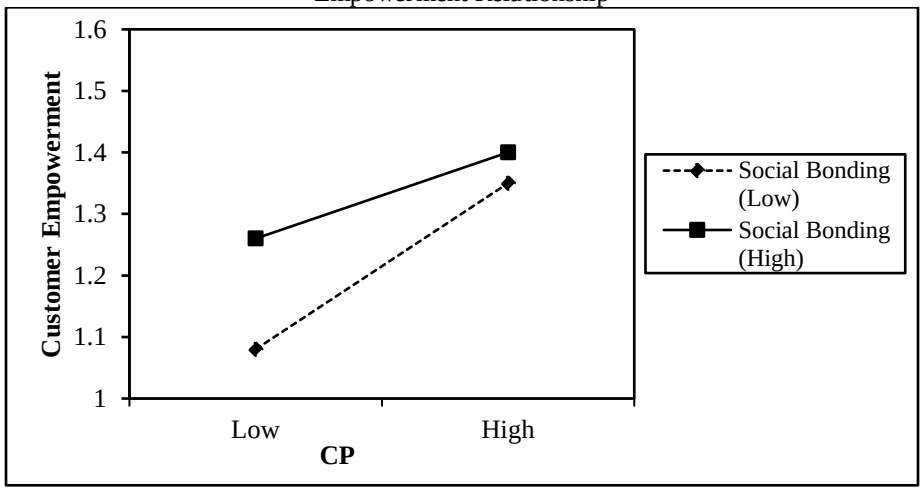
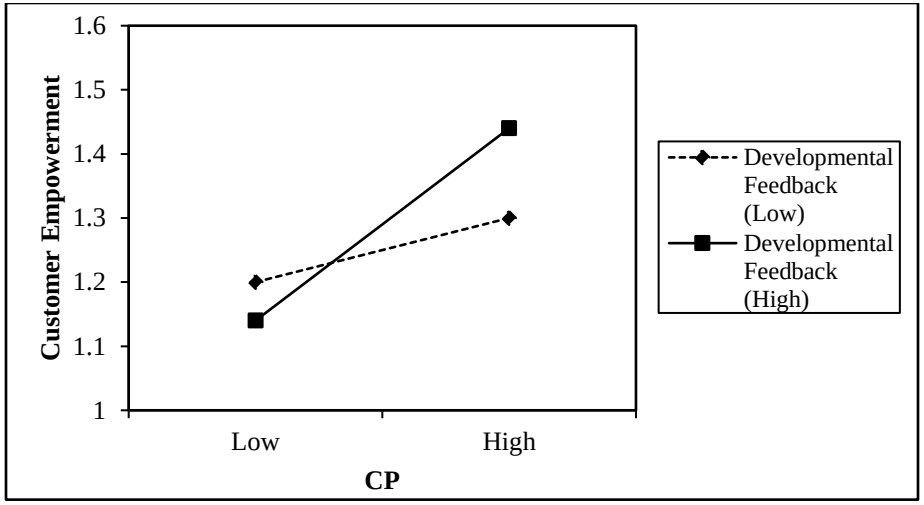


Figure 2
MODERATING EFFECTS ON THE CP–CUSTOMER EMPOWERMENT RELATIONSHIP

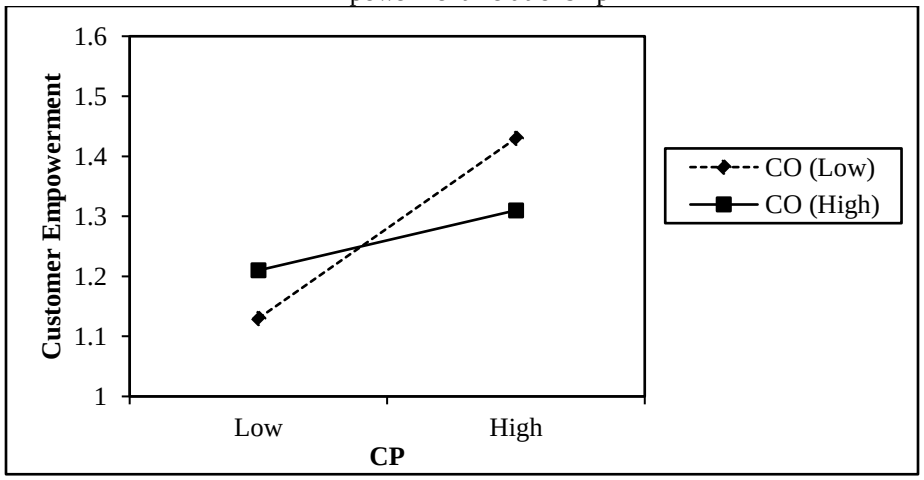
A: Moderating Effect of the Importance of Social Bonding on the CP–Customer Empowerment Relationship



B: Moderating Effect of Developmental Feedback on the CP–Customer Empowerment Relationship



C: Moderating Effect of Customer Orientation (CO) on the CP–Customer Empowerment Relationship



D: Moderating Effect of Formalization on the CP–Customer Empowerment Relationship

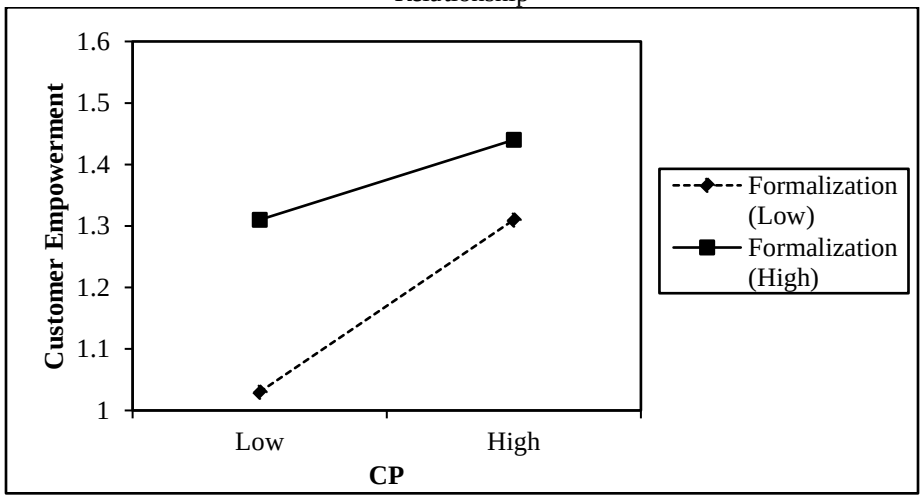
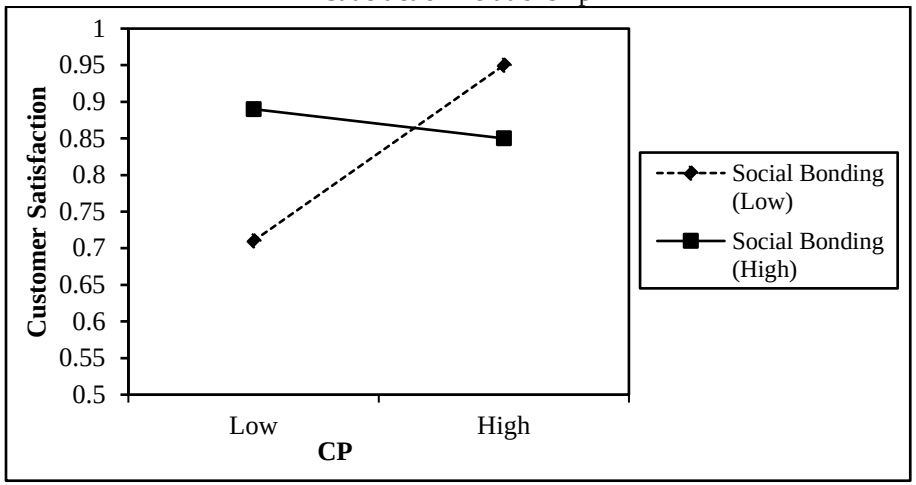
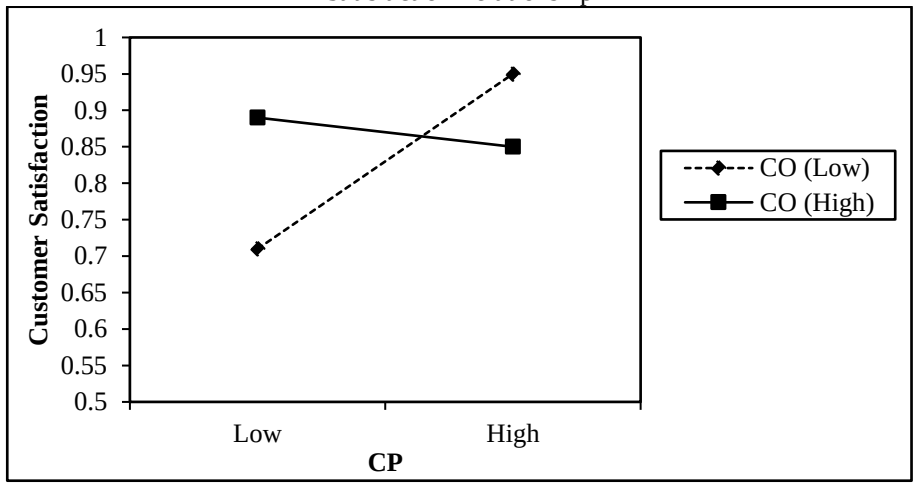


Figure 3
MODERATING EFFECTS ON THE CP–CUSTOMER SATISFACTION RELATIONSHIP

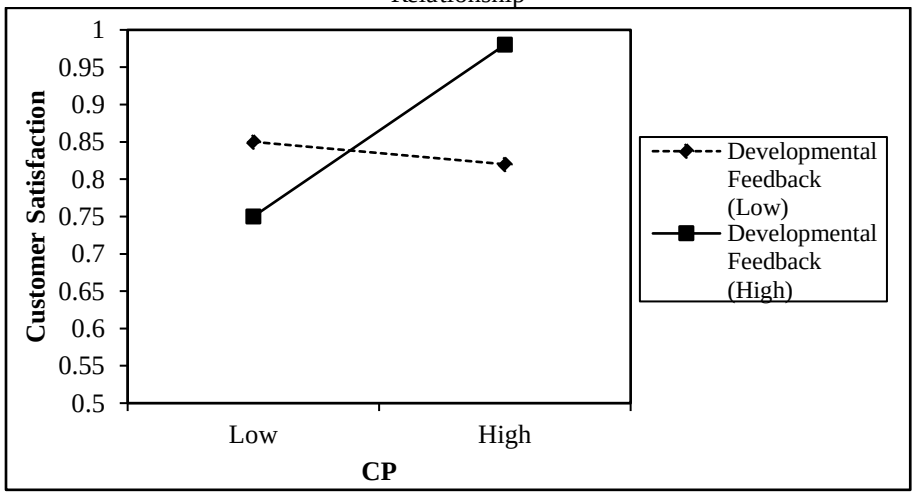
A: Moderating Effect of the Importance of Social Bonding on the CP–Customer Satisfaction Relationship



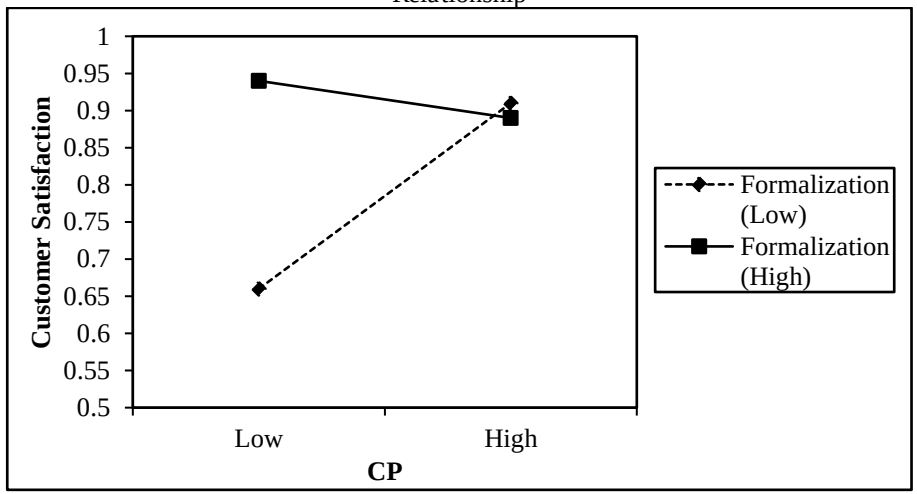
C: Moderating Effect of Customer Orientation (CO) on the CP– Customer Satisfaction Relationship



B: Moderating Effect of Developmental Feedback on the CP– Customer Satisfaction Relationship



D: Moderating Effect of Formalization on the CP– Customer Satisfaction Relationship



Web Appendix A
SELECT STUDIES ON CUSTOMER PARTICIPATION (CP) AND RELATED CONSTRUCTS

Construct	Source	Context	Definition	Major Empirical Findings
CP	Chan, Yim, and Lam (2010)	Financial services	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.	• Economic and relational values fully mediate the effect of CP on customer satisfaction • Employee job stress and relational value fully mediate the effect of CP on employee job satisfaction. • CP has a weaker (stronger) effect on customer's economic (relational) value as a customer's collectivist value orientation increases. • CP has a weaker (stronger) effect on employee job stress (relational value) as an employee's collectivist value orientation increases. • CP has a weaker effect on customer's economic value as a customer's power distance value orientation increases.
CP	Yim, Chan, and Lam (2012)	Financial services	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.	• CP enjoyment, in addition to economic and relational values, fully mediates the effect of CP on customer satisfaction. • Employee participation enjoyment, in addition to job stress and relational value, fully mediates the effect of CP on employee job satisfaction. • CP has a positive effect on CP enjoyment when both customer self-efficacy (SE) and customer other efficacy (OE) are high; however, it has a negative effect when both customer SE and customer OE are low. • CP has a positive effect on employee participation enjoyment when both employee SE and employee OE are high; however, it has a negative effect when both employee SE and employee OE are low. • CP has a positive effect on CP enjoyment when customers have low customer SE and high customer OE.
CP	Ho and Ganesan (2013)	High technology industry including optics, computing, and the automotive industry	Customer engagement in suppliers' collaborative efforts, which include behaviors such as coordinating collaborative activities, mediating conflicts between supplier partners, and offering technical assistance.	• Knowledge base compatibility between supplier partners has a positive effect on knowledge sharing between supplier partners when CP is high and customer value is high. • Knowledge base compatibility between supplier partners has a negative effect on knowledge sharing between supplier partners when CP is high and customer value is low.
CP	Chang and Taylor (2016)	Meta-analysis in new product development (NPD) context	A customer's involvement in the firm's NPD process in which customers share their needs- and solution-related inputs in the firm's NPD process.	• Customer involvement in the ideation and launch (development) stage leads to improved (diminished) financial performance. • The impact of CP on NPD performance is elevated in technologically turbulent NPD projects, in emerging countries, in low-technology industries, for business firms, and for small firms.
CP	Gallan, Jarvis, Brown, and Bitner (2013)	Health care	The extent to which customers share information, provide suggestions, and engage in shared decision making	• CP partially (fully) mediates the relationship between positivity and technical (functional) service quality. • The impact of CP on customer satisfaction is fully mediated by only functional service quality but not by technical service quality.

CP	Fang, Palmatier, and Evans (2008)	Original equipment manufacturer customers and component manufacturer in business-to-business market	The extent to which the customer is involved in the manufacturer's NPD process and differentiates between customer participation as an information resource (CPI) and customer participation as a co-developer (CPC).	• When downstream customer network connectivity is high (low), CPI has a negative (positive) effect on product innovativeness. • When downstream customer connectivity is high (low), CPI has a positive (no) effect on speed to market. • When process interdependence is high (low), CPC has no (negative) effect on new product innovativeness. • When process interdependence is high (low), CPC has a negative (positive) influence on new product speed to market.
CP	Dong et al. (2015)	Study abroad tour (Study 1) and Internet setup (Study 2)	The degree to which a customer contributes effort, preference, knowledge, or other inputs to service production and delivery.	• The impact of CP on perceived service quality and customer satisfaction is greater for customers who possess high (vs. low) participation readiness (i.e., perceived ability, perceived benefit of participation, and identification with participation role).
CP	Dong and Sivakumar (2016)	Conceptual paper	The extent to which customers are involved in service production and delivery by contributing effort, knowledge, information, and other resources. Develops typology of CP into mandatory, replaceable, and voluntary. Distinguishes CP from customer engagement and customer innovation. A key distinction between CP and coproduction is that the former is more inclusive than the latter. That is, coproduction can be regarded as CP but CP cannot be necessarily regarded as coproduction. In this regard, coproduction is considered a subset of CP.	Not applicable
CP/Co-production	Bendapudi and Leone (2003)	Six product and service categories, including three in products and three in services.	The degree to which the customer is involved in producing and delivering the service. A focus on joint production between the customer and employee in interaction and production.	• When the outcome is better than expected, customers who participated have lower satisfaction with the firm than those who did not participate. • When the outcome is worse than expected, there is no difference in satisfaction between those who did and did not participate. • When a customer has a choice to participate or not, and the outcome is better (worse) than expected, customer satisfaction with the firm is greater when the customer chooses not (chooses) to participate than when chooses (not) to participate.
Coproduction	Auh et al. (2007)	Financial services and health care	Engaging customers as active participants in the organization's work.	• Communication, client expertise, affective commitment, and interactional justice are positively related to co-production. • Coproduction is positively related to attitudinal loyalty but not to behavioral loyalty.
Coproduction intensity	Haumann et al. (2015)	Ready to assemble furniture	Customers' subjective perception of the extent of effort and time invested within a specific process of coproducing a product/service.	• Coproduction intensity lowers customer satisfaction. • Economic value, relational value, economic and relational value, support-service communication, and full-service communication strategies lessen the negative effect of coproduction intensity on customer satisfaction.
Customers as partial employees	Bowen (1986); Lengnick-Hall (1996)	Conceptual papers	Customers should be viewed as human resources or partial employees who should be involved in service operations and the delivery process. The following three elements are argued to be critical for customers to act as partial employees: clarity/expectation of the task, ability to do the work, and motivation to do the work.	Not applicable
Customer involvement/	Vargo and Lusch (2004); Prahalad and Ramaswamy (2000)	Conceptual papers	A service-dominant logic view of marketing that customers are active players and involved in co-creation of value (Vargo and Lusch 2004). Foundational premise (FP 6) suggests that	Not applicable

Value co-creation			customers are operant (not operand) resources and that they are always coproducers. Customers should be viewed as a critical resource and source of competency for value creation (Prahalad and Ramaswamy 2000).	
Value co-creation (VCC)	Ranjan and Read (2016)	Seven brands used to develop VCC scale	Consumers assuming an active role and creating value together with the firm through direct and indirect collaboration across one or more stages of production and consumption.	Development of a VCC scale as higher-order construct composed of two lower dimensions: co-production and value-in-use.
Customer engagement	Pansari and Kumar (2016)	Conceptual paper	The mechanics of a customer's value addition to the firm, through direct or/and indirect contribution, where a direct contribution consists of customer purchases and an indirect contribution consists of incentivized referrals that the customer provides, the social media conversations customers have about the brand, and customer feedback/suggestions to the firm.	Not applicable
Customer engagement	Brodie, Hollebeek, and Ilic (2011)	Conceptual paper	A psychological state that occurs by virtue of interactive, co-creative customer experiences with a focal agent/object (e.g., a brand) in focal service relationships.	Not applicable
Customer involvement	Zaichkowsky (1985)	Scale development	A person's perceived relevance of the object based on inherent needs, values, and interests.	Development of a 20-item bipolar adjective personal involvement inventory (PII).

WEB APPENDIX B: MEASURES

We measured all multi-item constructs using a five-point Likert scale (1 = "strongly disagree," 5 = "strongly agree").

Customer-Reported Measures

We measured customer participation with a five-item scale borrowed from Chan, Yim, and Lam (2010); the importance of social bonding with a three-item scale adapted from Dash, Bruning, and Guin (2009) for the context of this study; employee developmental feedback on CP with a three-item scale adapted from Zhou (2003); and customer participation formalization with a three-item scale borrowed from Fang, Palmatier, and Evans (2008).

We captured customer empowerment in terms of perceived impact and perceived worth of CP. We measured perceived impact with a three-item scale adapted from the impact dimension of Spreitzer's (1995) scale of psychological empowerment and perceived worth (four items) with a scale adapted from Eisenberger et al. (1997).

We measured customer satisfaction with four items taken from Chan, Yim, and Lam (2010). We measured private banker service performance with a seven-item, five-point Likert scale (1 = "needs improvement," 5 = "excellent") taken from Liao and Chuang (2007).

Private Banker–Reported Measures

We measured customer orientation with the five highest loading items from Kennedy, Lassk, and Goolsby's (2002) scale of customer-oriented mindset. We measured psychological empowerment with Spreitzer's (1995) scale, which consists of four subdimensions (i.e., autonomy, self-efficacy, impact, and meaning) with three items each.

Branch Manager–Reported Measures

We measured customer service quality with a five-item scale borrowed from Deeter-Schmelz and Kennedy (2003) and branch performance with a three-item, five-point formative scale (1 = "much worse," 5 = "much better"). We asked managers to respond to their branch's current performance relative to their branch's stated objectives in terms of profitability, sales growth, and customer retention (e.g., Li and Atuahene-Gima 2001).

Covariates

We included covariates in our model to avoid model misspecification, to rule out alternative explanations, and to show the robustness of our model by mitigating self-selection and omitted-variables biases. In choosing control variables, we paid particular attention to their theoretical relevance and to the explanatory power indicated by significant bivariate correlations between a potential covariate and the model's dependent variables (Carlson and Wu 2012; Spector and Brannick 2011). Consequently, we employed three levels of covariates.

At the customer level, we controlled for customer demographics (i.e., gender, age, education, and branch experience), feedback frequency, doing business with another private banker, CP initiation, and customer–branch identification when estimating customer empowerment and customer satisfaction. Gender (male = 0, female = 1), age (in years), education (high school = 0, university/college = 1), customers' experience with the branch (in years), feedback frequency ("How frequently do you receive feedback from the bank regarding service changes, new services, etc.?" [every week/biweekly/every month/every three months/every six months/once a year]), doing business with another private banker ("Do you do business with another private banker?" [yes = 1, no = 0]), and CP initiation ("Who initiates participation?" [voluntary, initiated by myself = 0, at the encouragement of the private banker = 1]) were all self-report measures. We took a natural-logarithmic transformation of the raw values of customer experience because the raw values were not normally distributed. We measured customer–branch identification with a five-item scale borrowed from Homburg, Wieseke, and Hoyer (2009).

At the private banker level, we controlled for psychological empowerment and private banker service performance when estimating customer empowerment and customer satisfaction. In doing so, we accounted for the intrinsic sources of motivation and service variability across private bankers within the same bank branch. At the branch level, we controlled for customer service quality and branch size (i.e., number of private bankers in each branch) when estimating customer empowerment, customer satisfaction, and branch performance. Because the raw values of branch size were not normally distributed, we entered this variable after we took a natural-logarithmic transformation of the raw values.

WEB APPENDIX C: ANALYTIC APPROACH

Measure Validation

We conducted separate confirmatory factor analysis (CFA) to assess the reliability, validity, and unidimensionality of the measures to which customers, private bankers, and branch managers responded. As Table 1 reports, the CFAs reveal a good fit to the data. Cronbach's alphas and composite reliabilities were above .70. All factor loadings were statistically significant (Anderson and Gerbing 1988), and the average variance extracted (AVE) values were greater than .50 (Bagozzi and Yi 1988). For the customer- and private banker–reported measures, the AVE estimates were greater than the squared intercorrelations between all pairs of constructs (Fornell and Larcker 1981). These results support the validity and reliability of the measures.

We operationalized psychological empowerment as a second-order construct of autonomy, self-efficacy, meaning, and impact (Spreitzer 1995). The second-order CFA resulted in a good fit ($\chi^2(50) = 106.69$, goodness-of-fit index [GFI] = .899, Tucker–Lewis index [TLI] = .944, comparative fit index [CFI] = .957, root mean square error of approximation [RMSEA] = .074). In addition, the first-order dimensions were highly correlated. All these findings provide statistical justification for operationalizing psychological empowerment as a second-order construct.

Similarly, we considered customer empowerment a second-order construct of perceived impact and perceived worth. The second-order CFA indicated a good fit ($\chi^2(13) = 58.0$, GFI = .980, TLI = .984, CFI = .990, RMSEA = .065, Akaike information criterion [AIC] = 88.0, Bayesian information criterion [BIC] = 159.89). The bivariate correlation between the first-order dimensions of perceived impact and perceived worth was .751. These findings support the operationalization of customer empowerment as a second-order construct. We also considered the possibility that adding CP as the third dimension to the second-order construct of customer empowerment would result in a better fit to the data than the two-dimensional conceptualization of customer empowerment. However, the three-dimensional CFA did not result in a better fit than the two-dimensional CFA ($\chi^2(53) = 616.107$, GFI = .887, TLI = .906, CFI = .924, RMSEA = .109), with higher AIC and BIC values (AIC = 666.11, BIC = 785.92). This finding suggests that CP and customer empowerment must be operationalized as two distinct constructs.

Based on these findings, we averaged the first-order dimensions to create the second-order constructs of psychological empowerment and customer empowerment for the next steps of data analysis.

Additional Tests for Measure Validation

We conducted the main study with data collected from the private banking context. We found that the multi-item constructs were valid and reliable and the CFAs resulted in a good fit to the data. Yet the majority of the multi-item scales we used in the customer survey are either new or adopted from relevant scales (i.e., customer empowerment). Because we assessed the validity and reliability of these scales in the private banking context, it is not clear whether the same scales are equally valid and reliable in other service contexts. Thus, we tested the reliability, validity, and unidimensionality of the measures by conducting an online data collection prcoedure through Amazon Mechanical Turk (MTurk). We chose participants in a variety of service industries to enhance the generalizability of the psychometric properties of our constructs: insurance, legal consulting, travel and tourism, health care (i.e., diet), and physical fitness. The final sample consisted of 291 participants. The mean age was 34 years, and 56% of the participants were male.

We ran a CFA to assess the reliability, validity, and unidimensionality of the measures (see Table C1). The CFA resulted in good fit to the data (χ^2 = 843.98, d.f. = 377; GFI = .878; TLI = .928; CFI = .939; RMSEA = .065). In addition to statistically significant factor loadings (Anderson and Gerbing 1988), the AVE and composite reliability values for all constructs were greater than .50 and .70, respectively (Bagozzi and Yi 1988). As Table C2 reports, the AVE estimates were also greater than the squared correlation between all pairs of constructs (Fornell and Larcker 1981). These findings indicate convergent and discriminant validity of the constructs. Accordingly, we conclude that the multi-item constructs of our study are valid and reliable in other service contexts besides private banking.

Accounting for Causal, Observed, and Unobserved Heterogeneity

We account for causal, observed, and unobserved heterogeneity in the model estimation. First, we consider causal heterogeneity by introducing two levels of contextual (or moderating)

variables into our model. We capture causal heterogeneity in the CP–customer empowerment/satisfaction relationship by analyzing the moderating roles of customer-level (i.e., within-level) and private banker–level (i.e., cross-level) variables. Second, we minimize the observed heterogeneity bias by controlling for customer-, private banker–, and branch-level observable covariates, as we introduced in the main paper (see Figure 1). Third, as we detail later, we estimate the model by using both fixed- and random-effects technique to take into account unobserved heterogeneity. We use the fixed-effects results to test the hypotheses and the random-effects results to demsontrate the robustness of the fixed-effects results.

Addressing Simultaneity

Simultaneity is likely to be a concern for endogeneity if the effect of CP on customer empowerment cannot be distinguished from the effect of customer empowerment on CP (e.g., Shi, Grewal, and Sridhar 2015). We provide theoretical justification as to why CP must lead to feelings of perceived impact and worth. Yet customer empowerment at t may lead to CP at t + 1. Because we introduced temporal ordering (or time lag) when measuring CP and perceived impact and worth of CP, simultaneity-caused endogeneity should not be a major concern (Shi, Grewal, and Sridhar 2015).

Correcting for Sample Selection Bias

The customer data are not random, as we collected data from customers who had transactions with the private banker within the last three months. This type of nonrandom sample may produce biased estimates, as the customers who are most satisfied with the services offered by the private banker might also be the ones who participate in the service process most frequently (e.g., Grewal, Chakravarty, and Saini 2010). Therefore, we used Heckman's (1979) technique to control for sample selection bias. Following Godfrey, Seiders, and Voss (2011), we estimated the probability of the customers' response to the survey as a function of the following: the frequency of feedback sent from the bank regarding service changes, new services, and so forth; the change of home address during the survey period; and doing business with another private banker. Then, we computed an inverse Mills ratio for each customer and entered it in the model as a covariate when estimating customer empowerment and satisfaction.

Fixed-Effects Modeling

Fixed-effects model uses within-level variation in the dependent and independent variables. Germann, Ebbes, and Grewal (2015, p. 4) highlights two underlying assumptions of the fixed-effects model. First, a within-level analysis captures level-specific, unobserved heterogeneity that might otherwise cause omitted variables bias in a between-level analysis. Second, both independent and dependent variables must demonstrate sufficient within-level variance.

As Sridhar and Sriram (2015) note, one cannot completely control for all the factors that potentially influence the dependent variable(s) in a model. Although we control for the effect of customer-, private-banker, and branch-level factors on customer satisfaction and customer empowerment, there are a variety of unobserved factors that need to be included in the model to avoid model estimation bias. In our case, it is necessary to control for private banker- and branch-fixed effects because of the nested structure of our data (i.e., customers are nested in private bankers and eventually in branches, and private bankers are nested in bank branches). By adding private banker- and branch-specific fixed effects into the model, we aim to eliminate omitted variables bias due to unobserved heterogeneity. With sufficient within-private banker and within-branch variance in customer empowerment and customer satisfaction, we conducted fixed-effects technqiue to test our hypotheses (see Table 3).

Testing Mediation and Moderation Effects

Our model focuses mainly on mediation (H_1) and within-level ($H_{2a–2d}$–$H_{3a–3b}$, and $H_{5a–5b}$) and cross-level ($H_{4a–4d}$) moderation hypotheses. We tested the mediation and moderation hypotheses by performing the Bayesian estimation option. Note that the maximum-likelihood estimation is an option when linear effects that are assumed to be normally distributed are tested (e.g., Grewal et al. 2013). However, this option might produce biased results when dealing with a product term of two variables (i.e., interactions), as is the case when testing both mediation and moderation hypotheses. The Bayesian analysis uses Markov chain Monte Carlo (MCMC) algorithms, through which we obtain bootstrapped estimates (i.e., 1,000 samples). We used trace/autocorrelation plots to monitor posterior distributions and the Gelman–Rubin's potential

scaling reduction to monitor convergence by using parallel computing in multiple MCMC chains (Muthén and Muthén 1998–2015). We now explain our approach to testing mediation and moderation hypotheses by providing rationale for using the Bayesian estimation option.

First, we employed the multilevel mediation test outlined in Preacher, Zyphur, and Zhang (2010). As Zhao, Lynch, and Chen (2010, p. 198) summarize, "there should be only one requirement to establish mediation, that the indirect effect …be significant," and "the strength of mediation should be measured by the size of the indirect effect, not by the lack of the direct effect." An indirect effect is not normally distributed because it is computed by multiplying the path coefficients from the independent variable to the mediator and from the mediator to the dependent variable (Preacher, Zyphur, and Zhang 2010). Therefore, bootstrapping provides a more appropriate test of mediation because it computes the indirect effect in each sample by taking a large number of samples from the data and generates a 95% confidence interval from the bootstrap samples. A confidence interval that does not contain zero indicates a significant indirect effect (Preacher, Zyphur, and Zhang 2010).

Second, we performed a latent moderated structural equation technique to test within- and cross-level interactions (for details, see Preacher, Zhang, and Zyphur 2016). Because interaction effects are not normally distributed, we employed the Bayesian estimation option, which provides more accurate standard errors than the maximum-likelihood option. We created the interaction terms by using mean-centered values of their respective constructs. We tested the effects of CP on customer empowerment and satisfaction at high and low levels of the moderating variables using the approach to test interaction effects in multilevel models (Bauer and Curran 2005).

Table C1
MEASURES AND FACTOR LOADINGS

	Factor Loading
Customer-Reported Measures	
Customer Participation	
I spend a lot of time sharing information about my needs and opinions with my [service employee] during the service process.	.693
I put a lot of effort into expressing my personal needs to my [service employee] during the service process.	.709
I always provide suggestions to my [service employee] for improving the service outcome.	.603
I have a high level of participation in the service process.	.721
I am very much involved in deciding how the services should be provided.	.899
Importance of Social Bonding	
Establishing a personal relationship between my [service employee] and myself is very important to me.	.867
Sharing personal advice or support with my [service employee] is very important to me.	.803
Developing friendship with my [service employee] is very important to me.	.790
Developmental Feedback on Customer Participation	
The timely and regular feedback provided by my [service employee] helps me learn how the bank improves customer service operations.	.859
My [service employee] provides me with regular and timely feedback on how my participation in the service process benefits the bank to improve its operations.	.757
My [service employee] provides me with regular and timely feedback on how customers' suggestions are used to improve service operations.	.743
Customer Participation Formalization	
I am formally involved in the customer participation process.	.862
There is a system of formal rules imposed regarding involvement in customer participation.	.841
I follow formal procedures on how to engage in customer participation.	.848
Customer [Work Unit] Identification	
I strongly identify with this [work unit].	.711
I feel good to be a customer of this [work unit].	.730
I like to tell that I am a customer of this [work unit].	.693
This [work unit] fits well with me.	.878
I feel attached to this [work unit].	.832
Perceived Customer Participation Impact	
I am very well aware of the positive impact that my participation in the service process has on this [work unit].	.724
I am very well aware of the ways in which my participation in the service process is benefiting this [work unit].	.827
I have a positive impact on this [work unit] through my participation in the service process.	.793
Perceived Customer Participation Worth	
This [work unit] cares about my participation in the service process.	.835
This participation in the service process is very important to this [work unit].	.780
This [work unit] appreciates my participation in the service process.	.699
This [work unit] values my participation in the service process.	.803
Customer Satisfaction	
I am satisfied with the services provided by this [work unit].	.724
This bank is a good [work unit] to do business with.	.827
The service of this [work unit] meets my expectations.	.793
Overall, I am satisfied with the service provided by this [work unit].	.835

Notes: All factor loadings are significant at $p < .01$.

Table C2
DESCRIPTIVE STATISTICS, INTERCORRELATIONS, AND RELIABILITIES

Variables	1	2	3	4	5	6	7
1. Customer identification							
2. CP	.293**						
3. Customer empowerment	.289**	.248**					
4. Customer satisfaction	.334**	.339**	.351**				
5. Importance of Social bonding	.046	.363**	.147*	.222**			
6. Developmental feedback	.199**	.325**	.204**	.218**	.429**		
7. CP formalization	.129*	.158**	.045	.011	.097	.233**	
M	3.82	3.54	3.70	3.93	3.48	3.68	3.51
SD	.62	.56	.70	.82	.72	.60	.97
Cronbach's alpha	.87	.84	.91	.86	.85	.83	.88
Composite reliability	.88	.85	.92	.87	.86	.83	.89
Average variance extracted	.60	.53	.61	.63	.67	.62	.72

*p < .05 (two–tailed test).
**p < .01 (two–tailed test).

WEB APPENDIX D: ADDITIONAL ANALYSES AND ROBUSTNESS CHECK

Correcting for Endogeneity of Customer Empowerment and Customer Satisfaction

We checked the robustness of our model estimation by instrumenting for the endogeneity of customer satisfaction and customer empowerment using the two-stage control function approach (Petrin and Train 2010; Wooldridge 2010). We introduced relationship length and branch identification similarity of other customers–private banker dyads as the instrumental variables. We draw from social exchange theory and the similarity-attraction paradigm to explain why and how relationship length and identification similarity of other customers–private banker dyads influence a focal customer's level of empowerment and satisfaction. That is, private bankers who have longer relationships with customers and share similar levels of identification with the branch engage in more effective and frequent communication with customers. Accordingly, a focal customer who shares the same private banker with other customers will also benefit from high quality service provided by the private banker and therefore be more satisfied. In addition, by virtue of the focal customer sharing the same private banker with other customers, the focal customer will perceive that his/her participation makes an impact and difference because the focal customer benefits from better service that results from the similarity of relationship length and branch identification between the private banker and other customers. Hence, the instrumental variables pass the relevance criterion. However, there is no theoretical reason to assume a direct relationship between the instrumental variables and branch performance metrics, satisfying the exclusion restriction.

The instruments are correlated significantly with customer empowerment ($r_{rellenght} = .101$, $r_{ident} = .153$) and customer satisfaction ($r_{rellenght} = .099$, $r_{ident} = .158$) but not with the outcome variables ($r_{age–profit} = –.017$, $r_{age–sgrowth} = –.034$, $r_{age–retention} = .028$, $r_{ident–profit} = –.007$, $r_{ident–sgrowth} = .005$, $r_{ident–retention} = –.003$). The Sargan test indicates that the instruments were exogenous (relationship length: $\chi^2 = .99$, $p > .10$; identification similarity: $\chi^2 = 1.01$, $p > .10$). Then, we computed the residuals for customer empowerment and satisfaction by regressing them against the instrument along with all exogenous variables. In turn, customer empowerment and satisfaction became uncorrelated with the error term in the outcome variables. The Anderson–Rubin test revealed that the error terms were not correlated with the instruments ($F_{rellength–profit} = 4.21$, $p < .05$; $F_{rellength–sgrowth} = 4.73$, $p < .05$; $F_{rellength–retention} = 3.81$, $p < .05$; $F_{ident–profit} = 4.08$, $p <$

.05; $F_{ident–sgrowth} = 5.42$, $p < .05$; $F_{ident–retention} = 4.84$, $p < .05$). We corrected for endogeneity bias by entering their residual values into the proposed model as an additional covariate. As Table 3 (Model 4) reports, the direction and significance of the re-estimated coefficients remained the same as those reported in Table 3 (Model 3), thus confirming the robustness of the model.

Re-estimating the Model with Random Effects

We re-estimated the customer empowerment and customer satisfaction models by introducing random effects. Due to the nested nature of our data (i.e., non-independence), random-effects modeling is an effective technique as the basic assumptions of ordinary least squares–based techniques are violated (e.g., Raudenbush et al. 2011). Random-effects modeling is an effective means to merge both within- and between-firm variance when estimating the effects of independent variables on dependent variables. Therefore, we used random-effects modeling to assess variation at the customer, private banker, and branch levels so that the hypothesized relationships and their standard errors are estimated more accurately by simultaneously separating and modeling the variance between and within levels (e.g., Raudenbush and Bryk 2002). In addition, as Rabe-Hesketh, Skrondal, and Pickles (2004, pp. 167–68) state:

> [T]he latent variables, or random effects, can be interpreted as unobserved heterogeneity at the different levels inducing dependence among all lower–level units in the same higher-level unit. Whereas random intercepts represent heterogeneity between clusters in the overall response, random coefficients represent heterogeneity in the relationship between the response and explanatory variables.

We tested our model by using three-level path analysis with Mplus 7 (Muthén and Muthén 1998–2015). We performed a series of tests to determine whether the three-level modeling was statistically justifiable. We computed ICC(1) for customer empowerment and customer satisfaction, which indicates how much variance resides between private bankers and branches. For customer empowerment, the ICC(1) was .23 ($F(109, 781) = 3.426$, $p < .001$) and .24 ($F(202, 688) = 3.437$, $p < .001$), respectively, indicating that 23% of the variance in customer empowerment resided between branches and 24% resided between private bankers. For customer satisfaction, the ICC(1) was .24 ($F(109, 781) = 3.484$, $p < .01$) and .33 ($F(202, 688) = 3.140$, $p < .001$), respectively, indicating that 24% of the variance in customer satisfaction resided between

branches and 33% resided between private bankers. Significant ICC(1) values and chi-square tests indicated that three-level modeling is statistically appropriate (LeBreton and Senter 2008).

A comparison of Akaike's information criterion (AIC) and the Bayesian information criterion (BIC) confirms that the hypothesized model is a better fit (AIC = 874.98, BIC = 1,718.77) than the direct effects model (AIC = 897.04, BIC = 1,748.83). The hypothesized model explains 31%, 46%, 15%, 10%, and 11% of the variance in customer empowerment, customer satisfaction, profitability, sales growth, and customer retention, respectively. The estimation results reported in Table 3 (Model 5) remained the same in terms of direction and significance, thus confirming the robustness of the fixed-effects model.

Alternative Models

The quadratic model revealed significant linear effects of empowerment and satisfaction on profitability and sales growth, but the quadratic effects were not significant. The logarithmic and square root models revealed that the logarithmic and square root forms of empowerment and satisfaction were not related to sales growth and profitability. Overall, the hypothesized model was a better fit (AIC = 874.98, BIC = 1,718.77) than the alternative models (the quadratic model: AIC = 902.98, BIC = 1,739.63; the logarithmic model: AIC = 900.01, BIC = 1,755.07; the square root model: AIC = 912.54, BIC = 1,795.21). These results verified the robustness of the proposed model and our original findings.

Re-estimating the Model with Matching Techniques

The premise of our model is that the higher (lower) the level of customer participation, the higher (lower) the level of customer empowerment and satisfaction. By employing a regression-based approach, we identified a positive and significant main effect of CP on customer empowerment and satisfaction, thus confirming our hypotheses. We also validated our original findings by re-estimating the main effect of CP on customer empowerment and satisfaction by conducting propensity score matching (PSM). The PSM technique uses the distance between estimated propensity scores (i.e., the probability that a customer will receive a treatment) to find similar customers in the control and treatment groups. The PSM technique does not require bias

correction, because it uses a treatment probability model and matches on a single continuous covariate.

In line with Shi et al. (2017), we employed the following procedure to conduct PSM: First, we identified the treatment (Y = 1 if treatment customer) and control (Y = 0 if otherwise) groups, chose matching variables of the treatment variable, and computed the propensity score by conducting probit analysis. Second, we matched each customer in the treatment group with the closest customer(s) in the control group by choosing different algorithms (e.g., nearest-neighbors–based matching, kernel matching, etc.). Third, we tested the model by using the treatment effect.

Accordingly, we identified the treatment (Y = 1 if treatment customer) and control (Y = 0 if otherwise) groups. In an ideal situation, we would test the main effects by employing an experimental design through which we identify low-participation (control group) and high-participation (treatment group) customers. However, because our study is not designed as a randomized experiment, we cannot identify treatment and control groups with dummy variables. Instead, we created treatment and control groups using the participation score for each customer nested in a private banker and, in turn, a branch. Due to the nested nature of our final sample consisting of 891 customer–private banker–branch manager matched pairs from 110 bank branches, we computed the group median for CP using private banker as a grouping variable. We then created two groups of customers by K-means clustering. The treatment group was composed of customers with a higher level of participation than the value of 3.56 (min = 3.56; max = 5.0), whereas the control group was composed of customers with a lower level of participation than the value of 3.51 (min = 1.0; max = 3.51). As a result, the final sample consisted of 549 customers in the treatment group and 342 customers in the control group, covering 209 private bankers in 110 branches. Table D2 reports mean differences in the covariates, moderating variables, and outcome variables between the control and treatment groups before matching. Despite significant mean differences between the two groups in terms of some covariates (customer age, feedback frequency, customer-bank identification), the moderating variables, and outcome variables, the standardized mean differences of all variables are below the threshold of .25, suggesting a well-balanced allocation of customers between the two groups (Ho et al. 2007).

We computed a propensity score from a probit model, which regressed the matching variables on the treatment dummy (see Table D3). We used customer-, private banker–, and branch-specific covariates (see Figure 1 in the text) as matching variables. We compared each customer in the treatment group with a matched customer in the control group by means of propensity scores (Shi et al. 2017). As Table D2 reports, a well-balanced allocation of customers between two groups has been reached after matching as standardized mean differences of all variables are below the threshold of .25 (Ho et al. 2007).

As in Shi et al. (2017), we first conducted nearest-neighbor matching with replacement, which pairs each treatment customer with the closest control customer by using the propensity scores. Then, we conducted two nearest-neighbors–based matching (i.e., matching each treatment customer with the two nearest control customers) and kernel matching (i.e., matching every treatment customer with a weighted average of multiple customers in the control group, by using the propensity score differences between each customer in the control group and the treatment group as weights). We also conducted minimum Mahalanobis distance matching, which does not require the same assumptions as propensity score matching (i.e., pairing each treatment customer with the most similar control customer using the Mahalanobis distance). Table D4 reports the average treatment effect on customer empowerment and customer satisfaction for the matching techniques performed.

We re-estimated the model with the matching techniques (Table 4). Overall, the results confirm the original, regression-based findings. Customers with a high level of participation in the service design and process exhibit higher levels of empowerment and satisfaction than those with a low level of participation.

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Table D1
(UN)CONDITIONAL EFFECTS OF CUSTOMER PARTICIPATION ON BRANCH PERFORMANCE METRICS

(X = Customer Participation, M1 = Customer Empowerment, M2 = Customer Satisfaction, Y = Profitability)

Moderating Variable	Direct Effects					Indirect Effects			Total Effect
Importance of Social Bonding	(X → M1)	(X → M2)	(M1 → Y)	(M2 → Y)	(X → Y)	Through M1	Through M2	Through (M1 + M2)	
Mean	.132** [.079; .186]	.064* [.005; .125]	.109** [.036; .182]	.095** [.036; .154]	.041 [–.014; .096]	.015** [.005; .025]	.006** [.001; .016]	.021** [.011; .031]	.062* [.017; .107]
Low (–1SD)	.166** [.100; .231]	.141** [.063; .211]	.109** [.036; .182]	.095** [.036; .154]	.041 [–.014; .096]	.018** [.008; .028]	.013** [.004; .023]	.031** [.021; .041]	.072** [.027; .117]
High (+1SD)	.098** [.037; .158]	–.012 [–.079; .057]	.109** [.036; .182]	.095** [.036; .154]	.041 [–.014; .096]	.010* [.001; .020]	–.001 [–.011; .009]	.009 [–.001; .019]	.050 [–.002; .104]

(X = Customer Participation, M1 = Customer Empowerment, M2 = Customer Satisfaction, Y = Sales Growth)

Moderating Variable	Direct Effects					Indirect Effects			Total Effect
Importance of Social Bonding	(X → M1)	(X → M2)	(M1 → Y)	(M2 → Y)	(X → Y)	Through M1	Through M2	Through (M1 + M2)	
Mean	.132** [.079; .186]	.064* [.005; .125]	.068* [.007; .129]	.122** [.073; .171]	.038 [–.017; .093]	.009 [–.001; .019]	.008** [.001; .016]	.017** [.009; .025]	.055* [.020; .090]
Low (–1SD)	.173** [.106; .24]	.139** [.061; .217]	.068* [.007; .129]	.122** [.073; .171]	.038 [–.017; .093]	.012* [.002; .022]	.017** [.009; .025]	.029** [.021; .037]	.067** [.032; .102]
High (+1SD)	.098** [.037; .158]	–.012 [–.079; .057]	.068* [.007; .129]	.122** [.073; .171]	.038 [–.017; .093]	.007 [–.003; .017]	–.001 [–.009; .006]	.006 [–.002; .014]	.043 [–.001; .096]

(X = Customer Participation, M1 = Customer Empowerment, M2 = Customer Satisfaction, Y = Customer Retention)

Moderating Variable	Direct Effects					Indirect Effects			Total Effect
Importance of Social Bonding	(X → M1)	(X → M2)	(M1 → Y)	(M2 → Y)	(X → Y)	Through M1	Through M2	Through (M1 + M2)	
Mean	.132** [.079; .186]	.064* [.005; .125]	.140** [.052; .228]	.070* [.001; .139]	.035 [–.030; .100]	.019** [.009; .028]	.004* [.001; .014]	.024** [.013; .033]	.059* [.004; .114]
Low (–1SD)	.173** [.106; .24]	.139** [.061; .217]	.140** [.052; .228]	.070* [.001; .139]	.035 [–.030; .100]	.024** [.014; .034]	.010** [.001; .020]	.034** [.024; .044]	.069** [.014; .124]
High (+1SD)	.098** [.037; .158]	–.012 [–.079; .057]	.140** [.052; .228]	.070* [.001; .139]	.035 [–.030; .100]	.014** [.004; .024]	–.001 [–.011; .009]	.013* [.003; .023]	.048 [–.007; .103]

(X = Customer Participation, M1 = Customer Empowerment, M2 = Customer Satisfaction, Y = Profitability)

Moderating Variable	Direct Effects					Indirect Effects			Total Effect
Developmental Feedback	(X → M1)	(X → M2)	(M1 → Y)	(M2 → Y)	(X → Y)	Through M1	Through M2	Through (M1 + M2)	
Mean	.132** [.079; .186]	.064* [.005; .125]	.109** [.036; .182]	.095** [.036; .154]	.041 [–.014; .096]	.015** [.005; .025]	.006** [.001; .016]	.021** [.011; .031]	.062* [.017; .107]
Low (–1SD)	.080** [.016; .143]	–.003 [–.074; .068]	.109** [.036; .182]	.095** [.036; .154]	.041 [–.014; .096]	.009 [–.001; .019]	.000 [–.001; .010]	.009 [–.001; .019]	.050 [–.005; .105]
High (+1SD)	.183** [.113; .251]	.131** [.053; .209]	.109** [.036; .182]	.095** [.036; .154]	.041 [–.014; .096]	.020** [.010; .030]	.012** [.003; .022]	.032** [.022; .042]	.073** [.028; .118]

(X = Customer Participation, M1 = Customer Empowerment, M2 = Customer Satisfaction, Y = Sales Growth)

Moderating Variable	Direct Effects					Indirect Effects			Total Effect
Developmental Feedback	(X → M1)	(X → M2)	(M1 → Y)	(M2 → Y)	(X → Y)	Through M1	Through M2	Through (M1 + M2)	
Mean	.132** [.079; .186]	.064* [.005; .125]	.068* [.007; .129]	.122** [.073; .171]	.038 [–.017; .093]	.009 [–.001; .019]	.008** [.001; .016]	.017** [.009; .025]	.055* [.020; .090]
Low (–1SD)	.080** [.016; .143]	–.003 [–.074; .068]	.068* [.007; .129]	.122** [.073; .171]	.038 [–.017; .093]	.005* [.001; .013]	.000 [–.008; .007]	.005 [–.003; .013]	.043 [–.001; .078]
High (+1SD)	.183** [.113; .251]	.131** [.053; .209]	.068* [.007; .129]	.122** [.073; .171]	.038 [–.017; .093]	.012* [.005; .020]	.016** [.008; .024]	.028** [.020; .036]	.067** [.032; .102]

(X = Customer Participation, M1 = Customer Empowerment, M2 = Customer Satisfaction, Y = Customer Retention)

Moderating Variable	Direct Effects					Indirect Effects			Total Effect
Developmental Feedback	(X → M1)	(X → M2)	(M1 → Y)	(M2 → Y)	(X → Y)	Through M1	Through M2	Through (M1 + M2)	
Mean	.132** [.079; .186]	.064* [.005; .125]	.140** [.052; .228]	.070* [.001; .139]	.035 [–.030; .100]	.019** [.009; .028]	.004* [.001; .014]	.024** [.013; .033]	.059* [.004; .114]
Low (–1SD)	.080** [.016; .143]	–.003 [–.074; .068]	.140** [.052; .228]	.070* [.001; .139]	.035 [–.030; .100]	.011** [.001; .021]	.000 [–.010; .010]	.012* [.001; .021]	.047 [–.008; .102]
High (+1SD)	.183** [.113; .251]	.131** [.053; .209]	.140** [.052; .228]	.070* [.001; .139]	.035 [–.030; .100]	.026** [.016; .035]	.009** [.001; .019]	.035** [.025; .045]	.070* [.015; .125]

(X = Customer Participation, M1 = Customer Empowerment, M2 = Customer Satisfaction, Y = Profitability)

Moderating Variable	Direct Effects					Indirect Effects			Total Effect
CP Formalization	(X → M1)	(X → M2)	(M1 → Y)	(M2 → Y)	(X → Y)	Through M1	Through M2	Through (M1 + M2)	
Mean	.132** [.079; .186]	.064* [.005; .125]	.109** [.036; .182]	.095** [.036; .154]	.041 [–.014; .096]	.015** [.005; .025]	.006** [.001; .016]	.021** [.011; .031]	.062* [.017; .107]
Low (–1SD)	.170** [.105; .234]	.140** [.068; .213]	.109** [.036; .182]	.095** [.036; .154]	.041 [–.014; .096]	.019** [.009; .028]	.013** [.004; .023]	.032** [.022; .042]	.073** [.028; .118]
High (+1SD)	.093** [.026; .159]	–.011 [–.090; .065]	.109** [.036; .182]	.095** [.036; .154]	.041 [–.014; .096]	.010 [.000; .020]	–.001 [–.011; .009]	.009 [–.001; .019]	.051 [–.006; .096]

(X = Customer Participation, M1 = Customer Empowerment, M2 = Customer Satisfaction, Y = Sales Growth)

Moderating Variable	Direct Effects					Indirect Effects			Total Effect
CP Formalization	(X → M1)	(X → M2)	(M1 → Y)	(M2 → Y)	(X → Y)	Through M1	Through M2	Through (M1 + M2)	
Mean	.132** [.079; .186]	.064* [.005; .125]	.068* [.007; .129]	.122** [.073; .171]	.038 [–.017; .093]	.009 [–.001; .019]	.008** [.001; .016]	.017** [.009; .025]	.055* [.020; .090]
Low (–1SD)	.170** [.105; .234]	.140** [.068; .213]	.068* [.007; .129]	.122** [.073; .171]	.038 [–.017; .093]	.012** [.004; .019]	.017** [.009; .025]	.029** [.021; .37]	.067** [.032; .102]
High (+1SD)	.093** [.026; .159]	–.011 [–.090; .065]	.068* [.007; .129]	.122** [.073; .171]	.038 [–.017; .093]	.006 [–.002; .014]	–.001 [–.009; .006]	.005 [–.003; .013]	.043 [–.001; .078]

(X = Customer Participation, M1 = Customer Empowerment, M2 = Customer Satisfaction, Y = Customer Retention)

Moderating Variable	Direct Effects					Indirect Effects			Total Effect
CP Formalization	(X → M1)	(X → M2)	(M1 → Y)	(M2 → Y)	(X → Y)	Through M1	Through M2	Through (M1 + M2)	
Mean	.132** [.079; .186]	.064* [.005; .125]	.140** [.052; .228]	.070* [.001; .139]	.035 [–.030; .100]	.019** [.009; .028]	.004* [.001; .014]	.024** [.013; .033]	.059* [.004; .114]
Low (–1SD)	.170** [.105; .234]	.140** [.068; .213]	.140** [.052; .228]	.070* [.001; .139]	.035 [–.030; .100]	.024** [.014; .034]	.010** [.001; .020]	.034** [.024; .044]	.069* [.014; .124]
High (+1SD)	.093** [.026; .159]	–.011 [–.090; .065]	.140** [.052; .228]	.070* [.001; .139]	.035 [–.030; .100]	.013 [–.003; .033]	–.001 [–.011; .009]	.012* [.002; .022]	.048 [–.007; .103]

(X = Customer Participation, M1 = Customer Empowerment, M2 = Customer Satisfaction, Y = Profitability)

Moderating Variable	Direct Effects					Indirect Effects			Total Effect
Customer Orientation	(X → M1)	(X → M2)	(M1 → Y)	(M2 → Y)	(X → Y)	Through M1	Through M2	Through (M1 + M2)	
Mean	.132** [.079; .186]	.064* [.005; .125]	.109** [.036; .182]	.095** [.036; .154]	.041 [–.014; .096]	.015** [.005; .025]	.006** [.001; .016]	.021** [.011; .031]	.062* [.017; .107]
Low (–1SD)	.197** [.126; .266]	.156** [.076; .235]	.109** [.036; .182]	.095** [.036; .154]	.041 [–.014; .096]	.021** [.012; .031]	.015** [.005; .025]	.036** [.026; .046]	.078** [.033; .123]
High (+1SD)	.066 [–.022; .133	–.028 [–.103; .051]	.109** [.036; .182]	.095** [.036; .154]	.041 [–.014; .096]	.007 [–.003; .017]	–.003 [–.012; .007]	.004 [–.006; .014]	.046 [–.001; .091]

(X = Customer Participation, M1 = Customer Empowerment, M2 = Customer Satisfaction, Y = Sales Growth)

Moderating Variable	Direct Effects					Indirect Effects			Total Effect
Customer Orientation	(X → M1)	(X → M2)	(M1 → Y)	(M2 → Y)	(X → Y)	Through M1	Through M2	Through (M1 + M2)	
Mean	.132** [.079; .186]	.064* [.005; .125]	.068* [.007; .129]	.122** [.073; .171]	.038 [–.017; .093]	.009 [–.001; .019]	.008** [.001; .016]	.017** [.009; .025]	.055* [.020; .090]
Low (–1SD)	.197** [.126; .266]	.156** [.076; .235]	.068* [.007; .129]	.122** [.073; .171]	.038 [–.017; .093]	.013** [.006; .021]	.019** [.011; .027]	.032** [.024; .040]	.071** [.036; .106]
High (+1SD)	.066 [–.022; .133	–.028 [–.103; .051]	.068* [.007; .129]	.122** [.073; .171]	.038 [–.017; .093]	.004 [–.003; .012]	–.003 [–.011; .004]	.001 [–.007; .009]	.039 [–.002; .074]

(X = Customer Participation, M1 = Customer Empowerment, M2 = Customer Satisfaction, Y = Customer Retention)

Moderating Variable	Direct Effects					Indirect Effects			Total Effect
Customer Orientation	(X → M1)	(X → M2)	(M1 → Y)	(M2 → Y)	(X → Y)	Through M1	Through M2	Through (M1 + M2)	
Mean	.132** [.079; .186]	.064* [.005; .125]	.140** [.052; .228]	.070* [.001; .139]	.035 [–.030; .100]	.019** [.009; .028]	.004* [.001; .014]	.024** [.013; .033]	.059* [.004; .114]
Low (–1SD)	.197** [.126; .266]	.156** [.076; .235]	.140** [.052; .228]	.070* [.001; .139]	.035 [–.030; .100]	.028** [.018; .037]	.011** [.001; .021]	.039** [.029; .049]	.074* [.019; .129]
High (+1SD)	.066 [–.022; .133	–.028 [–.103; .051]	.140** [.052; .228]	.070* [.001; .139]	.035 [–.030; .100]	.009 [–.001; .019]	–.002 [–.012; .008]	.007 [–.003; .017]	.043 [–.012; .098]

*p < .05 (two-tailed test).
**p < .01 (two-tailed test).
Notes: Bootstrapped (1,000 samples) values are reported. Lower and upper bound of confidence intervals are reported in brackets.

Table D2
STANDARDIZED MEAN DIFFERENCES BETWEEN CONTROL AND TREATMENT GROUPS BEFORE AND AFTER MATCHING

	Before Matching						After Matching
	Treatment Group		Control Group		Group Mean Difference (t-test)	Standardized Mean Difference[a]	Standardized Mean Difference[a]
	Mean	SD	Mean	SD			
Customer gender	.383	.485	.425	.494	-.042	-.087	-.137
Customer age	55.693	10.958	53.760	11.897	1.934*	.177	-.002
Customer education	1.701	.458	1.714	.453	-.012	-.027	-.149
Branch experience (ln)	5.329	.280	5.300	.284	.029	.106	-.113
Feedback frequency	2.792	1.130	2.955	1.070	-.163*	-.144	.024
CP initiation	.292	.483	.329	.566	-.037	-.076	.042
Doing business with another PB	.600	.499	.606	.532	-.006	-.013	.138
Customer-company identification	3.976	.602	3.841	.704	.135**	.224	-.092
Service performance	4.387	.477	4.334	.520	.053	.112	-.178
Psychological empowerment	4.312	.440	4.273	.453	.039	.089	-.019
Branch size	2.149	.316	2.177	.299	-.028	-.087	.086
Service quality	4.619	.603	4.664	.558	-.044	-.074	-.053
Importance of social bonding	3.890	.730	3.732	.875	.158**	.216	.063
Developmental feedback	3.718	.688	3.574	.750	.144**	.209	-.031
CP formalization	3.503	.856	3.354	.769	.149**	.174	.052
Customer orientation	4.562	.465	4.569	.451	-.007	-.014	-.057
Customer satisfaction	4.180	.577	4.050	.798	.130**	.225	.054
Customer empowerment	3.909	.612	3.781	.492	.128**	.209	.043

*p < .05, **p < .01

[a]Divides group mean difference by the standard deviation of the treatment group. Values lower than .25 indicate good balance across groups (Ho et al. 2007).

Table D3
PROBIT ESTIMATION

	Dependent variable: Treatment Dummy	
Variables	Coefficient	St. Error
Constant	1.356*	.065
Customer gender	-.156*	.094
Customer age	.002	.004
Customer education	-.225*	.107
Branch experience (ln)	-.034	.178
Feedback frequency	-.016	.042
CP initiation	.039	.091
Doing business with another PB	.031	.091
Customer-company identification	.798**	.076
Service performance	.064	.110
Psychological empowerment	-.038	.122
Branch size	-.142	.155
Service quality	-.153*	.080
Branch/Private Banker Fixed Effects	Yes	
Observations	891	
Adjusted R-square	.122	

Table D4
MATCHING MODEL RESULTS

	Nearest Neighbor (1)		Nearest neighbor (2)		Kernel Matching		Minimum Mahalanobis Distance Matching	
	CEMP	CSAT	CEMP	CSAT	CEMP	CSAT	CEMP	CSAT
Average	.199**	.132**	.235**	.186**	.212**	.182**	.246**	.191**
Treatment Effect	(.059)	(.039)	(.045)	(.043)	(.039)	(.044)	(.046)	(.046)
Matched Sample	744		829		816		780	

Notes: CEMP = customer empowerment; CSAT = customer satisfaction. Robust standard errors are in parantheses.
*p < .05
**p < .01

WEB APPENDIX E: REFERENCES CITED IN THE WEB APPENDICES

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