Unraveling the Customer Education Paradox: When, and How, Should Firms Educate Their Customers?

ABSTRACT

Customer education or the extent to which firms are seen as providing customers with the skills and abilities to utilize critical information is often considered a valuable augmentation to a firm's service offerings. Yet, many firms are hesitant to invest in customer education efforts for fear that it will equip customers with the skills to shop around and possibly switch providers. The purpose of this research is to understand the circumstances under which customer education ties customers more closely to a firm or encourages customers to leave. Specifically, our studies show that an understanding of this paradox of customer education lies in the specificity of customer expertise that is built as a result of customer education initiatives. The results demonstrate that educating customers for firm-specific expertise leads to increased loyalty, while building market-related expertise may decrease customer loyalty. A critical practical implication of our findings therefore is the need for managers to understand the varying effects of enhancing customers' firm-specific vs. market related expertise and to consider customer education initiatives proactively as part of their path to customer centricity.

Keywords

customer education, customer expertise, loyalty, switching costs, customer centricity

Quite apart from the organizational challenges such as employee training, increased variability in service encounters, not to mention cost implications, managers have long suspected – although rarely admitted openly – that keeping customers 'in the dark' was good for business (The Economist 2014). Maintaining black box or proprietary methodologies, so the logic goes, protects a firm's competitive advantage. To share too much with customers about the workings of a firm and its market is to equip customers with the expertise to shop around for competing alternatives, or even produce the service themselves (e.g., Heilman, Bowman, and Wright 2000).

This status quo is becoming less tenable in today's market environment as customers 'prefer honest brands' (NBC News 2016). Particularly in a service context, there has been an increased emphasis on managing customer equity (Hogan, Lemon, and Rust 2002; Kumar, Lemon, and Parasuraman 2006) and seeking a path to customer centricity (Shah et al. 2006). First, there is emerging evidence that the process of educating customers has a positive impact on customer trust and loyalty. Efforts expended by individuals and organizations to enhance customer education are seen as a valuable augmentation to the core service offering (Bell and Eisingerich 2007; Burton 2002; Hennig-Thurau 2000).

Second, given the increased popularity of co–creation and co–production business models in service research and practice (e.g., Dong et al. 2015; Guo et al. 2013; Mende and Van Doorn 2015; Moeller et al. 2013), concerted efforts by firms to educate customers may be necessary to ensure their successful transformation from product-centric to customer-centric organizations. Indeed, customer knowledge has been noted as a "valuable asset" (Shah et al. 2006, p. 115) that can be leveraged for enhanced cross-selling opportunities, while customer knowledge or expertise has been found to be a key determinant of involvement in service co–production processes (Auh et al. 2007).

Third, customers' appreciation of a service offering requires customers to be able to understand how a new offering makes a difference to their lives (Moreau, Lehmann, and Markman 2001). To the extent that "… the true essence of the customer centricity paradigm lies not in how to sell products but rather on creating value for the customer and, in the process, creating value for the firm…" (Shah et al. 2006, p. 115), educating customers about a firm's offerings can be a catalyst for serving customers better, tying them more closely to the firm, and ensuring greater share of wallet.

Yet, despite evidence of its effectiveness and its potential to equip service organizations to compete in a new world of co-creation possibilities, many firms remain resistant to the idea of educating customers. Legal services providers, for example, appear especially intransigent (Robertson and Corbin 2005) and, despite evidence that highlights the value of educating patients, the medical fraternity for instance has been slow to embrace the idea (Dellande, Gilly, and Graham 2004; Hausman and Mader 2004). What is the cause of this inertia?

An important reason, and one that forms the core thesis of this paper, stems from the uncertainty about the implications of helping build customer expertise in the first place. To what degree will customer education initiatives lead to customer-retention benefits versus equipping customers with the confidence and ability to switch to a competitor? This is the essence of a paradox of customer education highlighted some time ago by Levitt (1980).

While past research has alluded to the paradox of customer education, prior work has neither attempted to measure it nor offer insights toward its solution. Of the few available studies in customer education, many are either conceptual (e.g., Burton 2002) or do not provide sufficient granularity in their conceptualization of customer education (e.g., Bell and Eisingerich 2007) and customer skill development (e.g., Hennig-Thurau 2000) to tease out the source of this paradox. The evidence for a relationship between customer expertise – the

result of customer education – and loyalty is somewhat equivocal with some studies showing a negative effect (e.g., Wirtz and Mattila 2003), others showing a null effect (e.g., Bell and Eisingerich 2007), and yet another group demonstrating a positive relationship (e.g., Bell, Auh, and Smalley 2005; Punj and Staelin 1983). We believe that part of the confusion, and the means by which we might understand the paradox of customer education, lies in the nature or *specificity* of expertise or knowledge that is built as a result of customer education initiatives. Expertise or knowledge that is general (or market-related) is, due to its transferability, likely to equip customers with the skills to shop around for alternatives. Firm-specific expertise, on the other hand, is likely to bond the customer more closely to the firm as customers increase their level of comfort with the way it does business.

In this paper we present the results of a field study that explores the implications of educating customers using customer behavioral data and an experimental study, which manipulated levels of customer education. In the first study, we test whether customer education that is focused on building a particular type of expertise (i.e., market–related versus firm–specific) is a viable strategy for service firms interested in taking a proactive approach to customer education without losing customers in the process. In the second study, we manipulate types of customer education (market–related and firm–specific) and examine their effects on consumer outcome variables in two different service contexts of varying degrees of customer involvement and customer-firm interdependency (Ma and Dubé 2011) and consider perceived switching costs as a potential mediator.

Thus, we make the following critical contributions to the literature. Our focus on different types of customer education extends previous work that has studied customer expertise (e.g., Auh et al. 2007; Bell, Auh, and Smalley 2005), but has not considered how service firms can be proactive in changing or modifying this expertise and its implications for customer loyalty and the customer-centric status of the firm (Shah et al. 2006). Importantly,

by exploring the impact of education on different domains of expertise we are able to demonstrate the paradox of customer education. We therefore extend previous work, which has investigated the influence of customer education and knowledge, but neglected to explore the nuanced implications for customer loyalty (e.g., Eisingerich and Bell 2006, 2008; Hibbert et al. 2012).

CONCEPTUAL BACKGROUND AND HYPOTHESES

We define customer education as the extent to which a firm is seen as proactively providing customers with the skills and abilities to utilize information (Burton 2002). Education is a process of informing, explaining, and demonstrating concepts to customers (Bell and Eisingerich 2007). To better understand how customer education initiatives influence customer loyalty, we turn to von Hippel's (1994) theory of information stickiness which holds that knowledge varies in terms of the ease with which it can be transferred to alternative settings. Thus, we propose a model of customer education which investigates its impact on customer expertise and knowledge which, in turn, will have implications for loyalty.

Customer Knowledge and Expertise

Customer knowledge can be classified according to *type* and *specificity*. The declarative knowledge/procedural knowledge distinction is often employed in assessing the type of knowledge that is gained from education (Brucks 1986). Briefly, declarative knowledge refers to the understanding of concepts, objects, or facts (i.e., "knowing what") while procedural knowledge refers to the understanding of rules for taking action (i.e., "knowing how"). Knowledge is also often distinguished according to its level of specificity; knowledge can be broad-based or product-specific (Gregan-Paxton 2001; Punj and Staelin

1983). Broad-based knowledge refers to the understanding of product category information that is relevant to a range of goods or services. Product-specific or specialized knowledge, on the other hand, refers to the understanding of the attributes of individual products, services, or firms.

Over the course of a number of transactions, customer knowledge, or expertise, grows with accumulated exposure to a firm and the market (Brady and Cronin 2001; Eisingerich and Bell 2008). Most research to date has taken the view that as customers accumulate knowledge, they become better able to assess products and services within the market, more capable of making finer distinctions between alternatives, more savvy and discerning, and ultimately better equipped to shop around (Heilman, Bowman, and Wright 2000; Levitt 1980). In other words, expert customers are likely to be less loyal than novice customers. While the logic of these arguments is compelling, often we observe the opposite in many firms and markets. Anecdotal and empirical evidence shows us that some of the most expert customers tend to be the most loyal (e.g., Apple lead–users, customers offering advice on how Starbucks can create and deliver better service experiences on *My Starbucks Idea*, etc.) – a phenomenon observed by Söderlund (2002) for high performance brands.

We suggest that part of the reason for this is that existing research overlooks the locus of knowledge and expertise. While a great deal of what customers learn will indeed equip them to leave the firm, much of what is learned will bind a customer closer to the organization. In particular we suggest that knowledge that is broad-based, market-related, and of a general nature – what Punj and Staelin (1983) call “product class knowledge” – will reduce switching costs and provide customers with the latitude to shop around (Wirtz and Mattila 2003); firm- or service-specific knowledge (Punj and Staelin 1983), on the other hand, will tend to increase loyalty through increased switching costs. Our logic is derived

from the theory of information stickiness (von Hippel 1994), namely firm-specific knowledge is ‘stickier’ than market-related knowledge.

Stickiness of Customer Knowledge

The notion of knowledge stickiness provides some insight into why some knowledge frees a customer to shop around while other knowledge binds a customer more closely to the organization. The stickiness of knowledge is proportionate to the cost of transferring it from one locus to another such that it remains useful to the customer (von Hippel 1994). Firm-specific knowledge will be stickier than market-related knowledge for two main reasons. First, firm-specific knowledge will have a higher tacit component than market-related knowledge (Polanyi 1958). As firms interact with customers in educating them about their service offerings, a great deal of what firms convey will be revealed by their actions (e.g., demonstrating how to use internet banking or how to set up a new account). As Polanyi (1958, p. 49) notes, “… the aim of a skillful performance is achieved by the observance of a set of rules which are not known as such to the person following them”. Yet, customers will pick up on this tacit knowledge through observation and engagement with the firm and it is this tacit knowledge accumulated by customers that is fundamentally more difficult to redeploy in an alternative setting.

Second, educating customers about the firm will likely involve the communication of relatively more procedural information than declarative information. Interactions with a firm require customers to learn and perform a set of appropriate behaviors or roles to ensure seamless and efficient transactions (Dong et al. 2015; Shah et al. 2006). While knowledge of service categories, service attributes, and market dynamics (i.e., declarative knowledge) will be useful irrespective of the firm being patronized, how to purchase and use a firm’s services (i.e., procedural knowledge) is likely to be idiosyncratic to each firm. Further, there will be a

closer link between knowledge and the skills needed to use this knowledge when it is domain specific (i.e., firm-focused) (von Hippel 1994). Thus, domain specific knowledge will tend to build switching costs (Burnham, Frels, and Mahajan 2003). Market-related knowledge, on the other hand, is inherently useful on its own. It can be more easily compartmentalized and communicated independently of the knowledge required to purchase and use the services.

Customer Education, Firm–Specific Expertise, and Market–Related Expertise

Educational efforts will play a role in helping customers know which behaviors to adopt and how to perform in the service delivery process (Dellande, Gilly, and Graham 2004). Any educational effort by firms will tend to boost both market-related expertise and firm-specific expertise of customers. We define market–related expertise as a customer's understanding of service category information relevant to a range of providers within a market. Firm–specific expertise refers to the customer's understanding of the offerings and processes of a particular firm.

Firm–specific information will be nested to some extent in market-related information. For example, in order to understand a specific service of the firm (e.g., a firm's web–based retail interface), some general background to the service category (e.g., e–commerce) will need to be communicated. Equally, in providing a broad overview of a service category, illustrations of a firm's services in this category are likely to be used. Any education efforts by a firm, therefore, will tend to boost *both* market-related expertise and firm–specific expertise of customers. Firms are unlikely to be able to direct their educational efforts with the sort of precision that will only boost one type of knowledge; there is likely to be some cross-influence or 'spillover' of focused educational initiatives. Nonetheless, we suggest that it is possible for firms to direct their educational initiatives toward intended

outcomes by simply focusing more attention on the specific domain. Therefore, we propose the following;

Hypothesis 1: Firm–specific customer education will be positively associated with (a) firm–specific expertise and (b) market–related expertise with the positive association between firm–specific education and firm–specific expertise being stronger than the positive association between firm–specific education and market–related expertise.

Hypothesis 2: Market–related customer education will be positively associated with (a) firm–specific expertise and (b) market–related expertise with the positive association between market–related education and market–related expertise being stronger than the positive association between market–related education and firm–specific expertise.

Customer Expertise, Switching Costs, and Customer Purchase Behavior

Firm–specific expertise is more likely to be based on an understanding of procedural elements than market-related information. An organization's procedures and routines, while often sharing common elements with those of competitors, tend to exhibit many characteristics that are idiosyncratic (Josephson et al. 2016). Thus, customers who have high levels of firm-specific expertise will tend to be more loyal to the firm about which they are knowledgeable. Customers with product-specific skills, for example, have been shown to demonstrate greater calculative commitment to the firm (Hennig-Thurau 2002), while firm-specific expertise is also likely to underpin more efficient and productive customer relationships with the focal organization.

In contrast, as customers' market-related expertise increases, customers will have greater confidence in evaluating competing alternatives (Alba and Hutchinson 1987). Expert customers can make more fine-grained distinctions between services and their various

attributes. More accurate and comprehensive assessment of service attributes allows customers to choose services that best fit their circumstances (Brucks 1986). They can 'unbundle' services with confidence and easily switch between providers, cherry picking elements of each firm's service that best suit their needs. Potentially, they may even self-produce part of the solution (Dong et al. 2015). Finally, customers with a high level of market–based expertise will have a good understanding of levels of performance across competitors within the market. They are likely, therefore, to have increased expectations of service quality and will be more critical of the service delivered by a focal firm.

Marketers' emphasis on building relationships with customers typically considers ways in which firms might maximize the strength of a relationship relative to competitors (e.g., Park et al. 2010). Thus, we consider the impact of firm-specific expertise and market-related expertise on three measures of relationship strength including; relationship depth (the number of services held by a customer from the focal firm), purchase growth from the focal firm (the increase in number of services purchased over time), and purchase growth from competitors (the increase in number of services purchased from competitors over time). Taken together, we hypothesize that:

Hypothesis 3: Firm–specific expertise will be positively associated with (a) relationship depth and purchase growth from the focal firm and (b) negatively associated with purchase growth from competitors.

Hypothesis 4: Market–related expertise will be negatively associated with (a) relationship depth and purchase growth from the focal firm and (b) positively associated with purchase growth from competitors.

As a consequence of firm-specific customer education, customers grow expert in a set of behaviors and skills that are specific to a particular service firm and are not easily

transferred elsewhere. The knowledge they accumulate is stickier. In other words, the procedural costs of switching between firms grow (Bell, Auh, and Smalley 2005) as customers become more comfortable with a particular way of doing things. We define perceived switching costs as the "onetime costs that customers associate with the process of switching from one provider to another" (Burnham, Frels and Mahajan 2003, p. 110). Customers with high firm-specific expertise will need to invest relatively more in 'setting up' a relationship with a competitor to equivalent levels. Market–related expertise, on the other hand, does not similarly constrain customers. Those with high market-related expertise, because their knowledge is more broad-based and transferable, will perceive lower evaluation costs (i.e., costs associated with assessing competitive alternatives) and economic risk costs (i.e., costs of uncertainty about a new provider) as these customers are more familiar with the market as a whole (Burnham, Frels, and Mahajan 2003). Therefore, we hypothesize that:

> **Hypothesis 5:** Firm-specific (market-related) customer education is positively (negatively) related to perceived switching costs, which in turn result in stronger (weaker) customer loyalty.

Taken together, we hypothesize that building customer expertise can result in both customer defection *and* customer retention. Furthermore, by hypothesizing the loyalty impact of different domains of education and expertise, we are able to show that some customer knowledge domains are 'stickier' than others. Importantly, we demonstrate this mechanism at work by arguing that switching costs mediate, to different degrees, the impact of firm-specific and market-related customer education on loyalty (see Figure 1).

"Insert Figure 1 about here"

STUDY 1

In Study 1 we test Hypotheses 1–4 using data collected from a global commercial bank. The collaborating firm provided us with contact details for 2,700 randomly selected customers. We matched self-reported data from customers collected at time T_1 (independent and mediating variables) with customer behavior data collected at time T_2 (dependent variables).

Method

We first conducted a pretest to generate scale items for market-related and firm-specific customer education and expertise. As noted earlier, most prior research has taken a general approach to measuring education and expertise (e.g. Bell and Eisingerich 2007) so we generated a pool of 16 items – eight items each for the firm-specific and market-related customer education scales – with "different nuances of meaning" (Churchill 1979). Included in the pool were items from existing measures (Bell and Eisingerich 2007) and items contributed by customers in 10 face-to-face interviews. In a further set of interviews (N = 88), we tested our pool of 16 items asking customers to point out any ambiguity in responding to individual items. Items that loaded strongly on their intended factors and had minimal cross-loadings were retained while others were discarded. This resulted in two education scales with four items each.

In our interviews we also refined our market-related expertise scale which was adapted from Bell and Eisingerich (2007) whose 'expertise' scale drew predominantly from the market-related domain of knowledge. The three final items captured the words 'understanding', 'knowledge', and 'expertise' – themes that emerged from our interviews – which we incorporated in the measure of firm-specific expertise when adapting the items for this domain. We then pre-tested our all scales with 200 randomly selected customers of the collaborating firm. The customers were from one branch deemed representative of the firm's

entire network (i.e., respondents did not differ significantly from the population of customers in terms of relationship length with the focal firm, age, or gender). Due to minor changes in item wording, we did not include pretest response data in our subsequent main analysis. The final scale items are listed in Table 1.

"Insert Table 1about here"

Our main survey efforts involved two rounds of data collection. In the first round, we asked respondents to indicate levels of firm–specific and market–related customer education as well as their perceived firm–specific and market–related expertise. The total number of usable responses was 789 (thirty-nine questionnaires were eliminated because of excessive missing values). After six months, we followed up with a second questionnaire asking customers to indicate their behavioral loyalty. The second round resulted in 763 usable responses. The response rate is a consequence of the firm communicating frequently with customers via a monthly, tailored newsletter (e.g., containing specific information about customers' mortgages, pension savings, etc.). Questionnaire data from the second round were matched with survey data obtained in the first round for a total of 763 usable responses. Females represented 47% of the sample. We assessed whether relationship length, gender, and purchases with the firm differed between respondents and non-respondents; we found no significant difference across any of these variables. We also compared early and late responses (first 100 versus last 100) across study variables and found no significant differences between the two groups. Correlations and descriptive statistics for our measures can be seen in Table 2. We collected data on relationship depth by asking customers to indicate the services they held with the firm ("Please indicate and check the services that you currently hold with [firm name]; e.g., deposit/savings account, credit card, personal loan, home loan, insurance services, etc."). For 20% of customers, response data were cross–

checked by the bank and verified that customer responses were in fact in line with their actual number of services held with the firm. The cross–check showed that over 98% of customer responses were correct. For the remaining 2%, customers indicated one or two fewer services than they actually held with the firm.

"Insert Table 2 about here"

We also measured growth in purchases from the focal firm[1] as the change in the number of purchases from the firm over the six months between data collections. We asked respondents if the number of services they bought from the firm had decreased (=1), stayed the same (=2), or increased (=3). Again, 20% of customer responses were matched with objective purchase data from the firm and cross-checked for accuracy. Results indicated that customer responses were factually correct (r > 90%). We measured purchase growth from competitors by asking customers to indicate on a scale how their purchases from competing firms had changed in the past six months (i.e., "Over the past six months the number of services I have bought from other banks has… decreased (= 1), stayed the same (= 2), increased (= 3), or not applicable (I only bank with [*firm name*]) (= 4)"). While we were unable to validate purchasing behavior from other banks, we suggest that the accuracy with which customers reported purchasing behavior for the focal bank will be indicative of the accuracy of their reports for competitor purchases. We also controlled for relationship length (in years) and gender (1 = male, 2 = female).

Results

[1] We conclude that purchase growth from focal firm and purchase growth from competitor follow a normal distribution based on the skewness test statistic falling between ± 1.96, 95% Confidence Interval of skewness including 0, and the linear shape of the Q-Q plot.

We used structural equation modeling with AMOS to test our hypotheses. Although our study used behavioral measures as dependent variables, they were still based on self-reported measures. Therefore, we sought to control for potential common methods bias (CMB) by including a common method factor (Podsakoff et al. 2003). In Table 3, we report the findings from two models, Model 1 and Model 2. Model 1 does not include a common method factor, while Model 2 does. Both models (Model 1: $\chi2_{(129)} = 587.36$, $p < .001$, CFI = .96, TLI = .95, RMSEA = .07; Model 2: $\chi2_{(113)} = 342.91$, $p < .001$, CFI = .98, TLI = .97, RMSEA = .05) provide good fit to the data. The chi-square difference between Model 1 and Model 2 was significant ($\Delta\chi2_{(16)} = 244.45$, $p < .001$). However, when both models are compared, none of the structural paths became non-significant after including the common method factor. In fact, the paths are robust and intact. Thus, we conclude that CMB is not a threat to the study and turn our attention to hypotheses testing. We report the results of our hypotheses testing from Model 2 (model with common method factor included).

"Insert Table 3 about here"

Firm–specific customer education was positively associated with both firm–specific expertise ($\gamma = .30$, $p < .001$) and market–related expertise ($\gamma = .07$, $p < .05$). However, consistent with H_1, firm–specific customer education had a significantly stronger positive effect on firm–specific expertise than on market–related expertise ($\Delta\chi2_{(1)} = 23.32$, $p < .001$). Regarding H_2, our results showed that market-related customer education was positively associated with both market-related expertise ($\gamma = .68$, $p < .001$) and firm–specific expertise ($\gamma = .32$, $p < .001$); yet the impact of the former was significantly greater than the influence of the latter ($\Delta\chi2_{(1)} = 45.31$, $p < .001$), lending support to H_2.

As predicted, firm–specific expertise was positively associated with relationship depth (i.e., number of services currently held with the firm) ($\gamma = .25$, $p < .001$) and purchase

growth from the focal firm (i.e., the change in number of services purchased over the period following the survey) ($\gamma = .33$, $p < .001$). It is also noteworthy that firm–specific expertise was negatively associated with purchase growth from competitors (i.e., the change in number of services purchased from competitors over the period following the survey) ($\gamma = -.40$, $p < .001$). Therefore, H_3 was supported. In line with H_4, market–related expertise was negatively associated with purchase growth from the focal firm ($\gamma = -.49$, $p < .001$) as well as relationship depth ($\gamma = -.35$, $p < .001$). Market-related expertise was positively associated with purchase growth from competitors ($\gamma = .34$, $p < .001$) as predicted. Gender and relationship length had no significant effect on any of the behavioral loyalty measures (p = ns).

The model explained 24% of the variance in purchase growth from the focal firm, 19% of the variance in purchase growth from competitors, and 12% of the variance in relationship depth. The model was able to explain 25% of the variance in firm–specific expertise and 50% of the variance in market–related expertise. Further, to determine whether firm-specific and market-related customer education had a direct impact on the three behavioral loyalty measures, we included direct paths from firm-specific and market-related customer education to the three behavioral loyalty variables. Since the model without the direct paths (our conceptual model) is a constrained version of the model with the direct paths included, they are nested and a chi-square difference test can be used to test for the direct paths' significance. The chi-square difference ($\Delta\chi2_{(6)} = 11.93$, $p > .05$) between the unconstrained model ($\chi2_{(107)} = 330.98$, $p < .001$) and the constrained model ($\chi2_{(113)} = 342.91$, $p < .001$) was nonsignificant, supporting the constrained model (conceptual model) over the unconstrained model.

Since we did not find support for a direct path from firm-specific and market-related customer education to behavioral loyalty, we tested for the significance of the indirect effects

via firm-specific and market-related expertise. The indirect effect of firm-specific customer education via firm-specific expertise on (a) purchase growth from the focal firm (Sobel z = 4.32, $p < .001$; 95% confidence interval (CI) [.04, .09], (b) purchase growth from competitors (Sobel z = -6.73, $p < .001$; 95% confidence interval (CI) [-.14, -.08], and (c) relationship depth (Sobel z = 3.91, $p < .001$; 95% confidence interval (CI) [.07, .21] were all statistically significant. Similarly, the indirect effect of market-related education via market-related expertise on (a) purchase growth from the focal firm (Sobel z = -8.99, $p < .001$; 95% confidence interval (CI) [-.19, -.12], (b) purchase growth from competitors (Sobel z = 5.41, $p < .001$; 95% confidence interval (CI) [.06, .14], and (c) relationship depth (Sobel z = -7.15, $p < .001$; 95% confidence interval (CI) [-.39, -.21] were also all statistically significant[2].

"Insert Table 4 about here"

Finally, we calculated the total effects for each indirect path (total of 12) in our conceptual model. The results are shown in Table 4. We computed the total effects that firm-specific customer education and market-related customer educations have on each of the three behavioral loyalty measures. The total effect of firm-specific customer education on purchase growth from the focal firm is .07 (a + d) while the same effect of market-related customer education is -.22 (g + j). We performed similar calculations for purchase growth from competitors and relationship depth. The total effect of firm-specific customer education on purchase growth from competitors is -.10 (b + e) while the same effect of market-related customer education is .10 (h + k). For relationship depth, the total effect of firm-specific customer education on number of services possessed is .05 (c + f) while the same effect of market-related customer education is -.16 (i + l). According to results from Table 4, the sum

[2] Due to space considerations, we do not report the significance of the indirect effects of firm-specific (market-related education) education on behavioral loyalty via market-related expertise (firm-specific expertise). However, based on the Sobel's (1982) z test and the 95% confidence interval, all six indirect effects support the mediating role of firm-specific and market-related expertise.

of total effects[3] on customer loyalty that originate from firm-specific education (a-f) is .22, while the aggregate of total effects from market-related education (g-l) is -.48.

Discussion

Our findings from Study 1 demonstrate that firm-specific and market-related expertise have opposing effects on customer loyalty to the firm. This provides further validation of the paradox of customer education to which Levitt (1980) alluded. Our results from Study 1 further indicate that customer education – irrespective of how it is directed – significantly increases *both* the firm-specific and market-related expertise of customers although, as hypothesized, the effect is not symmetrical. Interestingly, our analysis of total effects shows that market-related education has, all things being equal, a stronger overall negative impact on loyalty than firm-specific education has positive (-.48 versus .22). This finding lends some credence to managers' concerns that educating customers may equip them to ultimately leave the firm. Nonetheless, there would appear to be scope for firms to craft educational campaigns to focus more specifically on firm-specific skills and knowledge. Firm-specific education (despite also increasing a customer's market-related expertise) significantly increased customer loyalty to the firm (in terms of increasing relationship depth, increasing number of services purchased from the firm, and decreasing the number of services purchased from competitors).

Study 1 measured firm–specific education versus market–related education as perceived by customers. We wanted to investigate whether results would be replicated with *actual* customer education using an experimental manipulation. Further, drawing on our arguments about knowledge 'stickiness', we were intrigued as to whether switching costs played a role in explaining the varying effects of firm–specific education and market–related

[3] Before aggregating total effects, we changed the sign for the total effects on *purchase growth from competitors* to align it with the other two measures of loyalty [i.e., a negative (positive) sign is a positive (negative)] indication of loyalty).

education on customer loyalty across service contexts that differed in terms of customer involvement and the degree of interdependency between customer and firm in the value creation process (Ma and Dubé 2011). We therefore conducted a second study to address these issues.

STUDY 2

Study 2 was designed to enable us to educate customers (through a manipulation) and also investigate a potential process mechanism – perceived switching costs – as an explanation for the effects of customer education on customer loyalty. The two service contexts (medical services and hospitality) in Study 2 allowed us to investigate whether the level of customer involvement and customer-firm interdependency influenced the results. The complexity and heterogeneity of service processes differ between café and cancer clinic contexts. The former tends to require relatively little customer participation beyond ordering and payment (i.e., low interdependency) and, for the most part, provide a low-involvement service. The latter, on the other hand, is likely to require significant participation in design, implementation, and monitoring of treatment regimens.

"Insert Table 5 about here"

Method

Study 2 used a 2 (high vs. low market–related customer education) × 2 (high vs. low firm–specific customer education) × 2 (service setting: cancer clinic vs. café) between–subjects experimental design. The cancer clinic and café service settings were chosen based on a pretest (N = 48), which showed that the two were of equal familiarity to respondents but differed in interest to them. Two hundred and twenty-five students took part in Study 2 as part of a regular course. Respondents were randomly assigned to one of the 8 conditions.

Measures (with anchors (1) = not at all, (7) = completely) and their reliabilities are shown in Table 5.

First, respondents were asked to indicate their familiarity with the coffee industry/cancer care market ((1) = not at all familiar, (7) = very familiar), attitude towards the service setting ("To what extent do you view the coffee industry/cancer care market as (1) = bad/negative, (7) = good/positive; r = .93; (1) = boring/irrelevant to me, (7) = interesting/relevant to me; r = .97), and prior market expertise ("I possess good knowledge of the coffee industry/cancer clinic market", "I am quite experienced in the coffee/cancer clinic area" (1) = strongly disagree, (7) = strongly agree; r = .96).

They were then asked to read a short text containing paragraphs that varied in terms of how educational they were about the industry and the focal firm. Thus, we aimed to manipulate respondents' *objective* level of knowledge. The Web Appendix shows sample excerpts for the high market/high firm and low market/low firm customer education in the café and cancer clinic conditions. Next, respondents were asked to respond to a set of questions that included perceived firm-specific expertise, perceived market-related expertise, attitudinal loyalty, and perceived switching costs (see Table 5 for items and scale reliabilities). Attitudinal loyalty was measured using a three-item scale from Zeithaml, Berry, and Parasuraman (1996). Perceived switching costs was measured using a four-item scale adapted from Burnham, Frels and Mahajan (2003). Finally, respondents rated the believability of the excerpt ("How believable is the description?", "How trustworthy is the description?" (1) = not at all believable/not at all trustworthy, (7) = very believable/very trustworthy; r = .60), their attitude toward ("To what extent do you view the café/cancer clinic as" (1) = bad/negative, (7) = good/positive; r = .76), and interest in, the service firm ((1) = boring/irrelevant to me, (7) = interesting/relevant to me; r = .89).

Results

Manipulation checks. A set of 2 (high vs. low market–related customer education) × 2 (high vs. low firm–specific customer education) × 2 (service setting: cancer clinic vs. café) ANOVAs on the manipulation checks revealed that the manipulations were successful (see Table 6 for details). The manipulation check for firm-specific customer education revealed the expected main effect of firm-specific education (M_{high} = 4.97 vs. M_{low} = 2.09; $F(1, 225)$ = 421.21, $p < .001$; Cancer clinic, M_{high} = 4.89 vs. M_{low} = 2.12, $p < .001$; Café, M_{high} = 5.05 vs. M_{low} = 2.04, $p < .001$). The manipulation check for market-related customer education also revealed the expected main effect of market-related education (M_{high} = 5.31 vs. M_{low} = 2.20; $F(1, 225)$ = 454.33, $p < .001$; Cancer clinic, M_{high} = 5.29 vs. M_{low} = 2.22, $p < .001$; Café, M_{high} = 5.32 vs. M_{low} = 2.18, $p < .001$). In addition, the results showed that the café service setting was higher in customer relevance than the cancer clinic setting ($M_{café}$ = 5.37 vs. M_{clinic} = 3.51; F(1, 225) = 64.84, $p < .001$). No other effects were observed.

"Insert Table 6 about here"

Confound checks. As illustrated in Table 6**,** a set of 2 × 2 × 2 ANOVAs on variables that might produce potential confounds showed that there were no differences across the conditions in service setting familiarity, attitude, and excerpt believability. In our analyses we also controlled for attitude toward and interest in the service firm.

Effects of firm-specific and market-related customer education on expertise. Consistent with our theorizing and replicating our earlier study, a 2 × 2 × 2 ANOVA on customers' firm-specific expertise and market-related expertise revealed main effects of firm-specific customer education (Firm-specific expertise: M_{high} = 5.84 vs. M_{low} = 2.44; $F(1, 225)$ = 723.59, $p < .001$) and market-related customer education (Market-related expertise: M_{high} = 4.74 vs. M_{low} = 3.53; $F(1, 225)$ = 91.22, $p < .001$), respectively. Further, using regression

analysis, we found that firm-specific education had a stronger impact on firm-specific expertise than on market-related expertise ($\beta_{\text{firm-specific}} = .68$ vs. $\beta_{\text{market-related}} = .29$, $p < .001$). Conversely, market-related education had a stronger impact on market-related expertise than on firm-specific expertise ($\beta_{\text{firm-specific}} = .22$ vs. $\beta_{\text{market-related}} = .71$, $p < .001$).[4] The main effect of service setting was not significant ($M_{\text{café}} = 4.15$ vs. $M_{\text{clinic}} = 4.12$; $F(1, 225) = .08$, p = ns). The two-way interaction between firm-specific and market-related customer education was not significant at the standard .05 level ($F(1, 225) = 3.50$, $p = .06$). No other effects were observed.

Effects of firm-specific and market-related customer education on attitudinal loyalty. Consistent with our theorizing, a 2 × 2 × 2 ANOVA on attitudinal loyalty showed that customers' attitudinal loyalty was stronger when firm-specific education levels of the service firm were high vs. low ($M_{\text{high}} = 5.60$ vs. $M_{\text{low}} = 2.09$; $F(1, 225) = 807.42$, $p < .001$; Cancer clinic, $M_{\text{high}} = 5.66$ vs. $M_{\text{low}} = 2.10$, $p < .001$; Café, $M_{\text{high}} = 5.55$ vs. $M_{\text{low}} = 2.08$, $p < .001$). In contrast, and in line with our theorizing, attitudinal loyalty was weaker for high vs. low levels of market-related education ($M_{\text{high}} = 3.16$ vs. $M_{\text{low}} = 4.53$; $F(1, 225) = 121.85$, $p < .001$; Cancer clinic, $M_{\text{high}} = 3.24$ vs. $M_{\text{low}} = 4.52$, $p < .001$; Café, $M_{\text{high}} = 3.09$ vs. $M_{\text{low}} = 4.53$, $p < .001$).

"Insert Table 7 about here"

Evidence for proposed mechanism. A set of 2 × 2 × 2 ANOVAs on customers' perceived switching costs revealed a main effect of firm-specific education; respondents had stronger perceived switching costs for the firm that offered high vs. low levels of firm-specific education ($M_{\text{high}} = 4.93$ vs. $M_{\text{low}} = 2.42$; $F(1, 225) = 264.96$, $p < .001$). In contrast, no such effect was observed for market-related education ($M_{\text{high}} = 3.53$ vs. $M_{\text{low}} = 3.81$; F(1,

[4] There was no difference between the two service categories (cancer clinic vs. café), p = ns.

225) = 3.23, p = ns). We also observed a significant main effect of service setting for perceived switching costs ($M_{café}$ = 3.51 vs. M_{clinic} = 3.83; $F(1, 225) = 4.19$, $p < .05$) and a two-way interaction between firm-specific and market-related customer education ($F(1, 225) = 22.56$, $p < .001$). Using Hayes' (2012) bootstrapping technique, we revealed that perceived switching costs mediated the influence of firm-specific customer education on attitudinal loyalty such that higher levels of firm-specific customer education led to stronger perceived switching costs, which in turn resulted in greater attitudinal loyalty (for detailed results see Table 7A). In contrast, however, and contrary to our formal prediction, market-related customer education did not significantly affect perceived switching costs (see Table 7B) and, thus, we did not observe a mediating role of switching costs in the relationship between market-related customer education and attitudinal loyalty. Thus, support for H5 was mixed.

Discussion

Study 2 manipulated firm-specific and market-related customer education in two different service contexts with varying requirements for customer-firm interdependency in value creation. Consistent with Study 1, the results of Study 2 showed that firm-specific (market-related) education had a stronger influence on firm-specific (market-related) expertise than on market-related (firm-specific) expertise. Moreover, Study 2 showed that customers' attitudinal loyalty was stronger (weaker) when firm-specific (market-related) education levels of the service firm were high. In addition, Study 2 offered evidence for the role of switching costs in helping explain the positive effect of firm-specific customer education on attitudinal loyalty. Contrary to our expectation, however, switching costs did not mediate the effect of market-related expertise on attitudinal loyalty.

GENERAL DISCUSSION

While many firms claim to share information openly with their customers, few firms share critical information with customers (Forbes 2016), and fewer firms still equip customers with the tools needed to make full use of critical information (Hausman and Mader 2004). The hesitation of many firms to *not* proactively engage in customer education initiatives is backed by a body of literature that suggests firms may better protect their competitive advantage by leaving customers in the dark (Heilman, Bowman, and Wright 2000). There is considerable merit in these studies; we find empirical support in Study 1 for the potentially negative overall effect of customer education. Yet, we also find evidence across our two studies that loyalty can be enhanced when education is directed toward building firm-specific expertise, and the total effects of customer education in our experimental setting are positive. This critical finding offers important implications for marketing practice and theory.

Managerial Implications

While we have been able to demonstrate that customer education can have both positive and negative effects on customer loyalty, the total effects appear to vary by industry. In the retail banking context, the net effect was negative while the net effect in both the café and cancer clinic contexts was positive, albeit within an experimental context. The positive total effects of education in cancer clinics may be a function of relatively high levels of customer-firm interdependency, however this does not explain the positive total effects in the café setting (a low interdependence context, similar to banks). That said, banks differ from cafes in other important ways. First, banking services (e.g., insurance products, loans) tend to be seen as 'grudge' purchases – "a mundane, non-conspicuous mode of consumption that typically exists outside of the paraphernalia of consumer culture" (Loader, Goold, and Thumala 2015, p. 858). Banks provide services that customers need but may not necessarily want (Berry and Bendapudi 2007). Customers in developed economies have almost no option

but to purchase banking services, and these services are seen as a means to an end (e.g., credit cards facilitate purchases of *other* things) rather than aspirational purchases in their own right. Second, in many developed countries, retail banks are seen as oligopolistic and exploitative in the pursuit of large profits, often breeding resentment and a cynicism amongst customers. Finally, the café setting is likely to involve a far more somatic, intimate service relationship than the retail-banking context. While there will undoubtedly be exceptions, customers will tend to have warmer, more intimate feelings for their favorite café and cup of coffee than a new savings account or mortgage offers from a bank. Encounters between customers and their café, therefore, will be characterized by greater intimacy and communion than encounters between customers and a bank. Taken together, these differences are likely to increase customers' likelihood of shopping around with an increase in market-related knowledge in a banking context. Managers might take into account the intimacy of their service offering where, perhaps, the act of educating customers may be perceived as a service augmentation, and then invest appropriately in the training of employees to be able to deliver such initiatives.

Critically, our results showed that customer education (directed toward firm-specific elements of the service) has a strong, positive effect on customer loyalty, and that distinction between firm-specific and market-related customer education is indeed possible. Customers find such a distinction natural so there appears to be an opportunity for managers to build customer education campaigns paying careful attention to the mix of market–related and firm–specific elements. Our findings demonstrate that any educational efforts improve both firm-specific and market-related expertise. Managers might, however, craft educational initiatives such that they are anchored in the idiosyncrasies of the firm or, at the very least, make it clear to customers how 'things work' in their own firms.

Apple's 'Genius Bars' – a service focused on increasing the technology skills and knowledge of customers – is a good example of how educational initiatives can be built around a firm's core offerings and thus build firm-specific expertise. Quite the opposite of protecting black box methodologies and keeping customers at arm's length, firms should let customers 'into the kitchen' and educate them thoroughly about the firm's services. We should note that we are by no means advocating keeping customers 'in the dark' about market related opportunities, especially where they are essential for customer need fulfillment (e.g., alternative treatment regimens, or non-treatment possibilities for sick patients). As Study 2 showed, educating customers about the market does not necessarily reduce their switching costs overall. Further, in conditions of high customer-firm interdependence or where the service is experiential, customer education may have customer-retention effects overall as service providers might be perceived by customers as more honest and caring.

Because of Internet access and social media, customers' ability to 'self educate' has increased substantially. Even if firms choose not to invest in market-related customer education or try to avoid it, customers are likely to become increasingly informed about how competitors and markets operate over time. This may have implications for the way in which service providers engage with customers; static, one–size–fits–all approach customer education is inadvisable. At the very least, it suggests that firms should be aware of the changing levels of expertise of customers within their market and how they can play a part in shaping its development (Bell and Eisingerich 2007; Bell, Auh and Smalley 2005). Further, our relatively parsimonious model might benefit from the inclusion of additional, well-established drivers of loyalty (e.g., customer satisfaction, trust, etc.) in order to show the additional variance in loyalty explained by our customer expertise variables. The inclusion of contingency and contextual variables might shed additional light on the boundaries of our model.

Service employees are likely to play a key role in identifying customers' receptivity to educational efforts. This has implications for managers needing to align service employees' values and behavior with the firm's overall educational mission (Ostrom et al. 2010; Sirianni et al. 2013) to ensure employees' customer-orientation (Yoo and Arnold 2016) and emotional competence (Delcourt et al. 2016) for delivering on the customer education promise.

Theoretical Implications and Future Research Directions

Customer knowledge is seen as a valuable asset to firms in their pursuit of customer-centricity (Shah et al. 2006). The current research provides scholars with a typology of customer knowledge that can account for the nuance in the relationship between expertise and loyalty. While this typology could undoubtedly be extended (e.g., to customer life-cycle stages, purchase decision phases), we suggest that considering market-related and firm-specific education as a foundation provides researchers with the basis for understanding where education is likely to lead to stronger relationship outcomes and where it will lead to weaker outcomes. Future studies might consider the interactive effects of market-related and firm-specific education on customer expertise. To the extent that each mutually reinforced the other's main effect on customer expertise, one might observe increased (or decreased) gaps between customer-retention and customer-defection effects of education.

In previous research, a number of causes of information stickiness have been advanced including; the nature of the knowledge itself, such as its codifiability, heterogeneity, and completeness (Turner and Makhija 2006); the volume of knowledge transferred; and the attributes of the senders and receivers of this knowledge (von Hippel 1994). Our finding, that perceived switching costs mediate (to different degrees) the impact of firm-specific and market-related customer education on loyalty, demonstrates the difficulty of redeploying certain types of knowledge elsewhere. It is likely, therefore, that knowledge

codifiability – the ease with which knowledge can be articulated, partitioned and catalogued for use in other settings (Turner and Makhija 2006) – is a key determinant of knowledge stickiness. In addition to this more general contribution to the literature on knowledge, we demonstrate this mechanism at work across varied service settings, thus answering the call for studies into the "transferability" of customer education across industries and contexts (Hennig-Thurau 2000, p. 74).

Notably, we found that it is possible to educate customers both in low interdependency settings (i.e., cafés) as well as higher interdependency (cancer clinic) settings. However, one wonders about the exact returns to customer education (Hennig-Thurau 2000), particularly in high interdependency settings where education efforts may be costly and demand increased efforts in employee training. Important questions thus remain about potential cost-benefit tradeoffs. When does it not pay-off to educate one's customers? Furthermore, we are conscious of the fact that both studies 1 and 2 employed subjective measures of customer expertise, which might raise a question about our ability to generalize our findings. Wirtz and Mattila (2003), however, who studied market-related expertise, compared the impacts of objective versus subjective expertise on customer loyalty, showing that objective knowledge led to a significant decrease in loyalty while subjective knowledge did not. Potentially, therefore, our subjective measures of loyalty may be a conservative estimate of the true impact of expertise. Future research should, nonetheless, consider the impact of both subjective and objective expertise across the market-related and firm-specific knowledge domains to get a more nuanced sense of the loyalty impact of educating customers.

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Table 1. Study 1: Constructs and Measurement.

Constructs	Measurement	Factor Loadings
Firm–specific customer education	[Company name] makes an effort to increase my knowledge of the products and services offered by [company name].	.97[a]
	[Company name] tries to improve my skills needed to assess the pros and cons of the different services they offer.	.90
	[Company name] takes the time to provide me with all information I need on [company name's] way of doing things.	.71
	[Company name] gives me all the tools necessary to make informed decisions about the mix of services I buy from them.	.82
Market–related customer education	[Company name] makes an effort to increase my knowledge of the financial services available in the market.	.96
	[Company name] tries to improve my skills needed to assess the pros and cons of different financial services in the market as a whole.	.94
	[Company name] takes the time to provide me with all information I need on the financial services industry.	.93
	[Company name] gives me all the tools necessary to make informed decisions about opportunities in the financial services market.	.90
Firm–specific customer expertise	My understanding of [company name's] services and products is much stronger than of other banks.	.96
	I have a much greater knowledge of how [company name] operates than I do of other banks.	.84
	I am expert at getting the most out of my relationship with [company name].	.89
Market–related customer expertise	I can understand almost all the aspects of banking services across the market.	.85
	I possess a good knowledge of financial services and products.	.93
	I have a high level of expertise in the financial services industry.	.79

Note. [a]All factor loadings are significant at $p < .001$ level.

Table 2. Study 1: Descriptive Statistics and Correlations.

Variable	AVE	CR	1	2	3	4	5	6	7	8
1. Relationship depth			1.00							
2. Purchase growth from focal firm			.27**	1.00						
3. Purchase growth from competitors			-.18**	-.70**	1.00					
4. Firm-specific customer education	.73	.91	.03	.02	-.06*	1.00				
5. Market-related customer education	.87	.96	-.08**	-.17**	.07*	.36**	1.00			
6. Firm-specific customer expertise	.81	.93	.13**	.16**	-.28**	.41**	.37**	1.00		
7. Market-related customer expertise	.74	.90	-.25**	-.36**	.29**	.31**	.66**	.33**	1.00	
8. Relationship length			.00	-.06*	.07*	.05	.13**	.01	.08*	1.00
Mean			3.70	1.93	1.82	5.61	4.03	5.92	4.54	13.52
Standard Deviation			2.14	.88	.94	1.10	1.65	1.31	1.74	12.38

Note. *$p < .05$, **$p < .01$; AVE = average variance extracted; CR = composite reliability.

Table 3. Study 1: Hypotheses Testing.

	Model 1: Without common method factor		Model 2: With common method factor	
Hypothesized Paths	γ	t-value	γ	t-value
Firm–specific education → firm–specific expertise	.32	8.67***	.30	8.29***
Market–related education → firm–specific expertise	.28	7.76***	.32	8.42***
Market–related education → market–related expertise	.66	18.03***	.68	17.99***
Firm–specific education → market–related expertise	.07	2.34*	.07	2.10*
Firm–specific expertise → relationship depth	.24	6.36***	.25	6.44***
Firm–specific expertise → purchase growth from focal firm	.33	9.30***	.33	9.28***
Firm–specific expertise → purchase growth from competitors	-.41	-11.02***	-.40	-10.88***
Market–related expertise → relationship depth	-.34	-8.65***	-.35	-8.66***
Market–related expertise → purchase growth from focal firm	-.49	-12.59***	-.49	-12.46***
Market–related expertise → purchase growth from competitors	.34	8.91***	.34	8.73***
Controls				
Gender → firm–specific expertise	-.04	-1.06	-.03	-.91
Gender → market–related expertise	.04	1.28	.04	1.46
Gender → purchase growth from focal firm	-.04	-1.17	-.04	-1.21
Gender → purchase growth from competitors	.02	.71	.03	.77
Gender → relationship depth	-.04	-1.18	-.04	-1.21
Relationship length → firm–specific expertise	-.04	-1.05	-.04	-1.07
Relationship length → market–related expertise	-.02	-.65	-.02	-.56
Relationship length → purchase growth from focal firm	-.03	-.98	-.03	-1.00
Relationship length → purchase growth from competitors	.05	1.55	.05	1.58
Relationship length → relationship depth	.02	.55	.02	.54
Squared multiple correlation (R^2)				
Firm–specific expertise	.23		.25	
Market–related expertise	.48		.50	
Purchase growth from focal firm	.24		.24	
Purchase growth from competitors	.19		.19	
Relationship depth	.12		.12	
Model fit				
(df) χ2	(129) 587.36		(113) 342.91	
CFI/TLI/RMSEA	.96/.95/.07		.98/.97/.05	

Note. Standardized path coefficients reported; ***p < .001, **p < .01, *p < .05.

Table 4. Study 1: Total Effects.

Independent variable	*Mediator*	*Dependent variable*	*Total effect*
Firm–specific customer education	Firm–specific expertise	Purchase growth from focal firm[a]	.10 (a)
Firm–specific customer education	Firm–specific expertise	Purchase growth from competitors[b]	-.12 (b)
Firm–specific customer education	Firm–specific expertise	Relationship depth[c]	.08 (c)
Firm–specific customer education	Market–related expertise	Purchase growth from focal firm	-.03 (d)
Firm–specific customer education	Market–related expertise	Purchase growth from competitors	.02 (e)
Firm–specific customer education	Market–related expertise	Relationship depth	-.03 (f)
Market–related customer education	Firm–specific expertise	Purchase growth from focal firm	.11 (g)
Market–related customer education	Firm–specific expertise	Purchase growth from competitors	-.13 (h)
Market–related customer education	Firm–specific expertise	Relationship depth	.08 (i)
Market–related customer education	Market–related expertise	Purchase growth from focal firm	-.33 (j)
Market–related customer education	Market–related expertise	Purchase growth from competitors	.23 (k)
Market–related customer education	Market–related expertise	Relationship depth	-.24 (l)

Note. [a] Change in number of services purchased from focal firm; [b] Change in number of services purchased from competitors; [c] Number of services used.

Table 5. Study 2: Measure Reliabilities

Measures	*Items*	*Cronbach α*
Firm-specific expertise	My understanding of [Company name's] services and products is much stronger than of other [coffee/cancer care] providers.	.97
	I have much greater knowledge of how [Company name] operates than I do of other [coffee/cancer care] providers.	
	I feel I would be an expert at getting the most out of a relationship with [Company name].	
Market-related expertise	I can understand almost all aspects of [coffee and coffee products/cancer care services] across the market.	.99
	I possess a good knowledge of [coffees and coffee products/cancer care services].	
	I have a high level of expertise in the [coffee industry/cancer care market].	
Attitudinal loyalty	I would be highly interested in trying the products and services offered by [Company name].	.98
	I would like to purchase the products and services offered by [Company name].	
	I would make an effort on behalf of [Company name] to help it succeed.	
Switching costs	[Company name] offers service benefits I would not receive from another [coffee company/cancer clinic].	.98
	I would find it hard to switch and use another [coffee company/cancer clinic] instead of [Company name].	
	I would find it difficult to use another [coffee company/cancer clinic] other than [Company name].	
	Using [Company name] gives me privileges I would not receive from another [coffee company/cancer clinic].	

Table 6. Study 2: Manipulation Checks and Hypotheses Testing.

Means	*Café*				*Cancer Clinic*			
Customer education	High firm/High market (N = 28)	High firm/ Low market (N = 29)	Low firm/ High market (N = 28)	Low firm/ Low market (N = 29)	High firm/ High market (N = 28)	High firm/ Low market (N = 29)	Low firm/ High market (N = 27)	Low firm/ Low market (N = 27)
Manipulation checks								
Firm-specific education	5.07^{a}	5.03^{a}	2.05^{b}	2.03^{b}	4.88^{a}	4.90^{a}	2.21^{b}	2.06^{b}
Market-related education	5.60^{a}	2.28^{b}	5.05^{a}	2.09^{b}	5.39^{a}	2.19^{b}	5.19^{a}	2.26^{b}
Interest in service setting	5.29^{a}	5.47^{a}	5.39^{a}	5.33^{a}	3.32^{b}	3.45^{b}	3.57^{b}	3.69^{b}
Confounds								
Familiarity of service setting	3.46^{a}	3.48^{a}	3.43^{a}	3.55^{a}	3.18^{a}	3.24^{a}	3.26^{a}	3.33^{a}
Attitude toward service setting	4.63^{a}	4.50^{a}	4.63^{a}	4.79^{a}	4.56^{a}	4.55^{a}	4.50^{a}	4.57^{a}
Excerpt believability	5.86^{a}	5.78^{a}	5.77^{a}	5.86^{a}	5.88^{a}	5.81^{a}	5.98^{a}	6.09^{a}
Attitude toward firm	5.41^{a}	3.95^{c}	4.64^{b}	2.43^{d}	5.45^{a}	4.77^{b}	4.70^{b}	2.48^{d}
Interest in firm	5.38^{a}	4.07^{b}	3.48^{b}	2.50^{c}	5.34^{a}	4.10^{b}	3.43^{b}	2.44^{d}
Dependent variable								
Attitudinal loyalty	4.75^{b}	6.35^{a}	1.43^{d}	2.72^{c}	5.00^{b}	6.31^{a}	1.47^{d}	2.73^{c}
Variables relevant to the underlying logic of the hypotheses								
Firm-specific expertise	6.25^{a}	5.46^{a}	3.17^{b}	1.74^{c}	6.39^{a}	5.24^{a}	3.15^{b}	1.69^{c}
Market-related expertise	6.24^{a}	2.91^{b}	5.29^{a}	1.51^{c}	6.30^{a}	3.05^{b}	5.75^{a}	1.46^{c}
Switching costs	4.17^{b}	5.32^{a}	2.50^{c}	2.07^{c}	4.68^{b}	5.55^{a}	2.78^{c}	2.31^{c}

Note. Means with different superscripts are significantly different, $p < .05$.

Table 7. Study 2: Mediation Analyses.

(A): Firm-specific Education						
Mediator variable model (predicting switching costs)	R^2	*F* (1, 223)	B (SE)	*T*	LLCI	ULCI
Firm-specific customer education	.35	129.48***	.58 (.05)	11.38***	.48	.68
Dependent variable model (predicting attitudinal loyalty)	R^2	*F* (2, 222)	B (SE)	*T*	LLCI	ULCI
Switching costs	.53	169.99***	.43 (.07)	6.15***	.30	.58
Firm-specific customer education			.53 (.07)	7.52***	.39	.67
Total effect of firm-specific education on attitudinal loyalty	R^2	*F* (1, 223)	B (SE)	*T*	LLCI	ULCI
Firm-specific customer education	.44	65.22***	.78 (.05)	15.52***	.69	.88
Direct effect of firm-specific education on attitudinal loyalty						
Firm-specific customer education			.53 (.07)	7.52***	.39	.67
Indirect effect of firm-specific education on attitudinal loyalty						
Switching costs			.25 (.05)		.17	.35
(B): Market-related Education						
Mediator variable model (predicting switching costs)	R^2	*F* (1, 223)	B (SE)	*T*	LLCI	ULCI
Market-related customer education	.01	.56	-.05 (.06)	-.75	-.17	.08
Dependent variable model (predicting attitudinal loyalty)	R^2	*F* (2, 222)	B (SE)	*T*	LLCI	ULCI
Switching costs	.43	137.01***	.75 (.05)	15.39***	.65	.84
Market-related customer education			-.21 (.06)	-3.75***	-.32	-.10
Total effect of market-related education on attitudinal loyalty	R^2	*F* (1, 223)	B (SE)	*T*	LLCI	ULCI
Market-related customer education	.05	11.29***	-.24 (.07)	-3.36***	-.38	-.10
Direct effect of market-related education on attitudinal loyalty						
Market-related customer education			-.21 (.06)	-3.75***	-.32	-.10
Indirect effect of market-related education on attitudinal loyalty						
Switching costs			-.03 (.05)		-.13	.06

Note. *** p <.001, ** p < .01, * p < .05.
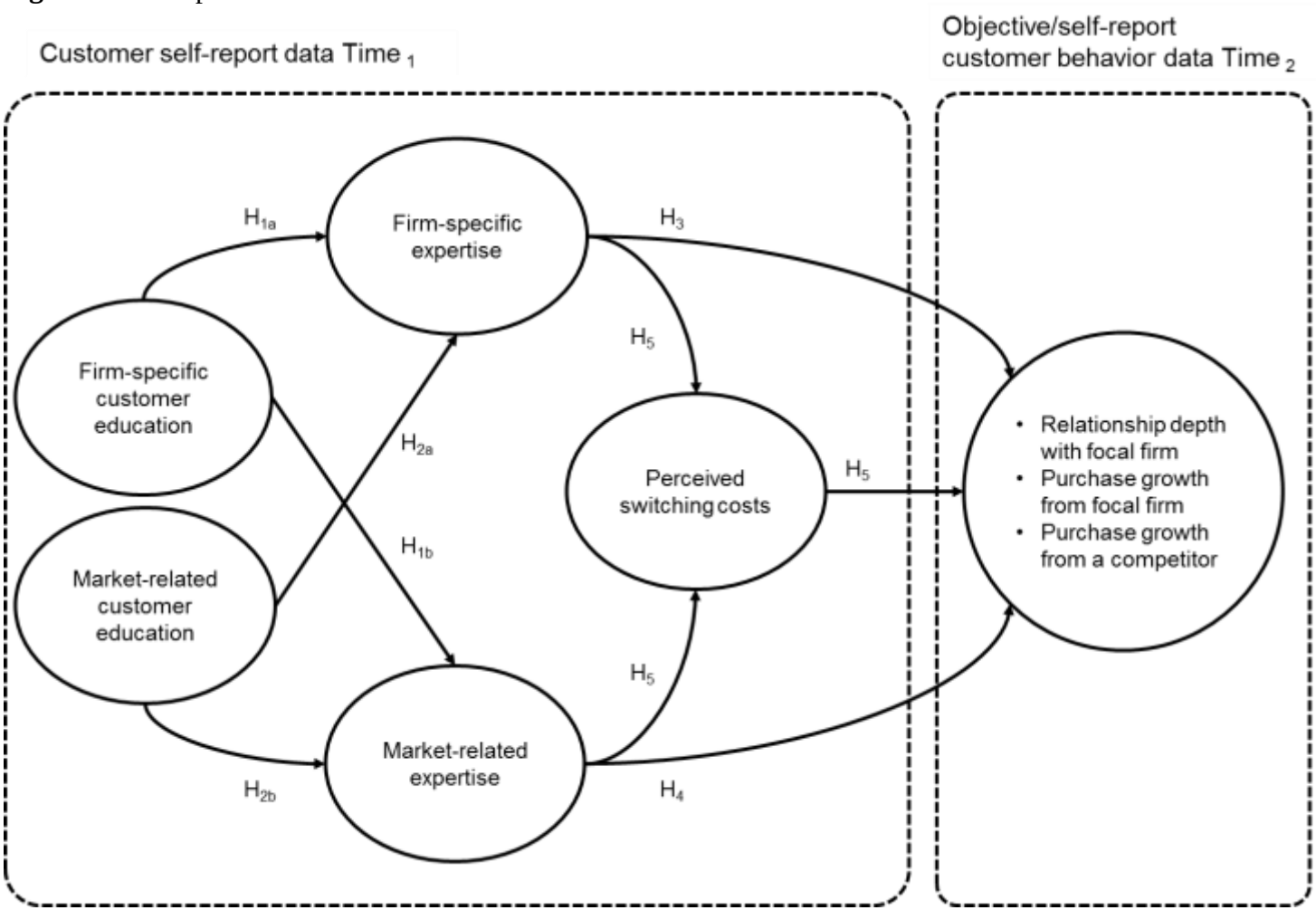
Figure 1. Conceptual Model