



Marketing Science Institute Working Paper Series 2014  
Report No. 14-121

## Consequences of Customer Engagement: How Customer Engagement Alters the Effects of Habit-, Dependence-, and Relationship-Based Intrinsic Loyalty

Conor M. Henderson, Lena Steinhoff, and Robert W. Palmatier

“Consequences of Customer Engagement: How Customer Engagement Alters the Effects of Habit-, Dependence-, and Relationship-Based Intrinsic Loyalty” © 2014 Conor M. Henderson, Lena Steinhoff, and Robert W. Palmatier; Report Summary © 2014 Marketing Science Institute

MSI working papers are distributed for the benefit of MSI corporate and academic members and the general public. Reports are not to be reproduced or published in any form or by any means, electronic or mechanical, without written permission.

## Report Summary

Existing customers are commonly considered a relatively secure source of revenue and thus taken for granted. Yet complacency can result in missed opportunities to expand the business or, in the worst case, customer defection. Customer engagement—sellers’ initiatives to occupy the attention of an existing customer by providing special benefits and experiences that go beyond the core offering—is often promoted as a proactive solution to revive and deepen business with complacent customers.

While customer engagement initiatives are potent, these firm-initiated stimulants to ongoing exchanges have potentially conflicting consequences for customer performance. In this study, Conor Henderson, Lena Steinhoff, and Robert Palmatier investigate the performance ramifications of customer engagement by identifying how these initiatives interact with customer loyalty mechanisms that already operate in the background, underlying ongoing business exchanges.

They use a longitudinal field experiment with a service provider to understand how customer engagement alters, rather than simply augments, an existing customer–company bond, characterized by three intrinsic loyalty mechanisms (habit, dependence, and relationship). The results show customer engagement can have opposing performance implications for customers’ likelihood of expansion and defection, related to both habits and relationships.

The results also provide greater insight into the power of each source of intrinsic loyalty. For instance, the loyalty benefits of relationship and dependence appear to be latent and become activated by external stimuli, such as an engagement initiative. Alternatively, habit’s power is in its inertia, which is disrupted by external stimuli such as an engagement initiative.

These findings offer insights to managers to identify prototypical customer loyalty profiles for which engagement helps, hurts, or has mixed performance effects. The authors identify four unique groups of customers, on the basis of their intrinsic loyalty profiles, then use a spotlight analysis for each group to determine the local effects of engagement.

For example, “loyalists” are characterized as the most appropriate target of customer engagement as there are benefits with no offsetting penalty (5.1% reduction in defection with no significant effect on expansion). Customer engagement initiatives signal the seller still cares, and thus activate latent dependence and relationship mechanisms.

“Sleeping dogs” describe customers who are mainly bound by habit; awakening them with engagement initiatives can cause them to either play (expansion increases by 1.9%) or bite (defection increases by 3.3%). Firms might need to wait for them to become “leashed” by higher levels of dependence and relationship, which suppresses their defection likelihood, before attempting to engage them.

If managers can determine the intrinsic loyalty profile of their existing customers, they can design, test, and target customer engagement strategies with maximal effectiveness.

*Conor M. Henderson is Assistant Professor of Marketing, Lundquist College of Business, University of Oregon. Lena Steinhoff is Assistant Professor of Marketing, Faculty of Business Administration and Economics, University of Paderborn, Germany. Robert W. Palmatier is John C. Narver Endowed Chair in Business Administration and Professor of Marketing, Michael G. Foster School of Business, University of Washington.*

***Acknowledgments***

The authors acknowledge helpful feedback from the MSI Review Committee, Kevin Steensma, Shailendra Jain, Joshua Beck, Ju-Yeon Lee, and Hari Sridhar on a previous draft of this article.

Managers recognize that ignoring existing customers, a critical source of ongoing profits, can result in customer complacency, which often leads to missed opportunities to expand the business or in the worst case, customer defection (Gupta and Lehmann 2005). Based on the desire to overcome complacency by moving customers “away from business as usual to a more active state” (van Doorn and Verhoef 2008, p. 123), firms have turned to *customer engagement*—sellers’ initiatives to occupy the attention of an existing customer through the provision of special benefits and experiences that go beyond the core offering. The Economist Intelligence Unit’s report on the dramatic rise of customer engagement as a strategic trend towards stimulating an active psychological state that enables the development of “a deeper, more meaningful connection between the company and the customer, and one that endures over time” (Voyles 2007, p. 2). Google searches for the term “customer engagement” grew 175% from 2006 to 2014, outpacing “loyalty programs” at 92% growth and “relationship marketing” with a 41% decline, which supports its increasing popularity. However, firms’ effectiveness at deploying customer engagement remains mixed (Henderson, Beck, and Palmatier 2011; Kumar 2013; Kumar et al. 2010), which led the Marketing Science Institute to identify understanding customer engagement as a top-tier research priority (MSI 2014). Thus, the focus of this research is to *understand the performance ramifications of customer engagement by identifying how these initiatives interact with the underlying customer loyalty mechanisms (habit, dependence, relationship) present in ongoing business exchange.*

Specifically, we decompose the existing customer-seller bond into three *intrinsic loyalty mechanisms*, defined as the underlying forces that secure a customer’s ongoing business. They are habit-, dependence-, and relationship-based loyalty, and together they cover the different mental bases through which behavioral loyalty is held (Dick and Basu 1994; Oliver 1999). Habit, memory-based advantages for an established patronage pattern, represents a basis for sustained performance through the automatic mind (Tobias 2009; Wood and Neal 2009). Dependence, which relies on cost-benefit evaluations of defection, represents a basis for sustained performance through the rational mind (Kumar, George, and Pancras 2008). Relationship, capturing customers’ emotional attachment and trust that arise through multiple interactions and norm development, represents a basis for sustained performance through the social-emotional mind (Palmatier et al. 2006). We focus on these three intrinsic loyalty mechanisms since they are already present to varying degrees across a firm’s existing customer base, forming the loyalty

foundation, as a firm launches any customer engagement campaign. Recent research suggests that accounting for ongoing loyalty mechanisms is critical to understanding customer responses to a firm's marketing efforts (Liu-Thompkins and Tam 2013).

To empirically test the interaction effects between customer engagement and the three loyalty mechanisms on customer performance, we conduct a longitudinal field experiment at a major telecommunications service provider. After capturing the initial levels of customers' habit, dependence, and relationship, existing customers were randomly selected to receive a new engagement initiative (i.e., no-strings-attached gift of two months free calling), and then observed for an additional nine months to capture changes to performance-relevant behaviors. We evaluate the impact on both customer defection and expansion since opposing effects across these two outcomes may be masked in an aggregate measure of performance.

Overall, this article makes four key contributions. First, we conceptually and empirically distinguish three intrinsic loyalty mechanisms, which concurrently constitute the stickiness of the existing customer-company bond. While habit, dependence, and relationship jointly prevent customer defection, dependence also enhances customer expansion but habit suppresses it. Representing all three mechanisms with a single amorphous indicator of the customer-company bond masks the effect of each loyalty mechanism and limits our understanding of the most critical mechanisms for a given customer. Results demonstrate that the loyalty profile across customers in our sample were highly variable with important ramifications. For example, habit was the most important of the three loyalty mechanisms for 31% of customers in the sample while relationship was the most important mechanism for 29% of customers. Since we capture each loyalty mechanism with information commonly stored in companies' CRM databases, our approach is accessible to many firms.

Second, we theoretically argue and empirically demonstrate the exogenous shock of customer engagement differentially alters the effect of these loyalty mechanisms on performance. Through these interactions, we learn more about the loyalty mechanisms and uncover how customer engagement can help or hurt the firm. For example, our study shows customer engagement disrupts habit's behavioral inertia. Normally, habitual customers are less likely to make both good (expansion) and bad (defection) changes, but engagement reverses habit's suppression effect on likelihood of expansion and defection. Consistent with the belief that firms should engage complacent customers, we find that the defection-reducing power of

both dependence and relationship is latent (no effect on defection in the control group) but becomes activated after engagement (larger suppression effect for higher levels of dependence and relationship in the treatment group). The countervailing results underscore the importance of disaggregating the effects of marketing initiatives across the three intrinsic loyalty mechanisms. For example, customer habit strength is the strongest predictor of retention in the control group (no engagement) but leads to defection in the treatment group (post customer engagement), whereas dependence becomes the strongest driver of retention after engagement.

Third, we isolate customer defection and expansion as two distinct facets of customer performance and demonstrate how these outcomes are differentially affected by the interplay of habit, dependence, relationship and the company's attempt to fight customer complacency through customer engagement campaigns. Disaggregating performance into a simultaneous examination of defection and expansion reveals an important tension between the two outcomes. In the case of habitual customers, stimulating the customer to elaborate on the seller leads to defection just as easily as expansion, opposing performance effects which might be lost when examining aggregate indicators such as customer spending levels. In the full sample, defection occurred 1.7 more often than expansion, but the prevalence of each outcome behavior varied widely across customers and between engagement/no-engagement groups. For example, in the engagement group, expansion increases by 41% while defection increases by 17% in comparison to the no engagement control group. Failure to account for diverging effects on defection and expansion across different intrinsic loyalty mechanisms for marketing initiatives might help explain the mixed effectiveness of loyalty programs and other sales incentives (Bijmolt, Dorotic, and Verhoef 2011; Henderson, Beck, and Palmatier 2011).

Fourth, these collective insights suggest that managers must carefully consider the nature of their existing bonds when marketing to existing customers, but the diverging effects across multiple mechanisms makes it difficult for managers to determine the most effective engagement strategy for a specific customer. To address this issue we provide actionable guidelines for targeting customer engagement depending on prototypical customer loyalty profiles as well as outline a methodological approach for managers to follow. Specifically, we identify four groups of customers based on their intrinsic loyalty profile, and then we use a spotlight analysis on each group to determine the local *net effect* of engagement. Based on the managerially relevant net effect across mechanisms we suggest unique customer engagement strategies for each profile.

For instance, we identify “Loyalists,” characterized by high levels across all loyalty mechanisms as the most appropriate target of customer engagement as there are benefits with no offsetting penalty (e.g., 5.1% reduction in defection with no significant effect on expansion). For other loyalty profiles, however, we identify conflicting effects. We label customers mainly bound by habit as “Sleeping Dogs” because upon awakening them with engagement they may play (expansion increases by 1.9%) or bite (defection increases 3.3%). With these customers, a firm may need to wait for them to become “tethered” with higher levels of dependence and relationship to suppress defection before engaging with ancillary initiatives. Lastly, our analysis suggests customers with low levels across all intrinsic loyalty mechanisms respond negatively to engagement with no offsetting gains (5.8% increase in defection). Since these customers appear to have little motivation (neither memory, rational, nor social-emotive) to remain with a firm, then any form of engagement is perceived with suspicion or as a hassle, and thus they are labeled as “Skeptics.” Managers need to understand the intrinsic loyalty profile of their existing customers in order to design and target customer engagement strategies to maximize effectiveness since there is no effective “one-size-fits-all” approach.

### **Understanding Intrinsic Loyalty Mechanisms**

The existing customer-company bond forms a lens through which a customer views the seller’s actions, and thus it informs the effectiveness of any relationship marketing tactic (De Wulf, Odekerken-Schröder, and Iacobucci 2001; Henderson, Beck, and Palmatier 2011). We term the underlying forces that promote a customer’s ongoing business as *intrinsic loyalty mechanisms*. These mechanisms—habit, dependence, and relationship—are what make existing customers such a valuable source of future revenue compared to similar prospective customers where such mechanisms are absent. To the best of our knowledge, they have yet to appear together in a single model of behavioral loyalty, as the summary of prior literature in Table 1 reveals (Table 1 appears following the References). Oliver’s (1999) seminal loyalty framework, which argues that customer loyalty is built over time through cognitive evaluations, affective attachment, conative motivations, and “action inertia.”

### **Habit based loyalty (habit)**

*Habit-based loyalty (habit)* refers to a customer’s increased propensity to remain with a seller arising from memory-based advantages for the established patronage pattern over

alternatives. Habit is created by consistently performing the same behavior in a regular context. Representing *customers' automatic behavioral mind*, habit is closely related to Oliver's (1999, p. 36) concept of "action inertia." Theoretical explanations of habit draw on the dual-mode model of mental processing which distinguishes pre-habitual behavior relying on deliberative, rational, effortful, and analytic processing from habitual behavior relying on automatic, experiential, effortless, holistic processing. As people consistently repeat a behavior, they decreasingly employ deliberative processing to consider potential alternatives and increasingly rely on automated decision-making (Ajzen 2002; Wood and Neal 2009). Original preferences guide behavior until habits are broken and then behaviors update to correspond with newly formed preferences through active processing (Tobias 2009).

A recent New York Times bestselling book, *The Power of Habit: Why We Do What We Do in Life and Business*, exalts habit's potency with claims that over 45% of choices are supported by habits (Duhigg 2012). Despite representing "a new but booming topic" (Tobias 2009, p. 415), habit for a long time remained an "undervalued concept in consumer research" (Verplanken 2008, p. 125). It is only recently that habit's powerful inertia effects have appeared in relationship marketing research (Liu-Thompkins and Tam 2013; Shah, Kumar, and Kim 2014). Findings indicate that habits positively impact several performance outcomes (Breivik and Thorbjørnsen 2008; Liu-Thompkins and Tam 2013) and insulate a customer by diminishing search for or attention to alternative options (Tobias 2009; Verplanken 2006).

### **Dependence-based loyalty (dependence)**

We define *dependence-based loyalty (dependence)* as a customer's increased propensity to remain with a seller arising from cognitive evaluations of potential switching costs. A state of dependence restricts mobility when rational considerations of the unique benefits lost and expenses incurred outweigh potential benefits available from defection. Dependence reflects *customers' rational mind* or what Oliver (1999) conceptualizes as cognitive loyalty. Having its theoretical roots in economics, marketing scholars traditionally studied dependence from a transaction cost theory perspective (Heide and John 1988), a power-dependence theory perspective (Emerson 1962), or a switching costs perspective (Bendapudi and Berry 1997; Burnham, Frels, and Mahajan 2003) to understand its role in contract utilization, bargaining power, and customer retention.

Dependence can exert both detrimental and beneficial effects on the exchange. On the one



hand, if one partner is much more dependent than the other, the powerful partner may unfairly exploit their power, an inequity that can destroy the exchange (Samaha, Palmatier, and Dant 2011). Dependence constrains opportunities and creates “lock-in,” an uncomfortable feeling that may deter customers from expanding their business at a seller to avoid further losing their freedom to easily switch providers (Kumar, George, and Pancras 2008). On the other hand, restricting outside mobility increases partners’ confidence in stability and longevity, a confidence that is critical to spurring investments in the exchange to further enhance its value (Palmatier, Dant, and Grewal 2007). As a customer’s dependence and the seller’s relative power increase, customers judge the seller’s behavior as a more accurate signal of their true intentions, because they know the seller has the opportunity to exploit their lack of mobility. A seller’s benevolent actions elicit strong feelings of gratitude when customers believe the seller is acting freely (Martín and Camarero 2005; Palmatier et al. 2009).

### **Relationship-based loyalty (relationship)**

As the third force, *relationship-based loyalty (relationship)* captures a customer’s increased propensity to remain with a seller arising from social emotions and confidence in the seller. A relationship solidified through multiple interactions overtime gives partners a shared history to reflect on and helps build exchange-specific norms (Dwyer, Schurr, and Oh 1987). Alluding to *customers’ social-emotional mind*, relationships provide both an affective basis for loyalty by satisfying emotional desires for attachment as well as a conative basis for loyalty as they grow over time (Oliver 1999). According to social exchange theory (Thibaut and Kelley 1959), relationships create value beyond one-time transactions from trust and commitment formed through mutual learning, adaptation, and norm convergence (Palmatier et al. 2006).

Relationships form slowly because customers require a series of interactions before believing the seller is revealing their true colors (Palmatier et al. 2007). Arousal is strongest early because customers are discovering whether or not the brand will help them accomplish their goals, but a secure connection begins to replace more extreme emotional reactions as customers learn to include the brand and the benefits obtained from it into their self-concept (Johnson, Herrmann, and Huber 2006; Reimann et al. 2012). Consistent with this idea, Haisley and Loewenstein (2011) find customers with mature, long-held relationships to the firm exhibited greater behavioral loyalty than customers in new relationships, but customers with mature relationships had no discernible increase in purchases in response to a seller’s benevolent

actions. Experienced customers are already loyal, they simply require a little “rejuvenation as they reach the mature stage” to maintain their belief that the seller cares about them (Barnes 1997, p. 786).

### **Conceptual Model and Hypotheses**

Our conceptual model and hypotheses focus on predicting how customer engagement alters, rather than simply augments, the effects of loyalty mechanisms on customer performance (see Figure 1, appears following References). In this research, we define *customer engagement* as a seller’s initiatives to occupy the attention of an existing customer through the provision of special benefits and experiences that go beyond the core offering. Successful customer engagement is thought to stimulate positive elaborations that promote customer performance. However, we posit that such a stimulus acts as an external shock to the existing loyalty mechanisms that support ongoing customer performance and can result in complex pattern of non-intuitive effects.

In order to explicate how specific interactions affect customer performance, we disentangle performance—the value of a customer to the company—into the key underlying behaviors of defection and expansion. *Defection* is defined as an existing customer’s discontinued patronage, while *expansion* is defined as an existing customer’s increased patronage, both based on changes to prior purchases (Aurier and N’Goala 2010; Verhoef 2003). In this fine-grained approach, we compare these behaviors to *status quo*, defined as an existing customer’s unchanged patronage. By differentiating reactions to customer engagement, we can help managers answer the questions whom to target to diminish defection risk, to increase the likelihood of expansion, and for whom customer engagement simultaneously increases the likelihood of expansion and defection.

### **Engagement moderating the effects of habit on customer performance**

Habit suppresses both defection and expansion. Habitual customers automatically perform behaviors without actively forming intentions or fully considering competing alternatives (Tobias 2009). Once a habit solidifies, behavior no longer responds to changes in intentions and customers no longer weigh alternatives with deliberative processing (Wood and Neal 2009). As long as the behavior-context linkage remains, cues between context and habitual behavior trigger automated decision-making. Thus, consistent with prior literature, we expect habits to limit defection and expansion (Liu-Thompkins and Tam 2013).

Customer engagement has three traits that should counter the unaltered performance effects of habit. First, customer engagement changes the consumption context by providing experiences or benefits beyond the core offering, which grabs customer attention and changes the tie between cost and total consumption. By providing customers with free products, service, or experience, customers consume more without paying more and engagement may change the payment and consumption process (e.g., coupons, redemptions codes, access to special channels or events). Second, customers allocate additional cognitive resources to the consumption category upon engagement because humans are hardwired to learn patterns between behaviors and rewards (Redish et al. 2007). Third, engagement activates goals such as receiving more, achieving higher status, or saving money (Wood and Neal 2009). New goals motivate customers to reconsider their optimal level of consumption. All three traits activate conscious decision-making (Quinn et al. 2010), and trigger changes (Gustafsson, Johnson, and Roos 2005).

Customer engagement should simultaneously hurt and help habitual customers' performance by making both defection and expansion more likely after habitual customers engages in a process of behavioral updating (Quinn et al. 2010). Consider a habitual telecom customer who barely pays any attention to their behavior or bill and they suddenly receive an unexpected temporary discount or free service. The customer would want to look closely at his bill to see how much he saves, and would pay attention to the bill for the first time in a long time. It certainly would activate a more engaged psychological state. But, thrilled and motivated by the savings, he considers if his current consumption behavior and account subscriptions are still ideal. Once engaged, he would be more likely to notice advertisements promising greater savings, similar advertisements he previously ignored. Freed from his habit and paying attention to the category for the first time in a long time, the engaged customer might consider making changes, such as dropping the service, going to a competitor, or upgrading to get more from his current provider. Therefore, previous direct effects of habit limiting changes should be reduced or even reversed. We predict these *breaking habit effects* of customer engagement:

**H<sub>1</sub>:** Habit's negative effect on the likelihood of defection will be diminished by customer engagement.

**H<sub>2</sub>:** Habit's negative effect on the likelihood of expansion will be diminished by customer engagement.

### **Engagement moderating the effects of dependence on customer performance**

Dependence generally supports performance by reducing defection and supporting expansion. Reducing defection, customer dependence provides a cognitive-based barrier to customer mobility. Dependent customers enjoy additional benefits at their current provider that would become inaccessible if they defect, or they are exposed to higher termination and replacement costs than non-dependent customers, making defection less appealing (Hibbard, Kumar, and Stern 2001). Dependent customers are also more likely to expand their business with their current seller. A non-dependent customer may be anxious to give up mobility and raise his exposure to a seller by expanding, uncertain if the seller would take advantage of the customer's greater reliance on the seller. Dependent customers, if not experiencing exploitation by the seller so far, should become comfortable with their dependency. As dependency becomes less salient they become less anxious that further expanding on their current business will encourage the seller to exploit increased power (Kumar, George, and Pancras 2008). In line with extant research, we assume dependence to diminish defection and foster expansion.

Customer engagement should enhance dependence's power to suppress defection. Based on their level of dependence, customers will interpret potential signals about the seller from customer engagement differently. Engagement can signal a seller's commitment to the customer, communicating that they care about the customer relationship (Palmatier et al. 2009). Dependent customers are more likely to consider this interpretation of customer engagement. Their high switching costs protect the seller from competition, thus the dependent customer may judge an engagement initiative as a genuine act of kindness that "provides an attribution basis for affect-based trust" (McAllister 1995, p. 29). Imagine how the customer of a gym who is "stuck" in a 3-year contract with high termination costs might feel upon receiving a free fitness checkup and personalized nutrition advice, versus how would he feel if he was nearing the end of a free trial period? Positive interpretations of seller motives make dependent customers more cognizant of and more comfortable with their high switching costs and thus lower defection risk further.

Customer engagement is a less appealing signal of seller commitment to a non-dependent customer. Wary of manipulative promotions (Friestad and Wright 1994), non-dependent customers should be more concerned and suspicious that sellers have a greater incentive to artificially build switching costs through customer engagement. The gym customer on a free trial might feel a free fitness checkup and personalized nutrition advice is an overboard attempt to lure him into a long contract or done out of desperation for customers rather than genuine care.

Relationship reactance theory suggests that non-dependent customers may prefer to exert their freedom by noticing competitors rather than allow the seller to “buy” their behavioral loyalty (Chartrand, Dalton, and Fitzsimons 2007; Melancon, Noble, and Noble 2011).

Hurting the company, the positive direct effect of dependence on expansion should be reduced by customer engagement. Customer engagement pressures non-dependent customers to reciprocate and match the seller’s increased commitment, leading them to expanding on their previous business or exert their freedom by defecting. However, engagement does little to further increase dependent customers’ already greater propensity to expand. For dependent customers, engagement is the seller’s reciprocal investment that stabilizes the balance of power in the exchange rather than tilt expected behavior in their favor, and it would be inappropriate for the customer to immediately pay back the seller investment (Clark and Mills 1979). Customer engagement targeted to a dependent customer represents a benevolent signal of the seller’s desire for a balanced communal exchange (Palmatier et al. 2009). Therefore, dependent customers, who are already more likely to expand their business with the seller for rational reasons (Burnham, Frels, and Mahajan 2003), are not likely to further increase their propensity to expand for social reasons. We predict these *signaling and balancing dependence effects* of customer engagement:

**H3:** Dependence’s negative effect on the likelihood of defection will be enhanced by customer engagement.

**H4:** Dependence’s positive effect on the likelihood of expansion will be diminished by customer engagement.

### **Engagement moderating the effects of relationship on customer performance**

Relationship is widely acknowledged to support performance by reducing defection and supporting expansion. As customers build attachment to the seller, rooted in emotion, they are more likely to apply social norms of mutuality and solidarity to govern their behavior rather than quid-pro-quo governance norms characteristic of a transactional exchange (Cannon, Achrol, and Gundlach 2000). Over time, customers receive positive utility simply by maintaining the relationship (Thomson, MacInnis, and Park 2005). Relational customers enjoy their secure attachment and efficient exchange norms developed from a shared history and thus are inclined to give as much of their business as possible to their partner (Mende, Bolton, and Bitner 2013). Therefore, customers with a good relationship are also more receptive to expansion sales pitches (Fang, Palmatier, and Evans 2008). Thus, as suggested by previous studies, relationship should

reduce defection and support expansion.

Customer engagement should further enhance relationship's power to reduce defection. For instance, a customer that has already established a trusting relationship to a car insurance agent might appreciate further customer engagement such as his car insurance agent's offer to install a device that tracks driving behavior and then teach the customer how to use it with a mobile app to adopt responsible driving behavior in order to lower their insurance rate. However, the same customer engagement efforts might be interpreted as an invasion of privacy and an attempt to control or take advantage of the customer when a foundation of trust is lacking. Engaging customers with unexpected benefits and new experiences will spur new customers, to a greater extent than established customers, to guess the seller's intentions and react strongly. New customers are still trying to develop a better understanding of the seller's true identity, and therefore will engage in more attribution activity (Henderson, Beck, and Palmatier 2011). Engagement can even backfire for new customers if they believe the seller is trying to control or manipulate their behavior (Chartrand, Dalton, and Fitzsimons 2007; Melancon, Noble, and Noble 2011). Customers with a secure relationship are more likely to view the seller's actions as a reaffirmation of the seller's commitment.

While customer engagement should enhance prior benefits of relationship reducing defection risk, at the same time it may hamper relationship's performance advantages by attenuating relational customers' greater propensity to expand, at least in the near term. When new customers' attributions do not leave them feeling manipulated by customer engagement, they may feel a strong obligation to respond as they have not earned special benefits. Customer engagement in the context of a long shared history of interactions will reaffirm mutual commitment and strengthen resolve to overcome any temporary turmoil, rather than pressure a proactive response (Haisley and Loewenstein 2011). Tit-for-tat repayments are inappropriate in a communal relationship (Shen, Wan, and Wyer Jr 2011). The car insurance customer might appreciate the insurance agent's efforts to teach him how to use the tracking device to save money on their insurance, yet there is little obligation to expand his insurance policy. If he could expand to an additional car, the insurance provider should already be the first choice. Consequently, engagement widens the propensity gap (i.e., the difference in likelihoods) between relational and non-relational customers to remain a customer, but narrows their propensity gap to expand. We predict these *stabilizing/destabilizing relationship effects* of

customer engagement:

- H<sub>5</sub>:** Relationship's negative effect on the likelihood of defection will be enhanced by customer engagement.
- H<sub>6</sub>:** Relationship's positive effect on the likelihood of expansion will be diminished by customer engagement.

### **Longitudinal Field Experiment**

We conducted a field experiment with the cooperation of a major global telecommunication service provider. Service providers have long recognized customer loyalty as critical to customer lifetime value, but before engagement began gaining prevalence, their proactive marketing primarily focused on customer acquisition or targeted efforts to upsell/cross-sell to existing customer (Bolton 1998; Kumar 2013). A field experiment is a powerful method to isolate the effects of customer engagement to test our hypotheses. Random selection overcomes the problem that firms often prioritize efforts towards their best customers and minimize the effects of many potential confounds (Liu 2007). Our longitudinal test also allows us to temporal separate cause and effect, which supports strong theory testing.

### **Data and measurement**

*Manipulated data.* Customer engagement was manipulated by randomly selecting customers for two months of free calling on their home phone lines. This type of customer engagement was selected for its simplicity to help remove potential confounds due to more complex engagements, which may offer alternative explanations. We randomly selected 2,000 customers from a pool of more than one hundred thousand eligible customers. Three criteria determined eligibility. First, customers were acquired before the first month of a five-month pre-engagement observational period, which provided baseline usage levels. Second, customers subscribed to at least one home phone line during the pre-engagement observational period. Third, if a customer subscribed to additional categories (e.g., paid television, internet), then any accompanying bundling contract had to expire after the customer engagement was initiated and before the end of a nine-month post-engagement observation period. This ensured all customers studied had the opportunity to defect without penalty.

The call center notified the randomly selected customers of the “no strings attached gift of two months of free calls on [their] home phone lines as a thank you.” Callers were explicitly

instructed to simply say the company wanted to say “thank you” and not to up-sell. This engagement should be perceived positively (immediate benefit) with a relatively low level of interaction (few minutes on the phone) and thus represents a conservative test of our hypotheses. While this process was easy to execute, only 1,132 customers (57%) of the randomly selected customers answered their phone. To create a complementary control group of 1,132 customers from all eligible candidates, we used the propensity score matching procedure (Rosenbaum and Rubin 1985). This step reduces the risk that the treatment group became potentially biased if they were more likely to answer the phone than the control group. The treatment group showed no difference from the control group in propensity scores, continuous variables ( $p > .30$ ) and frequencies of nominal variables ( $p > .15$ ). Creating a treatment and control group similar except for customer engagement provides a clear picture of the loyalty mechanisms’ unaltered effects in the control group and their moderated effects in the treatment group. This adds to our confidence that the customer engagement represents an exogenous shock to the existing customer-firm bond with the potential to provide causal insights.

*Observed data.* Using the company’s customer database, we unobtrusively capture habit-, dependence-, and relationship-based loyalty from naturally occurring heterogeneity across customers. Loyalty mechanisms in an ongoing exchange are not easily surveyed, manipulated, or imagined from a scenario described in a lab. For instance, habit cannot be randomly assigned nor reliably measured through a questionnaire without weakening the habit by bringing it to the forefront of consciousness (Ajzen 2002; Verwijmeren et al. 2011). Changes in customer account information during a nine-month post-engagement period indicated defection and expansion, underlying customer performance. The customer database measures can serve as a blue print for practitioners seeking to track and integrate loyalty mechanisms into targeted customer engagement. While database metrics have advantages, interpretation of the results should come with full knowledge that all database metrics are approximations of the underlying constructs we believe to be operating. Researchers and practitioners should be aware of potential measurement error when employing similar database metrics in their specific context. Table 2 provides a detailed overview of each construct, definition, and operationalization. Table 3 displays the descriptive statistics for our samples (Tables appear following References).

We constructed a behavior-based metric of habit using the consistency of a customer’s monthly bill (Roy, Chintagunta, and Haldar 1996), because habit is created by consistently



performing the same behavior in a regular context (Quinn et al. 2010), and inconsistent behavior indicates a lack of habit better than low frequency or a short time period (Ajzen 2002). Although frequency and length of time are convenient habit correlates, “just because a behavior has been performed many times does not, by itself, prove habituation” (Ajzen 2002, p. 109). For instance, habit is absent for a telecom customer of twenty years when their child goes away to college and their usage context and behavior change drastically, but a light user of just a few months that makes a single call each night to the same person is likely guided by a strong habit. Therefore, we constructed the metric by first dividing customers’ monthly bill by their average bill over the five-month pre-engagement baseline period to normalize for level of spending. Then, we calculated the variance across these five months. Finally, we inversed this value and multiplied it by 100 so that a higher score reflects a stronger habit.

To provide further evidence of customer engagement reducing habit strength, we regressed post-engagement habit on customer engagement and all other variables as controls and confirmed that customer engagement did reduce post-engagement habit ( $\beta = -.79, p < .01$ ), even among those that did not defect or expand ( $N = 2043$ ). In this specific context, customer engagement grabbed customers’ attention and encouraged new consumption behavior. It untied costs from behavior, allowing free long distance calls and may have heightened price awareness for customers who saw their bill drop. New behaviors and heightened awareness can lead to many small changes, such as thinking twice about making or taking a call (Wood and Neal 2009). In sum, evidence suggests customer engagement weakens habits.

For the indicator of dependence, we counted the different categories the customer subscribes to in the month before the experiment (e.g., if a customer has a home phone line and an internet line, then their dependence score equals two). Among the “various empirical indicators that have been used more or less interchangeably as measures of dependence” (Heide and John 1988, p. 34), for continuous service providers, an appropriate indicator is the number of categories a customer subscribes. With each additional category, the customer “faces higher costs of switching in replacing the multi-category service provider” (Crosby, Evans, and Cowles 1990, p. 71; Reinartz and Kumar 2003). When the customer has an Internet or paid television subscription in addition to his phone line, they enjoy bundling savings and efficient dealings with a single provider. Bundling creates dependence at the time of the customer engagement, but all customers in the sample had contracts that expired during the observation period so they had the

opportunity to eventually defect penalty free.

For a customer database indicator of relationship, we followed extant research to use the number of years each customer has been a subscriber at the service provider (Cooil et al. 2007; Dagger, Danaher, and Gibbs 2009). Relationship strength can be measured through survey, but a database metric is advantageous for targeting and to prevent any measurement or demand effects, which is especially problematic for understanding the effects of habits. Time is elemental to movement through stages of the relationship lifecycle; and although relationship age is not perfectly correlated to stage, it has been tied to relationship quality, trust, commitment, and performance (Jap and Ganesan 2000; Johnson, Herrmann, and Huber 2006; Reinartz and Kumar 2003). A relationship solidified through a shared history propels the customer beyond the present to reflect on the past and then look to the future with hope. Customers who lack a shared history with a seller are more reactive, because they are more likely to judge any single positive experience cautiously and negative experience harshly. In this context, the participating service provider's past customer surveys indicate that length of time is the most strongly correlated metric to Word-of-Mouth, consistent with expectations for relationships (Palmatier et al. 2006).

We controlled for several descriptors that are tracked in the customer database that the firm uses for segmentation purposes. To maintain customer privacy, several steps were taken to clean and adjusted variables of identifiable info before these data were shared. Customer age and size were continuous controls. Customers were grouped into ordinal age brackets, from youngest to oldest. For customer size, we used the natural log of the customer's average bill in the five-month pre-engagement observation period, which was adjusted by a small, unknown constant. We included two nominal variables indicating lifestyle (three categories, e.g., families) and region (five regions, e.g., dense urban metro), and used an effect-coding scheme to control for these nominal variables. Together, these controls capture additional customer heterogeneity that might predict expansion and defection because they may correspond with the attractiveness of a customer to the existing provider and its competitors, as well as the attractiveness of the existing provider and its competitors to the customer.

We were interested in modeling changes to customers' accounts from their original subscriptions to their subscriptions at the end of nine months after customer engagement was initiated (Aurier and N'Goala 2010; Mende, Bolton, and Bitner 2013). Customers either discontinued their patronage completely (defection), maintained stable subscriptions (status quo),

or increased patronage by adding to their existing subscriptions (expansion). Together, these outcomes comprised a multinomial variable of customer performance. Aggregate performance indicators (e.g., spending) could mask opposing effects such as habit limiting defection and expansion.

## **Analysis and results**

*Model specification.* We used multinomial logistic regression to estimate the effects of intrinsic loyalty mechanisms, customer engagement, their interactions, and control variables on behaviors underlying customer performance. Coefficients were estimated in two logistic functions and hypotheses are assessed from *t*-statistics for the coefficients predicting the likelihood of defection and expansion relative to status quo. Multinomial logistic regression is well established in marketing (Leeflang and Wittink 2000; Mende, Bolton, and Bitner 2013). Ordinal logit was rejected because prior research suggests antecedents of defection differ from expansion and could hide opposing directional effects such as habit suppressing defection and expansion (Verhoef 2003). We also tested hazard rate models that accounted for the timing of an event (e.g., dropping or expanding services) with right censoring, but because the customer engagement initiative involved free service that lasted for two months, it caused a short-term shift in the temporal risk of defection for the treatment group. Furthermore, the hazard rate models produced the same substantive conclusions as our multinomial logistic regressions.

*Model fit.* Two model specifications were estimated. Model 1, main effects model without interactions, established a simple estimate of the overall effects of intrinsic loyalty mechanisms and customer engagement on defection and expansion. The likelihood ratio test comparing this main effects model to the null model indicated predictive value ( $\chi^2 = 117.83$ , d.f. = 24,  $p < .01$ ). Comparing the log-likelihoods for Model 1 to Model 2, which included interactions shows that the hypothesized interactions improve the Model 2's predictive value ( $\chi^2 = 24.69$ , d.f. = 6,  $p < .01$ ). Results from Model 2 are used for hypotheses testing (see Table 4, appears following References).

*Results.* We tested six moderation hypotheses regarding customer engagement altering the linkages from loyalty mechanisms to defection (Table 4; Model 2a) and expansion (Table 4; Model 2b). Additional insights into understanding these effects are provided in Figure 2 (appears following References) that displays graphs of the interactions as well as the results of simple slope analyses of the loyalty mechanisms' direct effects in the control group and in the

engagement (treatment) group targeted for customer engagement (Spiller et al. 2013). Overall, the conceptual model performed well, as four of the six hypotheses were supported and one hypothesis was marginally supported.

We expected habit to suppress changes, captured by negative effects of habit on defection and expansion relative to status quo, respectively. In Hypotheses 1 and 2, we predicted that habit's support for the status quo would be weakened by the exogenous shock from customer engagement. Positive coefficients ( $p < .05$ ) for the interaction terms in both logistic functions provide evidence supporting both H<sub>1</sub> and H<sub>2</sub>. Simple slope analysis (see Figure 2, appears following References) shows that among the control group habit reduced defection (Panel A;  $p < .05$ ) and expansion (Panel B;  $p < .01$ ), consistent with prior literature. However, in the treatment group, these effects vanished and a marginally significant positive effect of habit on expansion (Panel B;  $p < .10$ ) suggests that customer engagement released habitual customers' pent up demand for expansion. In sum, evidence suggests that habitual customers are less likely to defect or expand, but customer engagement breaks habits and releases pent up changes.

Hypotheses 3 and 4 test the interactions of customer engagement with dependence-based loyalty on the performance outcomes. Consistent with prior literature, we expected and confirmed that dependence reduced defection (Model 1a;  $p < .05$ ) and supported expansion (Model 1b;  $p < .01$ ) in the main effects model. In the interaction model, Hypothesis 3 is supported by a negative interaction (Model 2a;  $p < .05$ ) for defection relative to status quo. Slope analysis (Figure 2; Panel C) shows that the effect of dependence in reducing defection is very strong in the treatment group ( $p < .01$ ), but it is not significant in the control group ( $p > .10$ ). There was not a significant interaction effect for expansion or any difference in the effect of dependence on expansion between the control and treatment groups (Model 2b;  $p > .10$ ), thus we failed to find support for Hypothesis 4. These effects are graphed in Figure 2, Panels C and D.

Hypotheses 5 and 6 test the interactions of customer engagement with relationship-based loyalty on performance outcomes. Consistent with prior literature, we expected and confirmed in the main effects model that relationship-based loyalty reduces likelihood of defection (Model 1a;  $p < .05$ ); however, it did not have an overall effect on expansion (Model 1b). For the interaction between customer engagement and relationship, a significant negative interaction in predicting defection (Model 2a;  $p < .05$ ) supports Hypothesis 5. The simple slope analysis shows that relationship reduces the risk of defection if the customer is in the treatment group (Panel E;  $p <$

.01), but fails to do so if the customer is not engaged. This results support the notion that long-term customers that are ignored become complacent resulting in a loss of relational efficacy, which reinforces the key role of customer engagement to keep a relational bonds salient. Hypothesis 6 is marginally supported as customer engagement alters the influence of relationship on expansion (Model 2b;  $p < .10$ ). Additional evidence emerges from the simple slope analysis. As depicted in Figure 2, relationship's effect on expansion turns negative in response to customer engagement for the treatment group (Panel F;  $p < .10$ ) in contrast to a non-significant slope in the control group. Together, this evidence affirms that customer engagement enhances relationship's protection against defection, possibly by activating complacent relationships, but the effects are opposite for expansion. Customers with weak relationships are more likely to reciprocate for benefits received since they exceed norms resulting in gratitude-based reciprocal behaviors (i.e., expansion) (Palmatier et al. 2009).

To support the multinomial analysis, we considered the potential effects of rare events, noting that only 6.14% of customers defected and 3.62% expanded. These small percentages had substantial implications for the firm's financial performance, but their low frequency qualifies them as potentially rare events, which could lead to biased or inefficient coefficients. This risk was minimal, at less than 1% according to rare event guidelines offered by King and Zeng (2001), because the sample size was greater than 2,000, and each rare outcome accounted for at least 3% of all outcomes. The guidelines consider the rate of occurrence and the overall sample size and suggest risk for biased or inefficient coefficients is much greater with combinations of small sample sizes and events below 3%. For further assurance beyond the guidelines, we reestimated the model with a smaller sample, after dropping 624 random status quo cases, so that each outcome represented more than 5% of all outcomes. The signs and significance of the hypothesized effects remained consistent, though the interaction of habit and customer engagement on defection moved from significant at  $p < .05$  to marginally significant at  $p < .10$ .

## **Discussion and Implications**

Firms are tempted to take customers' business for granted since existing customers are considered a relatively secure source of future revenue; consequently many exchange reach a state of complacency and vulnerability rather than their full potential. In recent years, marketing experts have begun promoting customer engagement as the cure-all for dormant and vulnerable

customers (Kumar 2013; Voyles 2007). Yet, customer engagement is challenging. It needs to be well-crafted and directed towards the right recipients to be successful. This research helps inform this challenge by showing that companies must account for customers' loyalty profile across three intrinsic loyalty mechanisms to successfully target customer engagement. We examine how customer engagement alters, rather than simply augments, the existing habit-, dependence-, and relationship-based loyalty mechanisms that characterize existing customer exchanges.

### **Theoretical insights into customer engagement and intrinsic loyalty mechanisms**

Responding to the Marketing Science Institute's call for insights on customer engagement as formulated in their current Research Priorities, this study contributes to marketing knowledge on several dimensions. First, we disentangle the existing customer-company bond into three high-level customer loyalty mechanisms, showing an interesting pattern of results. In particular, habit-based loyalty deserves greater attention in relationship marketing theory and research. With a few notable exceptions (Henderson, Beck, and Palmatier 2011; Liu-Thompkins and Tam 2013; Shah, Kumar, and Kim 2014), relationship marketing research rarely theorizes about or measures habit as a driver of behavioral loyalty alongside other well-recognized constructs (e.g., dependence, relationship) (Palmatier et al. 2006; Verhoef 2003). This research is the first to include all three in the same model and highlights the importance of habit in suppressing change, which is valuable for reducing defection but detrimental for expansion.

By including habit alongside metrics for relationship and dependence, we insure habit's impact is not misattributed and we are better situated to isolate unique effects of other loyalty mechanisms. For instance, our findings may help refine the understanding of dependence and relationship's role in suppressing defection after accounting for the effects of habit that are often ignored in previous research. Dependence and relationship both exhibited a negative main effect on defection for our overall sample, as is well documented in the extant research (Palmatier et al. 2006). However, upon closer examination of the simple slopes for the control group and the treatment group, these effects occurred when customers received an engagement initiative. This implies that the power of relationship and dependence to suppress defection may lie latent until activated by external forces, such as customer engagement. In contrast, habit's power on defection appears to be a constant inertia force until disrupted by external forces.

Capturing all three mechanisms allows us to demonstrate how customer engagement success depends on its indirect effects through altering the loyalty mechanism already in play. Prior

research on customer engagement, loyalty programs, and relationship marketing investments largely focuses on design characteristics of the tactic rather than characteristics of the recipient (Kopalle et al. 2012; Liu and Yang 2009; Palmatier, Gopalakrishna, and Houston 2006). While design characteristics are critical, our findings emphasize that theoretical explanations of relationship marketing effectiveness must also consider how relationship marketing tactics might undermine, in addition to build loyalty. We argue that this is especially true for customer engagement because it is designed as an exchange stimulant, an external shock, which instigates intended and unintended effects. For instance, customer engagement disrupts habit's behavioral inertia, which releases habit's hold on expansion but simultaneously reduces habit's power to suppress the likelihood of defection. Similarly, customer engagement enhances dependence's and relationship's protection against defection. Thus, customer engagement can indeed spark superior performance when targeted wisely, but can also backfire.

Finally, this research underscores the importance of adopting research designs that disentangle constructs and aggregate outcomes and thereby aid the discovery of complex differential effects. Our study reveals a strong tension between defection and expansion. For example, if spending level were used as the outcome variable the opposing effects of habit limiting defection and expansion, reversed by customer engagement, would be hidden. Perhaps habit received less prior attention because it appeared unimportant when studies used aggregate performance outcomes. By disentangling outcomes, opposing effects were revealed enabling more nuanced and thorough effectiveness evaluations.

### **Managerial insights into customer engagement across customer loyalty profiles**

Marketers interested in customer engagement need to develop specific customer engagement strategies for each customer segment based on its unique loyalty profile, because, as our results suggest, customer engagement has mixed effects on performance. To provide managerial guidance, we conduct a post-hoc spotlight analysis to capture the significant effects of customer engagement for four prototypical loyalty profiles (Spiller et al. 2013). The results are summarized in Figure 3 (appears following References) where each customer profile, characterized by different levels of habit-, dependence-, and relationship-based loyalty, is mapped onto a three-dimensional loyalty space. The size of each bubble corresponds to the change in the percentage likelihood of the defection and expansion. In addition, we offer potential engagement strategies for each customer group.

For example, we identify “Loyalists,” characterized by high levels across all loyalty mechanisms as the most appropriate target of customer engagement as there are benefits with no offsetting penalty (5.1% reduction in defection with no significant effect on expansion). Customer engagement appears to be valuable strategy to Loyalist by signaling the seller still cares, and thus activating latent dependence and relationship mechanisms. Sellers should note that after engagement, these customers will have their habits “broken” but with benefits of the two other mechanism activated, they will be more loyal and less likely to defect.

The effects of customer engagement on other loyalty profiles are not as clear cut. Customers mainly bound by habit are labeled “Sleeping Dogs” because upon awakening through customer engagement they may play (expansion increases by 1.9%) or bite (defection increases 3.3%). With these customers, a firm may need to wait for them to become “tethered” with higher levels of dependence and relationship to suppress defection before engaging with ancillary initiatives. However, the net effect on sales and profits will depend on the relative benefits from gains in expansion versus losses due to defection, which could vary across customers depending on a customer’s projected lifetime value.

Our analysis suggests customers with low levels across all intrinsic loyalty mechanisms respond negatively to engagement with no offsetting gains (5.8% increase in defection with no significant effect on expansion). Since these customers appear to have little motivation (neither memory, rational, nor social-emotive) to remain with a firm then any form of engagement may be perceived with suspicion or as a hassle, and thus they are labeled “Skeptics.” Uncertain of the seller’s true value and intentions, Skeptics are more likely than other customers to perceive customer engagement tactics as a negative signal of seller’s motivation (Feltovich, Harbaugh, and To 2002; Martín and Camarero 2005), they may view it as a means to manipulate or compensate for an inferior or overpriced core-offering. A short-term approach is to consistently deliver the existing offering to provide the stability needed for habits to develop offering some underpinning to loyalty as a longer term solution is developed.

The effect of customer engagement is quite the opposite for another group of customers termed “Dependent Partners,” characterized by high dependence, low habit, and moderate relationship. Customer engagement can activate a customer dependency by making it more salient, which makes them less likely to defect by both signaling that the seller is not exploiting their power and reminding them of their dependency (Feltovich, Harbaugh, and To 2002; Martín



and Camarero 2005). For these customers, engagement leads to a 5.3% drop in likelihood of defection. However, by making customer dependence more salient these Dependent Partners reduced their likelihood of expansion by 8.6% possibly to prevent adding to their dependence on this seller. Although it probably still makes sense to target Dependent Partners because of the important drop in defection, perhaps sellers should test other more socially-oriented customer engagement tactics to build a relationship to offset a customer's concern about power-based exploitation. Overall, managers need to understand the intrinsic loyalty profile of their existing customers in order to design and target customer engagement strategies to maximize effectiveness since customer engagement does not appear to be a magic bullet that always generates rewards.

### **Limitations and Future Research**

This research is the first major effort to evaluate the effects of customer engagement in the context of existing customer-company bonds, and therefore, is not without limitations that are worth addressing in future research. First, we focus on establishing the moderating impact of customer engagement on the links between existing loyalty mechanisms and two important customer behaviors underlying performance. Future research should consider how customer engagement interacts with customer loyalty mechanisms to impact second-order behavioral such as customers' referral, influencer, or knowledge behavior manifestations (Kumar et al. 2010).

Second, the data came from a single company. Future research should extend to other firms in different industries to evaluate the generalizability of the findings and to identify moderating conditions. For example, many retail contexts require customers to actively choose to buy, and defection can be a passive act, which may alter the role habits play in guiding behavior. Third, the particular engagement tactic investigated in this research occurred once and lasted for two months. Research is needed to understand how different customer engagement characteristics may differentially affect intrinsic loyalty mechanisms. Future research could examine how the interaction effects uncovered with any particular form of customer engagement may evolve dynamically with continuous tactics, especially the longer reaching traditional loyalty programs. Effects may grow stronger or diminish over time as customers adjust to the engagement. A potential finding could be that customer engagement initially breaks habits, but over time, the initiative could become ingrained into the consumption context and help build habits by encouraging consistent consumption. If this were the case, changes of behavior such as defection

and expansion would be especially likely early but become increasingly rare over time.

## References

- Ajzen, Icek (2002), "Residual Effects of Past on Later Behavior: Habituation and Reasoned Action Perspectives," *Personality and Social Psychology Review*, 6 (2), 107-22.
- Aurier, Philippe and Gilles N'Goala (2010), "The Differing and Mediating Roles of Trust and Relationship Commitment in Service Relationship Maintenance and Development," *Journal of the Academy of Marketing Science*, 38 (Summer), 303-25.
- Barnes, James G. (1997), "Closeness, Strength, and Satisfaction: Examining the Nature of Relationships between Providers of Financial Services and Their Retail Customers," *Psychology & Marketing*, 14 (December), 765-90.
- Bendapudi, Neeli and Leonard L. Berry (1997), "Customers' Motivations for Maintaining Relationship with Service Providers," *Journal of Retailing*, 73 (1), 15-37.
- Bijmolt, Tammo H. A., Matilda Dorotic, and Peter C. Verhoef (2011), "Loyalty Programs: Generalizations on Their Adoption, Effectiveness and Design," *Foundations and Trends in Marketing*, 5 (4), 197-258.
- Bolton, Ruth N. (1998), "A Dynamic Model of the Duration of the Customer's Relationship with a Continuous Service Provider: The Role of Satisfaction," *Marketing Science*, 17 (1), 45-65.
- Breivik, Einar and Helge Thorbjørnsen (2008), "Consumer Brand Relationships: An Investigation of Two Alternative Models," *Journal of the Academy of Marketing Science*, 36 (4), 443-72.
- Burnham, Thomas A., Judy K. Frels, and Vijay Mahajan (2003), "Consumer Switching Costs: A Typology, Antecedents, and Consequences," *Journal of the Academy Marketing Science*, 31 (Spring), 109-26.
- Cannon, Joseph P., Ravi S. Achrol, and Gregory T. Gundlach (2000), "Contracts, Norms, and Plural Form Governance," *Journal of the Academy Marketing Science*, 28 (Spring), 180-94.
- Chartrand, Tanya L., Amy N. Dalton, and Gavan J. Fitzsimons (2007), "Nonconscious Relationship Reactance: When Significant Others Prime Opposing Goals," *Journal of Experimental Social Psychology*, 43 (5), 719-26.
- Clark, Margaret S. and Judson Mills (1979), "Interpersonal Attraction in Exchange and Communal Relationships," *Journal of Personality and Social Psychology*, 37 (1), 12.
- Cooil, Bruce, Timothy L. Keiningham, Lerzan Aksoy, and Michael Hsu (2007), "A Longitudinal Analysis of Customer Satisfaction and Share of Wallet: Investigating the Moderating Effect of Customer Characteristics," *Journal of Marketing*, 71 (January), 67-83.

- Crosby, Lawrence A., Kenneth R. Evans, and Deborah Cowles (1990), "Relationship Quality in Services Selling: An Interpersonal Influence Perspective," *Journal of Marketing*, 54 (July), 68-81.
- Dagger, Tracey S., Peter J. Danaher, and Brian J. Gibbs (2009), "How Often Versus How Long: The Interplay of Contact Frequency and Relationship Duration in Customer-Reported Service Relationship Strength," *Journal of Service Research*, 11 (4), 371-88.
- De Wulf, Kristof, Gaby Odekerken-Schröder, and Dawn Iacobucci (2001), "Investments in Consumer Relationships: A Cross-Country and Cross-Industry Exploration," *Journal of Marketing*, 65 (October), 33-50.
- Dick, Alan S. and Kunal Basu (1994), "Customer Loyalty: Toward an Integrated Conceptual Framework," *Journal of the Academy of Marketing Science*, 22 (2), 99-113.
- Duhigg, Charles (2012), "How Companies Learn Your Secrets," (accessed March 23, 2012, 2012), [available at [http://www.nytimes.com/2012/02/19/magazine/shopping-habits.html?\\_r=4&smid=fb-share&adxnlnx=1329411784-cfhixAj51tDp2Pmch5BQDQ&pagewanted=all](http://www.nytimes.com/2012/02/19/magazine/shopping-habits.html?_r=4&smid=fb-share&adxnlnx=1329411784-cfhixAj51tDp2Pmch5BQDQ&pagewanted=all)].
- Dwyer, Robert F., Paul H. Schurr, and Sejo Oh (1987), "Developing Buyer-Seller Relationships," *Journal of Marketing*, 51 (April), 11-27.
- Emerson, Richard M. (1962), "Power-Dependence Relations," *American Sociological Review*, 27 (February), 31-41.
- Fang, Eric, Robert W. Palmatier, and Kenneth R. Evans (2008), "Influence of Customer Participation on Creating and Sharing of New Product Value," *Journal of the Academy of Marketing Science*, 36 (3), 322-36.
- Feltovich, Nick, Richmond Harbaugh, and Ted To (2002), "Too Cool for School? Signalling and Countersignalling," *The RAND Journal of Economics*, 33, 630-49.
- Friestad, Marian and Peter Wright (1994), "The Persuasion Knowledge Model: How People Cope with Persuasion Attempts," *Journal of Consumer Research*, 21 (1), 1-31.
- Gupta, Sunil and Donald R. Lehmann (2005), *Managing Customers as Investments*. Upper Saddle River, NJ: Wharton School Publishing.
- Gustafsson, Anders, Michael D. Johnson, and Inger Roos (2005), "The Effects of Customer Satisfaction, Relationship Commitment Dimensions, and Triggers on Customer Retention," *Journal of Marketing*, 69, 210-18.
- Haisley, Emily and George Loewenstein (2011), "It's Not What You Get but When You Get It: The Effect of Gift Sequence on Deposit Balances and Customer Sentiment in a Commercial Bank," *Journal of Marketing Research*, 48 (1), 103-15.

- Heide, Jan B. and George John (1988), "The Role of Dependence Balancing in Safeguarding Transaction-Specific Assets in Conventional Channels," *Journal of Marketing*, 52 (January), 20-35.
- Henderson, Conor M., Joshua T. Beck, and Robert W. Palmatier (2011), "Review of the Theoretical Underpinnings of Loyalty Programs," *Journal of Consumer Psychology*, 21 (July), 257-73.
- Hibbard, Jonathan D., Nirmalya Kumar, and Louis W. Stern (2001), "Examining the Impact of Destructive Acts in Marketing Channels Relationship," *Journal of Marketing Research*, 38 (February), 25-61.
- Jap, Sandy D. and Shankar Ganesan (2000), "Control Mechanisms and the Relationship Life Cycle: Implications for Safeguarding Specific Investments and Developing Commitment," *Journal of Marketing Research*, 37 (May), 227-45.
- Johnson, Michael D, Andreas Herrmann, and Frank Huber (2006), "The Evolution of Loyalty Intentions," *Journal of Marketing*, 70 (April), 122-32.
- King, Gary and Langche Zeng (2001), "Logistic Regression in Rare Events Data," *Political Analysis*, 9 (2), 137-63.
- Kopalle, Praveen K., Yacheng Sun, Scott A. Neslin, Baohong Sun, and Vanitha Swaminathan (2012), "The Joint Sales Impact of Frequency Reward and Customer Tier Components of Loyalty Programs," *Marketing Science*, 31 (2), 216-35.
- Kumar, V. (2013), *Profitable Customer Engagement: Concept, Metrics, and Strategies*. Thousand Oaks, Ca: Sage Publications.
- Kumar, V., Lerzan Aksoy, Bas Donkers, Rajkumar Venkatesan, Thorsten Wiesel, and Sebastian Tillmanns (2010), "Undervalued or Overvalued Customers: Capturing Total Customer Engagement Value," *Journal of Service Research*, 13 (August), 297-310.
- Kumar, V., Morris George, and Joseph Pancras (2008), "Cross-Buying in Retailing: Drivers and Consequences," *Journal of Retailing*, 84 (1), 15-27.
- Leeflang, Peter S. H. and Dick R. Wittink (2000), "Building Models for Marketing Decisions: Past, Present and Future," *International Journal of Research in Marketing*, 17 (September), 105-26.
- Liu-Thompkins, Yuping and Leona Tam (2013), "Not All Repeat Customers Are the Same: Designing Effective Cross-Selling Promotion on the Basis of Attitudinal Loyalty and Habit," *Journal of Marketing*, 77 (September), 21-36.
- Liu, Yuping (2007), "The Long-Term Impact of Loyalty Programs on Consumer Purchase Behavior and Loyalty," *Journal of Marketing*, 71 (October), 19-35.

- Liu, Yuping and Rong Yang (2009), "Competing Loyalty Programs: Impact of Market Saturation, Market Share, and Category Expandability," *Journal of Marketing*, 73 (January), 93-108.
- Martín, Sonia San and Carmen Camarero (2005), "Consumer Reactions to Firm Signals in Asymmetric Relationships," *Journal of Service Research*, 8 (August), 79-97.
- McAllister, Daniel J. (1995), "Affect- and Cognition-Based Trust as Foundations for Interpersonal Cooperation in Organizations," *Academy of Management Journal*, 38 (February), 24-59.
- Melancon, Joanna Phillips, Stephanie M. Noble, and Charles H. Noble (2011), "Managing Rewards to Enhance Relational Worth," *Journal of the Academy of Marketing Science*, 39 (3), 341-62.
- Mende, Martin, Ruth N. Bolton, and Mary Jo Bitner (2013), "Decoding Customer-Firm Relationships: How Attachment Styles Help Explain Customers' Preferences for Closeness, Repurchase Intentions, and Changes in Relationship Breadth," *Journal of Marketing Research*, 50 (February), 125-42.
- MSI (2014), "2014-2016 Research Priorities," (accessed September 15, 2014, [available at [http://www.msi.org/uploads/files/MSI\\_RP14-16.pdf](http://www.msi.org/uploads/files/MSI_RP14-16.pdf)].
- Oliver, Richard L. (1999), "Whence Consumer Loyalty?," *Journal of Marketing*, 63 (Special Issue), 33-44.
- Palmatier, Robert W., Rajiv P. Dant, and Dhruv Grewal (2007), "A Comparative Longitudinal Analysis of Theoretical Perspectives of Interorganizational Relationship Performance," *Journal of Marketing*, 71 (October), 172-94.
- Palmatier, Robert W., Rajiv P. Dant, Dhruv Grewal, and Kenneth R. Evans (2006), "Factors Influencing the Effectiveness of Relationship Marketing: A Meta-Analysis," *Journal of Marketing*, 70 (October), 136-53.
- Palmatier, Robert W., Srinath Gopalakrishna, and Mark B. Houston (2006), "Returns on Business-to-Business Relationship Marketing Investments: Strategies for Leveraging Profits," *Marketing Science*, 25 (5), 477-93.
- Palmatier, Robert W., Cheryl Burke Jarvis, Jennifer R. Bechkoff, and Frank R. Kardes (2009), "The Role of Customer Gratitude in Relationship Marketing," *Journal of Marketing*, 73 (September), 1-18.
- Palmatier, Robert W., Lisa K. Scheer, Mark B. Houston, Kenneth R. Evans, and Srinath Gopalakrishna (2007), "Use of Relationship Marketing Programs in Building Customer-Salesperson and Customer-Firm Relationships: Differential Influences on Financial Outcomes," *International Journal of Research in Marketing*, 24 (September), 210-23.

- Quinn, Jeffrey M., Anthony Pascoe, Wendy Wood, and David T. Neal (2010), "Can't Control Yourself? Monitor Those Bad Habits," *Personality and Social Psychology Bulletin*, 36 (4), 499-511.
- Redish, A. David, Steve Jensen, Adam Johnson, and Zeb Kurth-Nelson (2007), "Reconciling Reinforcement Learning Models with Behavioral Extinction and Renewal: Implications for Addiction, Relapse, and Problem Gambling," *Psychological Review*, 114 (3), 784-805.
- Reimann, Martin, Raquel Castaño, Judith Zaichkowsky, and Antoine Bechara (2012), "How We Relate to Brands: Psychological and Neurophysiological Insights into Consumer-Brand Relationships," *Journal of Consumer Psychology*, 22 (January), 128-42.
- Reinartz, Werner J. and V. Kumar (2003), "The Impact of Customer Relationship Characteristics on Profitable Lifetime Duration," *Journal of Marketing*, 67 (January), 77-99.
- Rosenbaum, Paul R. and Donald B. Rubin (1985), "Constructing a Control Group Using Multivariate Matched Sampling Methods That Incorporate the Propensity Score," *The American Statistician*, 39 (1), 33-38.
- Roy, Rishin, Pradeep K. Chintagunta, and Sudeep Haldar (1996), "A Framework for Investigating Habits, "the Hand of the Past," and Heterogeneity in Dynamic Brand Choice," *Marketing Science*, 15 (3), 280-99.
- Samaha, Stephen, Robert W. Palmatier, and Rajiv P. Dant (2011), "Poisoning Relationships: Perceived Unfairness in Channels of Distribution," *Journal of Marketing*, 75 (May), 99-117.
- Shah, Denish, V. Kumar, and Kihyun Hannah Kim (2014), "Managing Customer Profits: The Power of Habits," *Journal of Marketing Research*, published online May 29, 2014.
- Shen, Hao, Fang Wan, and Robert S. Wyer Jr (2011), "Cross-Cultural Differences in the Refusal to Accept a Small Gift: The Differential Influence of Reciprocity Norms on Asians and North Americans," *Journal of Personality and Social Psychology*, 100 (2), 271-81.
- Spiller, Stephen A., Gavan J. Fitzsimons, John G. Lynch Jr, and Gary H. McClelland (2013), "Spotlights, Floodlights, and the Magic Number Zero: Simple Effects Tests in Moderated Regression," *Journal of Marketing Research*, 50 (April), 277-88.
- Thibaut, John W. and Harold H. Kelley (1959), *The Social Psychology of Groups*. New York: John Wiley & Sons.
- Thomson, Matthew, Deborah J. MacInnis, and C. W. Park (2005), "The Ties That Bind: Measuring the Strength of Consumers' Emotional Attachments to Brands," *Journal of Consumer Psychology*, 15 (1), 77-91.

- Tobias, Robert (2009), "Changing Behavior by Memory Aids: A Social Psychological Model of Prospective Memory and Habit Development Tested with Dynamic Field Data," *Psychological Review*, 116 (2), 408-38.
- van Doorn, Jenny and Peter C. Verhoef (2008), "Critical Incidents and the Impact of Satisfaction on Customer Share," *Journal of Marketing*, 72 (July), 123-42.
- Verhoef, Peter C. (2003), "Understanding the Effect of Customer Relationship Management Efforts on Customer Retention and Customer Share Development," *Journal of Marketing*, 67 (October), 30-45.
- Verplanken, Bas (2006), "Beyond Frequency: Habit as Mental Construct," *British Journal of Social Psychology*, 45 (3), 639-56.
- (2008), "Habit and Consumer Behavior: Implications for Interventions and Behavior Change," in *Advances in Consumer Research Conference*, Angela Y. Lee and Dilip Soman (Eds.) Vol. 35. Duluth, MN: Association for Consumer Research.
- Verwijmeren, Thijs, Johan C. Karremans, Wolfgang Stroebe, and Daniël H. J. Wigboldus (2011), "The Workings and Limits of Subliminal Advertising: The Role of Habits," *Journal of Consumer Psychology*, 21, 206-13.
- Voyles, Bennett (2007), "Beyond Loyalty: Meeting the Challenge of Customer Engagement Part I," (accessed May 30, 2014, [available at <http://www.adobe.com/engagement/pdfs/partI.pdf>]).
- Wood, Wendy and David T. Neal (2009), "The Habitual Consumer," *Journal of Consumer Psychology*, 19 (October), 579-92.



**Table 1**  
**Selected Marketing Research on Intrinsic Loyalty Mechanisms**

Reference	Context	Key Constructs	Major Findings
<b>Habit</b>			
Breivik and Thorbjørnsen 2008	Online brand communities	Consumer-brand relationship, habit strength	Indicators of habit strength predicted <i>repurchase likelihood</i> beyond that of commonly used measures of relationship strength or quality. The impact of habits increases with frequently bought or consumed categories.
Liu-Thompkins and Tam 2013	Convenience store chain	Attitudinal loyalty, habit, <i>repeat purchase</i> , <i>cross-selling</i>	Both attitudinal loyalty and habit positively affect <i>repeat purchase</i> . While attitudinal loyalty facilitates <i>cross-selling</i> , habit impedes it. One-shot cross-selling promotions are not only ineffective for habitual customers, but can even reduce their purchases in the original category. Instead, action repetition should be built into cross-selling promotions.
Tobias 2009	Recycling campaign	Accessibility, <i>behavior</i> , commitment, habit strength	Habits provide a strong memory advantage over competing behaviors. Intention accessibility decays as habits develop but is enhanced by reminders. Reminders' positive impact on accessibility is positively moderated by behavior commitment. Reminder's potency increases with proximity to behavior context, but its salience decreases with exposure.
<b>Dependence</b>			
Burnham, Frels, and Mahajan 2003	Service provider, telecom & finance	Breadth of use, switching costs, <i>intent to stay</i>	Breadth of use was one of the main drivers of procedural, financial, and relational switching costs (dependence). All three supported customers <i>intent to stay</i> with the provider, but financial switching costs had the weakest effect.
Kumar, George, and Pancras 2008	Catalog retailing	Product returns, mailings, <i>cross-buying</i>	<i>Cross-buying</i> provides benefits from expansion at a retailer but also risks from increased dependence. Factors that theoretically should decrease perceived risk empirically support <i>cross-buying</i> .
Martín and Camarero 2005	Service provider, auto	Information asymmetry, dependence, <i>trust</i>	Customers, uncertain of a seller's true competence and intentions, will interpret seller investments as signals of <i>trustworthiness</i> . Dependent customers, exclusive to one seller, interpret seller investments (e.g. warranty) as a signal of benevolent intentions in addition to competence, reducing fear of <i>opportunism</i> .
<b>Relationship</b>			
Palmatier et al. 2006	Meta-analysis	Dependence, duration, benefits, <i>trust</i> , <i>commitment</i>	Dependence and relationship duration have relatively small but positive effects on commitment and trust. Investments, expertise, similarity, and benefits had larger effects. Conflict had the largest effect, but was negative. Both commitment and trust drove relationship performance outcomes.
Palmatier et al. 2009	Retail clothing, manufacturer of industrial products and services	Gratitude, relationship investments, <i>purchase intentions</i> , <i>sales</i>	Gratitude mediates the effect of relationship investment on <i>performance</i> , along with trust and commitment. Relationship investments' effect on gratitude is positively moderated by customers' perceptions of seller's free will, benevolence, and customer's need for the investment.
Reimann et al. 2012	Brand recall experiments	Relationship length, love	As consumer's relationships with their favorite brand endure, the arousal reactions decline but the inclusion of the brand in the self concept solidifies.

Notes: These studies examined a number of relevant outcome variables. We emphasize these different dependent variables by formatting each outcome with *italics*.

**Table 2**  
**Construct, Definition, and Operationalization**

Construct	Definition	CRM Database Metrics for Variable Operationalization	Source
<b>Manipulated Moderator: Customer Engagement</b>			
Customer engagement	Sellers' initiatives to occupy the attention of an existing customer through the provision of special benefits and experiences that go beyond the core offering.	An indicator of whether or not the seller provided a customer with two months of free calls on their home phone lines, "no-strings attached". Customers were randomly selected.	Haisley and Loewenstein 2011
<b>Observed Independent Variables: Intrinsic Loyalty Mechanisms</b>			
Habit	A customer's increased propensity to remain with a seller arising from memory-based advantages for the established patronage pattern over alternatives. Habit is created by consistently performing the same behavior in a regular context.	A lack of variance in behavior over time, represented by the following calculation: $100 / (1 + \text{Var}(X))$ , where $X$ represents the customer's monthly bill divided by their average bill for each of the 5 months preceding the experiment.	Ajzen 2002; Roy, Chintagunta, and Halder 1996
Dependence	A customer's increased propensity to remain with a seller arising from cognitive evaluations of potential switching costs. A state of dependence restricts mobility when rational considerations of the unique benefits lost and expenses incurred outweigh potential benefits available from defection.	The number of service categories. Multi-category subscribers receive bundling discounts but sign contracts with early termination penalties <sup>a</sup> .	Burnham, Frels, and Mahajan 2003; Crosby, Evans, and Cowles 1990; Reinartz and Kumar 2003
Relationship	A customer's increased propensity to remain with a seller arising from social emotions and confidence in the seller. A relationship solidified through a shared history propels the customer beyond present turmoil to reflect on the past and then confidently look to the future.	The length of time the seller has served the customer, captured at the beginning of the observation period <sup>b</sup> .	Coolil et al. 2007; Dagger, Danaher, and Gibbs 2009
<b>Observed Control Variables: Segmentation Descriptors</b>			
Segmentation descriptors	Commonly available customer segmentation descriptors that often correlate with a customer's attractiveness to the existing seller and its competitors, and the attractiveness of these providers to the customer.	<ul style="list-style-type: none"> <li>• Age (collapsed into ordinal brackets)<sup>b</sup></li> <li>• Size (natural log of pre-experiment spending level)<sup>b</sup></li> <li>• Lifestyle (three nominal categories)<sup>c</sup></li> <li>• Region (five regions)<sup>c</sup></li> </ul>	Mende, Bolton, Bitner 2013; Verhoef 2003
<b>Observed Dependent Variables: Customer Performance</b>			
Defection	An existing customer's discontinued patronage.	A multinomial indicator <sup>d</sup> of whether the customer: A) no longer subscribed to the seller's services (defection),	Aurier and N'Goala 2010; Mende, Bolton, Bitner 2013; Verhoef 2003
Status quo	An existing customer's unchanged patronage.	B) maintained his or her original subscriptions (status quo) <sup>e</sup> , or	
Expansion	An existing customer's increased patronage.	C) subscribed to more of his or her original subscriptions	

<sup>a</sup> All contracts expired after the distribution of the engagement initiative but before the end of the observation period, thus all customers could defect without penalty.

<sup>b</sup> For confidentiality, values were shifted by a constant.

<sup>c</sup> For confidentiality, meaning of individual categories of nominal variables are not specified.

<sup>d</sup> Assessed by comparing pre and post-experiment subscriptions.

<sup>e</sup> This category served as the reference category in multinomial logit analysis. An ordinal logit would not allow for opposing effects (e.g., habits limit both defection and expansion).

**Table 3**  
**Descriptive Statistics**

Variables	Control (N = 1132) <sup>a</sup>		Engagement (N = 1132) <sup>a</sup>		Correlations <sup>b</sup>				
	Mean	Std Dev	Mean	Std Dev	1.	2.	3.	4.	5.
<b>Continuous Variables</b>									
1. Habit	97.94	6.75	97.63	7.37	1.00				
2. Dependence	1.61	.74	1.63	.77	-.02	1.00			
3. Relationship	13.74	9.69	14.12	10.50	.08	-.04	1.00		
4. Age	9.04	2.40	9.05	2.45	.09	-.13	.40	1.00	
5. Size	5.23	.44	5.24	.45	.26	.05	-.02	-.10	1.00
<b>Nominal Variables</b>	<b>Frequency</b>	<b>Percent</b>	<b>Frequency</b>	<b>Percent</b>					
Lifestyle 1	264	12%	262	12%					
Lifestyle 2	672	30%	680	30%					
Lifestyle 3	196	9%	190	8%					
Region 1	262	23%	303	27%					
Region 2	247	22%	207	18%					
Region 3	413	36%	412	36%					
Region 4	182	16%	185	16%					
Region 5	28	2%	25	2%					
Defection	64	6%	75	7%					
Status quo	1034	91%	1009	89%					
Expansion	34	3%	48	4%					

<sup>a</sup>No significant differences between the control group and engagement (treatment) group (*t*-tests for continuous variables  $p > .30$  and chi-square tests for nominal variables  $p > .15$ ).

<sup>b</sup>Correlations greater than .04 are significant at  $p < .05$ .

**Table 4**  
**Results: Multinomial Logit Model of Defection and Expansion Versus Status Quo**

	Defection Versus Status Quo		Expansion Versus Status Quo	
	Model 1a	Model 2a	Model 1b	Model 2b
<b>Observed Independent Variables: Intrinsic Loyalty Mechanisms</b>				
Habit	-.004 (.012)	-.024 ** (.014)	-.012 (.015)	-.051 *** (.016)
Dependence	-.266 ** (.130)	-.003 (.178)	.415 *** (.141)	.599 *** (.216)
Relationship	-.023 ** (.012)	.000 (.015)	-.019 (.017)	.008 (.023)
<b>Manipulated Moderator: Customer Engagement</b>				
Customer engagement	.203 (.178)	-2.930 (2.688)	.369 (.234)	-18.583 ** (8.904)
Customer engagement × habit		H1 .045 ** (.027)	H2	.204 ** (.090)
Customer engagement × dependence		H3 -.517 ** (.261)	H4	-.287 (.286)
Customer engagement × relationship		H5 -.044 ** (.021)	H6	-.048 * (.031)
<b>Observed Control Variables: Segmentation Descriptors</b>				
Intercept	-2.237 (1.404)	-.940 (1.543)	-6.588 *** (1.866)	-4.141 ** (1.757)
Age	-.089 (.055)	-.096 * (.055)	-.045 (.068)	-.045 (.069)
Size	.277 (.208)	.290 (.208)	.772 *** (.259)	.906 *** (.268)
Lifestyle (three categories)	Included *	Included *	Included *	Included *
Region (five regions)	Included	Included	Included	Included
<b>Model Evaluation</b>				
Log-likelihood Model 1: 1621.773; ratio test vs Null Model $\chi^2(24) = 117.831^{***}$				
Log-likelihood Model 2: 1597.081; ratio test vs Model 1 $\chi^2(6) = 24.692^{***}$				

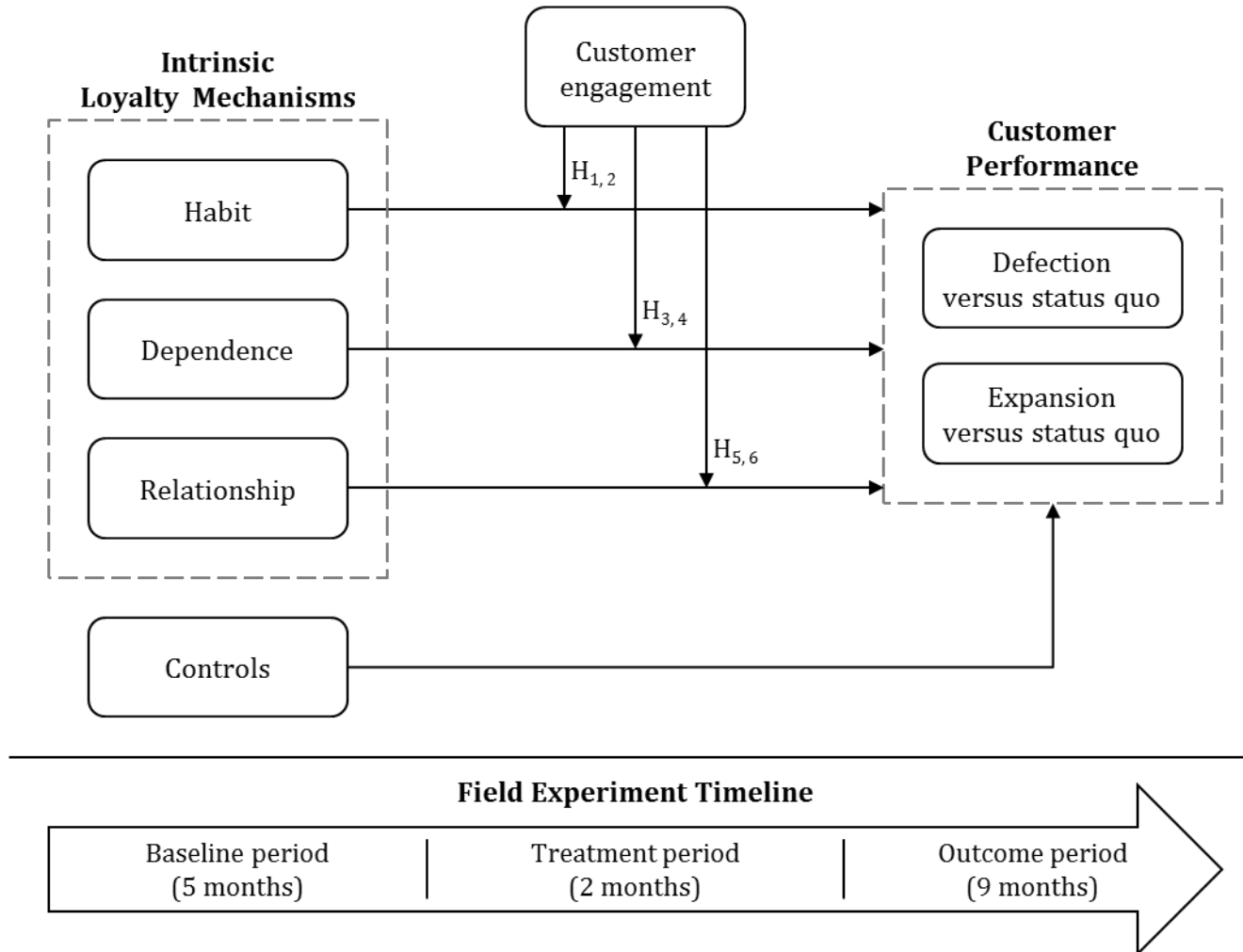
\* $p < .10$ .

\*\* $p < .05$ .

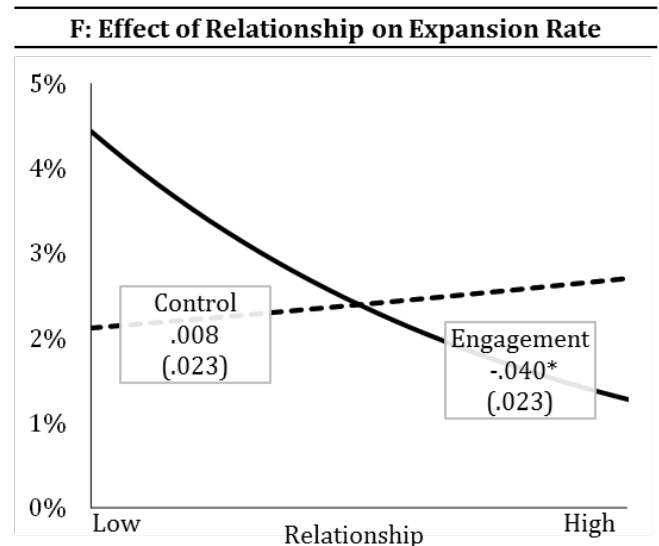
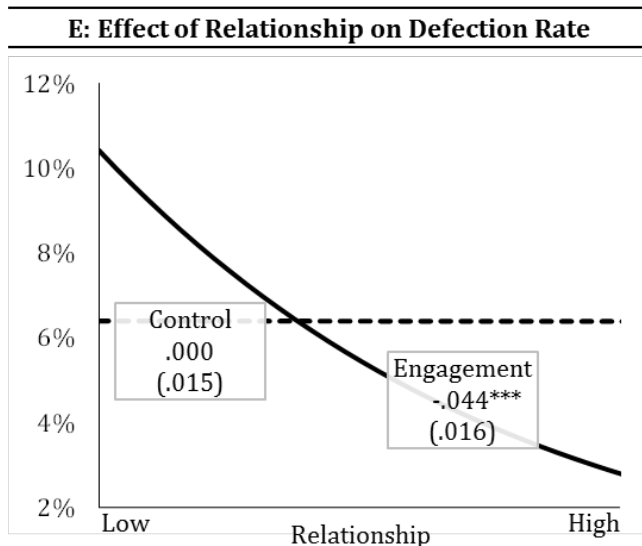
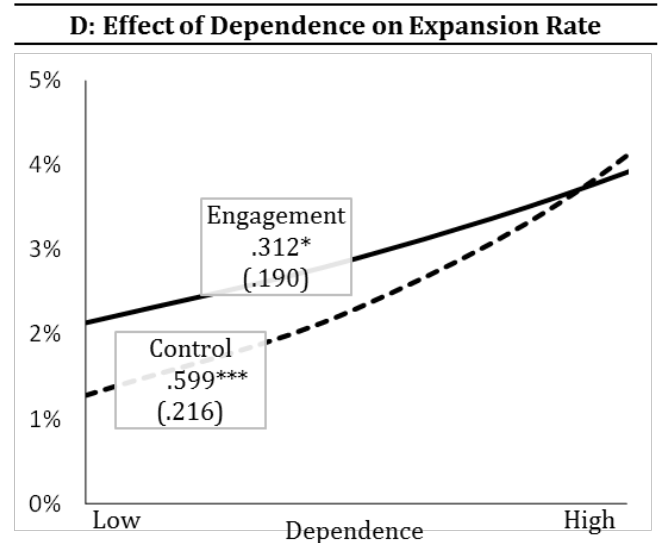
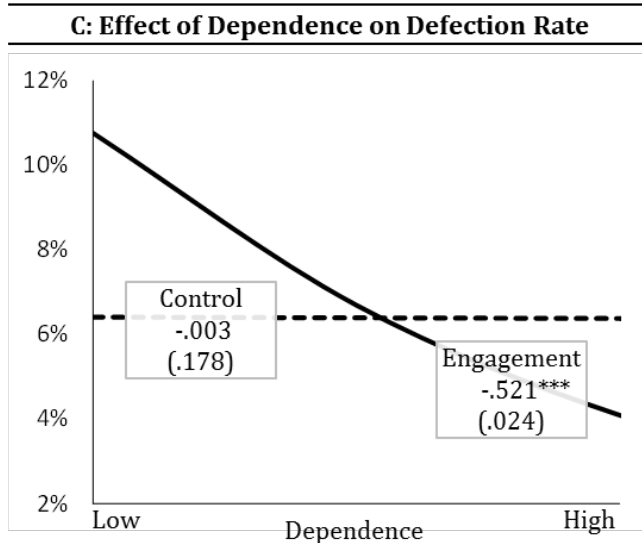
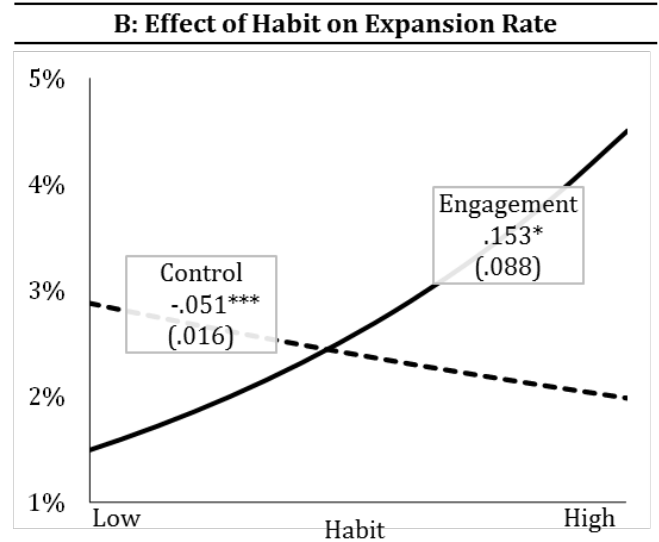
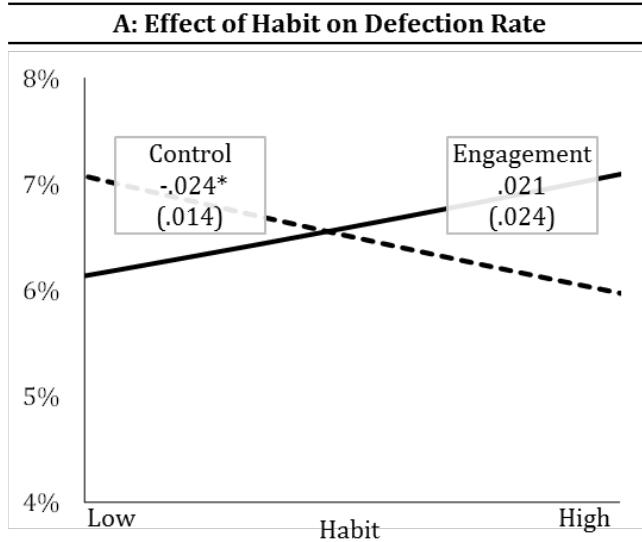
\*\*\* $p < .01$ .

Notes: Standard errors listed in parentheses below the parameter estimates. One-tailed test for hypothesized effects.

**Figure 1**  
**Conceptual Model and Research Design: How Customer Engagement Alters the Effects of Intrinsic Loyalty Mechanisms**

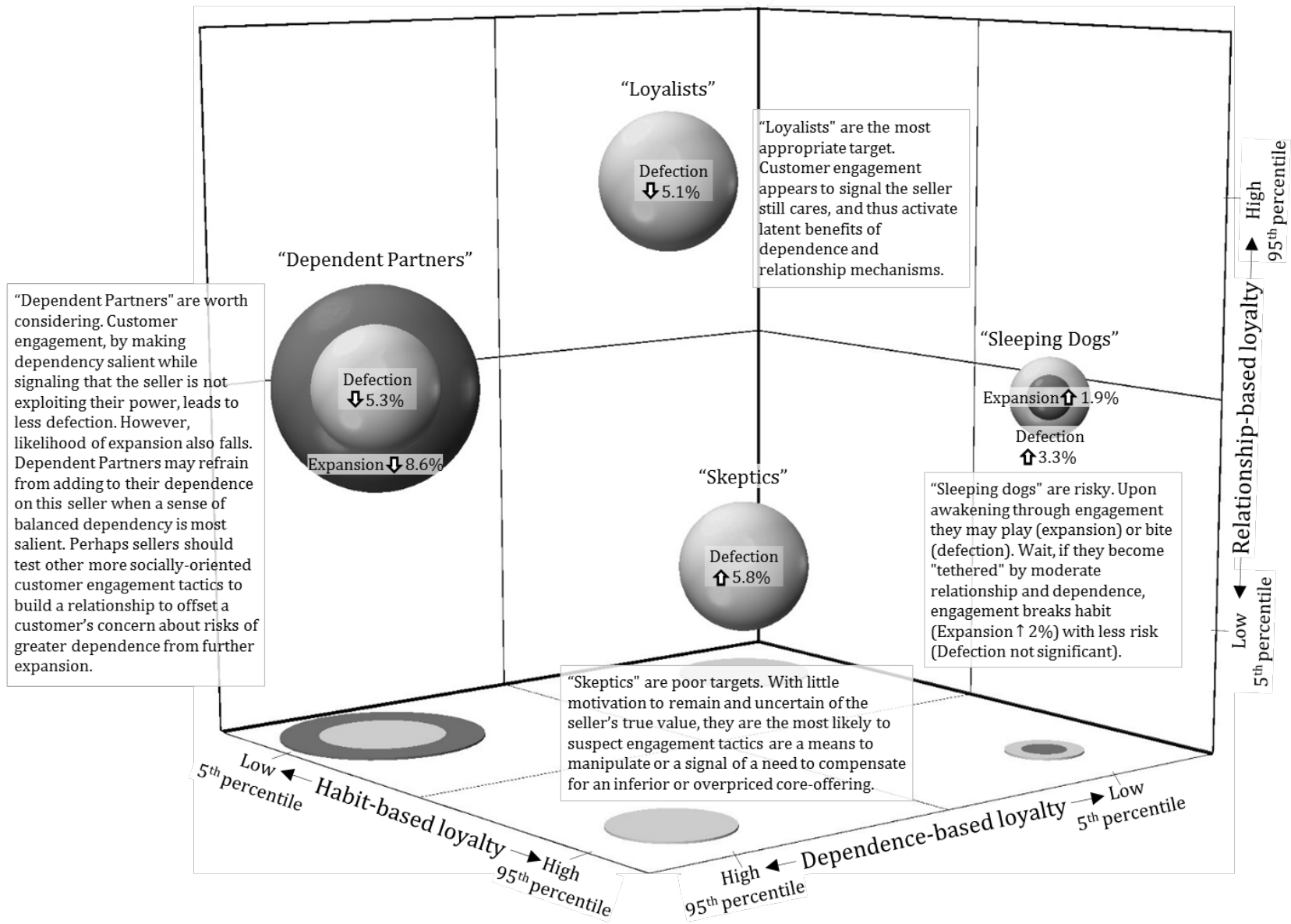


**Figure 2**  
**Effects of Intrinsic Loyalty Mechanisms across Experimental Conditions**



Notes: Coefficients from simple slope analysis above standard errors listed in parentheses. \* $p < .10$ , \*\* $p < .05$ , \*\*\* $p < .01$ .

**Figure 3**  
**Mapping the Effects of Customer Engagement on Expansion and Defection in Three-Dimensional Loyalty Space**



Notes: Bubble sizes correspond with the absolute percentage change in the likelihood of expansion or defection due to customer engagement. Based on spotlight analysis, where effects depicted are significant at  $p < .05$ . Locations for spotlight analysis chosen for their managerial relevance and interesting results.