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Antecedents and Consequences of Salesperson Perceptual Accuracy in Customer Relationships

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To Adrienne

As always, your love, laughter, and caring have helped me to endure the sacrifices necessary to complete this dissertation. Thanks for your patience and faith as we now embark on many more chapters together!!

To Mom, Dad, and Eric

Thanks for all of your steady and loving support. Without it, I would not have been able to do any of this. Mom and Dad, you both have given me such big shoes to fill.

Love you all.

**ANTECEDENTS AND CONSEQUENCES OF
SALESPERSON PERCEPTUAL ACCURACY IN CUSTOMER RELATIONSHIPS**

Abstract

Perceptual accuracy, or lack thereof, often influences a salesperson's effectiveness in delivering value to customers, yet prior research has generally assumed that salespeople can accurately evaluate customer relationship quality. Using survey and performance data from salesperson-customer dyads within a global industrial goods supplier, I demonstrate the vital role of salesperson perceptual accuracy in achieving relationship marketing effectiveness.

Surprisingly, salesperson perceptual accuracy does not bring benefits from all customers; rather, it provides a curvilinear improvement for both customer profitability and future purchase intention. Salesperson perceptual inaccuracy always reduces customer profitability, but only hurts future purchase intentions when perceptions are overblown. The effects of salesperson perceptual (in)accuracy depend on the relationship phase. To explain salesperson perceptual inaccuracy, I demonstrate that relationship quality antecedents (i.e., customer orientation, self-efficacy) can bias salesperson perception. Finally, a behavior-based control system is shown to be a managerial solution to attenuate salesperson perceptual inaccuracy.

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INTRODUCTION

Relationship marketing research has often demonstrated the positive performance outcomes associated with improving customer relationship perceptions (e.g., Doney and Cannon 1997; Kumar, Scheer, and Steenkamp 1995; Morgan and Hunt 1994; Palmatier et al. 2006a; Weitz and Bradford 1999). Furthermore, the growth of the service economy and systems selling has highlighted the role of the salesperson as a customer relationship manager (Crosby, Evans, and Cowles 1990; Dwyer, Schurr, and Oh 1987; Parvatiyar and Sheth 2000). Unfortunately, increasing evidence has shown that salespeople using relationship selling are often ineffective at delivering expected outcomes (Palmatier et al. 2008). Even more worrisome is that large investments in relationship marketing can be counterproductive and actually generate negative customer reactions (Colgate and Danaher 2000). It seems very challenging for salespeople to utilize resources effectively to produce the results desired from relationship marketing efforts. Firms and researchers are now asking: “Why are salespeople often ineffective at delivering value from relationship marketing investments?”

In this study, I attribute such ineffectiveness to the prevalent assumption in academic research and practice that salespeople accurately perceive customer relationships. In reality, a salesperson’s perceptions are error prone. Indeed, research in both marketing and psychology suggest that one’s social perceptions of others are often prone to systematic and potentially consequential errors (Gill and Swann 2004; John and Reve 1982). The limited research which has questioned the assumption of salesperson accuracy supports this notion. Ross, Anderson, and Weitz (1997) examined how asymmetric commitment perceptions enhance customers’ perceptions of relationship conflict and negatively affect their performance expectations. In a follow-up study, Vosgerau, Anderson, and Ross (2008) further examined perceptual differences and showed that the magnitude, as well as the direction, of firm misperceptions of relational

closeness affect conflict and losses in profit. While both studies highlight the importance of perceptual accuracy, or lack thereof, at least four important questions remain unanswered. Namely: (1) When salespeople accurately perceive their customers, do they receive the same benefits as predicted in relationship marketing literature? 2) If salespeople are inaccurate, what effects do the magnitude and direction of inaccuracy have on both short- and long-term performance outcomes? (3) Do the effects of salesperson (in)accuracy¹ change as the relationship matures? (4) What are potential antecedents to salesperson inaccuracy?

To answer these questions, I first propose a framework for salesperson perceptual (in)accuracy — the extent to which a salesperson can correctly evaluate a customer's perceptions of relationship quality— that captures the effects of accurate and inaccurate salesperson evaluations on two outcomes, customer profitability and future purchase intention. As relational norms and expectations change over the life of the relationship (Jap and Ganesan 2000), I also examine how the phase of the relationship affects the impacts of having accurate or inaccurate customer evaluations. Second, based on a three predictor framework of relationship quality (Crosby, Evans, and Cowles 1990; Palmatier et al. 2006a) I identify three antecedents – self-efficacy, customer orientation, and salesperson-customer similarity – to explain inaccuracy in salesperson perceptions. Finally, I investigate the moderating effects of control systems on these antecedents as a managerial solution for attenuating salesperson perceptual (in)accuracy.

I test my conceptual framework using 132 unique salesperson-customer dyads from a global industrial goods supplier. Several novel insights emerge. First, contrary to popular belief, findings support a U-shaped relationship between accurate salesperson perceptions and both outcomes, indicating that accurate salespeople attain higher profits and elicit more future

¹ We use the term perceptual (in)accuracy to refer to both perceptual accuracy and inaccuracy. When we use the term perceptual inaccuracy without brackets, we specifically focus on only the 'misperception' aspect.

purchases only when customers have high or low relationship quality. Second, inaccurate salesperson perceptions have an inverted U-shaped relationship with customer profitability, indicating that any deviation from actual customer perceptions lowers profits. However, the relationship between salesperson inaccuracy and future purchase intention is only costly for overestimations of relationship quality, while underestimations can provide improvement. Furthermore, accurate evaluations have a stronger influence on future purchase intention during the exploration phase of the relationship, while the build-up and maturation stage strengthens the effectiveness of accurate evaluations by providing increased benefits to profitability, and insulating salespeople from losses due to inaccuracy. Lastly, I show that self-efficacy and customer orientation can create biased perceptions for salespeople and lead to inaccurate customer evaluations. Fortunately, I found a behavioral-based control system to be a managerial solution to define relationship goals and attenuate bias.

With these findings, my study makes several contributions to researchers and practitioners. First, I divert from the conventional relationship marketing perspective to study the benefits of accurate salesperson perceptions as well as account for the difference in perceptions between customer and salesperson when examining outcomes of relationship quality. By understanding how salesperson evaluations affect the profitability of customer accounts and customers' future purchase intention, I shed new light on relationship marketing effectiveness. Additionally, I illustrate how the phase of the relationship changes the effects of salesperson perceptual (in)accuracy on both outcomes. Second, to explain why salespeople are inaccurate, I provide evidence that both customer orientation and self-efficacy bias salesperson perceptions. With this I aim to provide the first insights on antecedents that hinder a salesperson's ability to accurately perceive customers. Third, I propose that a behavior-based control system guides salespeople to decrease selective feedback seeking and form a more accurate perception of

customers not captured under an outcome-based system. Managerially, this study provides strategic implications for firms to improve relationship marketing effectiveness, understand the impact of salesperson evaluations as relationships mature, and reduce salesperson misperception of customer relationships when necessary.

I organize the paper as follows. First, I review literature on both relationship quality and perceptual accuracy. Second, I present research hypotheses for the consequences of salesperson relationship quality accuracy and inaccuracy. Third, I present research hypotheses for the predictors of salesperson relationship quality misperception. Using a dyadic salesperson-customer dataset, I then model my framework for the antecedents and consequences of salesperson perceptual accuracy, and present my findings. I conclude with a general discussion of theoretical and managerial implications.

CONCEPTUAL BACKGROUND

Relationship Quality

Relational mediators have been studied extensively to support the notion that relationship investments lead to favorable customer (Doney and Cannon 1997), firm (Kumar, Scheer, and Steenkamp 1995), and salesperson (Sirdeshmukh, Singh, and Sabol 2002) outcomes. To this end, previous studies have focused primarily on three facets of strong relationships – i.e., commitment (Morgan and Hunt 1994), trust (Kumar, Scheer, and Steenkamp 1995), and satisfaction (Colgate and Danaher 2000). However, the extant literature also demonstrates that neither of these relationship facets truly capture the full essence of buyer–seller relationships (De Wulf, Odekerken-Schroder, and Iacobucci 2001). Indeed, a recent meta-analysis (Palmatier et al. 2006a) found relationship quality, conceptualized as an overarching construct that represents commitment, trust, *and* satisfaction, to have the greatest influence on salesperson outcomes, indicating that a “synergistic view” of relationship quality is a stronger approach to study the

impact of relationship management efforts. My perspective echoes this sentiment, as I model relationship quality as a higher-order construct, consisting of commitment, trust, and satisfaction. Accordingly, relationship quality is defined here as the extent to which a customer is committed to a given supplier firm and willing to make sacrifices to maintain a long-term relationship, trusting of a supplier's salespeople and believing that they are honest, and satisfied with the current state of the relationship (De Wulf, Odekerken-Schroder, and Iacobucci 2001).

Relationship quality has received increasing attention in relationship marketing efforts due to its anticipated, and often demonstrated, positive influence on several positive work-related outcomes, e.g., sales growth, customer loyalty, market share, profits, cooperation, and word of mouth (Dorsch, Swanson, and Kelley 1998; Palmatier et al. 2006a).

Salesperson Perceptual Accuracy

Salesperson perceptual (in)accuracy is defined here as the extent to which a salesperson correctly evaluates a given customer's perception of relationship quality. Specifically, (in)accurate evaluations occur when there is (in)congruence between the customer's level of relationship quality and the salesperson's evaluation of relationship quality assumed for the customer. That is, in studying outcomes of *salesperson perceptual accuracy*, the focus is on congruence, which occurs when a salesperson correctly perceives a customer's level of relationship quality (e.g., correctly evaluating customers with high versus low relationship quality). On the other hand, in studying outcomes of *salesperson perceptual inaccuracy*, the focus is on the magnitude and direction of incongruence, which occurs to varying degrees when a salesperson over- or under-estimates a customer's relationship quality.

To understand the causes of salesperson perceptual (in)accuracy, I turn to the pragmatic accuracy framework from the psychology literature on social perceptions (Gill and Swann 2004) as a strong guideline for my theoretical development of the antecedents to salesperson perceptual

bias. A pragmatic approach to perceptual accuracy proposes that “accuracy is determined by how well they [a target’s cues] serve the goals of perceivers rather than by the extent to which they are accurate in the ultimate sense” (Swann 1984, p. 461). As such, a perceiver is more likely to accurately perceive a target’s cues that pertain to the perceiver’s own goals, rather than cues that signify more broad-based perceptions (Gill and Swann 2004). This perspective suggests that salespeople will form more accurate judgments about goal-relevant information, as opposed to more holistic customer characteristics that are harder to judge out of context. Based on this guideline, understanding perceptual (in)accuracy antecedents in the sales context begins from examining how drivers of relationship quality may affect the feedback salespeople selectively seek out during interactions with customers.

HYPOTHESES

Figure 1 depicts my conceptual framework. I first hypothesize the effects of salesperson perceptual (in)accuracy on customer profitability and repurchase intention, as well as the moderating effects of relationship phase. Subsequently, I then form hypotheses on antecedents to salesperson perceptual (in)accuracy and the moderating effects of control systems.

----- Insert Figure 1 about here -----

Consequences of Accurate Salesperson Perceptions

Future purchase intention. Increased customer loyalty is one of the most common outcomes expected from relationship marketing efforts (Palmatier et al. 2006a). By creating a strong buyer-seller relationship, salespeople can further increase the likelihood of future sales opportunities (Crosby, Evans, and Cowles 1990) and loyalty (De Wulf, Odekerken-Schroder, and Iacobucci 2001). Indeed, salespeople who understand their customers have been shown to lessen conflict and improve expected returns (Ross, Anderson, and Weitz 1997). From a transaction cost perspective, salespeople who accurately evaluate their customers’ relationship

quality when customers perceive relationships to be of high value should be more adept at managing relationship expectations and resolving customers' uncertainty about future opportunism (Williamson 1985; Zeithaml 1988). In turn, customers may reciprocate by increasing their future purchase intention (Zeithaml, Berry, and Parasuraman 1996). However, accurate evaluations of low relationship quality are indicative of discrete transaction-based customer relationships. Because these customers do not perceive much relationship value from forming relationships and vice versa, salespeople should have a more difficult time increasing customers' future purchase intentions (Dwyer, Schurr, and Oh 1987). More formally, I hypothesize:

H₁: When salespeople accurately evaluate their customers' relationship quality, their customers' future purchase intentions will be higher (lower) when relationship quality is high (low).

Customer profitability. I also contend that a salesperson's accurate evaluation of relationship quality relates to more profitable relationships. First, a salesperson who accurately perceives their customers' relationship quality can tailor the level of relationship benefits he or she offers. Customers with low relationship quality are akin to discrete transactions typified by minimal personal relationships, mutually accepted social norms, and a focus on the substance of the exchange (Dwyer, Schurr, and Oh 1987). By accurately identifying these customers, salespeople can lessen the degree to which they invest in idiosyncratic relationship activities, and thus be more profitable (Kumar, Venkatesan, and Reinartz 2008; Williamson 1985). Likewise, a salesperson who correctly identifies customers with high relationship quality is more likely to increase his or her relationship investments, but such investments are justified by a high return due to the high level of relationship quality. Thus, he or she will be able to translate and leverage high-quality relationships into profitable exchanges.

However, customers who have moderate relationship quality will still require costs to

maintain the relationship, but these customers do not necessarily desire deep relational exchanges (Palmatier et al. 2008). These “moderate” customers will be the most difficult to pursue profitable relationship strategies with because there is not yet a perception of significant relationship value that would vastly increase the customer’s willingness to pay (Anderson and Narus 2003). Therefore, salespeople who correctly evaluate high or low relationship quality customers should achieve higher profits by optimizing their relationship investments appropriately. Thus, I hypothesize:

H₂: When salespeople accurately evaluate customers’ relationship quality, customer profitability will be lower (higher) when a customer has moderate (high or low) relationship quality. Thus, when salesperson evaluations are accurate, there will be a U-shaped relationship between customer relationship quality and customer profitability.

Consequences of Inaccurate Salesperson Perceptions

Future purchase intention. Moving away from the assumption of accurate salesperson perceptions, it is unclear whether inaccurate salesperson perceptions will always have negative consequences. Outcomes may differ depending on the magnitude and direction of perceptual error (Vosgerau, Anderson, and Ross 2008). For my context, the effects of inaccurate perceptions on future purchase intentions depend on whether or not salespeople over- or underestimate their customers’ relationship quality. Customers provided with an abundance of relationship investment have different perceptions than those who feel neglected.

Prior research has shown that inaccurate perceptions of commitment actually increase relationship functionality when perceivers believe their counterpart is more committed to the relationship (Vosgerau, Anderson, and Ross 2008). For the buyer-seller interface, this implies that customers will perceive the most benefit when they feel the salesperson is more committed. Salespeople who underestimate their customers’ relationship quality are more likely to undervalue their relationship efforts and provide unanticipated relationship benefits in their

efforts to improve customer perceptions. Thus, customers will be assured of the salesperson's intentions, reducing their uncertainty and increasing future purchase intention.

On the other hand, when the perception of the counterpart's commitment is less than one's own, it will likely create feelings of unmet expectations in the relationship (Ross, Anderson, and Weitz 1997). Salespeople who overestimate customers' relationship quality are more likely to overvalue their relationship efforts and become complacent in their communication and time investments. Salesperson complacency will be perceived as a lack of reciprocation, increasing perceived uncertainty and reducing customers' future purchase intention. Thus, inaccurate evaluations of relationship quality should have different effects on future intention to purchase depending on the direction of the inaccuracy. I therefore hypothesize:

- H₃:** When a salesperson inaccurately evaluates a customer's relationship quality, the customer's future purchase intention will be lower (higher) when the salesperson overestimates (underestimates) the customer's relationship quality.

Customer profitability. Firms investing time, effort, and expertise on customers to receive a return on their investment have seen mixed results. For example, Franke and Park (2006) find in their meta-analysis that a salesperson's customer-oriented efforts have no significant effect on their objective performance. This finding implies that customers do not always perceive relationship value unless salespeople have the ability to exhibit, as well as leverage, relationship benefits.

One reason salespeople are unable to capitalize profitably on customer relationships stems from salespeople having perceptual inaccuracy. When a salesperson overestimates a customer's relationship quality, the salesperson's efforts to capitalize on a perceived profitable opportunity are likely to be ineffective, as the customer does not perceive the relationship as

highly as the salesperson. In a similar fashion, salespeople who underestimate customers' relationship quality are not providing the level of relationship benefits expected from a customer.

In short, the inherent value stemming from "knowing your customer", over and above a price-centered exchange, cannot be realized when salespeople do not reciprocate relationship quality accurately. Thus, as salesperson inaccuracy increases (either over- or under-estimation), opportunities for the salesperson to leverage relationship knowledge dwindle, causing more reliance on price cutting and increasingly lower profits. Therefore, I hypothesize:

- H₄:** When a salesperson inaccurately evaluates a customer's relationship quality, customer profitability will decrease as the salesperson's evaluation deviates from the customer's relationship quality, irrespective of the direction of the salesperson perceptual inaccuracy. Thus, there is an inverted U-shaped relationship between salesperson perceptual inaccuracy and customer profitability.

Moderating Role of Relationship Phase

Prior research has also suggested that relationship phases play an important role in buyer-seller relationships (Jap and Anderson 2007). In this section, I examine the interaction between relationship phase and salesperson perceptual (in)accuracy on the two outcomes of my study. From early research on buyer-seller relationships, Dwyer, Schurr, and Oh (1987) refer to relationship phases as the major transitions in how each party regards each other. The early, or exploratory, phase of a buyer-seller relationship is marked by a benefit search and trial for both parties, as each aims to reduce uncertainty and assess the potential value of continued interactions (Jap and Ganesan 2000). As interdependence deepens, the transition to the build up and maturity phases begins; mutual benefits, social norms, and values become an assumed part of transactions. As the relationship continues on a regular basis, both parties form satisfaction and benefit expectations which act as safeguards against opportunism (Jap and Anderson 2003).

Future purchase intention and relationship phase. During the exploration phase, accurate salesperson evaluations are instrumental toward uncertainty reduction. Accurate evaluations

provide a way for salespeople to reciprocate relational behaviors, provide mutual benefits, and manage expectations. These initial cooperative moves signal to customers that a committed long-term relationship is desired (Jap and Ganesan 2000), increasing future purchase intention. Thus, the costs of having inaccurate evaluations in this phase are substantial. However, as the relationship progresses into the build-up and maturation phases, interdependencies and established expectations develop making the role of salesperson perceptual accuracy less important in impacting uncertainty. As such, salesperson perceptual accuracy should have stronger effects on future purchase intention in the exploration phase of the relationship. This discussion suggests the following hypothesis:

H₅: During the exploration phase of the relationship, the effect of salesperson accuracy and inaccuracy on future purchase intention will be stronger than in later phases.

Customer profitability and relationship phase. Salespeople gain many subtle benefits when moving to the build-up and maturation phases. Customers are more dependent on salespeople, more willing to take risks, and less willing to consider alternatives (Jap and Anderson 2007). As such, these phases provide the most opportunities for salespeople to pursue profitable strategies. By having an accurate evaluation, salespeople can tailor their selling costs and relationship investments to customers already willing to pay more. Additionally, the interdependencies developed in these phases create relational safeguards, which keep salespeople insulated from conflicts with their customer (Williamson 1985). In sum, relational dependencies that develop in the build-up and maturation phases allow salespeople to profit more from accurate evaluations, and suffer less from inaccurate evaluations.² Thus, I hypothesize:

H₆: During the build-up and maturation phases of the relationship, the effect of salesperson accuracy on customer profitability will be stronger than in the

² Another relationship phase is the decline phase, which accounts for only a negligible 2 per cent in our data.

exploration phase. In contrast, the effect of salesperson inaccuracy on customer profitability will be weaker than in the exploration phase.

Antecedents to Salesperson Biases in Perceptions of Customer Relationship Quality

As theorized above, understanding the (in)accuracy of salesperson perceptions is critical for firms wanting to capitalize on their relationship investments with key customers. However, we have very little understanding of what causes salesperson perceptual (in)accuracy of customer relationship quality, leaving management at a loss for ways to alleviate the resulting ineffectiveness.

Early literature on customer relationship quality helps provide a theoretical framework to understand salesperson misperception. In Crosby, Evans, and Cowles' (1990) seminal article, they lay the groundwork for customer relationship quality using three predictors: 1) Seller focused antecedent 2) Customer focused antecedent, and 3) Dyadic antecedent. A recent meta-analysis (Palmatier et al. 2006a) supports these predictors as well, indicating strong positive associations with relationship outcomes for all three antecedents. With these findings in mind, I propose a model using self-efficacy (seller focused), customer orientation (customer focused), and salesperson-customer similarity (dyadic) as drivers for both customer perceptions and salesperson evaluations of relationship quality.

While self-efficacy, customer orientation, and similarity may cause an increase in customer relationship quality, salespeople may not always perceive the increase accurately. Because salespeople are apt to selectively seek out feedback in order to evaluate their behaviors toward a goal, they will often overlook information that affects the overall accuracy of the information acquired. Using pragmatic accuracy helps to provide guidance for this rationale. As Gill and Swann (2004, p. 406) state about motivated perception, “partners will be motivated to develop pragmatic accuracy, that is, accuracy that facilitates

relationship-specific interaction goals.” Just as using improper performance metrics can mask the true effectiveness of a relationship marketing strategy (Parvatiyar and Sheth 2000), higher levels of self-efficacy, customer orientation, and behavioral similarity can bias salespeople to seek out some customer feedback cues and not others in order to satisfy their goal attainment.

Self-efficacy and relationship quality misperception. For salespeople, one route to relationship quality strength is attained through knowledge, experience, and overall competence of the market with the customer. This seller-focused antecedent provides customers with the perception of increased value and importance through transactions with competent and knowledgeable salespeople (Crosby, Evans, and Cowles 1990). Therefore, salespeople who have an innate belief in their abilities, or self-efficacy, are more likely to provide customers with perceived value beyond the product.

Self-efficacy, a construct derived from social cognitive theory, refers to “the beliefs in one’s capabilities to mobilize the motivation, cognitive resources, and courses of action needed to meet given situational demands” (Bandura 1977). Having high self-efficacy provides an avenue for salespeople to alleviate their customers’ uncertainty about potential negative outcomes. Since relationship quality from the customer’s perspective is achieved through the salesperson’s ability to reduce uncertainty (Zeithaml 1988), I expect increases in salesperson self-efficacy to be associated with higher customer relationship quality.

However, the self-regulation theory literature reveals that self-efficacy can often bias the interpretation of feedback and impact subsequent performance outcomes (Wood and Bandura 1989). Salespeople high in self-efficacy are primarily concerned with maintaining the status of their knowledge, expertise, and capability and these salespeople will often make self-serving attributions in order to sustain this status. Specifically, individuals will attribute

positive feedback to their own ability and effort, while attributing negative feedback to external causes or bad luck, often giving themselves more credit than what is due (Gist and Mitchell 1992). This suggests that salespeople are prone to overlook negative feedback as they judge their ability to manage customer relationships. Consequently, increases in self-efficacy may increase customer relationship quality, but this increase will be overinflated in the salespersons' mind. This discussion leads me to hypothesize:

H₇: Salespeople with high self-efficacy will overestimate the customer's relationship quality.

Customer orientation and relationship quality misperception. When salespeople are oriented to address needs, invest effort, and provide social benefits, customers perceive value from the relationship (Anderson and Weitz 1992). Salespeople who have high customer orientation are intrinsically motivated to assess and meet customers' needs (Brown et al. 2002; Saxe and Weitz 1982). The effort towards the customer provides time savings, convenience, and other relationship benefits that increase customer perceptions of relationship quality.

However, highly customer-oriented salespeople will perceive relationship quality differently. Salespeople with a higher customer orientation will be more attuned to social feedback cues to detect discrepancies in their relational goals. Research on salesperson-customer interactions has shown that customer satisfaction with a given encounter is found to be higher when salespeople rate their own social competency highly (van Dolen et al. 2002). Thus, salespeople spending more time investing in the customer relationship will be motivated to seek out feedback about the customer's perception of their social skills. However, social cues are subjective and often inaccurate. The most concrete types of social evidence cues for salespeople are typically negative ones (Bitner, Booms, and Mohr 1994). Relying on social cues will cause salespeople to be negatively biased as they look for service

failures and lack of reciprocity from the customer. As such, highly customer-oriented salespeople may increase customer relationship quality, but this increase will be downwardly biased in the salesperson's mind. I therefore hypothesize:

H₈: Salespeople with high customer orientation will underestimate the customer's relationship quality.

Salesperson-Customer Similarity and Relationship Quality Misperception. Dyadic antecedents to relationship quality provide a perspective that involves both parties of the buyer-seller interface. One example of such a dyadic antecedent is behavioral similarity between a buyer and a seller. Shown to be a predictor of relationship quality facets (Crosby, Evans, and Cowles 1990), similarity can provide a common ground for a relationship. Additionally, literature on social networks suggests that behavioral similarity fosters relationships of trust and reciprocity (McPherson, Smith-Lovin, and Cook 2001); thus, behavioral similarity should positively influence the customer's relationship quality.

However, despite these positive outcomes, the benefits of predictability stemming from similarities can have a biasing effect on accuracy. Often, people similar to each other are found to overestimate relationship perceptions because there is a strong motivation to perceive a similar partner in positive ways (Kenny and Acitelli 2001). The perceptions of similar others are idealized in order to bolster one's own relationship norms. This implies that salespeople who are more similar to their customers will be more likely to overestimate the customer's relationship quality increases in an effort to validate their own relationship expectations. I put forth the following hypothesis:

H₉: Salespeople similar to their customers will overestimate their customer's relationship quality.

Moderating Effects of A Behavioral-Based Control System

In order to attenuate salesperson inaccuracy, managers need an avenue to guide salesperson goals. One way managers can influence the goals and drivers of performance is through changes in the control system (Oliver and Anderson 1994). By using a behavior-based control system, managers have a way to define a salesperson's customer relationship goals and influence feedback seeking. Behavior-based controls provide monitoring processes that can help keep relationship marketing programs on track by evaluating the proper alignment of goals, results, and resources (Parvatiyar and Sheth 2000). Specifically, managers can exert more control on relationship activities, guiding salespeople to interaction experiences and feedback they may otherwise have overlooked.

As mentioned previously, highly customer-oriented or high self-efficacy salespeople often misperceive their customer's relationship quality because they selectively search out feedback. An outcome-based control system will only reinforce selective feedback seeking as there are no controls on relational feedback selection (Oliver and Anderson 1994). However, a behavior-based control system will compel them to assess their relationship proficiency more often in order to gauge their progress toward manager-defined goals. By receiving relationship feedback more often, as well as relationship feedback that was once overlooked, salespeople become more accurate in their perceptions of their customers' relationship quality. Therefore, by providing relationship building goals (e.g., number of sales calls, time spent with customers) using a behavior-based control system, the focus on bias-producing antecedent goals is reduced.

Additionally, the effect of increased activity control should also decrease the bias created by salesperson-customer similarity. Innate cues inherent between two similar people are constricted when salespeople are incentivized to perform activities they may have otherwise not performed (Oliver and Anderson 1994). So, for two people initially thought to

be very similar, increased relationship building activities should provide more sources of information and enhance perceptual accuracy (Kenny and Acitelli 2001). I therefore hypothesize:

- H₁₀:** A behavior-based control system will decrease:
- a) overestimations of the customer's relationship quality associated with high self-efficacy.
 - b) underestimations of the customer's relationship quality associated with high customer orientation.
 - c) overestimations of the customer's relationship quality associated with high salesperson-customer similarity.

METHODOLOGY

Sample

Research context. My model was tested using a unique, dyadic (salesperson-customer) dataset that includes survey and objective performance data from the sales division of a global consumer and industrial goods supplier. Before data collection, fifty in-depth interviews were conducted with sales managers, sales representatives, and customers to understand the importance of relationships in their context.

Data source. The dataset comprises three data sources. First, 2,992 customers were randomly selected from the firm's database, and then incentivized to participate in a blinded customer survey, resulting in a 10% response rate. Customer surveys included multiple firms in the industry in order to reduce any firm preference bias in the sample. Second, the salesperson survey was administered to 161 salespeople with a 100% response rate. Surveyed customers were then matched with their dedicated salesperson in order to accurately assess each relationship from both perspectives. For salespeople with multiple customer dyads, random selection was used to eliminate any selection bias present from self-selecting customer accounts. After removing dyads with missing values, 132 unique salesperson-

customer dyads were used for the analysis. Finally, objective performance data for each salesperson and customer account was collected from the focal company.

Measures

Aside from the objective performance measures, all scales used in the current research are well established in the marketing literature. I assessed each perception (salesperson and customer) of *relationship quality* by using a combinatory measure of satisfaction, trust, and commitment that assesses the overall strength of all three facets (De Wulf, Odekerken-Schroder, and Iacobucci 2001). I operationalized *salesperson-customer similarity* using a dichotomous categorization variable. The behavioral style of each person is self-assessed using the assertiveness-responsiveness scale from Rich and Smith (2000). These self-assessments are categorized as being high or low on each facet, then categorized dichotomously for a behavioral match between the salesperson and customer in each dyad.

I measured salesperson *customer orientation*, the salesperson's intrinsic motivation to help customers achieve their goals, using four items adapted from Brown et al. (2002). Salesperson *self-efficacy* was measured with four items that capture the salesperson's self-rating of ability, knowledge, and skills used in relationship selling (Sujan, Weitz, and Kumar 1994). The relationship phase was measured by using the scale adapted from Jap and Ganesan (2000). Because of the small number of relationships reported in the decline phase (2%), and recent findings supporting a lack of empirical differences between the build-up and maturity phases (Jap and Anderson 2007, p. 271), this measure was dichotomized as being either in the early phase (Exploration), or later phase of the relationship (Build-up/Maturity).

I used a continuum-based approach to measure the belief salespeople have of being under an outcome- versus behavior-based *control system*. As used previously (Oliver and Anderson 1994), control system was measured by converting subscales to z-scores and

additively combining them to form an index where lower scores represent outcome-based control systems, and higher scores represent behavior-based control systems.

For objective performance, I operationalized *customer profitability* as the profit margin percentage of customer accounts that match each dyad under study. In addition, I assessed the customer's *future intent to purchase* as a long-term outcome of successful relationship marketing efforts (Doney and Cannon 1997).

In order to strengthen the robustness of the results, control variables were included in the analysis. For the response surface analysis, in addition to relationship quality perceptions, I also controlled for salesperson experience and tenure. A full list of the items, measurement scales, and literature sources appears in the Appendix.

Analytical Procedure

Within my study, relationship quality accuracy and inaccuracy are dyadic variables that result from the comparison of two components (i.e., salesperson and customer perceptions). Rather than using a difference score, I kept the relationship quality perceptions of the salesperson and customer separate to allow the effects of each perception, as well as the magnitude and direction of their difference, to model reality as accurately as possible. Since, my research questions are bent on understanding the antecedents and consequences of both perceptions, I take a two-stage analysis approach. I modeled the consequences of accurate and inaccurate relationship quality evaluations in the first stage, and the antecedents of relationship quality perceptions in the second stage.

Outcomes of relationship quality inaccuracy. For the first stage, I assessed the consequences of salesperson and customer relationship quality perceptions using polynomial regression and response surface analysis. This analysis technique allowed me to test the effects of accurate perceptions (i.e., salesperson accurately evaluates the customer's

relationship quality) as well as inaccurate perceptions (i.e., salesperson over- or underestimates customer relationship quality) on the profitability of the customer, and the customer's future purchase intention. This analysis technique is fitting because it allows both scenarios (accuracy and inaccuracy) to be examined.

The following is a short interpretation of the effects using polynomial regression and response surface analysis. A more extensive review can be found in Edwards and Parry (1993). To test for the effects of accurate and inaccurate perceptions, difference scores are replaced by the scale-centered relationship quality perceptions of the salesperson and customer. Specifically, the relationship between the components X (e.g., Salesperson perceptions of Customer Relationship Quality), Y (e.g., Customer's perception of Relationship Quality) and an outcome Z (e.g., customer profitability) can be written as:

$$Z = b_0 + b_1X + b_2Y + b_3X^2 + b_4XY + b_5Y^2 + e. \quad (1)$$

In order to analyze the effects of accurate salesperson perceptions on customer profitability, the slope and the curvature of the regression defined by $Y = X$ has to be assessed. Substituting $Y = X$ in equation (1), the accurate salesperson perception line can be expressed as:

$$Z = b_0 + (b_1 + b_2)X + (b_3 + b_4 + b_5)X^2 + e. \quad (2)$$

Therefore, given the point $X = 0$, the slope of the effect of accurate perceptions is denoted by $(b_1 + b_2)$ and, respectively, the curvature is $(b_3 + b_4 + b_5)$. If either the slope or the curvature is significantly different from zero, the hypothesis that accurate salesperson perceptions of customers' relationship quality have a differential effect can be rejected. If the curvature, $(b_3 + b_4 + b_5)$, does not significantly differ from zero but the slope does, the accurate perception line is linear. In such cases, a positive slope $((b_1 + b_2) > 0)$ denotes a linear increase of the outcome (Z) along the accurate perception line, while a negative slope indicates a decrease. If the curvature is significantly positive, $(b_3 + b_4 + b_5) > 0$, the form of the accurate perception line is

U-shaped. In contrast, if the curvature is significantly negative, $(b_3 + b_4 + b_5) < 0$, the line follows an inverted U-shape.

To analyze the effects of salesperson inaccuracy, the line for inaccurate perceptions is assessed. Substituting $Y = -X$ in equation (1), the inaccurate perception line can be written as:

$$Z = b_0 + (b_1 - b_2) X + (b_3 - b_4 + b_5) X^2 + e. \quad (3)$$

This line is characterized by a slope of $(b_1 - b_2)$ and curvature of $(b_3 - b_4 + b_5)$ at the point $X = 0$. The interpretation of the slope and curvature is analogous to that of the accurate perception line. As such, the hypothesis that increased inaccuracy does not have an effect on outcomes can be rejected if the slope $(b_1 - b_2)$ or the curvature $(b_3 - b_4 + b_5)$ differs significantly from zero. If the curvature of the inaccurate perception line at point $X = 0$ does not significantly differ from zero, but the slope takes a value that is significantly different from zero, the line has a linear form with either a positive ($[b_1 - b_2] > 0$) or a negative ($[b_1 - b_2] < 0$) slope. If the curvature however, does significantly differ from zero, the surface along the inaccurate perception line is either curved upward, if $(b_3 - b_4 + b_5) > 0$ or curved downward, if $(b_3 - b_4 + b_5) < 0$.

Summarizing the explications above, assessing the slopes and curvatures of the accurate and inaccurate perception lines allows a novel and quantitative description of the three-dimensional relationships between relationship quality perceptions and each respective outcome.

Predictors of relationship quality inaccuracy. In the second analysis, I examined the relationship quality antecedent effects on each person's (salesperson and customer) perception of relationship quality, as well as the moderating impact of control system perceptions. In order to answer the research questions at hand I estimated each predictor's relative effects on salesperson and customer perceptions. Using a multivariate hierarchical regression analysis (Edwards 1995) allowed me to model the predictive effects each antecedent on salesperson and customer perceptions simultaneously to tease out the difference in coefficient effects on each outcome.

RESULTS

Measurement Model

Because relationship quality is the focal variable of my study, a confirmatory factor analysis was performed to provide evidence of high reliability of this measure. First, the multi-item scales for trust, satisfaction, and commitment were all factor analyzed separately. All three scales exhibited high reliability (correlations between items range from .70 to .93) and a single factor emerged for each case. Then, I assessed the second-order factor model with the first-order factors (trust, satisfaction, and commitment) as indicators of the second-order factor, relationship quality. The measurement results were supportive of a good fit ($CFI = .99$, $GFI = .97$), and all first order and second order loadings were significant, demonstrating convergent validity. This provided evidence to use the averages for trust, satisfaction, and commitment as indicators of relationship quality (De Wulf, Odekerken-Schroder, and Iacobucci 2001). All other multi-item measures exhibit strong reliability with coefficient alphas above .70 (Cronbach 1978) and exhibit discriminant validity as the average variance extracted for all measures was greater than .5, and larger than all squared correlations (Fornell and Larcker 1981). Table 1 displays the means, standard deviations (SD), average variance extracted (AVE), and intercorrelation matrix for the focal measures of this study.

----- Insert Table 1 about here -----

Outcomes of Salesperson and Customer Relationship Quality Perceptions

Along with the polynomial regression results, the coefficients in Table 2 also describe a three-dimensional surface illustrating the dynamic relationships between both predictors and each respective outcome simultaneously. This depiction gives much more insight and depth into understanding the effects of customer relationship quality perceptions, given how accurate the salesperson evaluates them. Figure 2 shows the simple effects response surface for future

purchase intention, and the respective response surface for customer profitability can be found in Figure 3. In order to test specific hypotheses, the lines of symmetry and asymmetry on these plots will often be referred to in order provide support for the arguments (i.e., these lines are shown with solid lines = symmetry line; dashed line = asymmetry line). In addition, two-dimensional plots of the hypothesized relationships are provided below for easier interpretation on Figures 4 and 5.

Customer repurchase intention was found to be impacted by both accurate and inaccurate salesperson perceptions of their customer's relationship quality. Hypothesis H1 argues that a customer's future purchase intention will be higher (lower) when a salesperson can accurately evaluate a customer as having a high (low) level of customer relationship quality. From Table 2, the surface tests reveal that the coefficient for the slope along the symmetry line at $X = 0$ is not significant ($b_1 + b_2 = .52, p > .10$). However, the curvature along the symmetry line for repurchase intention is positive and significant ($b_3 + b_4 + b_5 = .44, p < .05$). This indicates that there is a significant quadratic relationship between accurate salesperson evaluations and repurchase intention, and that the repurchase intention is minimized when salespeople accurately evaluated moderate levels of customer relationship quality. Specifically, repurchase intention increases as salespeople accurately evaluate high or low levels of the customer's relationship quality (Figure 2). While surprising, this result does not provide support for H1.

Hypothesis 3 suggests that the customer's future purchase intention will be higher for salesperson evaluations below actual customer perceptions, and be lower for salesperson evaluations exceeding actual customer perceptions. Surface tests (Table 2) show that the slope along the asymmetry line is negative and significant ($b_1 - b_2 = 3.48, p < .01$) and the curvature along the asymmetry line is not significant ($b_3 - b_4 + b_5 = .51, p > .05$). This suggests a negative linear relationship along the asymmetry line indicating that repurchase intention is greater when

salesperson relationship quality evaluations fall below the customer's actual level of relationship quality, and will decrease as evaluations become more accurate and start to exceed the actual customer level (Figure 3). Thus, this strongly supports the proposed relationship in H3.

Moving to the effects on customer profitability, hypothesis H2 supports the idea that a customer's profitability will be lowest (highest) when the salesperson accurately evaluates customers' with moderate (high or low) perception(s) of relationship quality. Referring to Table 2, the surface level tests for the customer profitability along the symmetry line show a non-significant coefficient for the slope ($b_1 + b_2 = -.031, p > .05$) and a significant positive curvature ($b_3 + b_4 + b_5 = .033, p < .01$). This indicates a U-shaped surface along the symmetry line which is minimized at the midpoint of the scale (moderate levels) for customer profitability. Thus, the results provide strong support for H2 (Figure 2).

To assess the effects of salesperson inaccuracy, the asymmetry line results in Table 2 provide evidence of the relationship with customer profitability. In line with H4, the coefficient for the curvature along the asymmetry line is negative ($b_3 - b_4 + b_5 = -.064, p < .01$) indicating that there is an inverted U-shape along the asymmetry line. This, along with the result of an insignificant slope along the asymmetry line ($b_1 - b_2 = .044, p > .05$), indicates that customer profitability is maximized when salesperson evaluations approach the true level of customer relationship quality, supporting H4 (Figure 3).

Moderating impact of relationship phase. For further analysis, relationship phase was added to the polynomial regression as a dichotomous variable to assess the effects of accuracy and inaccuracy during early and late stages of the relationship. The addition of relationship phase provided added insight to many of the findings on relationship quality outcomes. For repurchase intention, the addition of relationship phase as an interaction variable created a negative coefficient when interacting with the quadratic salesperson perception variable ($\beta_9 = -.641, p <$

.05). When accounting for this interaction in surface tests, the curvature along the symmetry line becomes non-significant ($b_3 + b_4 + b_5 + b_9 = -.20, p > .05$) indicating that while accurate salesperson perceptions do matter in early phases of the relationship, they do not have an effect on repurchase intention in the latter stage of the customer relationship, supporting H5. These effects are illustrated in Figure 4A. The addition of relationship phase did not change the results for asymmetry as the curvature along the asymmetry line is not significant for either relationship phase ($b_3 - b_4 + b_5 = .51, p > .05$; $b_3 - b_4 + b_5 + b_9 = -.128, p > .05$) as seen in Figure 4B.

For customer profitability, the addition of relationship phase generated a positive coefficient for the interaction between quadratic salesperson perceptions and relationship phase ($\beta_9 = .028, p < .05$). This coefficient produced a positive curvature along the symmetry line ($b_3 + b_4 + b_5 + b_9 = .051, p < .01$) significantly steeper than during the early phase ($(b_3 + b_4 + b_5 + b_9) - (b_3 + b_4 + b_5) = .021, p < .01$). Thus, the results demonstrate a strengthened effect of accuracy on profitability during the latter phase of the relationship (Figure 5A). Further, the interaction between quadratic salesperson perceptions and relationship also creates a significant dampening effect for the curvature along the asymmetry line ($b_3 - b_4 + b_5 + b_9 = .045, p < .01$; $(b_3 - b_4 + b_5 + b_9) - (b_3 - b_4 + b_5) = -.020, p < .01$). This reveals that inaccurate salesperson evaluations are more costly for customer profitability during the early phase of the relationship as the curvature decreases faster than during the latter relationship phase (Figure 5B). Both of these results provide strong support for H6.

----- Insert Table 2, Figures 2, 3, 4A, 4B, 5A, 5B about here -----

Predictors of Salesperson and Customer Relationship Quality Perceptions

For the predictor side of the model, hierarchical multivariate regression equations were used to simultaneously test for the relative effects of relationship quality predictors on salesperson and customer perceptions of relationship quality. Hypotheses 7–9 argue that

relationship quality predictors will have biasing effects on the salesperson's perception such that his evaluation of the customer will become inaccurate.

To find support for these hypotheses, the model was first tested starting with control variables first (Salesperson Experience and Salesperson Tenure). Next, the main effects were tested on both outcomes. Results for the main effects model in Table 3 show salesperson customer orientation had a positive significant effect only on customer relationship quality ($\beta_{11} = .43, p < .01$), while salesperson self-efficacy had a positive significant effect only on salesperson perceptions of customer relationship quality ($\beta_{22} = .53, p < .01$). Salesperson-customer behavioral match did not have a significant effect on either person's perception of relationship quality ($\beta_{13} = .20, p > .10$; $\beta_{23} = -.04, p > .10$).

While the main effects for self-efficacy and customer orientation are significant, I have to ascertain whether or not the effects were significantly stronger or weaker for salesperson versus customer perceptions in order to support hypotheses 7–9. To support the presence of differential coefficient effects, a constraint (e.g., $\beta_{12} = \beta_{22}$) is fit to the model for each coefficient pairing. Using multivariate constraints in HLM (Raudenbush and Bryk 2002) to test these hypotheses, results show that indeed the coefficients for salesperson self-efficacy are very unlikely to be equivalent for both outcomes ($\chi^2(1) = 4.74, p < .05$). This finding provides support that salesperson self-efficacy has a stronger effect on salesperson evaluations of customer relationship quality. Therefore, higher levels of self-efficacy are associated with salespeople who overestimate their customer's relationship quality providing support for H7. In a similar vein, tests reveal that the coefficients for salesperson customer orientation are very unlikely to be equivalent for both salesperson and customer outcomes ($\chi^2(1) = 6.96, p < .01$). Thus, salesperson customer orientation has a weaker effect on salesperson evaluations of customer relationship

quality than for the customer's perceptions, providing support for H8 that higher levels of customer orientation are associated with salespeople who underestimate their evaluations of customer relationship quality. As the coefficients for behavioral similarity were non-significant for either outcome, there were no constraint tests performed on these coefficients, therefore, no support for H9 was found.

Moderating Impact of Behavioral Control Systems. Hypotheses 10a, b, and c argued that a more behaviorally based control system can help to attenuate salesperson inaccuracy in their evaluations of customer relationship quality. To find support for these arguments, we added the salesperson's perception of the control system into the main effects model as an interaction variable with each predictor for both salesperson and customer perceptions of relationship quality. The addition of the simple effect and interaction parameters that stem from this model were found to improve the model's explanatory power significantly ($\chi^2(8) = 33.09, p < .01$), providing justification for the full model.

Table 3 reports the parameter estimates of the full model for both outcomes. The simple effect of salesperson customer orientation was found to still be significant predictor of customer relationship quality ($\beta_{11} = .43, p < .01$) and self-efficacy was still found to be a significant predictor of salesperson evaluations of relationship quality ($\beta_{22} = .37, p < .01$). Table 3 provides the parameter estimates for the interaction terms for each predictor of salesperson evaluations of customer relationship quality. The interaction between self-efficacy and control system perceptions was significant and negative ($\beta_{29} = -.02, p < .01$), providing support for H10a that a behavioral control system can correct for overestimation bias associated with high self-efficacy. Figure 6A provides a chart to illustrate these results.

The interaction between customer orientation and control system perceptions was also found to have a significant positive effect on salesperson evaluations ($\beta_{28} = .01, p < .01$) providing support for H10b that a behavioral control system can correct for underestimation bias associated with high customer orientation. Figure 6B provides a chart to illustrate these results. The interaction between behavioral control system and salesperson-customer behavioral match was not significant for salesperson evaluations ($\beta_{29} = .02, p > .10$), thus H10c was not supported.

----- Insert Table 3, Figures 6A, 6B about here -----

Discussion

Conventional thought on customer relationships has intently focused on improving customer perceptions in order to stimulate sales outcomes. However, this one-sided focus overlooks the other half of customer relationships: the salesperson's perception. By neglecting the accuracy of salespeople's perception, prior research has failed to capture the full picture of buyer-seller relationships and may provide inaccurate estimates of the true returns from improved customer perceptions. With this in mind, I propose and demonstrate the antecedents and consequences of salespeople's perceptual (in)accuracy. Table 4 summarizes the empirical results and support for each hypothesis.

----- Insert Table 4 about here -----

Theoretical Contributions

My research builds on and extends the relationship marketing literature by examining the role of salesperson perceptual (in)accuracy of relationship quality. I uncover that salesperson perceptual accuracy is not necessarily beneficial and salesperson perceptual inaccuracy is not necessarily detrimental.

Salesperson perceptual accuracy and outcomes. My findings on salesperson accuracy illustrate that accurate evaluations provide increased future purchase intention and customer

profitability only for customers with high and low levels of relationship quality, exhibiting a U-shaped relationship. This result extends traditional research supporting linear performance returns from increased customer perceptions (Morgan and Hunt 1994) and offers an explanation for ineffective relationship marketing investments (Palmatier, Gopalakrishna, and Houston 2006b). Instead, the findings lead us to posit that salespeople translate relationship perceptions into outcomes more effectively only when they can accurately identify customers with high or low relationship quality. While I expected this finding for profitability, I was surprised to find this effect on customer repurchase intention because low relationship quality has not typically been associated with increased loyalty or buying intentions (Palmatier et al. 2006aa). However, this finding does coincide with earlier work by Cannon and Perrault (1999), who state that long-term buyer-seller relationships do not require strong relational bonds, but are more dependent on managing expectations in a mutual learning process. Overall, the findings gained from accurate salesperson evaluations inform us on the importance of “selectively pursuing” customers (Anderson and Narus 2003; c.f. Homburg, Droll, and Totzek 2008). In other words, salespeople must not only gain accurate customer knowledge, but also devise and implement relational strategies selectively according to customers’ relationship expectations.

Salesperson perceptual inaccuracy and outcomes. Prior research has shown that perceptual inaccuracy in the form of overestimating is beneficial while underestimating is detrimental for a relationship’s functioning (Vosgerau, Anderson, and Ross 2008). It appears that when firm’s underestimate the customer’s relationship quality, it creates a negative illusion that weakens the perceived image the salesperson believes the customer holds, which in turn inhibits opportunities for profit (Vosgerau, Anderson, and Ross 2008).

I extend this research by showing that the relationship between salesperson perceptual inaccuracy and outcomes can be much more complex. Specifically, I demonstrate that as

salesperson evaluations deviate from customers' actual relationship quality (whether over- or underestimation), customer profitability declines. However, perceptual errors are not always costly for future purchase intention. In fact, salespeople who underestimate their customer's relationship quality have higher purchase intentions from their customers, while those who overestimate decrease customers' future purchase intentions; the larger the magnitude of these errors, the stronger the effects. Combining the effects observed for salesperson perceptual inaccuracy on repurchase intention and profitability, I conjecture that when salespeople underestimate a customer's relationship quality, they may tend to overinvest in the relationship, leading to higher repurchase intention but lower profitability (i.e., return on investment is not justified by the actual level of relationship). On the contrary, when they overestimate a customer's relationship quality, they may tend to underinvest in the relationship, leading to lower repurchase intention and lower profitability (i.e., return on investment is low due to lack of effort).

The role of relationship phase. While my study sheds additional light on salesperson perceptual (in)accuracy, I also demonstrate that customer relationship phase differentially affects the outcomes of salesperson perceptual (in)accuracy. First, in later stages of the relationship, salesperson perceptual accuracy does not stimulate future purchase intention increases, but does enhance customer profitability. Second, the relationship between salesperson perceptual inaccuracy and customers' future purchase intention is generally downward (i.e., salespeople who underestimate their customer's relationship quality increase customers' future purchase intention, while those who overestimate customer relationship quality decrease customers' future purchase intention), regardless of the relationship phase. Third, perceptual biases (whether over- or underestimation) decrease the profitability of the customer more strongly during the early phase of the relationship, and less strongly during the later phase.

These findings suggest that the effects of (in)accuracy change as the relationship transitions from the exploration (i.e., early, awareness) to the buildup and maturity (i.e., later, exploitation-focused) phases. In the exploration phase, accurate salesperson evaluations allow the salesperson to manage expectations and reduce opportunism, in a phase filled with a high level of uncertainty (Jap and Ganesan 2000). In doing so, salespeople can ensure their customers transition to the buildup and maturation stages, where the payoff is much greater. In fact, salespeople can take more risks in offering profitable solutions. Accurate evaluations provide increased profits during the exploitation stage, while inaccurate evaluations are less costly, indicating that the interdependency between the two parties has created a relational buffer.

Antecedents to salesperson perceptual biases. Because the inaccuracy of salesperson evaluations can lead to suboptimal outcomes, research has called for an understanding of what drives salespeople to often misperceive their customers (Vosgerau, Anderson, and Ross 2008, p. 219). My study reveals some undocumented effects of self-efficacy and customer orientation on salesperson perceptual biases. More specifically, I show that increases in salesperson self-efficacy upwardly biases salesperson evaluations of their customers' relationship quality, while increased salesperson customer orientation causes a downward bias. Surprisingly, salesperson-customer behavioral similarity was not found to have any impact on relationship quality perceptions.

These findings also provide novel insights into the effect of salesperson self-efficacy and customer orientation. Prior research has generally shown that salesperson self-efficacy and customer orientation are positively related to salesperson performance. More recently, given the weak relationship between salesperson customer orientation and objective performance in a meta-analytic review (Franke and Park 2006), marketing research has started to examine the negative effect of customer orientation (e.g., Homburg, Muller, and Klarmann 2011). I extend

this perspective by attributing such negative effects to the biasing impact that salesperson self-efficacy and customer orientation can exert on salesperson perceptions of customer relationship quality. In other words, while my findings confirm that increasing these salesperson characteristics do lead to increases in customer relationship quality, these very characteristics also may lead to increasingly biased salesperson perception. By controlling for experience and tenure, I also provide evidence that perceptual inaccuracy is still evident regardless of the assumed “skills” of the salesperson.

The role of sales force control system. While perceptual inaccuracy can be troubling, the findings show that a behavioral based control system can help to attenuate the biasing effects of these relationship quality antecedents. Using a behavior-based control system to direct salesperson behavior is not new in the literature. However, I am among the first to propose and empirically show that behavior-based control can be an effective tool to manage salesperson perceptual inaccuracy. Note, however, that I do not posit that all perceptual inaccuracies need to be eradicated, as I elaborate next.

Managerial Implications

The findings I report here may change the way managers think and act when it comes to customer relationship management. First, firms spend billions of dollars on customer satisfaction initiatives and measurements that rely on customer data. I draw managers’ attention to the importance of tracking customer relationship quality as perceived by salespeople, not just the customers. In my data, the correlation between the two perceptions was only .16, suggesting that salesperson perceptual biases are dangerously prevalent. By identifying gaps between the two types of perceptions, managers can develop the right tactical strategy to act on salesperson perceptual accuracy when necessary.

Second, conventional wisdom suggests that salesperson perceptual accuracy is beneficial

while inaccuracy is detrimental. I show here that the effect of perceptual accuracy and inaccuracy varies, depending on whether the focus is on customer future purchase intention or customer profitability and the phase of the relationship. In my data, the correlation between customer future purchase intention and customer profitability is not significantly different from zero. Thus, depending on the type of customers (e.g., new versus old customers) and the goal of the organization (sales volume based on repurchase intent or profit maximization), managers may want to intervene to enhance salesperson accuracy, or actually tolerate a certain level of inaccuracy.

My findings on relationship phase should motivate salespeople and sales managers to make deliberate efforts to accurately pinpoint where they stand with customers in order to properly act on selling opportunities, especially in the early stage of a customer relationship. Identifying customers with high and low levels of relationship quality is pivotal in the exploratory phase to increase the likelihood of future purchases, and transition to the buildup and maturity phases where the payoffs are greater.

Finally, while most of prior research informs managers that enhancing salesperson self-efficacy and customer orientation will generally be beneficial to performance, my results show that these same variables can exert differential effects on the two aspects of a buyer-seller relationship, namely customer and salesperson perceptions of relationship quality. I further show that managers can curb salesperson perceptual inaccuracy by using a behavioral control system as a goal setting mechanism to increase the feedback received from customers. In this way, managers can provide relationship goals in step with a customer strategy (e.g., future purchases and profit), and shift salesperson focus to relational goals that provide more holistic, recurring, and accurate relationship feedback. However, such a control system is also known to be costly to the firm and unwelcomed by salespeople. Thus, managers will have to make a trade-off between

customer benefits and internal benefits.

Limitations and Future Research

As with any research undertaking, it is important to recognize the limitations imposed by the study design. First, the cross-sectional nature of the data limits any causal arguments that can be made about accuracy or inaccuracy. Even though the theoretical rationale proposes directional causes and consequences of salesperson perceptual (in)accuracy, there is no statistical evidence beyond association. Thus, future research that uses a longitudinal, or even an experimental approach, could add value by providing more support for causality. Second, the effects of salesperson accuracy, or lack thereof, is very likely to have enduring effects over time as unmet expectations and behavioral reciprocation can leave lasting impressions on customer relationship perceptions. While I attempt to explain part of relationship evolvement with my findings on relationship phase, this is still a proxy for a longitudinal study. Therefore, it would be important to examine whether or not there are cumulative effects stemming from multiple salesperson interactions.

Third, I focus on perceptual biases on relationship quality. While this construct is central to several conceptual frameworks of relationship marketing, further research is needed to explore perceptual biases with respect to relationship connectors such as information exchange, operational linkages, legal bonds, cooperative norms, and adaptation by buyers and sellers (Cannon and Perreault 1999). Lastly, even though this study was conducted using a single firm, I believe that the results, supported by strong theoretical rationale, generalize to other settings. Nevertheless, additional studies would not only benefit this lightly researched area, but would also provide further insight in confirming this phenomenon.

FIGURE 1

Proposed Antecedents and Consequences of Salesperson Relationship Accuracy

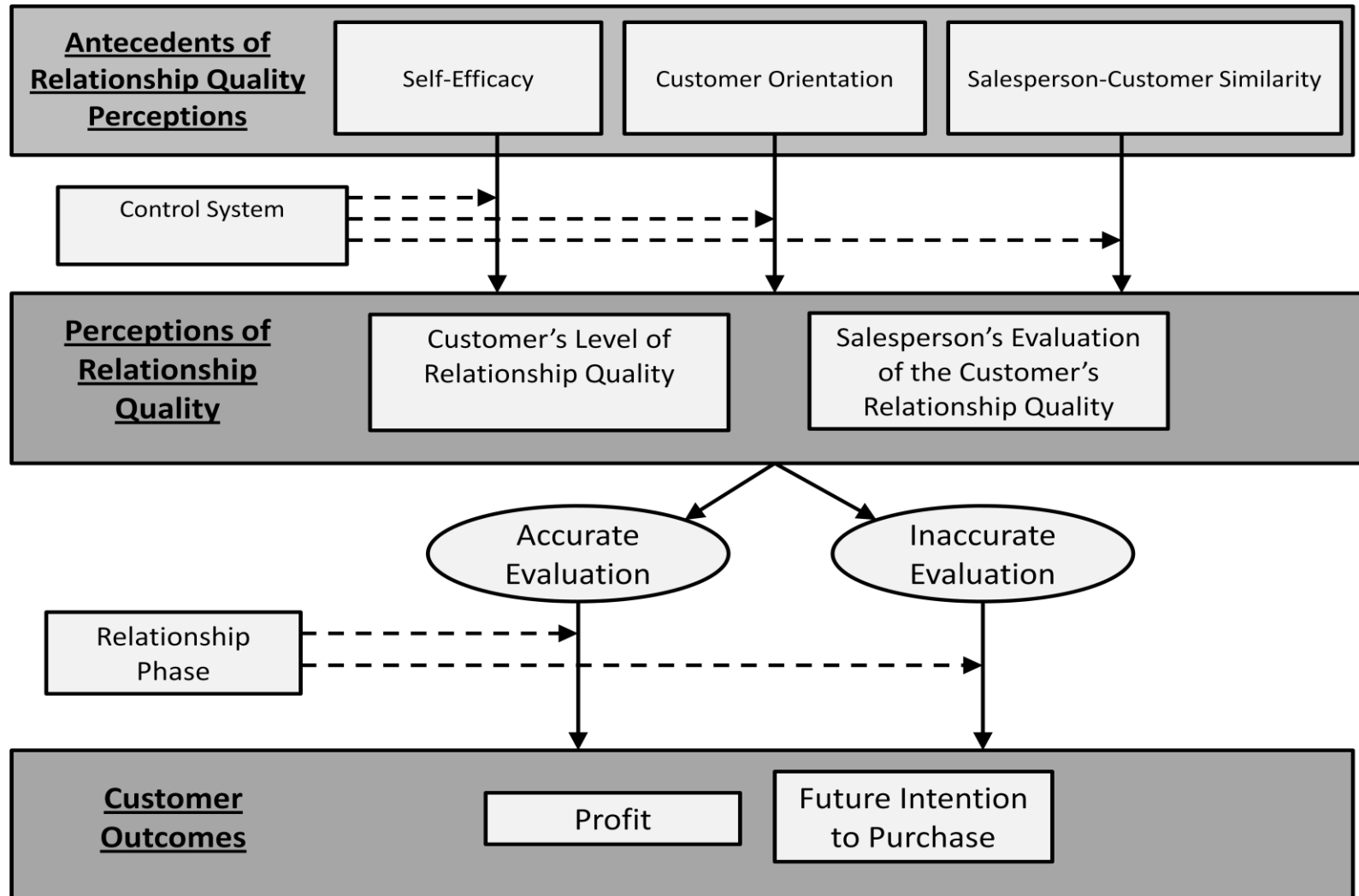


FIGURE 2

Response Surface for Future Purchase Intention

Simple Effects

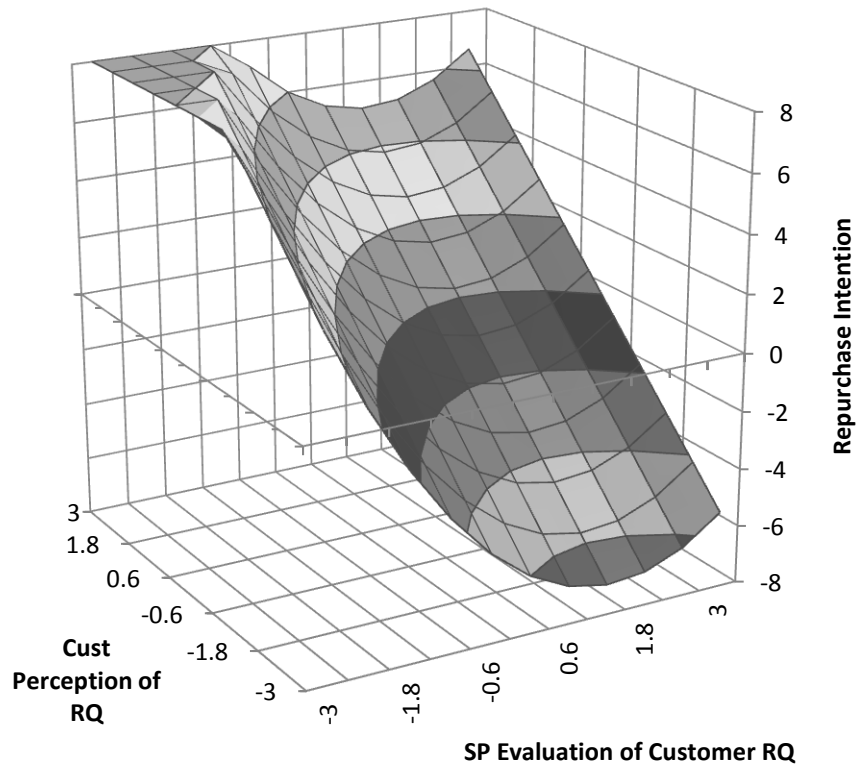


FIGURE 3

Response Surface for Customer Profitability

Simple Effects

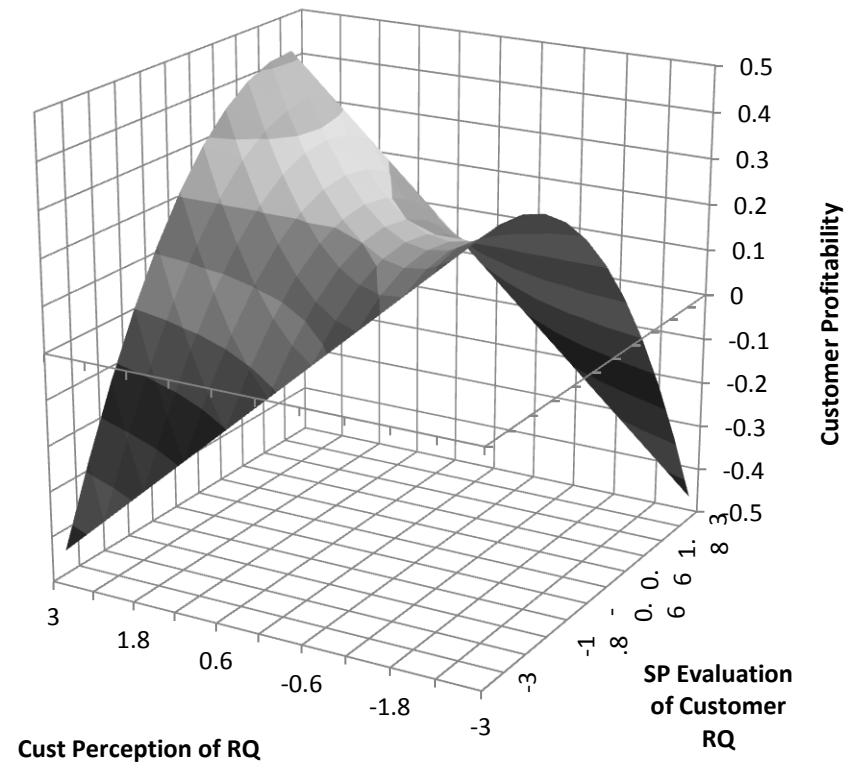
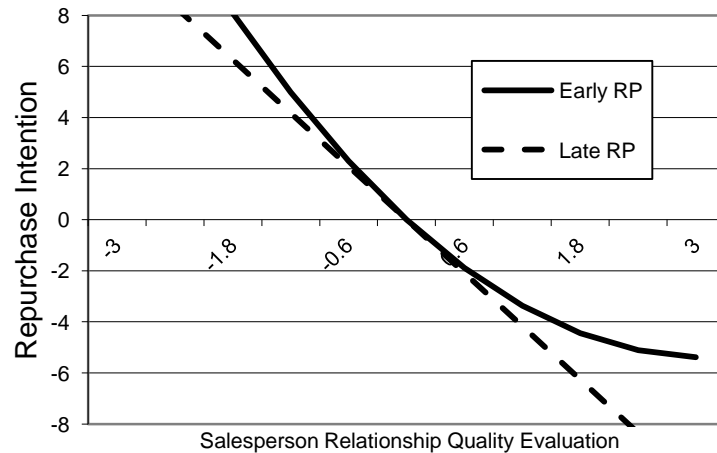


FIGURE 4

Symmetry and Asymmetry Lines for Future Purchase Intention
4A: Symmetry Line for Future Purchase Intention ($X = Y$)



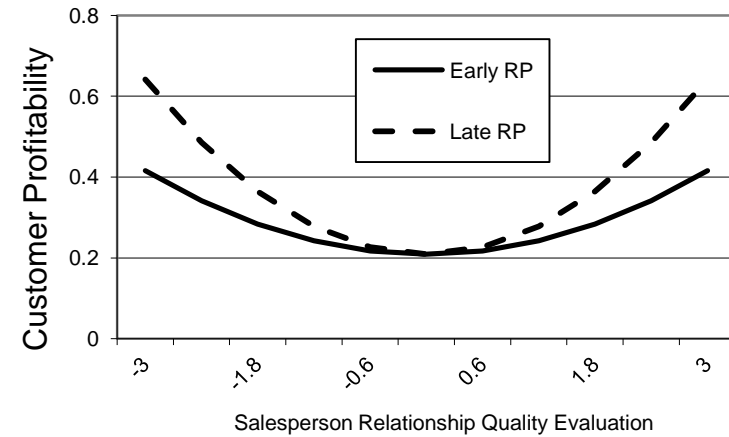
4B: Asymmetry Line for Future Purchase Intention ($-X = Y$)



Notes: X = Salesperson's evaluation of Customer Relationship Quality (centered at scale midpoint); Y = Actual Customer Relationship Quality.
 For asymmetry-line figures, from midpoint to the left reflects salesperson underestimation ($Y > X$), and to the right reflects salesperson overestimation ($Y < X$).

FIGURE 5

Symmetry and Asymmetry Lines for Customer Profitability
5A: Symmetry Line for Customer Profitability ($X = Y$)



5B: Asymmetry Line for Customer Profitability ($-X = Y$)

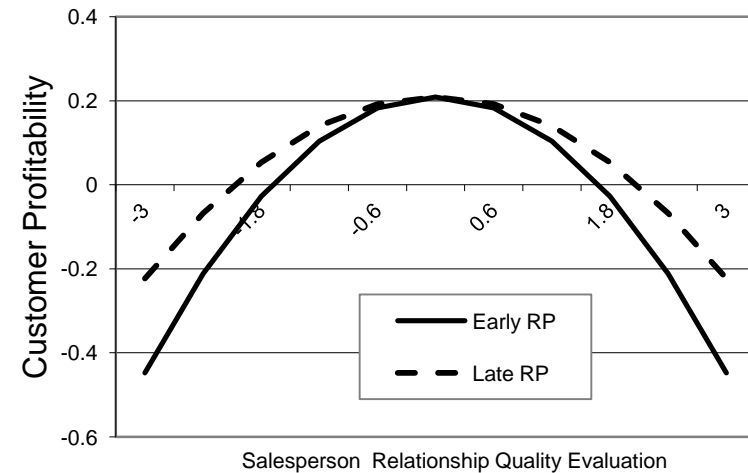
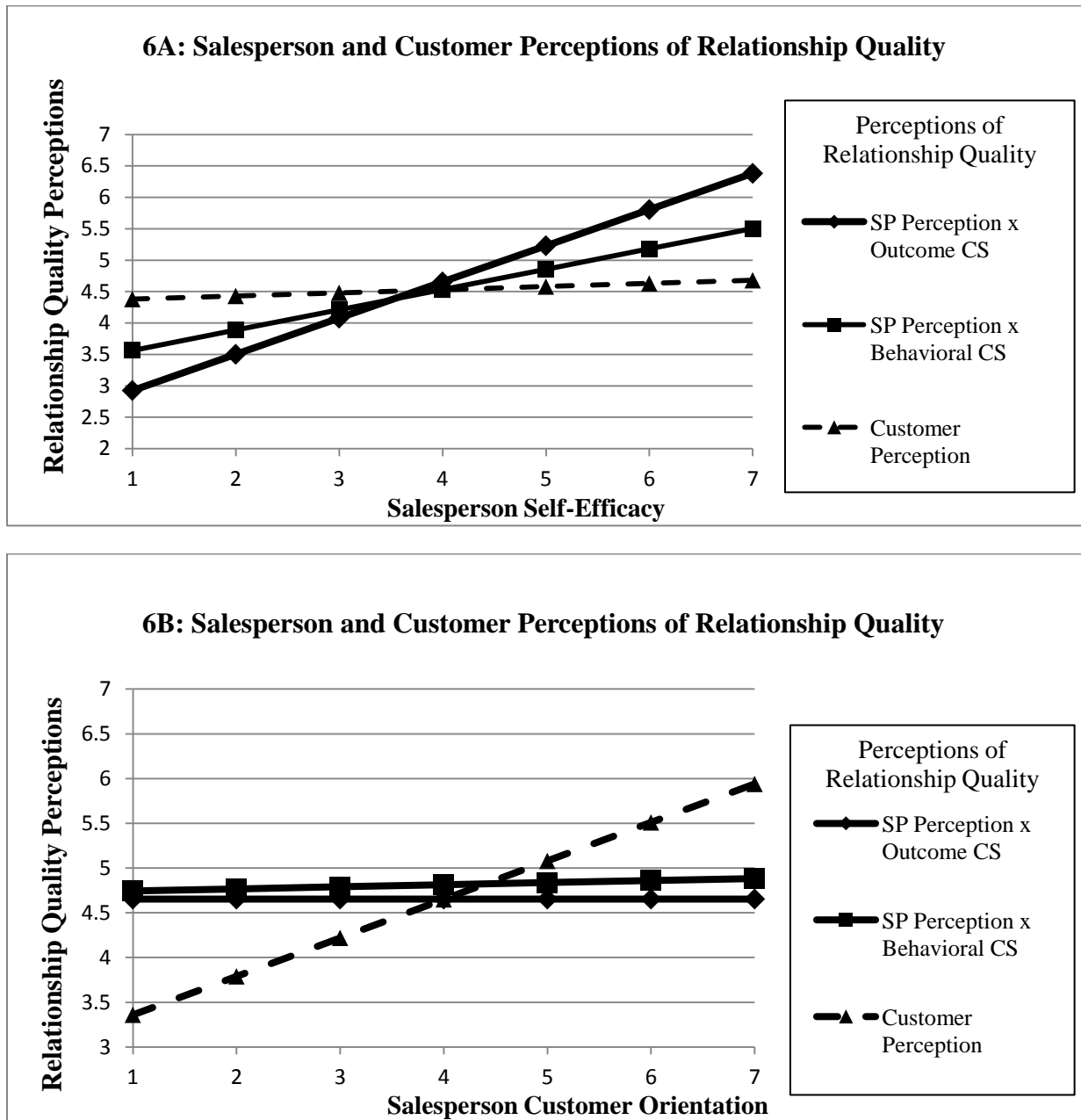


FIGURE 6
Biasing Effects of Salesperson Self-Efficacy and Customer Orientation



Note: SP = Salesperson, CS = control system

TABLE 1
Intercorrelation Matrix of Focal Constructs

Variables	1	2	3	4	5	6	7	8	9	10	11	12
Customer												
1. Relationship Quality	(.92)											
2. Future Purchase Intent	.43*	(.90)										
3. Relationship Phase ^a	-.16	-.06	–									
4. Share of Wallet (%)	.18*	-.38*	.08	–								
Salesperson												
5. Relationship Quality	.16	.04	.02	-.08	(.86)							
6. Customer Orientation	-.18*	.09	.12	.02	.19*	(.71)						
7. Self-Efficacy	-.08	.04	.05	.00	.26*	.57*	(.75)					
8. Behavioral Match ^a	-.02	-.02	.06	-.15	.01	.05	.07	–				
9. Control System ^b	-.06	-.04	.01	-.05	.03	.19*	.27*	.07	–			
10. Tenure (years)	.15	.04	.05	.04	.02	-.14*	-.23*	.05	-.16	–		
11. Sales Experience (years)	.18*	-.01	.01	-.09	.12	-.16	-.16	.04	-.09	.52*	–	
12. Customer Profitability	-.05	-.03	.01	-.08	.03	.13	.16	.12	.01	.06	.05	–
M	5.24	6.32	.66	62.31	6.09	6.18	6.11	.21	.00	14.44	24.53	.21
SD	1.55	1.45	.47	33.36	.95	.54	.54	.41	2.39	11.12	9.74	.19
AVE	.82	.89	–	–	.73	.55	.55	–	–	–	–	–
CR	.94	.94	–	–	.89	.83	.83	–	–	–	–	–

* $p < .01$ (two-tailed), ^adichotomous variable. ^bvalues prior to standardization

Notes: Correlations based on scores per dyad are below the diagonal, and Cronbach's (1978) internal consistency reliability coefficients appear in parentheses on the diagonal.

TABLE 2
Polynomial Regression Results

Full Model (with Interactions)				
$DV = \beta_0 + \beta_1(RQ_{sp}) + \beta_2(RQ_c) + \beta_3(RQ_{sp}^2) + \beta_4(RQ_{sp} \times RQ_c) + \beta_5(RQ_c^2) + \beta_6(RP) + \beta_7(RQ_{sp} \times RP) + \beta_8(RQ_c \times RP) + \beta_9(RQ_{sp}^2 \times RP) + \beta_{10}(RQ_{sp} \times RQ_c \times RP) + \beta_{11}(RQ_c^2 \times RP) + e$				
Variable	β (SE)			
	DV = Future Purchase Intention		DV = Customer Profitability	
	Main Effects	Full Model	Main Effects	Full Model
<i>Predictor Effects</i>				
Intercept (β_0)	1.549* (.75)	.046 (1.26)	.159** (.03)	.209** (.048)
RQ_{sp} (β_1)	-1.036** (.36)	-1.481** (.52)	-.013 (.01)	-.007 (.020)
RQ_c (β_2)	1.071** (.31)	1.998** (.66)	-.010 (.01)	-.037 (.025)
RQ_{sp}^2 (β_3)	.197 (.14)	.562* (.28)	-.005 (.01)	-.025* (.011)
$RQ_{sp} \times RQ_c$ (β_4)	-.037 (.15)	-.035 (.34)	.028** (.01)	.048** (.013)
RQ_c^2 (β_5)	.007 (.10)	-.084 (.21)	.011** (.00)	.009 (.008)
RP (β_6)		2.21 (1.65)		-.041 (.063)
<i>Interactions</i>				
$RQ_{sp} \times RP$ (β_7)		1.140 (.93)		-.041 (.036)
$RQ_c \times RP$ (β_8)		-.824 (.81)		.023 (.031)
$RQ_{sp}^2 \times RP$ (β_9)		-.641* (.32)		.028* (.014)
$RQ_{sp} \times RQ_c \times RP$ (β_{10})		-.150 (.41)		-.021 (.016)
$RQ_c^2 \times RP$ (β_{11})		-.021 (.24)		-.001 (.009)
R^2		.392**		.517**
Adjusted R^2		.335		.471
Surface Tests				
Symmetry line Slope ($b_1 + b_2$)	.036 (.49)	.52 (.57)	-.023 (.19)	-.031 (.022)
Symmetry line Curvature	.241 (.18)		.034* (.01)	
- Early Rel. Phase ($b_3 + b_4 + b_5$)		.44* (.21)		.031** (.008)
- Late Rel. Phase ($b_3 + b_4 + b_5 + b_9$)		-.20 (.62)		.052** (.007)
Asymmetry line Slope ($b_1 - b_2$)	-2.107** (.47)	-3.48** (1.05)	-.003 (.02)	.044 (.040)
Asymmetry line Curvature	.167 (.26)		-.022* (.01)	
- Early Rel. Phase ($b_3 - b_4 + b_5$)		.51 (.68)		-.065** (.008)
- Late Rel. Phase ($b_3 - b_4 + b_5 + b_9$)		-.128 (.78)		-.045** (.005)

Notes: ** $p < .01$; * $p < .05$; RQ_{sp} = Salesperson Assessment of Customer Relationship Quality, RQ_c = Customer Relationship Quality, RP = Relationship Phase (Early =0, Late = 1).

TABLE 3
Multivariate Hierarchical Regression Results

Model Specifications			
Main Effects Model (without interaction)		Full Model (with interactions)	
L1: $RQ_{ij} = \pi_{1j}(D_1)CRQ_j + \pi_{2j}(D_2)SRQ_j$		L1: $RQ_{ij} = \pi_{1j}(D_1)CRQ_j + \pi_{2j}(D_2)SRQ_j$	
L2: $\pi_{1j} = \beta_{10} + \beta_{11}(CO_j) + \beta_{12}(SEff_j) + \beta_{13}(SCBeh_j) + \beta_{14}(Exp_j) + \beta_{15}(Ten_j) + u_{1j}$		L2: $\pi_{1j} = \beta_{10} + \beta_{11}(CO_j) + \beta_{12}(SEff_j) + \beta_{13}(SCBeh_j) + \beta_{14}(Exp_j) + \beta_{15}(Ten_j) + \beta_{16}(BehCS_j) + \beta_{17}(BehCS_j \times CO_j) + \beta_{18}(BehCS_j \times SEff_j) + \beta_{19}(BehCS_j \times SCBeh_j) + u_{1j}$	
$\pi_{2j} = \beta_{20} + \beta_{21}(CO_j) + \beta_{22}(SEff_j) + \beta_{23}(SCBeh_j) + \beta_{24}(Exp_j) + \beta_{25}(Ten_j) + u_{2j}$		$\pi_{2j} = \beta_{20} + \beta_{21}(CO_j) + \beta_{22}(SEff_j) + \beta_{23}(SCBeh_j) + \beta_{24}(Exp_j) + \beta_{25}(Ten_j) + \beta_{26}(BehCS_j) + \beta_{27}(BehCS_j \times CO_j) + \beta_{28}(BehCS_j \times SEff_j) + \beta_{29}(BehCS_j \times SCBeh_j) + u_{2j}$	
Results			
Variable	β (SE)		Hypothesis
	Main Effects Only	Full Model	
Controls for Customer RQ			
Exp (β_{15})	.00 (.01)	.00 (.01)	
Ten (β_{16})	.00 (.01)	.00 (.01)	
Controls for Salesperson RQ			
Exp (β_{25})	.00 (.01)	.00 (.01)	
Ten (β_{26})	.01 (.01)	.01 (.01)	
Main/Simple Effects on Customer RQ			
Intercept (β_{10})	2.51** (.51)	2.65** (.51)	
CO (β_{11})	.43** (.06)	.43** (.05)	
SEff (β_{12})	.10 (.09)	.07 (.10)	
SCBeh (β_{13})	.20 (.12)	.42 (.30)	
BehCS (β_{17})		.02 (.03)	
Main/Simple Effects on Salesperson RQ			
Intercept (β_{20})	2.33** (.61)	3.24** (.58)	
CO (β_{21})	.11 (.08)	.12 (.07)	H7
SEff (β_{22})	.53** (.11)	.37** (.10)	H8
SCBeh (β_{23})	-.04 (.13)	-.03 (.15)	H9
BehCS (β_{27})		.05 (.05)	
Interactions on Customer RQ			
BehCS x CO (β_{18})		.00 (.00)	
BehCS x SEff(β_{19})		-.01** (.00)	
BehCS x SCBeh (β_{110})		.08 (.06)	
Interactions on Salesperson RQ			
BehCS x CO (β_{28})		.01** (.00)	H10a
BehCS x SEff (β_{29})		-.02** (.00)	H10b
BehCS x SCBeh (β_{210})		.09 (.05)	H10c
Customer RQ R^2 (Adjusted R^2)	.13** (.01)	.21** (.03)	
Salesperson RQ R^2 (Adjusted R^2)	.26** (.16)	.37** (.23)	
Deviance Statistic	500.47	467.38	
Change in Fit Index	$\chi^2 = 33.09^{**}$ (d.f. = 8)		

Notes: ** $p < .01$; * $p < .05$; L1 = Level 1, L2 = Level 2, SoW = Share of Wallet, Exp = Sales Experience, Ten = Salesperson Company Tenure, CO = Salesperson Customer Orientation, SEff = Salesperson Self-Efficacy, SCBeh = Behavioral Match between Salesperson and Customer, BehCS = Salesperson Perception of a Behavioral Control System, CRQ = Customer Relationship Quality, SRQ = Salesperson Evaluation of Customer Relationship Quality.

TABLE 4
Summary of Findings

Hypotheses		Findings
Consequences		
H1	When salespeople accurately evaluate their customers' relationship quality, their customers' future purchase intentions will be higher (lower) when relationship quality is high (low).	n.s.
H2	When salespeople accurately evaluate customers' relationship quality, customer profitability will be lower (higher) when a customer has moderate (high or low) relationship quality. Thus, when salesperson evaluations are accurate, there will be a U-shaped relationship between customer relationship quality and customer profitability.	✓
H3	When a salesperson inaccurately evaluates a customer's relationship quality, the customer's future purchase intention will be lower (higher) when the salesperson overestimates (underestimates) the customer's relationship quality.	✓
H4	When a salesperson inaccurately evaluates a customer's relationship quality, customer profitability will decrease as the salesperson's evaluation deviates from the customer's relationship quality, irrespective of the direction of the salesperson perceptual inaccuracy. Thus, there is an inverted U-shaped relationship between salesperson perceptual inaccuracy and customer profitability.	✓
H5	During the exploration phase of the relationship, the effect of salesperson accuracy and inaccuracy on future purchase intention will be stronger than in later phases.	✓
H6	During the build-up and maturation phases of the relationship, the effect of salesperson accuracy on customer profitability will be stronger than in the exploration phase. In contrast, the effect of salesperson inaccuracy on customer profitability will be weaker than in the exploration phase.	✓
Antecedents		
H6	Salespeople with high self-efficacy will overestimate the customer's relationship quality.	✓
H7	Salespeople with high customer orientation will underestimate the customer's relationship quality.	✓
H8	Salespeople similar to their customers will overestimate their customer's relationship quality.	n.s.
H9	A behavioral based control system will decrease:	✓
	a) overestimations of the customer's relationship quality associated with high self-efficacy.	
	b) underestimations of the customer's relationship quality associated with high customer orientation.	✓
	c) overestimations of the customer's relationship quality associated with high salesperson-customer similarity.	n.s.

Notes: Supported (✓), not significant (n.s.)

References

- Anderson, Erin and Bart Weitz (1992), "The Use of Pledges to Build and Sustain Commitment in Distribution Channels," *Journal of Marketing Research*, 29 (1), 18-34.
- Anderson, James C. and James A. Narus (2003), "Selectively Pursuing More of Your Customer's Business," *Mit Sloan Management Review*, 44 (3), 42-49.
- Bandura, Albert (1977), "Self-Efficacy - toward a Unifying Theory of Behavioral Change," *Psychological Review*, 84 (2), 191-215.
- Bitner, Mary Jo, Bernard H. Booms, and Lois A. Mohr (1994), "Critical Service Encounters - the Employees Viewpoint," *Journal of Marketing*, 58 (4), 95-106.
- Brown, Tom J., John C. Mowen, D Todd Donovan, and Jane W. Licata (2002), "The Customer Orientation of Service Workers: Personality Trait Effects on Self- and Supervisor Performance Ratings," *Journal of Marketing Research*, 39 (1), 110-19.
- Cannon, J. P. and W. D. Perreault (1999), "Buyer-Seller Relationships in Business Markets," *Journal of Marketing Research*, 36 (4), 439-60.
- Colgate, Mark R. and Peter J. Danaher (2000), "Implementing a Customer Relationship Strategy: The Asymmetric Impact of Poor Versus Excellent Execution," *Journal of the Academy of Marketing Science*, 28 (3), 375-87.
- Cronbach, Lee J. (1978), "Citation Classic - Coefficient-Alpha and Internal Structure of Tests," *Current Contents* (13), 8-8.
- Crosby, Lawrence A., Kenneth R. Evans, and Deborah Cowles (1990), "Relationship Quality in Services Selling - an Interpersonal Influence Perspective," *Journal of Marketing*, 54 (3), 68-81.
- De Wulf, Kristof, Gaby Odekerken-Schroder, and Dawn Iacobucci (2001), "Investments in Consumer Relationships: A Cross-Country and Cross-Industry Exploration," *Journal of Marketing*, 65 (4), 33-50.
- Doney, Patricia M. and Joseph P. Cannon (1997), "An Examination of the Nature of Trust in Buyer-Seller Relationships," *Journal of Marketing*, 61 (2), 35-51.
- Dorsch, Michael J., Scott R. Swanson, and Scott W. Kelley (1998), "The Role of Relationship Quality in the Stratification of Vendors as Perceived by Customers," *Journal of the Academy of Marketing Science*, 26 (2), 128-42.
- Dwyer, F. Robert, Paul H. Schurr, and Sejo Oh (1987), "Developing Buyer-Seller Relationships," *Journal of Marketing*, 51 (2), 11-27.

- Edwards, Jeffrey R. and Mark E. Parry (1993), "On the Use of Polynomial Regression Equations as an Alternative to Difference Scores in Organizational Research," *Academy of Management Journal*, 36 (6), 1577-613.
- Edwards, Jeffrey R. (1995), "Alternatives to Difference Scores as Dependent Variables in the Study of Congruence in Organizational Research," *Organizational Behavior and Human Decision Processes*, 64 (3), 307-24.
- Fornell, C. and D. F. Larcker (1981), "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error," *Journal of Marketing Research*, 18 (1), 39-50.
- Franke, George R. and Jeong-Eun Park (2006), "Salesperson Adaptive Selling Behavior and Customer Orientation: A Meta-Analysis," *Journal of Marketing Research*, 43 (4), 693-702.
- Gill, Michael J. and William B. Swann (2004), "On What It Means to Know Someone: A Matter of Pragmatics," *Journal of Personality and Social Psychology*, 86 (3), 405-18.
- Gist, Marilyn E. and Terence R. Mitchell (1992), "Self-Efficacy - a Theoretical-Analysis of Its Determinants and Malleability," *Academy of Management Review*, 17 (2), 183-211.
- Homburg, Christian, Mathias Droll, and Dirk Totzek (2008), "Customer Prioritization: Does It Pay Off, and How Should It Be Implemented?," *Journal of Marketing*, 72 (5), 110-30.
- Homburg, Christian, Michael Muller, and Martin Klarmann (2011), "When Should the Customer Really Be King? On the Optimum Level of Salesperson Customer Orientation in Sales Encounters," *Journal of Marketing*, 75 (2), 55-74.
- Jap, S. D. and E. Anderson (2003), "Safeguarding Interorganizational Performance and Continuity under Ex Post Opportunism," *Management Science*, 49 (12), 1684-701.
- 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 (2), 227-45.
- Jap, Sandy D. and Erin Anderson (2007), "Testing a Life-Cycle Theory of Cooperative Interorganizational Relationships: Movement across Stages and Performance," *Management Science*, 53 (2), 260-75.
- John, George and Torger Reve (1982), "The Reliability and Validity of Key Informant Data from Dyadic Relationships in Marketing Channels," *Journal of Marketing Research*, 19 (4), 517-24.
- Kenny, D. A. and L. K. Acitelli (2001), "Accuracy and Bias in the Perception of the Partner in a Close Relationship," *Journal of Personality and Social Psychology*, 80 (3), 439-48.

- Kumar, Nirmalya, Lisa K. Scheer, and Jan-Benedict E. M. Steenkamp (1995), "The Effects of Perceived Interdependence on Dealer Attitudes," *Journal of Marketing Research*, 32 (3), 348-56.
- Kumar, V., Rajkumar Venkatesan, and Werner Reinartz (2008), "Performance Implications of Adopting a Customer-Focused Sales Campaign," *Journal of Marketing*, 72 (5), 50-68.
- McPherson, Miller, Lynn Smith-Lovin, and James M. Cook (2001), "Birds of a Feather: Homophily in Social Networks," *Annual Review of Sociology*, 27, 415-44.
- Morgan, Robert M. and Shelby D. Hunt (1994), "The Commitment-Trust Theory of Relationship Marketing," *Journal of Marketing*, 58 (3), 20-38.
- Oliver, Richard L. and Erin Anderson (1994), "An Empirical-Test of the Consequences of Behavior - and Outcome-Based Sales Control-Systems," *Journal of Marketing*, 58 (4), 53-67.
- Palmatier, Robert W., Rajiv R. Dant, Dhruv Grewal, and Kenneth R. Evans (2006a), "Factors Influencing the Effectiveness of Relationship Marketing: A Meta-Analysis," *Journal of Marketing*, 70 (4), 136-53.
- Palmatier, Robert W., Srinath Gopalakrishna, and Mark B. Houston (2006b), "Returns on Business-to-Business Relationship Marketing Investments: Strategies for Leveraging Profits," *Marketing Science*, 25 (5), 477-93.
- Palmatier, Robert W., Lisa K. Scheer, Kenneth R. Evans, and Todd J. Arnold (2008), "Achieving Relationship Marketing Effectiveness in Business-to-Business Exchanges," *Journal of the Academy of Marketing Science*, 36 (2), 174-90.
- Parvatiyar, Atul and Jagdish N. Sheth (2000), "The Domain and Conceptual Foundations of Relationship Marketing," 3-38.
- Raudenbush, S.W. and A.S. Bryk (2002), *Hierarchical Linear Models: Applications and Data Analysis Methods*: Sage Publications, Inc.
- Rich, Michael K. and Daniel C. Smith (2000), "Determining Relationship Skills of Prospective Salespeople," *Journal of Business & Industrial Marketing*, 15 (4), 242-59.
- Ross, William T., Erin Anderson, and Barton A. Weitz (1997), "Performance in Principal-Agent Dyads: The Causes and Consequences of Perceived Asymmetry of Commitment to the Relationship," *Management Science*, 43 (5), 680-704.
- Saxe, Robert and Barton A. Weitz (1982), "The Soco Scale - a Measure of the Customer Orientation of Salespeople," *Journal of Marketing Research*, 19 (3), 343-51.
- Sirdeshmukh, Deepak, Jagdip Singh, and Barry Sabol (2002), "Consumer-Trust, Value, and Loyalty in Relational Exchanges," *Journal of Marketing*, 66 (1), 15-37.

- Sujan, Harish, Barton A. Weitz, and Nirmalya Kumar (1994), "Learning Orientation, Working Smart, and Effective Selling," *Journal of Marketing*, 58 (3), 39-52.
- Swann, William B. (1984), "Quest for Accuracy in Person Perception - a Matter of Pragmatics," *Psychological Review*, 91 (4), 457-77.
- van Dolen, Willemijn, Jos Lemmink, Ko de Ruyter, and Ad de Jong (2002), "Customer-Sales Employee Encounters: A Dyadic Perspective," *Journal of Retailing*, 78 (4), 265-79.
- Vosgerau, Joachim, Erin Anderson, and William T. Ross (2008), "Can Inaccurate Perceptions in Business-to-Business (B2b) Relationships Be Beneficial?," *Marketing Science*, 27 (2), 205-24.
- Weitz, Barton A. and Kevin D. Bradford (1999), "Personal Selling and Sales Management: A Relationship Marketing Perspective," *Journal of the Academy of Marketing Science*, 27 (2), 241-54.
- Williamson, O. (1985), "E.(1985): The Economic Institutions of Capitalism," *New York*.
- Wood, Robert and Albert Bandura (1989), "Impact of Conceptions of Ability on Self-Regulatory Mechanisms and Complex Decision-Making," *Journal of Personality and Social Psychology*, 56 (3), 407-15.
- Zeithaml, Valerie A. (1988), "Consumer Perceptions of Price, Quality, and Value - a Means-End Model and Synthesis of Evidence," *Journal of Marketing*, 52 (3), 2-22.
- Zeithaml, Valerie A., Leonard L. Berry, and A Parasuraman (1996), "The Behavioral Consequences of Service Quality," *Journal of Marketing*, 60 (2), 31-46.

APPENDIX

Measurement Scales

Relationship Quality (De Wulf, Odekerken-Schroder, and Iacobucci 2001) (1 = “strongly disagree,” and 7 = “strongly agree”)		*Control System (Oliver and Anderson 1994) (1 = “strongly disagree,” and 7 = “strongly agree”)	
Customer Perceptions	Salesperson Evaluations of Customer	Behavioral Facet (.95) My manager...	
Commitment I am committed to <i>this account</i> as a customer. I am willing to make sacrifices to preserve <i>our relationship</i> . Satisfaction Overall, I’m very satisfied with <i>this sales representative</i> . Overall, I like working with <i>this sales representative</i> . Trust <i>The Sales Representative...</i> ... is very trustworthy. ... is always honest in his/her dealings with me.	Commitment <i>This customer...</i> ... is committed to this account. ... willingly makes sacrifices to preserve our relationship. Satisfaction Overall, <i>this customer</i> is very satisfied with me. Overall, <i>this customer</i> likes working with me. Trust <i>This customer would perceive me as being...</i> ... very trustworthy. ... always honest in all of our dealings.	1) ... makes sure everyone knows what to do and how to do it. 2) ... stays in close contact with me. 3) ... frequently asks me for information on how I’m doing. 4) ... stays in touch with me. 5) ... stays very well informed of his salespeople’s activities. 6) ... is very integrated in the activities of his salespeople. 7) ... contacts salespeople on a day-to-day basis. 8) ... gives explicit direction to salespeople.	
Customer Orientation (Brown et al. 2002) (1 = “strongly disagree,” and 7 = “strongly agree”)		Outcome Facet (.79)	
1) I try to help customer achieve their goals. 2) I keep the best interests of the customer in mind. 3) I take a problem solving approach with customers. 4) I am able to answer customers’ questions correctly.		1) ... decides who’s good by looking strictly at each salesperson’s bottom line. 2) ... only values tangible results. 3) ... don’t care what I do as long as I produce. 4) ... takes very few things into consideration when rating my performance.	
Self-Efficacy (Sujan, Weitz, and Kumar 1994) (1 = “strongly disagree,” and 7 = “strongly agree”)		How heavily do you think your manager relies on the following measures when he evaluates salesperson performance?	
Compared with other sales representatives in my division, I...		Objective Outcomes (.71)	
1) ... am an excellent salesperson. 2) ... always sense exactly what customers want. 3) ... can easily use a wide variety of selling approaches. 4) ... know the applications and functions of company products very well.		1) Sales Volume 2) Market Penetration 3) Achievement of Quota	
Salesperson Customer Behavioral Similarity (based on Rich and Smith 2000) Please rate how often your coworkers would describe you as _____.		Paper Inputs (.70)	
1) Approachable 2) People Oriented 3) Open 4) Assertive 5) One who Takes Charge 6) Competitive		1) Number of Calls 2) Sales Expenses 3) Quality and Completeness of Call Reports	
Company Tenure How long have you been employed with <i>this company</i> ? (years)		Subjective Inputs (.92)	
Sales Experience How long have you been working in sales? (years)		1) Attitude 2) Ability 3) Effort	
		Relationship Phase (Jap and Ganesan 2000) Which of the following best describes your firm’s current relationship with X?	
		1) Exploration 2) Build-up 3) Maturity 4) Decline	
		Future Purchase Intention (Doney and Cannon 1997) (1 = “highly unlikely,” and 7 = “highly likely”)	
		How likely is it you will make a purchase from this supplier during the...	
		1) Next year 2) Next 3 years	
		Customer Profitability Objective firm performance of the revenue above cost of the customer account, standardized by the volume of sales from the customer account. <i>Notes: *Subscale reliabilities in parentheses</i>	