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ORIGINAL EMPIRICAL RESEARCH

Antecedents and consequences of adaptive selling confidence and behavior: a dyadic analysis of salespeople and their customers

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Abstract Personal selling is thought to be a very effective marketing vehicle. The notion of adaptive selling suggests that it should work better than any other means of communication because salespeople are able to develop a unique message for each customer. This research proposes a model of key antecedents and consequences of adaptive selling. In particular, we distinguish, measure, and model the attitudinal and behavioral aspects of adaptive selling, something that is encouraged but not thoroughly examined in the literature. Hypotheses are tested using data from 210 salesperson-customer dyads. The results indicate that a salesperson's perception of the firm's customer orientation has an effect on adaptive selling behavior through the salesperson's adaptive selling confidence, role ambiguity, intrinsic motivation and customer-qualification skills. Adaptive selling behavior increases salesperson's outcome performance, customers' evaluations of satisfaction with the product and with the salesperson, which enhance customers' anticipation of future interactions with the salesperson. The implications for management and theory are discussed.

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For some thirty years now, marketing scholars have been writing about optimal sales encounters as adaptive and interpersonally dynamic (cf., Weitz 1978, 1981). The basic concept is that there is no single best way to sell, and therefore a good salesperson will be adaptive enough to select and implement a sales strategy contingent upon the characteristics of the prospective customer and situation.

According to the seminal research of Weitz et al. (1986) and their "Adaptive Selling" framework, salespeople have the opportunity to gather information and then develop and implement a sales presentation tailored to the characteristics of each customer. Salespeople can observe their customers' reactions to a given sales pitch and make nearly instantaneous strategic adjustments. Thus, while personal selling is an extremely costly marketing vehicle (Román and Martín 2008), particularly compared to many of today's electronic alternatives, personal selling is nevertheless thought to be extremely effective, perhaps the most effective means of marketing communication (Spiro and Weitz 1990).

Research confirms that adaptive selling leads to strong sales performance (e.g., Boorom et al. 1998; Franke and Park 2006). A recent meta-analysis revealed that adaptive selling enhances sales performance, whether measured by self-reported rating, manager ratings, or more objective measures of performance (Franke and Park 2006). Accordingly, it is not surprising that marketing managers and scholars alike are interested in understanding how adaptive selling is created and encouraged.

Marketing scholars have established empirical evidence for several antecedents that enhance adaptive selling (see Appendix A). Many studies focus on the characteristics of the salespeople, such as ability and motivation—that is, can and will salespeople perform well (e.g., Boorom et al. 1998; Jaramillo et al. 2007; Levy and Sharma 1994; Park and Holloway 2003; Spiro and Weitz 1990; Sujan et al. 1994; Verbeke et al. 2004). Other studies examine characteristics of the firm, such as its sales management policies (e.g., Grant and Cravens 1996; Piercy et al. 1998; Rapp et al. 2006; Rapp et al. 2008).

Yet given the acknowledged importance of personal sales and adaptive selling, many questions remain unanswered. Our study is intended to contribute to the literature in several ways: First, while several studies examine a number of antecedents to adaptive selling, and others its consequences, we model numerous antecedent and consequential constructs simultaneously, so as to begin to build the foundations of a more comprehensive model, and to partial out and statistically control for the effects of established relationships, in order to more cleanly shed light on the effects of all of the associations. We begin with relationships that have been tested in the literature. Our findings concur with those results, and then our model builds a nomological network above and beyond the results established thus far in the literature.

Second, we aim to be robust in testing a broad selection of antecedent constructs, covering qualities of both the salespeople and the firm. In particular, the antecedents that are characteristics of salespeople provide thorough coverage of all three major domains (rather than a subset, as is true of some past research) found to be determinants of sales performance, including salespersons' motivations, skills, and perceptions about their roles in the organization (cf., Churchill et al. 1985). In addition, our model is created to be consistent with the arguments in the literature that these properties of individual salespeople should be examined and modeled in the context of the firm's characteristics, particularly the salespeople's perceptions of their firm's philosophical orientation to customers and marketing efforts more generally, issues that remain relatively understudied in the context of adaptive selling.

In addition, as evidenced in Franke and Park's (2006) meta-analysis, the extant research on adaptive selling has primarily used short-term consequences such as sales performance (see also Appendix A for a detailed description of the studies on the consequences of adaptive selling[1]). Clearly sales are important, but given today's emphasis on relationship selling (e.g., Jones et al. 2003; Ramsey and Sohi 1997; Weitz and Bradford 1999), we include a broader spectrum of measures, capturing the effects of adaptive selling not only on a salesperson's outcome performance, but also on customer satisfaction with the product, the salesperson, and the likelihood of repeat business. We believe this is an important contribution of our research because on the one hand, the topic of adaptive selling is very important to the field of personal selling and sales management, and has been extensively investigated. On the other hand, the field of marketing experienced a fundamental shift in focus characterized by the implementation of strategies designed for establishing, developing, and maintaining mutually supportive relationships with customers rather than a more traditional focus on the determinants and outcomes of single discrete transactional exchanges (Berry 1995; Morgan and Hunt 1994; Webster 1992). Nevertheless, past research on the consequences of adaptive selling has consistently ignored the influence of adaptive selling on customer relational variables such as customer satisfaction and retention.

Finally, we examine the salesperson-customer interactions in true dyadic fashion. Doing so allows us to incorporate the perspectives of both sides of the parties relevant to the sales interaction. Studies which focus on the salesforce's perceptions of their own constructs, as well as their estimates of their customers' perceptions, are biased and less meaningful than our study for which data were obtained to represent the fully interactive richness of the dyad. In the sections that follow, we propose hypotheses about key antecedents and consequences of adaptive selling.

Literature review and research hypotheses

As a guide to the literature and hypothesis development that follows, we begin with a brief overview of our model. The three constructs in the center of Fig. 1 (in the boxes) are our key constructs: salesperson's adaptive selling confidence, salesperson's adaptive selling behavior, and salesperson's outcome performance. We will develop Hypotheses H1–H4 to support the logic of the antecedent structure, including the firm's customer orientation and the salesperson's motivations, skills, and understanding of the job. Hypotheses H5–H8 will explain the inter-connections among these antecedents. Hypotheses H9–H11 are posited to test the consequences of adaptive selling behavior, namely, its impact on salesperson's outcome performance, customer satisfaction with the product and with the salesperson.

We will show that this model fits our data, and we will test alternative models representing competing theoretical perspectives. The model in Fig. 1 depicts several of the

[1] A remarkable exception is the recent work by Rapp et al. (2006). Yet even so, they only predicted a direct positive effect of *working smart* (a construct that includes adaptive selling) on customer service (a construct closely related to customer satisfaction), and furthermore, their data did not support the relationship.

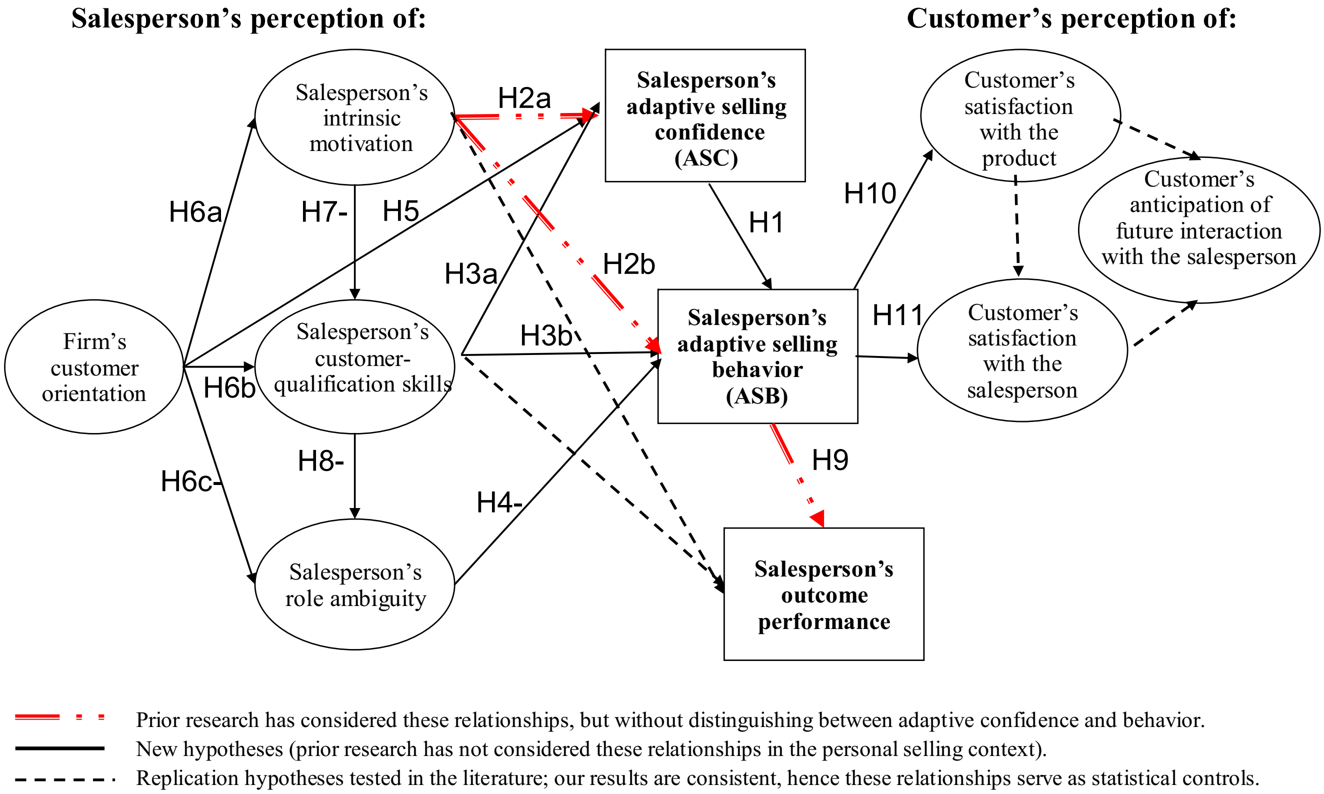

Figure 1 Conceptual framework: Antecedents of adaptive selling behavior (H1–H4); relationships among antecedents (H5–H8); consequences of adaptive selling behavior (H9–H11).

intended contributions of this research. First, note the inclusion of many antecedents and consequences in a single model. A few of the paths have already been established in the literature, and they are included for the purposes of replication and statistically controlling for these basic relationships, so that the model we build and test can be a clear contribution to the literature.

Also in Fig. 1, note the separation of the attitudinal and behavioral components of adaptive selling; namely, "confidence" and "behavior," as defended for decades by psychologists (e.g., Fishbein and Ajzen 1975), and indeed suggested originally by Spiro and Weitz (1990), and recently again by Stock and Hoyer (2005), but nevertheless rarely implemented and tested as such.

While both confidence and behavioral choices are naturally enhanced by both skills and motivation, we will demonstrate that adaptive selling confidence and behavior are in fact distinct constructs. One strong piece of empirical evidence will demonstrate, per this figure, that beyond skills and motivation, confidence and behavior are affected by different antecedents, and they affect different consequences. Confidence is enhanced by knowing that one works for a firm that will likely be supportive of one's marketing actions (i.e., the firm's customer orientation), whereas appropriate adaptive behavior is facilitated by role clarity—namely salespeople will behave optimally when there are clear expectations as to what behavior is deemed optimal in different situations. Regarding their subsequent effects, confidence contributes to appropriate behavior, but only behavior contributes directly to performance measures—both salesperson's outcome performance and reports of customer satisfaction. That is, salespeople who are merely confident but whose behavior is not adaptive will not reap the same rewards.

The rationale for each hypothesis follows. We begin with the focal concept of adaptive selling—confidence and behavior.

Adaptive selling confidence and behavior

The notion of adapting one's behavior to specific environmental conditions (Weitz 1978, 1981) was quickly embraced by marketing scholars studying the sales interaction. The basis for this perspective emanates from the realization that there is no one best way to sell and that the most effective salespeople use a contingency approach to selling, where the strategy selected is based on the characteristics of the situation (Weitz 1981). In particular, salespeople exhibit a high level of adaptive selling behavior when they use different sales presentations across sales encounters and when they make adjustments during the encounter based on real-time feedback and perceived information about the nature of the selling situation (Spiro and Weitz 1990; Weitz et al. 1986).

Adaptive selling behavior includes shaping the content and amount of information shared with different customers who have different needs, e.g., a repeat customer does not need the background information required by a new purchaser. Salespeople also adapt their selling tactics to the buyer's communication style (McFarland et al. 2006; Williams and Spiro 1985). For instance, a salesperson may tailor a presentation to focus on the bottom-line when talking to a "task-oriented" buyer (Williams and Spiro 1985).

Adaptive selling is captured by ADAPTS, a multidimensional scale that measures a salesperson's motivation and ability to practice adaptive selling, and their actual adaptive selling behaviors (Spiro and Weitz 1990). Specifically, the ADAPTS scale measures the motivation of salespeople to practice adaptive selling (seven items), the capabilities required to practice adaptive selling (two items), and the actual adaptive behavior of salespeople (seven items).

Research analyzing the psychometric properties of ADAPTS confirms that the scale is multi-faceted, not unidimensional (Chakrabarty et al. 2004; Marks et al. 1996; Robinson et al. 2002; Spiro and Weitz 1990). Yet, most studies in the literature have ignored the multidimensional nature of this construct, and proceed to use the ADAPTS scale as if it were unidimensional[2]. For example, Robinson et al. (2002, p. 118) cautioned that "researchers attempting to use ADAPTS as a single, unidimensional construct by taking all 16 items and summing them in the traditional manner are, in effect, confounding their findings." Because unidimensionality is one of the most critical and basic assumptions of measurement theory (Hattie 1985), the number and nature of items used to measure adaptive selling are important for drawing valid conclusions in sales and marketing research.

The ADAPTS scale has been popular and empirically very useful. A short form has also been employed (Robinson et al. 2002). Appendix A summarizes the studies that have used the scale to measure adaptive selling. Note that the studies use the scale as unidimensional. In addition, note that the studies do not capture data from both sides of the selling dyads. Our study improves upon both of these issues.

Per measurement theory, we are confident that a more precise measurement approach should lend a greater sensitivity to the theoretical effects of the salesperson's adaptive selling confidence and behavior. Unlike previous studies, we do not aggregate across these facets and purport to measure adaptive selling as if it were unidimensional. The short form of the ADAPTS scale clearly depicts coverage of the confidence and behavioral facets as distinct conceptually, but with only five items total, the scale tends to be used in a summated aggregate form (cf. Robinson et al. 2002). Rather, more appropriately, and isomorphic to the design of the original and short scale and the overarching construct which it reflects, we measure these elements distinctly and demonstrate that they behave differently as predicted theoretically.

To be successful, salespeople must be able to behave adaptively, and they must be confident that they will be able to do so. In both attitude and behavior, the adaptive salesperson assesses the situation and is able to tailor a presentation to the customer's unique needs. Accordingly, we will show that Adaptive Selling Confidence (ASC) and Adaptive Selling Behavior (ASB) are theoretically and empirically separable (i.e., they will show discriminant validity). The confidence that salespeople have in their own ability to execute their roles successfully should have a critical influence on their behavior—both the smoothness of the process and the successfulness of the outcomes of their subsequent sales engagement (Feldman and Weitz 1988; Lockeman and Hallag 1982; Milord and Perry 1977). The proposition that a salesperson's confidence should enhance his or her adaptive selling behavior is consistent with most psychological theories and research, namely that the attitudinal component serves as a precursor to the behavioral component.

Drawing from Sujan et al. (1994, p. 41), adaptive selling confidence can be defined as the salesperson's belief in his or her capability to use a variety of different sales approaches and make adjustments in the message in response to the customer's reactions (in contrast to adaptive selling behavior which is actual behavior). Thus, rather directly, adaptive selling confidence is the salesperson's belief that he or she will be able to engage in adaptive selling behavior. Note that the previous literature in combining confidence and selling behavior had aggregated over a theoretically and empirically interesting phenomenon.

Note also that a salesperson can be confident in his or her ability to adapt the sales strategy, yet the situational characteristics may constrain his or her behavior in such a way to be not suitable to practice and implement adaptive selling behaviors. In particular, Giacobbe et al. (2006, p. 121) indicate that adaptive selling is useful when: (i) the sales offering is complex and the seller has many alternatives to offer, (ii) the customers themselves are diverse, with their needs varying considerably, and (iii) the sales relationship is expected to produce future profit opportunities. This constraining relationship of course implies that the amount of variance explained by adaptive selling confidence might not necessarily be large, yet it may

[2] One exception is the Marks et al. (1996) study, which attempted to distinguish the factors. However, those authors acknowledged inadequate reliabilities, except for the behavioral items (p. 63), and Chakrabarty et al. (2004, p. 131) pointed to a lack of correspondence with the original scale.

still be a distinctive element of the overall adaptive selling framework. In our extension of this framework, we predict:

H1. Adaptive Selling Confidence (ASC) is positively related to Adaptive Selling Behavior (ASB).

Antecedents of adaptive selling

In this section, we derive hypotheses H2–H4. These hypotheses support the antecedents of adaptive selling: motivation, skills, and role ambiguity.

Intrinsic Motivation Motivation is generally defined as a psychological state that stimulates a person to engage in particular behaviors or make particular choices (Brown and Peterson 1994). Whereas extrinsic motivation reflects the extent to which salespeople treat their work as a means for obtaining external rewards, such as money, recognition, and promotion, in contrast, intrinsic motivation drives salespeople to work for rewards that are intrinsically appealing (Tyagi 1982). Examples of such intrinsic rewards include pride, sense of accomplishment, satisfaction, and enjoyment. Intrinsically motivated salespeople find their sales work inherently interesting and rewarding (Spiro and Weitz 1990; Weitz et al. 1986).

Early findings from Spiro and Weitz (1990) revealed that adaptive selling (considered as a unidimensional variable measured with 16 items) and intrinsic motivation were correlated. Only recently, Jaramillo et al. (2007) showed that adaptive selling (again measured as a unidimensional variable with five items) was influenced by intrinsic motivation. Miao and Evans (2007) showed the impact of perceived challenge, a cognitive element of intrinsic motivation, to affect salespeople's perceptions of their experienced role conflict, whereas the extent to which they enjoyed their work tasks, deemed a more affective element of intrinsic motivation, was found to affect role ambiguity, and both challenge and task enjoyment contributed to performance behaviors. They also reasoned that extrinsic motivation can be manipulated by the firm and clearly contributes to outcome performance, yet they found that the strongest performance came from those salespeople with high intrinsic motivation.

Harris et al. (2005) have also urged scholars to take a closer look at salespeople's motivations. They found learning- oriented salespeople to be those most effective at being customer-oriented. While the constructs do not map perfectly onto our own, it might be the case that the findings are somewhat analogous to our predicting intrinsic motivation effects on adaptive selling confidence and behaviors. In other analogous, related research, Wang and Netemeyer (2002; also see Artis and Harris 2007) demonstrate that the intrinsic drive to learn is an important precursor to self-efficacy, which we might extrapolate here to be confidence, or a knowledge that one is capable of adapting the sales situation, and if the efficacy is not just a perception, then it would enhance the adaptive selling behaviors as well. Thus, we expect intrinsic motivation to influence both adaptive selling confidence and behavior. In contrast, extrinsic motivation is more temporary, and is not internalized, compared with success and evidence of self-efficacy, which continue to feed and strengthen intrinsic motivations. Intrinsically motivated salespeople should be more likely to be confident that they can adapt their strategic approach across customers because they have a high need for learning more about selling and they are willing to accept potential failures as a natural part of learning. They will enter a sales encounter with confidence that they can manipulate the content of the sales pitch so that it should be successful, but that even if it is not, they will learn something about the customer and about selling in general. In addition, intrinsically motivated salespeople are more likely to engage in adaptive selling behaviors because they strive to improve their job performance. Extrinsic motivations are intended to reward performance also, but it is the intrinsically motivated salesperson who takes the knocks of a defeat as an opportunity to learn, get back up, and try to be successful again. Rather than relying upon routinized methods for performing their job, intrinsically motivated salespeople will try new tactics that they believe may suit the customer and situation better. Accordingly, intrinsic motivation should positively affect the extent to which the selling behaviors themselves are adaptive in the sales encounter. Consequently, we predict both that:

H2a. The salesperson's intrinsic motivation is positively related to the salesperson's adaptive selling confidence (ASC), and

H2b. The salesperson's intrinsic motivation is positively related to the salesperson's adaptive selling behavior (ASB).

Skills A salesperson's skills have generally been described as the individual's learned proficiency at performing the necessary tasks for the sales job (Grewal and Sharma 1991; Gwinner et al. 2005; Rentz et al. 2002; Sharma 2001; Szymanski 1988). Salespeople usually work in complex environments that require the processing of much information on the selling situation and the prospective customer. To aid in the processing of this information, and to adapt to individual customer needs, salespeople rely on cues to the customer type or category, e.g., this customer is price-sensitive, this other customer is not tech-savvy, etc. (Sharma and Levy 1995; Szymanski 1988; Weitz et al. 1986). The category to which the customer belongs aids the salesperson in adapting the selling strategy, e.g., focus on value when selling to the price-sensitive customer, explain the high-level benefits when selling to the low-tech customer, etc. Salespeople with more and better defined categories are expected to be more effective than salespeople with less refined or complex schemas (Sujan et al. 1988).

We draw on categorization theory to predict the relationship between this specific kind of customer knowledge and adaptive behavior. Categorization is a basic human function that helps simplify complex stimulus environments, such as our interactions with other people. In selling, categories enable the salespeople to structure incoming data on customers so as to categorize or “qualify” them; e.g., the salesperson decides whether the candidate is a prime customer or a prospect of lesser purchase potential. A customer typology can help a salesperson predict the customer’s likely behavior, by assuming the customers of a certain type will behave in a manner consistent with that of other, similar category members. This information would help the salesperson understand the customer’s needs (Szymanski 1988).

In particular, given their importance to the sale, this study specifically focuses on what we will call the salesperson’s *customer-qualification skills*. Building on the aforementioned literature, these skills refer to the salesperson’s learned proficiency to qualify or categorize prospects and customers. Qualification skills include the salesperson’s ability to identify and categorize different client types, as well as their associated product and selling requirements.

Note that while customer-qualification skills and customer-oriented selling should be related, they are conceptually different constructs. In particular, customer-oriented selling refers to “the degree to which salespeople practice the marketing concept by trying to help customers make purchase decisions that will satisfy customer needs” (Saxe and Weitz 1982, p. 344). Indeed, to successfully implement a customer-oriented selling approach the salesperson needs to have good qualification skills, but those skills are not sufficient for success in sales. The adaptive seller will quickly size up the situation and customer needs and think, “For this type of customer, I should approach with tactic A; for this other type of customer, tactic B; this third type of customer might not be worth my time because a successful close is unlikely.” Hence our belief is that qualification skills are a necessary but insufficient skill or knowledge set to achieve customer-oriented selling. After using the qualification skills, the customer-oriented salesperson needs to provide the appropriate type and amount of information so as to satisfy customer needs and increase long-term satisfaction.

Note that if qualification skills refer to a salesperson’s ability to classify prospects into categories and understand their needs, then adaptive selling behaviors require a high level of skills because salespeople must assess and seize the opportunity to use the most effective sales presentation for each customer. Uncovering those needs, designing and delivering different presentations, and making adjustments are clearly best accomplished—most readily and most effectively—by a skilled salesperson.

A salesperson’s knowledge about a customer’s expectations and needs should facilitate adapting to the situation. Salespeople who have higher levels of customer-qualification skills can reduce the complexity of the selling proposition and communications when interacting with prospects and “free up” their mental capacity. This facility and confidence will in turn allow them to adapt more effectively to the selling situation encountered. They will proceed with confidence that their sales strategies will address the needs of the customers, more than would be true of a less skilled salesperson who would not be so certain of his or her ability to assess, categorize and adapt the sales approach.

We posit that customer-qualification skills are positively related to adaptive selling confidence and behavior because they allow for the more accurate typology of customers, which subsequently facilitates the enactment of appropriate adaptive behaviors. Thus, we predict that a salesperson with stronger customer-qualification skills should be more facile at adaptive selling confidence and behaviors:

H3a. The salesperson’s customer-qualification skills are positively related to the salesperson’s Adaptive Selling Confidence (ASC), and

H3b. The salesperson’s customer-qualification skills are positively related to the salesperson’s Adaptive Selling Behavior (ASB).

Role Ambiguity Building on earlier work in organizational research by Kahn et al. (1964), the marketing literature defines a salesperson’s role ambiguity as “the perceived lack of information a salesperson needs to perform his or her role adequately (e.g., effort instrumentalities) and his or her uncertainty about the expectations of different role set members” (Singh 1998, p. 70; also see Brown and Peterson 1994; Grant et al. 2001; Hartline and Ferrell 1996; Michaels et al. 1987; Singh 1993). In a similar fashion, Behrman and Perrault (1984, p. 15) conceptualize role ambiguity as “the uncertainty the salesperson experiences with regard to job related expectations,” and Walker et al. (1975, p. 13) contend that role ambiguity “occurs when the salesman does not feel he has the necessary information to perform his role adequately, when he is uncertain about what the members of his role set expect of him.” When salespeople perceive there to be high role ambiguity, they will not likely be capable of engaging in the most appropriate or optimal selling behaviors.

In addition, given that adaptive selling behaviors require extra time and effort because the salesperson is required to focus greater attention on the customer, adaptive selling behaviors are likely to be inefficient, misdirected, or insufficient when high levels of role ambiguity are experienced. Although no empirical ties to adaptive selling behavior have been made yet in a personal selling context, we might expect that the experience of higher levels of role ambiguity will be detrimental to the practice of adaptive selling behavior. Accordingly, we propose:

H4. The salesperson's role ambiguity is negatively related to the salesperson's Adaptive Selling Behavior (ASB).

Relationships among the antecedents to adaptive selling behavior

Motivation, skills and role ambiguity are themselves interrelated. Furthermore, each is influenced by a company's philosophy toward marketing and its customers. We discuss these antecedents in this section (H5–H8).

A customer focus is the central element of a firm's market orientation (Kohli and Jaworski 1990). Narver and Slater (1990, p. 21) define customer and marketing orientation as "the sufficient understanding of one's target buyers to be able to create superior value for them continuously." Deshpandé et al. (1993, p. 27) refer to the philosophical orientation to marketing and the customer as "the set of beliefs that puts the customers' interest first, while not excluding those of all other stakeholders such as owners, managers, and employees, in order to develop a long-term profitable enterprise." Note that in both definitions, a long-term orientation is key, and specifically, by the "firm's customer orientation," we mean the "salesperson's perception of the firm's customer orientation," because Siguaw et al. (1994, p. 110) asserted that "the salesperson's perception of the firm's orientation is a relevant way to measure this construct."

For Day (1994, p. 45), a market-driven organization is one in which the philosophy that "all decisions start with the customer" permeates throughout all processes and corporate beliefs and values. He argues that the creation and sustainability of a market oriented culture are guided by a deep and shared understanding of the customer's needs and behavior. Customer-oriented firms are more likely to provide clear, well-defined guidelines to salespeople to help them understand the expectations regarding the amount and type of effort they should exert in their interactions with customers (Kohli and Jaworski 1990). Thus working in an organization with a strong marketing and customer-oriented philosophy should enhance a salesperson's confidence regarding adaptive selling: the salesperson can proceed with certainty that taking the time to understand a customer's particular needs is an effort that will be encouraged and rewarded, even expected, when working in such a firm.

H5. The firm's customer orientation is positively related to adaptive selling confidence (ASC).

Note that it is not as clear that a firm with such an orientation would enhance the effectiveness of the salesperson's behaviors per se, of course, as much as a salesperson's willingness to try to do so, hence our prediction focuses on confidence and not adaptive selling behavior.

A customer orientation helps formulate employees' attitudes and motivation, hence its position in our model as a precursor to the salesperson factors—including intrinsic motivation, qualification skills, and clarity regarding role ambiguity. For example, Kohli and Jaworski (1990) argue that market orientation affords certain psychological benefits to employees, specifically a sense of pride that they work for an organization that seeks to satisfy its customers. In contrast, an external motivator continues to motivate only to the extent that they are continually available; in most sales organizations, they will indeed be fairly regularly available, but it is the pride in a job well done that is internalized and continues to motivate a customer even when external motivation seems less accessible or salient. For an intrinsically motivated orientation, accomplishing a goal makes employees feel like their job is worthwhile, and enhances a sense of commitment to the organization (Jaworski and Kohli 1993). Note that this description captures the psychological state of intrinsic motivation which we are modeling.

Day (1994) characterizes market-driven organizations as having superior market sensing, customer linking, and channel bonding capabilities. He argues that when human resources are managed by the belief that customer satisfaction is both a cause and a consequence of employee satisfaction, key policies will naturally become market oriented, from rewards based on customer satisfaction, to hiring and recruiting based on problem-solving skills that help customers achieve that satisfaction. Salespeople can begin to solve problems for customers and provide benefits for them once they have effectively categorized them, per their qualification skills.

Kohli and Jaworski (1990), Day (1994), and Sinkula (1994) posit that organizations with strong market orientation value systems create strong norms for sharing information and reaching a consensus on its meaning. Many definitions of market orientation (Deshpandé et al. 1993; Kohli and Jaworski 1990; Narver and Slater 1990) describe the importance of developing and being responsive to market information. Such information should only enhance clarity of job responsibilities and reduce perceptions of the salesperson's role ambiguity.

The literature on how an organization shapes a psychological climate in which employees can thrive, have job satisfaction and perform successfully is relevant here. The extent to which a company supports the sales force's innovativeness should enhance their job satisfaction and in turn propel them further in their intrinsic motivation, and in clarifying their roles in terms of effective behaviors (Evans et al. 2007). Martin and Bush (2006) show that such a supportive corporate environment leads salespeople to feel empowered—they know what they must do to sell well.

In sum, customer-oriented firms help to effectively and efficiently promote the necessary motivation, skills, and understanding among their employees, especially those who interact with customers, so as to put themselves in a better position to create superior value for customers. Accordingly, we expect that:

H6a. The firm's customer orientation is positively related to the salesperson's intrinsic motivation.

H6b. The firm's customer orientation is positively related to the salesperson's customer-qualification skills.

H6c. The firm's customer orientation is negatively related to the salesperson's role ambiguity.

Intrinsically motivated salespeople are likely to work harder and seek out job responsibilities on their own. Greater motivation should enhance expertise and a building of skill sets. In particular, Plank and Reid (1994, p. 52), in their conceptual work, emphasize the idea that skill development essentially requires effort and motivation on the part of the salesperson, since "it does not just happen." They argue that sales skills may be developed in many ways, through formal training and coaching, as well as by reflecting upon past activities and drawing conclusions about how to do a particular behavior better. In the absence of any intrinsic motivation to conduct such analysis, salespeople are less likely to improve or develop new skills. Accordingly, we propose:

H7. A salesperson's intrinsic motivation is positively related to the salesperson's customer-qualification skills.

A salesperson's customer-qualification skills should reduce role ambiguity in turn, because such skills help salespeople know what to do and how to do it. Almost by definition, qualification skills lend the salesperson the template for success, as per, "If the customer is of type A, proceed as follows, however if the customer is of type B, then do this instead." That near-menu of behavior selection lessens ambiguity in procedure. Higher levels of salespersons' customer-qualification skills should improve their understanding of the job in terms of the necessary activities and how to perform them when interacting with customers, which in turn translates into less role ambiguity. In fact, Behrman and Perrault (1984) found that salespeople with more experience gain a clearer understanding of their work environment and the activities that are important when interacting with their various role partners.

Early evidence in the human resource management literature shows that higher levels of employees' ability reduces their role ambiguity (e.g., Organ and Greene 1974; Randolph and Posner 1981). To the best of our knowledge, the relationship between a salesperson's skills and role ambiguity has not been previously examined in the personal selling context. Yet it seems logical that sales training programs and experience, that is, the building of a repertoire of expertise and skills, would reduce role ambiguity. Fang et al. (2005) have explicated the complicated relationships among salespeople's attributions to their efforts, abilities, and strategies. The current model does not distinguish among the attributions, but to whatever source the salespeople attribute their successes, their roles then become clearer for subsequent sales transactions. Therefore, the following hypothesis is proposed:

H8. Greater customer-qualification skills will reduce a salesperson's role ambiguity.

The consequences of adaptive selling behavior

In this final set of hypotheses (H9–H11), we follow the consequences of adaptive selling behavior. Specifically we propose effects on salesperson's outcome performance and customer satisfaction.

Salesperson's Outcome Performance This construct refers to the sales results that salespeople achieve thorough application of effort and skills (Anderson and Oliver 1987). The literature on the effect of adaptive selling behavior on performance seems to present mixed results. As can be seen in Appendix A, numerous studies in fact provide evidence for this relationship. Yet some authors have summarized the literature by saying, "The relationship between ADAPTS and performance is inconclusive" (Spiro and Weitz 1990, p. 67). Recall our pointing to the frequent use of the multidimensional ADAPTS scale as if it were unidimensional (Vink and Verbeke 1993), and indeed, some researchers have used this contradiction to help explain the inconsistencies (Marks et al. 1996, p. 62):

> researchers attempting to use ADAPTS have often noted the scale's inability to predict sales performance consistently. The research presented here demonstrates that the multidimensionality of the scale contributes to this problem.

Given that the studies in Appendix A generally find support for the effect of adaptive selling on sales performance, and the logic that adaptive behavior should yield optimal sales performance outcomes, we too test this link:

H9. Adaptive Selling Behavior (ASB) positively influences salesperson's outcome performance.

Customer Satisfaction with the Product Customer satisfaction with the product is a post-choice evaluative judgment concerning a specific purchase selection (Oliver 1997; Westbrook and Oliver 1991). Per the disconfirmation paradigm, customer satisfaction results when product performance meets or exceeds expectations. Customer expectations regarding a product depend in part on the salesperson's presentation.

In the practice of adaptive selling behaviors, salespeople will adapt the content of their presentations to try to meet the needs of different types of customers (Weitz et al. 1986). In other words, the salesperson is more likely to speak the "customer's language" while providing product information and guidelines about what should be expected during the use of the product. For example, a salesperson may communicate more technical specifications to an experienced buyer, but concentrate on basic benefits of the product with a less experienced buyer. With clearer expectations, customers will have a better understanding of product performance, and in turn are more likely to have their expectations met, and enjoy the accompanying satisfaction. Also, as suggested in previous studies (e.g., Castleberry and Shepherd 1993; Porter et al. 2003), salespeople truly listen to customers when engaged in adaptive selling and thus are better equipped to identify and understand customers' needs, and therefore they are more likely to recommend the product that best meets customers' needs. Accordingly we propose:

H10. Adaptive Selling Behavior (ASB) is positively related to customer satisfaction with the product.

Customer Satisfaction with the Salesperson Customer satisfaction with the salesperson is thought to reflect an emotional state that occurs in response to an evaluation of the interaction experience that the customer has with the salesperson (Crosby et al. 1990). Adaptive selling activities should increase customer satisfaction with the salesperson because adaptive selling behavior not only entails adapting the content of the presentation, but also the sales tactics to the buyer's communication style. For example, the adaptive salesperson may emphasize ingratiation selling tactics (e.g., behaviors designed to enhance the salesperson's interpersonal attractiveness) when dealing with an "interaction-oriented" buyer (McFarland et al. 2006). These adaptations also enhance communication between the salesperson and prospective parties, which further implies that problems are more easily and rapidly addressed, and consequently customer satisfaction is increased. Thus, we propose:

H11. Adaptive Selling Behavior (ASB) is positively related to customer satisfaction with the salesperson.

Replication of relationships

Several relationships are depicted in Fig. 1 that we had characterized as replications, paths that we wish to include to enhance the internal validity of our model and its consistency with the empirical evidence in the literature. Thus, we review these links briefly.

First, the influence of intrinsic motivation and skills on salesperson's performance is well established in the literature (e.g., Churchill et al. 1985; Rentz et al. 2002; Sujan et al. 1988; Tyagi 1985), thus we test and expect to replicate these relationships. Next, prior evidence in sales and services marketing studies (cf., Crosby and Stephens 1987; Crosby et al. 1990; Goff et al. 1997; Ramsey and Sohi 1997) has shown that a customer's satisfaction with the product influences satisfaction with the salesperson, which in turn influences anticipation of future interactions with the salesperson. Finally, this literature has also established that satisfaction with the product itself influences anticipation of future interactions (e.g., Cronin et al. 2000). Therefore, these relationships are also included in the model.

To summarize briefly, our model as depicted in Fig. 1 posits effects of a firm's customer orientation mediated by a salesperson's motivation, customer-qualification skills, and role ambiguity. An important aspect of this model is our distinction between the effects on, and the effects of, adaptive selling confidence and adaptive selling behavior. We examine a portfolio of consequences of adaptive selling behavior, including salesperson's outcome performance and customer satisfaction. We simultaneously test a profile of antecedents and consequences, rather than attempt to draw theoretical conclusions from components of partial models. Another important aspect is the dyadic nature of the data—namely that the salesperson's perceptions are captured by data obtained on salespeople, and the customer's perceptions are captured by data obtained on their customers. We now test the model.

Method

We begin by discussing our data collection and sample. We then describe the measures we used.

Data collection

The unit of analysis in this study is the dyadic relationship between salespeople and their customers. In particular, we test our model on salesperson-customer dyads in the context of the financial services sector. This industry has several characteristics that make it likely that its people practice adaptive selling in general: (1) salespeople encounter a wide variety of customers with different needs,

(2) most financial services are highly abstract and complex products requiring explanation and adaptive selling (confidence and behaviors), and (3) there is a wide range of financial services offered by financial institutions.

Data collection proceeded in several steps. First, we obtained the cooperation of three financial service institutions of approximately the same size. Then, 300 salespeople (100 for each company) were randomly selected. Each salesperson managed a portfolio of clients and was responsible for ongoing customer contact. Questionnaires were administered during regularly scheduled meetings to a final sample of 280 salespeople at 12 sales office locations (for a similar procedure see Boorom et al. 1998). Respondents were assured that their responses would be kept confidential and the questionnaires were immediately given to the researchers. In exchange for their completing the surveys, a training seminar on sales techniques was provided, following the data collection so as not to bias responses. The sample was composed primarily of men (83%), one-third of whom had 4–8 years of selling experience, 48% had a college degree and 60% were 26–39 years old. Salespeople were mainly specialized in selling to final consumers.

Next, the participating companies provided lists of 30 customers from each salesperson's portfolio of customers (for a total of 8,400 customers), selected randomly but screened such that the customers had been with that bank for at least six months, and they had bought a high-involvement product/service in the last month (to enhance the validity of the responses). It is perhaps the case that customers retained for at least six months may be positively biased (i.e., dissatisfied customers would have terminated the relationship, leaving only relatively satisfied customers with the bank). However, this minimum requirement was instantiated so that, for example, bank customers would at least be able to identify their respective salesperson. Furthermore, in terms of the modeling, if there is a positive bias, then statistically there would be a range restriction on the satisfaction (and related) variables. Thus, if there is a concern about any possible bias, this sample selection errs in the direction of providing a conservative test of the model.

Following prior dyadic research (cf., Hartline and Ferrell 1996), the goal was to obtain three customer assessments per salesperson (840 customers). Multiple informants eliminate errors resulting from the one informant's selective perception, thus increasing reliability and validity (Phillips 1981).

At this stage, a marketing research firm conducted 652 telephone interviews (for a 77.6% response rate). Those cases which did not have three customers per salesperson were dropped. Based on extant dyadic research (e.g., Deshpandé et al. 1993; Hartline and Ferrell 1996; Rapp et al. 2006), for subsequent data analysis, the three customer responses were aggregated[3] and matched with the employee responses. The effective matched sample size was 210 (210 salespeople and 630 customers). The customer sample consisted of 441 men and 189 women, 45% were 26–45 years old, 25% had a college degree, 23% reported being customers of the bank 2–5 years and 46% of the sample worked with three or more banks.

Measures

In order to get a better understanding of the research variables, we interviewed nine financial services salespeople and ten financial services customers. Based on these interviews and the literature review, a survey comprised of 10-point Likert-scales was derived and a formal pretest of the questionnaire was conducted with 60 salespeople and 249 financial services customers, to improve the measures prior to the main survey. The respondents were asked to point out any scale items they found confusing, irrelevant, or repetitive. During this pretest, a few refinements needed to be made to clarify the scale items.[4]

When possible, validated existing scales were used (all items are presented in Table 2). The five confidence items from the ADAPTS scale were used to measure *adaptive selling confidence*. According to Spiro and Weitz (1990, p. 62) these items refer to the salesperson's confidence in his/her ability to engage in adaptive selling behaviors, including using a variety of different sales approaches as well as altering the sales approach during a customer interaction. *Adaptive selling behavior* was measured using a subset of five items from Spiro and Weitz's (1990) ADAPTS behavioral facet. Recall this subscale began with seven items, and as long as the subscale itself is unidimensional, more items contribute to better reliability, so our taking fewer items makes our tests somewhat more conservative, and as will be clear shortly, we obtained many significant results. Chakrabarty et al. (2004) recently analyzed the ADAPTS scale and two others that have drawn upon it: the 11-item, 2-factor model composed of beliefs and behaviors (Marks et al. 1996), and the 5-item version proposed by Robinson et al. (2002). Based on an item-sort by an expert judging panel and data from a random

[3] To test agreement across customer responses on satisfaction with the product, with the salesperson, and anticipation of future interaction, we estimated within-group interrater reliability for each multi-item scale (James et al. 1984, p. 88). This reliability is interpreted similarly to other reliability coefficients, e.g., a value of 0.70 or higher is said to be good. In our study, the average interrater reliabilities for customer satisfaction with the product, the salesperson and anticipation of future interaction were 0.84, 0.91 and 0.90 respectively. These results provided evidence that customer ratings were reasonably stable.

[4] The item "after-sales service" from the firm's customer orientation scale was eliminated.

sample of salespeople, they concluded that: "if a behavior-only scale is desired, we recommend a scale drawn from the original Spiro and Weitz behavioral facet" (p. 125).

Salesperson's outcome performance was measured by a four-item scale adapted from Behrman and Perrault's (1982) scale developed to provide self-ratings of performance. Self-evaluations of performance have been extensively used in the sales literature (e.g., Babakus et al. 1999; Sujan et al. 1994; Verbeke and Bagozzi 2000). Also, it has been argued that since salespeople can observe all the elements of their own job, "they may be in the best position to judge their performance" (Levy and Sharma 1993, p. 232). Here too, shortened versions of role ambiguity and outcome performance scales have been used in many studies, and positive evidence exists on both their reliability and validity (e.g., Bettencourt and Brown 2003; Chakrabarty et al. 2004; MacKenzie et al. 1998). *Intrinsic motivation* was measured using four items from the scale developed by Spiro and Weitz (1990). We used a four-item version of Rizzo et al.'s (1970) scale to assess *salesperson's role ambiguity*. We develop a three-item scale to measure a *salesperson's customer-qualification skills* on the basis of (a) the literature review (e.g., Rentz et al. 2002; Weitz et al. 1986), and (b) the aforementioned interviews conducted with salespeople. Salespeople were asked to rate themselves on Likert-type items anchored by 1 "weak" and 10 "excellent." Five items from Narver and Slater (1990) were used to measure the *salesperson's perceptions of the firm's customer orientation*. Salespeople responded on a 10-point Likert scale with one indicating that "their company does not engage in the practice at all" and ten indicating that "it engages in it to a great extent."

Customer satisfaction with the product was measured using a three-item scale adapted from Westbrook and Oliver (1991). Similar to Brady and Cronin (2001), respondents were asked to report the degree to which they were "happy," "pleased," and "delighted" with the financial products/services purchased from their salesperson—standard items used in the customer satisfaction literature. Due to the evidence that satisfaction is primarily an affectively oriented construct (cf. Oliver 1997), the adjectives used were emotive in nature. Furthermore, this three-item scale has shown very good levels of reliability and validity in previous research (e.g., Brady and Cronin 2001). *Customer satisfaction with the salesperson* and *anticipation of future interaction* were measured using a three-item and a four-item scale (respectively) developed by Ramsey and Sohi (1997).

Analysis and results

We now present the measurement results, after which follows the test of the structural model and our hypotheses. We also test competing models to substantiate our theoretical understanding.

Measurement model evaluation

We used two techniques to test the factor structure and item loadings of the scale constructs. We initially examined the factors for all the scale items simultaneously. A ten-factor structure was achieved with items loading on their respective, hypothesized dimensions. Evidence of unidimensionality of each construct included appropriate items that loaded at least 0.70 on their respective hypothesized factor and loaded no larger than 0.256 on others. As shown in Table 1, reliability of the measures was confirmed with composite reliability indices higher than the recommended level of 0.6 (Bagozzi and Yi 1988).

In addition, we performed a confirmatory factor analysis (see Table 2). Although the overall *chi-square* statistic was significant ($\chi^2(695)=1{,}062.52$), this statistic is known to be sensitive to sample size. The *observed normed* X^2 for this model was 1.53, which is smaller than 3, as recommended by Fornell and Larcker (1981). Nearly all of the fit statistics indicated good fit of the measurement model (CFI=0.96; NNFI=0.95; RMSEA=0.05; SMSR=0.05; GFI=0.80).

Convergent validity was assessed by verifying the significance of the t values associated with the parameter estimates (see Table 2). All t values were positive and significant ($p<.01$). While alternative techniques for scale development exist (cf., Mowen and Voss 2008), our intention is not to claim we are putting forth new measures. Indeed, it was more important to us to simply establish discriminability among the constructs prior to testing possible directional links. Thus, following the more established criteria of Fornell and Larcker (1981), discriminant validity was tested by comparing the average variance extracted by each construct to the shared variance between the construct and all other variables.[5] For each comparison, the explained variance exceeded all combinations of shared variance (see Table 1).[6]

[5] Having developed the salesperson's customer-qualification skills scale and demonstrated its psychometric characteristics (unidimensionality, reliability, convergent and discriminant validity), we tested whether it relates to other theoretical constructs as predicted by theory. In particular, prior research (e.g., Sujan et al. 1988) has shown that such skills increase sales performance, and we were able to verify this relationship (see the significant correlation between qualification skills and performance in Table 1).

[6] Alternatives also were suggested by an anonymous Reviewer to consider the Mowen (1999) 3 M model ("Meta-Theoretical Model of Motivation") as a theoretically useful framework in which to organize our conceptualization and proceed with empirical testing. However, we had not considered the 3 M model in the outset and design of our study, and we did not wish to create a *post hoc* claim in such a restructuring. Our conceptual framework is closer to the expectancy theory of Vroom (1994), long ago adopted by marketers studying sales performance (cf., Oliver 1974).

Table 1 Means, standard deviations, scale reliability, AVE[a] and correlations

	Means	s.d.	AVE	1	2	3	4	5	6	7	8	9	10
1. Intrinsic motivation	8.48	1.00	.65	.88[b]	.16 [c]	.13	.27	.09	.04	.04	.00	.14	.31
2. Customer-qualification skills	7.84	.90	.69	.41[d]	.87	.24	.29	.08	.08	.04	.01	.25	.22
3. Role ambiguity	7.85	1.11	.62	−.37	−.49	.87	.23	.16	.04	.02	.02	.10	.10
4. Adaptive selling behavior	8.02	1.05	.63	.52	.54	−.48	.90	.05	.07	.06	.02	.20	.26
5. Firm's customer orientation	8.10	1.35	.64	.30	.29	−.41	.23	.90	.02	.00	.00	.12	.08
6. Satisfaction with the product	8.73	.78	.79	.21	.29	−.22	.27	.16	.92	.11	.25	.01	.05
7. Satisfaction with the salesperson	9.00	1.30	.77	.20	.20	−.15	.25	.05	.34	.91	.21	.01	.01
8. Anticipation of future interaction	8.97	.86	.76	.05	.14	−.17	.15	.06	.50	.46	.93	.00	.00
9. Adaptive selling confidence	7.33	1.37	.63	.38	.50	−.32	.45	.35	.10	.14	.02	.90	.06
10. Salesperson's outcome performance	7.54	1.31	.64	.56	.47	−.32	.51	.29	.23	.12	.06	.25	.87

[a] *AVE* average variance extracted

[b] Scale composite reliability (Bagozzi and Yi 1988) is reported along the diagonal

[c] Shared variances are reported in the upper half of the matrix

[d] Correlations above .06 are significant at the 95% level. Correlations are reported in the lower half of the matrix

Structural model evaluation and tests of hypotheses

The results of structural model represent an acceptable fit of the data ($\chi^2(720)=1{,}084.34$; $\chi^2/df=1.50$; CFI=0.957; NNFI=0.952; RMSEA=0.049; SMSR=0.06; GFI=0.79[7]). As shown in Table 3, all hypotheses were supported including the replication hypotheses. To our knowledge, this model is the first demonstration establishing the distinct antecedents and consequences of adaptive selling confidence and adaptive selling behavior.

Rival models

It is generally agreed that researchers should compare the fit of rival models to that of the focal, proposed model. While our testing of competing conceptualizations is certainly not exhaustive, we will test several models intended to be meaningful and not just "straw" hypotheses. For example, we have been making strong claims regarding the discriminant validity of adaptive selling confidence and adaptive selling behavior. Thus, as a comparison, we began by fitting a model in which these two scales were treated as manifest from a single latent construct. The resulting test statistics ($\chi^2(723)=1{,}908.39$, CFI=0.92, NNFI=0.91, RMSEA=0.08, SRMR=0.07, GFI=0.68) were all worse than our focal model, which posits adaptive selling confidence and adaptive selling behavior as distinct constructs.

We also made strong claims about adaptive selling confidence and behavior having different antecedents and consequences. Accordingly, we tested an unconstrained alternative model in which adaptive selling confidence and behavior (treated as distinct variables) have the same antecedents and consequences. In particular, the following paths were added: from the firm's customer orientation to adaptive selling behavior, from role ambiguity to adaptive selling confidence, and from adaptive selling confidence to satisfaction with the product and with the salesperson. This model had a χ^2 value of 1,077.31, with 715 degrees of freedom. The decrease of the chi-square (from the original χ^2 value of 1,084.34) was not significant ($\chi^2(5)=7.03$; $p>0.1$). In addition, none of the new paths were significant, which suggests that these paths were not necessary or meaningful empirically. This benchmark model offers strong support in favor of our model—this alternative model contains more paths and therefore could very well have fit much better and produced effects through significant parameters. Yet it did not. Thus, even this substantial additional stochastic freedom lent nothing to the modeling. Finally, we tested an alternative model where adaptive selling was considered as a second-order construct composed of adaptive selling confidence and adaptive selling behavior. Fit statistics were borderline acceptable ($\chi^2(721)=1{,}196.93$, CFI=0.945, NNFI=0.940, RMSEA=0.056, SRMR=0.087, GFI=0.77), but in all cases our theoretical model performed better. In short, we believe that our model should serve well as an appropriate basis for further research.

Discussion

This study contributes to the sales literature in several ways. First, we examined the influence of some critical salesperson's variables on adaptive selling confidence and behavior. Much of the variance in adaptive selling behavior (46%) is explained by adaptive selling confidence, intrinsic

[7] Although this GFI is below .90, this index is known to be is sensitive to model complexity and sample size (Stevens 1996). Given the sensitivity of this index, it has become less popular in recent years and it has even been recommended that this index should not be used (Sharma et al. 2005, p. 941). The other indices suggest reasonable fit.

Table 2 Construct measurement summary: confirmatory factor analysis

Item description and source	Std. Loading (t-value)
Salesperson's adaptive selling confidence[a] (Spiro and Weitz 1990)	
When I feel that my sales approach is not working, I can easily change to another approach.	.74 (12.12)
I can easily use a wide variety of selling approaches.	.82 (14.07)
It is easy for me to modify my sales presentation if the situation calls for it.	.88 (15.91)
I find it difficult to adapt my presentation style to certain buyers. (r)[b]	.66 (10.56)
I feel confident that I can effectively change my planned presentation when necessary.	.86 (15.18)
Adaptive selling behavior (Spiro and Weitz 1990)	
I vary my sales style from situation to situation.	.83 (14.55)
I am very flexible in the selling approach I use.	.87 (15.53)
Basically I use the same approach with most customers. (r)	.73 (11.98)
I like to experiment with different sales approaches.	.80 (13.56)
I treat all of my buyers pretty much the same. (r)	.74 (12.30)
Salesperson's outcome performance (Behrman and Perrault 1982)	
Produce a high market share for the company in my territory.	.80 (13.65)
Generating a high level of sales.	.90 (16.10)
Quickly generating sales of new company products.	.72 (11.65)
Exceeding all sales targets and objectives in my territory during the year.	.76 (12.50)
Salesperson's intrinsic motivation (Spiro and Weitz 1990)	
Trying to sell to new customers is funny for me.	.83 (14.10)
Getting new customers is a challenge and a stimulant thing.	.83 (14.24)
For me it is a challenge to find the way to sell the product to the customer.	.81 (13.69)
I feel pretty good when I make a sale.	.74 (12.03)
Salesperson's role ambiguity (Rizzo et al. 1970)	
I have clear, planned goals and objectives for my job. (r)	.88 (15.51)
I know I have divided my time properly while performing the tasks connected with my job. (r)	.78 (12.90)
I know what my responsibilities are in my job. (r)	.77 (12.67)
I receive clear explanations of what has to be done in my job. (r)	.71 (11.49)
Salesperson's customer-qualification skills (new scale: 1 = "weak" to 10 = "excellent")	
My ability to identify and analyze customer's needs is…	.89 (15.60)
My ability to understand customer's buying motive is…	.83 (14.17)
My ability to distinguish different kinds of customers is...	.76 (12.58)
Salesperson's perceptions of the firm's customer orientation (Narver and Slater 1990)	
Customer commitment	.78 (13.04)
Create customer value	.73 (11.87)
Understand customer needs	.77 (12.78)
Customer satisfaction objectives	.87 (15.49)
Measure customer satisfaction	.84 (14.76)
(scale: 1 = "my company does not engage in this practice at all" to 10 = "my company engages in this practice to a great extent").	
Customer satisfaction with the product (Westbrook and Oliver 1991)	
I am happy with the financial services purchased from this salesperson.	.89 (16.15)
I am pleased with the financial services purchased from this salesperson.	.92 (17.27)
I am delighted with the financial services purchased from this salesperson.	.86 (15.40)
Customer satisfaction with the salesperson (Ramsey and Sohi 1997)	
The amount of contact I have had with this salesperson was adequate.	.87 (15.40)
I am satisfied with the level of service this person has provided.	.88 (15.87)
In general, I am pretty satisfied with my dealings with this salesperson.	.89 (16.04)
Customer's anticipation of future interaction with the salesperson (Ramsey and Sohi 1997)	
It is probable that I will contact this salesperson again.	.87 (15.79)
I am willing to discuss business with this salesperson again.	.84 (14.97)
I plan to continue doing business with this salesperson.	.91 (16.94)
I will purchase from this salesperson again.	.86 (15.62)

[a] Unless indicated otherwise, scales are from 1 = "strongly disagree" to 10 = "strongly agree"

[b] Items with (r) are reverse-scored

Table 3 Hypothesized model structural coefficients (n=210)

Path	Hypothesis	Std. Coeff.[a]
Adaptive selling confidence(+)→Adaptive selling behavior	H1	.15
Intrinsic motivation (+)→Adaptive selling confidence	H2a	.16
Intrinsic motivation (+)→Adaptive selling behavior	H2b	.29
Customer-qualification skills (+)→Adaptive selling confidence	H3a	.37
Customer-qualification skills (+)→Adaptive selling behavior	H3b	.24
Role ambiguity (−)→Adaptive selling behavior	H4	−.21
Firm's customer orientation (+)→Adaptive selling confidence	H5	.19
Firm's customer orientation (+)→Intrinsic motivation	H6a	.30
Firm's customer orientation (+)→Customer-qualification skills	H6b	.16
Firm's customer orientation (−)→Role ambiguity	H6c	−.29
Intrinsic motivation (+)→Customer-qualification skills	H7	.38
Customer-qualification skills (−)→Role ambiguity	H8	−.40
Adaptive selling behavior (+)→Salesperson's outcome performance	H9	.21
Adaptive selling behavior (+)→Satisfaction with the product	H10	.27
Adaptive selling behavior (+)→Satisfaction with the salesperson	H11	.17
Intrinsic motivation (+)→ Salesperson's outcome performance	Replication	.37
Customer-qualification skills (+)→ Salesperson's outcome performance	"	.18
Satisfaction with the product (+)→Satisfaction with the salesperson	"	.29
Satisfaction with the product (+)→Anticipation of future interaction	"	.39
Satisfaction with the salesperson (+)→Anticipation of future interaction	"	.33

[a] All paths significant at 95%

motivation, customer-qualification skills, and role ambiguity. The salesperson's characteristics mediate the effect of a firm's customer orientation on adaptive selling behavior. Overall, this is noteworthy because previous studies have only been able to explain about 25% of the variance in adaptive selling. From an academic research standpoint, this is the first attempt to analyze the relationship between a firm's customer orientation and salespeople's adaptive selling confidence and behavior. In doing so, our study begins to address the call for more empirical research concerning the effects of the firm's customer and marketing orientation on a salesperson's role perceptions, motivation and skills (e.g., Jones et al. 2003; Siguaw et al. 1994).

There is little in the literature that examines the relationship between the firm's customer orientation and adaptive selling, but it suggests that customer orientation has an indirect (not direct) influence on adaptive behavior. Therefore we believe our model refinement is reasonable. Research suggests that training and empowerment represent fundamental policies in customer-oriented firms, and that these are means by which employees' skills and motivation are much enhanced (Day 1994; Jaworski and Kohli 1993). As evidenced in our research, these variables in turn affect adaptive selling behavior. These effects seem consistent with the sales literature which has long suggested that such managerial policies influence a salesperson's behavior through the modification of his/her role perceptions, skills and motivation (cf. Churchill et al. 1985).

This study overcomes some of the limitations of the scant dyadic research on the impact of adaptive behavior on the customer. For example, Hartline and Ferrell (1996, p. 61) found no evidence of a relationship between employee adaptability and customers' perceived service quality, which they suggested was due to a problem in operationalization: "the conceptualization and measurement of adaptability may not match the way customers perceive employee adaptability." In a pharmaceutical sales context, Rapp et al. (2006) found no significant influence of adaptive selling on customer service, which they attributed to a customer being unable to recognize adaptive selling techniques. McFarland et al. (2006) showed that adaptive selling influences buyers, but they did not consider any relational consequence (i.e., satisfaction) on those customers.

Thus, another strong contribution of this study is the analysis of the consequences of adaptive selling behaviors on customer satisfaction and retention, and the clarity of these results, which we attribute in part to the dyadic data we collected. Modeling dyadic data to examine these relationships add a degree of richness to our findings. We found that adaptive selling behavior, as perceived by the salesperson, has a direct and positive effect on a customer's perceptions of satisfaction with the product and with the salesperson. These variables in turn enhance customer retention. We believe that these findings are very important in light of the paradigm shift that has moved the field's focus from transactional-based selling to one focused on developing and maintaining relationships with customers.

Given our dyadic data, it is perhaps not a surprise that our results were more sensitive than many of those in the literature, in that our study shows a significant influence of adaptive selling behavior on customer satisfaction. Thus, customers may indeed be able to detect the use of adaptive selling behaviors, e.g., the customer realizes that the salesperson is speaking “the customer’s language” and the selling tactic used is consistent with his/her communication style. As evidenced in the results of the unconstrained alternative model, perhaps customers are simply less likely to be aware of the salesperson’s confidence to adapt, i.e., the salesperson’s confidence in their ability to modify his/her behavior. It is also quite possible, as we argued earlier, that our results were more powerful and sensitive because previous research had aggregated over multiple facets of adaptive selling when using the scale in a unidimensional form, whereas we purified the operationalization by focusing on two key aspects of the construct: confidence and behavior.

Limitations and future directions

We believe our results have contributed insights to the literature, yet we acknowledge that no study is perfect, and we hope ours is the foundation of additional work. For example, this study was conducted with a sample from a single industry. Future research should strive to confirm these findings with samples of salespeople from different industries.

A second potential limitation concerns the use of a self-report measure of performance. Self-evaluations may have inflated the relationship between adaptive selling behavior and salesperson’s outcome performance. Our research design incorporated some procedures intended to reduce this potential bias. First, confidentiality of responses reduces the leniency bias in performance evaluations (Heneman 1974). Second, we focused on salesperson’s outcome performance—Behrman and Perrault (1982) originally called this variable *achieving overall sales objective performance*—as opposed to behavioral/input performance. Prior research has found that such evaluation criteria (output rather than input related) result in self-report data that are more consistent with sales manager ratings (Churchill et al. 1985), and objective indicators of performance (e.g., Behrman and Perrault 1982; Levy and Sharma 1993; Mabe and West 1982).

We were able to demonstrate basic nomological validity regarding our new customer-qualification skills scale. However, it would be fruitful to see the scale tested more broadly, in more samples, in more contexts. We could have also tested moderating factors, had we measured more variables. For example, customers who are highly involved in the product category are likely to require and desire more adaptive selling efforts. We might examine this moderator in the context of multiple industries, or by studying individual difference factors, such as age (for financial investments), gender, etc.

Managerial implications

Personal selling is the most costly marketing communication vehicle, but the higher cost is thought to be justified because it works better than any other communication vehicle—salespeople are able to develop a unique message for each customer, which customers appreciate, as demonstrated in sales data and now in customer satisfaction data. Prior research had been focused on the influence of adaptive selling on sales performance, but given the current emphasis on relational selling, sales managers are increasingly interested in knowing the extent to which adaptive selling activities lead to customer satisfaction and retention. The current research provides some preliminary evidence in this regard. In particular, our research shows that adaptive selling behaviors directly increase customer satisfaction with the product and the salesperson, and indirectly affect customer retention.

The results from this study provide guidance in several areas for sales managers who wish to create a more adaptive sales force. Our findings provide guidance for what managers should focus on in training employees to be adaptable. Specifically, the salesperson’s perception of the firm’s customer orientation increases adaptive selling confidence and behavior through its effect on motivation, customer-qualification skills, and role ambiguity. The customer-oriented organization should make extensive efforts to communicate its orientation and values to salespeople. While this can be readily accomplished during initial sales training activities, it should be reinforced on an ongoing basis to the entire sales force.

In addition, training should focus on increasing the employees’ customer-qualification skills. An effective approach is to have experienced salespeople train less experienced salespeople on (a) which customer traits to observe, (b) how to recognize those traits, and (c) which selling strategies might be most appropriate for specific customer categories. Our findings also support the assertion that intrinsic motivation increases adaptive behavior. Thus, a firm might not create more adaptive employees through increased pay or bonuses. Instead, managers looking to encourage adaptive behavior in their sales team should look to incentives beyond pay and other extrinsic motivators. Specifically, sales managers should emphasize to employees how their practice of adaptive behavior in the course of their work can lead to opportunities for being creative, growing personally, and working in a stimulating environment. Finally, managers should make every effort to provide detailed information to the sales force about company expectations, knowledge of products, selling techniques, customer requirements and performance appraisal methods.

We analyzed the consequences of adaptive selling on customer satisfaction and retention in the context of personal selling and sales management. Beyond this context, given every marketer’s concern with a customer’s satisfaction and retention, we believe our conceptual progress and empirical demonsrations offer consequences and implications to the field of marketing more broadly.

Appendix A

Table 4 A summary of prior empirical studies examining the antecedents and consequences of adaptive selling using the ADAPTS scale

Authors	Context of the study	Items, scale, and dimensionality	Relevant findings
Spiro and Weitz (1990)	268 salespeople of a manufacturer of diagnostic equipment and supplies	16-item ADAPTS scale (unidimensional)	Adaptive selling is correlated significantly with eight general measures of interpersonal flexibility. Adaptive selling is positively correlated to intrinsic motivation.
			Adaptive selling is not correlated to experience managerial style and management ratings of performance, but it is positively correlated to salespeople's assessments of performance.
Levy and Sharma (1994)	201 retail salespeople from one major department store	16-item ADAPTS scale (unidimensional)	Gender, age, experience and education are not linked to adaptive selling.
Siguaw and Honeycutt (1995)	268 salespeople from the Association for Information and Image Management	16-item ADAPTS scale (unidimensional)	No gender differences were found for adaptive selling.
Sujan et al. (1994)	190 salespeople from different industries	16-item ADAPTS scale (unidimensional)	Learning orientation positively influences working smart. Working smart positively influences sales perfomance.
Grant and Cravens (1996)	146 field sales managers from different industries	four behavioral items adapted from the ADAPTS scale (unidimensional)	Higher levels of behavior-based control system in terms of monitoring, rewarding and evaluating increase behavior performance (a construct that includes adapting selling).
Marks et al. (1996)	179 telecommunications equipment salespeople	Two dimensions from the ADAPS scale: Adaptive selling beliefs (four items), Adaptive selling behavior (seven items)	Adaptive selling beliefs do not influence sales performance, but behavior does.
Boorom et al. (1998)	239 insurance salespeople	16-item ADAPTS scale (unidimensional)	Interaction involvement is positively associated with adaptiveness in sales presentations
		Global measure of adaptiveness	Adaptive selling positively influences sales performance.
DelVecchio (1998)	155 business to business salespeople and their respective managers from different industries	16-item ADAPTS scale (unidimensional)	Higher levels of salesperson-manager relationship quality are associated with higher levels of adaptive selling.
Piercy et al. (1998)	144 field sales managers from different industries	four behavioral items adapted from the ADAPTS scale (unidimensional)	Higher levels of behavior-based control system in terms of monitoring, directing, rewarding and evaluating increase behavior performance (a construct that includes adapting selling).
Porter and Inks (2000)	161 industrial salespeople	16-item ADAPTS scale (unidimensional)	Motivation/interest to understand behavior and introspection of behavior positively influence adaptive selling.
Bush et al. (2001)	122 marketing executives from several industries involved in the selling	ten (motivational, capability and behavioral) items from the ADAPTS	Intercultural disposition (a second-order construct composed of empathy, worldmindedness,

Table 4 (continued)

Authors	Context of the study	Items, scale, and dimensionality	Relevant findings
	process with nonretail customers	scale (unidimensional)	ethnocentrism, and attributional complexity) and adaptive selling were not positively related.
Shoemaker and Johlke (2002)	236 salespeople from five companies	6 (motivational and behavioral) items from the ADAPTS scale (unidimensional)	Sales experience and sales training positively influence adaptive selling.
Park and Holloway (2003)	199 salespeople from a major automobile company	7 (motivational and behavioral) items from the ADAPTS scale (unidimensional)	A learning orientation is positively related to adaptive selling.
Fang et al. (2004)	290 salespeople from several industries (U.S.) 247 salespeople from several industries (China)	five behavioral items from the ADAPTS scale (unidimensional)	Goal difficulty has a negative relationship with adaptive selling behavior in the U.S. sample, but not in the Chinese sample. Goal specificity has a negative relationship with adaptive selling behavior in both samples.
Verbeke et al. (2004)	93 salespeople from different industries	eight items[a] from the ADAPTS scale (unidimensional)	Salespeople experiencing pride show more levels of adaptive sales behaviors.
Robinson et al. (2005)	118 field salespeople from a 500 Fortune firm	5-item Robinson[b] et al.'s (2002) scale (unidimensional)	Behavioral intentions to use technology are positively related to adaptive selling. Adaptive selling positively influences sales performance.
Rapp et al. (2006)	Matched data from 175 female health care salespeople, their customers (a minimum of two customers per salesrep) and their sales managers	12 (motivational and behavioral) items from the ADAPTS scale (unidimensional)	Knowledge and empowering leadership behaviors positively influence working smart. Experience does not have a significant influence on working smart. Experience does not moderate the effect of empowering leadership behaviors on working smart. Working smart positively influences sales performance.
Jaramillo et al. (2007)	400 salespeople from four banks	5-item Robinson et al.'s (2002) scale (unidimensional)	Intrinsic motivation is positively related to adaptive selling. Level of initiative positively moderates the effect of intrinsic motivation on adaptive selling. Adaptive selling positively influences sales performance.
Guenzi et al. (2007)	130 key account managers from different industries	four items from Robinson et al.'s (2002) scale (unidimensional)	The company's relational selling strategy is positively related to key account managers' adaptive selling.
Rapp et al. (2008)	662 health-care salespeople and 60 sales managers	four items from ADAPTS	CRM usage positively influences adaptive selling Adaptive selling positively influences sales performance.

[a] Items are not shown in the article, except the motivational item: "I can easily use a wide variety of selling approaches"

[b] Robinson et al.'s (2002) scale has two motivational items, one capability item and two behavioral items from the original ADAPTS scale

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