SALESFORCE CONTROL SYSTEMS – AN INTEGRATED APPROACH

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ABSTRACT

Salesforce control systems (i.e., behavioral and outcome control) are important

management tools in directing, monitoring, evaluating, and compensating salespeople

(Anderson and Oliver 1987). However, to date, the direct effects of the salesforce control

systems on sales personnel's key job outcomes (i.e., sales performance and job

satisfaction) are inconclusive and the findings are sometimes contradictory (e.g.,

Challagalla and Shervani 1996; Oliver and Anderson 1994). These inconclusive findings,

therefore, motivate the two research questions that serve as the basis for this study: (1)

What constitutes effective salesforce control systems? and (2) What contextual factors

influence their effectiveness?

This dissertation advances and empirically tests a theoretical framework

integrating salesperson's intrinsic/extrinsic (I/E) motivation, adaptive selling behavior,

and selling effort as key mediators. Specifically, this dissertation offers three key

contributions to the sales and marketing literature. First, the framework and empirical

results suggest that the effectiveness of salesforce control systems hinges on the extent to

which they enhance adaptive selling behavior through salesperson's motivation. Second,

drawing on the *Self-Determination Theory* (Deci and Ryan 2000) and recent sales

literature (Miao and Evans 2007; Miao, Evans, and Zou 2007), this dissertation clarifies

the role of salesperson's motivation in the sales control context by (1) demonstrating salesperson's I/E motivation as a state (cultivated on the job) as opposed to a stable trait (selected for in recruitment) and (2) by disaggregating the global I/E motivation into cognitive and affective dimensions that have distinct antecedents and consequences. Third, this dissertation found competitive intensity, salesperson experience, and selling effort to be important boundary conditions that must be considered in the effective design and deployment of salesforce control systems. The dissertation concludes with a discussion of the theoretical and managerial implications derived from the results.

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CHAPTER I: INTRODUCTION

I. 1. Effectiveness of Salesforce Control Systems

In the resource-based view of the firm (Barney 1991; Wernerfelt 1984), an effective salesforce is one of the important organizational resources at a company's disposal in generating revenues and sustaining competitive advantage. To ensure salesforce effectiveness, therefore, firms usually employ formal salesforce control systems – behavioral control and outcome control – to direct, train, evaluate, and compensate their salespeople (Anderson and Oliver 1987). In their seminal paper of salesforce control systems, Anderson and Oliver (1987) argue that, compared to outcome control, behavioral control will have a more positive impact on salespeople's long-term job outcomes (i.e., sales performance and job satisfaction) because it focuses on improving salespeople's ability and positive job attitudes. Following this line of reasoning, marketing researchers carried out empirical studies to verify Anderson and Oliver's (1987) propositions with respect to the effects of formal salesforce control systems.

However, a review of the salesforce control research over the past two decades reveals that the direct effects of salesforce controls on salespeople's key job outcomes are inconclusive and sometimes even contradictory, making it hard for marketing researchers to understand what constitutes an effective salesforce control system. For instance, researchers have found that behavioral control has a positive impact on job performance (e.g., Babakus, Cravens, Grant, Ingram, and LaForge 1996; Oliver and Anderson 1994), a negative impact (e.g., Jaworski and McInnis 1989; Ramaswami 1996), and no direct relationship (e.g., Challagalla and Shervani 1996; Lusch and Jaworski 1991). Similarly,

outcome control has been found to have a positive impact on performance (e.g., Jaworski and Kohli 1991), a negative impact (e.g., Oliver and Anderson 1994), and no direct relationship (e.g., Jaworski, Stathakopoulos, and Krishnan 1993). With respect to job satisfaction, salesforce controls (i.e., behavioral and outcome control) have been found to have a positive impact (e.g., Oliver and Anderson 1994), a negative impact (e.g., Ramaswami 1996), and no direct relationship (e.g., Jaworski and MacInnis 1989). The inconsistent evidence has motivated researchers to explore various theoretical constructs as potential moderators and mediators. While researchers generally have failed to find empirical support for the moderators investigated to date (e.g., Jaworski and MacInnis 1989; Ramaswami 1996), empirical support for a partial mediation perspective has been found by some researchers (e.g., Challagalla and Shervani 1996; Jaworski and Kohli 1991), suggesting that salesforce controls may impact job outcomes via some type of intermediary mechanism(s). However, additional work remains in revealing the complex nature of the relationship between salesforce controls and job outcomes because the previously tested partial mediators demonstrate relatively weak explanatory power (e.g., Kohli, Shervani, and Challagalla 1998). As Challagalla and Shervani (1996) and Oliver & Anderson (1994) suggest, the influence of salesforce control systems on job outcomes is a complex process and is not likely to be direct. Therefore, two key research questions remain in the salesforce control context:

1. What constitutes the key mediating mechanism(s) of salesforce controls that have an impact on salespeople's job outcomes?

2. What are the contextual factors that may influence the effectiveness of such mechanism(s)?

It should be noted that the extant marketing research that has tested the mediation mechanisms in the salesforce control context has attempted to identify universally effective behavioral predispositions (e.g., role perceptions, goal orientations, etc.) that mediate the impact of salesforce controls on job outcomes. However, this approach somewhat contradicts the contingency view of the selling environment which would suggest that sales performance is contingent on the alignment of salesperson motivation and behaviors (i.e., intrinsic versus extrinsic motivation, adaptive selling versus selling effort) with the selling environment (Sujan, Weitz, and Kumar 1994; Porter, Wiener, and Frankwick 2003; Weitz 1981; Weitz, Sujan, and Sujan 1986). The mediating attitudinal predispositions of salespeople tested to date demonstrate relatively weak explanatory power (e.g., Kohli, Shervani, and Challagalla 1998), suggesting a much more complex intermediary mechanism than had been investigated in previous research. As such, it is the central thesis of this dissertation that salesforce control systems should encourage salesperson's motivation and selling behavior that adjust to the sales context. This perspective has not been advanced and tested in the extant salesforce control literature. Because salesforce control systems are organizational variables that may impact salesperson I/E motivation (e.g., Anderson and Oliver 1987), adaptive selling behavior (e.g., Spiro and Weitz 1990), and selling effort (e.g., Chowdhury 1993), this dissertation proposes a partial mediation model integrating salesperson I/E motivation, adaptive selling behavior, and selling effort as key mediators (Figure 1). Specifically, this framework suggests that the deployment of salesforce control systems has an impact on the salesperson's I/E motivation, adaptive selling behavior, and selling effort, which, in turn, have an effect on job outcomes. Moreover, consistent with the contingency

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framework in the sales context (Weitz 1981), the proposed model suggests that the relative impact of adaptive selling behavior and selling effort on sales performance is dependent on their alignment with the characteristics of the selling environment (i.e., characteristics of the selling task and competitive intensity of the selling environment), which must be considered in the design and deployment of salesforce controls.

Figure 1
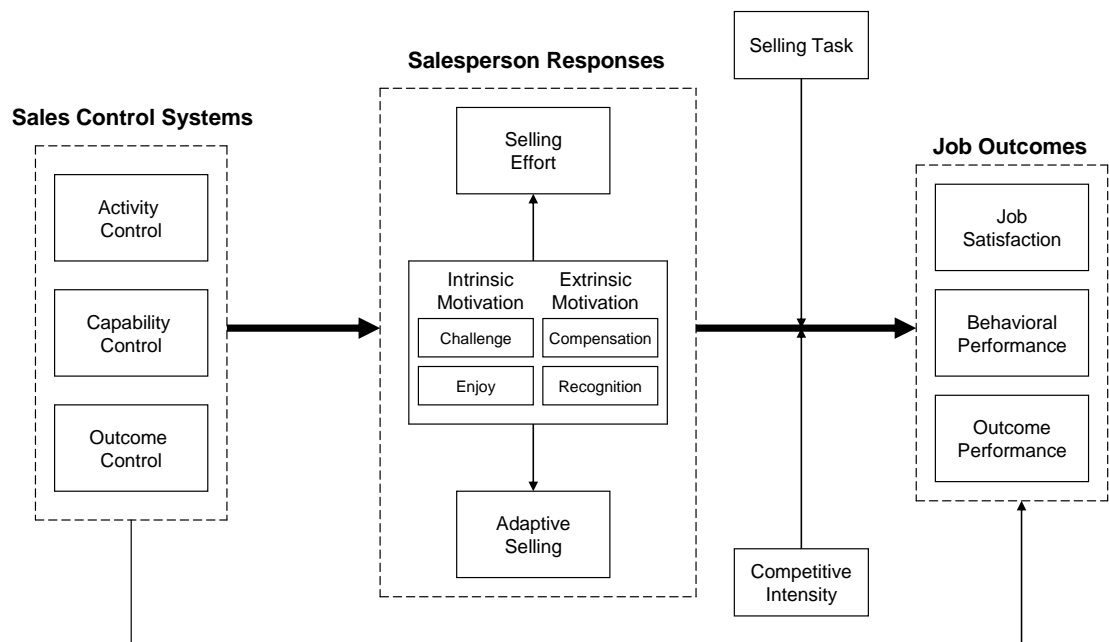
I. 2. Contributions of the Research

This dissertation is designed to answer the overarching research question "What constitutes an effective salesforce control system?" In addressing this focal research question, this dissertation provides three key contributions to the marketing and sales literature.

First of all, this dissertation represents the first empirical effort in the marketing literature that advances and tests a framework that integrates salesperson I/E motivation, adaptive selling behavior, and selling effort as key mediators in the salesforce control context. Unlike previous marketing research that attempted to uncover universally effective behavioral predispositions (e.g., goal orientation) that mediate the influence of salesforce controls on salesperson's job outcomes, this dissertation builds on the contingency view of selling effectiveness (Weitz 1981; Weitz, Sujan, and Sujan 1986) and found that the effectiveness of a given salesforce control system hinges on its ability to enhance salesperson's adaptive selling behavior through salesperson motivation. An important insight of the empirical findings is that misalignment of the salesforce control systems with the characteristics of the salesforce itself and/or the selling environment may significantly diminish selling effectiveness. Therefore, the alignment perspective of the mediation mechanism developed by this dissertation framework can shed light on inconsistent findings of previous research in salesforce control systems.

Another important contribution of this dissertation is its clarification of the role of salesperson I/E motivation in the sales control context. While salesperson I/E motivation has been found to have distinct correlations with behavior- and outcome-based sales control systems (e.g., Oliver and Anderson 1994), the sales control literature is unclear as

to whether salesperson motivation is a stable trait (salesperson characteristics) or if it can be influenced by sales control systems (contextually dependent), the answer to which bears important theoretical and managerial implications (Figure 2). Drawing on the *Self-Determination Theory* (SDT, Ryan and Deci 2000) and recent studies in the sales literature (Miao and Evans 2007; Miao, Evans, and Zou 2007), this dissertation found that salesperson's motivation can be induced and cultivated by sales controls, which , in turn, mediates the influence of sales controls on salespeople's job outcomes.

Figure 2

Two Perspectives

Motivation as a State   **Motivation as a Trait**
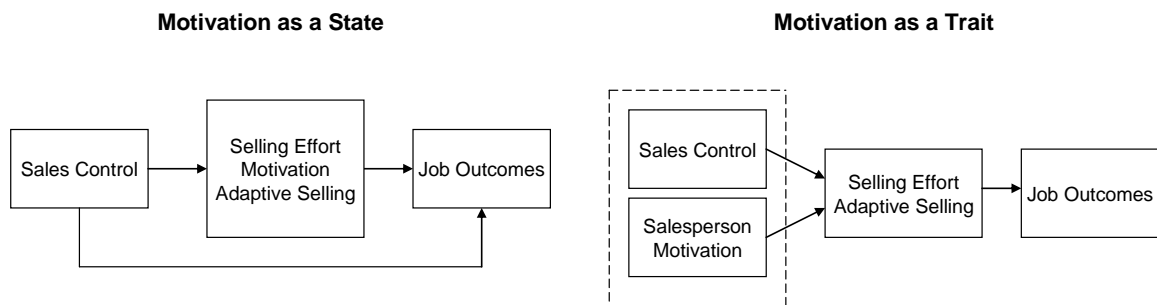
One distinctive feature of this research is its use of cognitive and affective components of I/E motivation that capture a much more complete role of salesperson motivation than had been offered by global I/E motivation to date. As can be seen with the use of the multidimensional motivational constructs, behavioral and outcome control have differential impacts on I/E motivation components, which, in turn, have distinct effects on job satisfaction and sales performance. At the aggregate level of I/E motivation, these complex relationships would not have been detected. In view of the critical role of motivation in sales management (e.g., Churchill, Ford, Hartley, and

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Walker 1985), it is important that these cognitive and affective motivation components be explored to better understand the role of I/E motivation in the salesforce control context.

This dissertation also found important boundary conditions that can influence the relative effectiveness of the salesforce control systems. Specifically, the effectiveness of adaptive selling behavior is more pronounced when competitive intensity is low rather than high. This finding contradicts the contention that activity control is more effective under low competitive intensity (i.e., script of routine activities, Challagalla and Shervani 1996; Ramaswami 1996) in that it was found in this study that outcome control has a maximal positive impact on adaptive selling, which leads to highest outcome performance when competitive intensity is low. In addition, *post hoc* analysis found salesperson's experience to be important boundary conditions. For salespeople who have a mean sales experience of 10 years, outcome control was found to be most effective in maximizing adaptive selling and outcome performance, whereas for salespeople who have a mean experience of 28 years activity control and outcome control appear to be equally effective in driving outcome performance but both have weak influence on adaptive selling behavior. Lastly, activity control and outcome control are more effective sales management tools with salespeople who show low as opposed to high levels of effort in selling.

Therefore, this dissertation provides critical insights into the mechanism and boundary conditions of salesforce control systems. In fact, the deployment of the appropriate salesforce control system itself is essentially "adaptive" in nature requiring careful evaluation and alignment with important contextual factors.

I. 3. Organization of the Dissertation

The remainder of this dissertation is organized into five chapters. The second chapter reviews the literature on salesforce control systems, adaptive selling, and salesperson motivation as they constitute the key constructs of the theoretical framework. The third chapter describes the research model and develops hypotheses in three sections: *A Mediation Perspective – Antecedents*, *A Mediation Perspective – Consequences*, and *A Contingency Perspective – Moderators*. The fourth chapter provides an overview of the research design, describes the sample and data collection procedures, and presents the measurement scales and measurement models. The fifth chapter presents the empirical results of hypotheses testing of the dissertation framework depicted in Figure 1, as well as the comparison with a rival model and *post hoc* analyses. The final chapter discusses the results, theoretical and managerial implications, limitations, and future research directions ensuing from the overall dissertation. References and appendix including additional statistical tests, cover letters, telemarketing script, salesperson/sales manager surveys, and top-line research summary for participating sales managers are attached at the end of this document.

CHAPTER II: LITERATURE REVIEW

While the nomological net of selling effort are relatively well understood in sales management (e.g., Brown and Peterson 1994; Fang, Palmatier, and Evans 2004), work remains to be done regarding the antecedents and consequences of adaptive selling (Spiro and Weitz 1990; Vink and Verbeke 1993) since inconsistent findings have been reported in the literature (Goolsby, Lagace, and Boorom 1992; Park and Holloway 2004). In their scale development study for the construct of *adaptive selling*, Spiro and Weitz (1990, p.61) assert that "Personal selling is the *only* communication vehicle that allows a marketing message to be adapted to the specific needs and beliefs of each customer." Given the importance of adaptive selling in the sales context, it is especially striking that research effort on adaptive selling is lacking in the salesforce control context because salesforce control systems arguably constitute the most important management tool in sales management (Anderson and Oliver 1987). Therefore, a managerially relevant question is to what extent and how do salesforce control systems affect a salesperson's adaptive selling behavior, as they do to salesperson motivation and selling effort, which, in turn, will *collectively* influence selling effectiveness. This research examines the integrated effects of these important mediating variables within the context of salesforce control systems.

II. 1. Salesforce Control Systems

In their seminal paper entitled "Perspectives on Behavior-Based Versus Outcome-Based Salesforce Control Systems", Anderson and Oliver (1987, p. 76) defined a control system as "[A]n organization's set of procedures for monitoring, directing, evaluating, and compensating its employees." As an important group of organizational employees, salespeople are usually managed with two types of salesforce control systems – outcome control and behavior control (Anderson and Oliver 1987). Outcome control approximates a market contract arrangement which uses incentives, usually in the form of commission, to reward salespeople in proportion to their sales outcomes (e.g., sales volume, revenue, or quota attainment). Because outcome control is essentially a laissez faire approach, management's involvement and effort in the selling process is less than some of the more process-oriented control options. Behavioral control, in contrast to outcome control, often entails intense management involvement in directing, training, evaluating, and compensating salespeople according to their performance in the process of selling rather than simply focusing on immediate sales outcome(s). Compared to outcome control, the principal advantage of a behavioral control system is the control it affords the sales manager in directing the sales staff to perform certain behaviors consistent with company strategy.

Following the conceptualization of behavior-based control, Challagalla and Shervani (1996) disaggregated the global behavioral control construct into activity control and capability control because behavioral control can vary from the day-to-day activities performed by the salesperson to more complex techniques aimed at improving the salesperson's long-term skills and capability. Specifically, activity control refers to

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the specification of the activities a salesperson is expected to perform (e.g., call rate or number of accounts to visit). Capability control, on the other hand, emphasizes the development of individual skills and abilities in the selling process and rewards salespeople according to their mastery of such skills. Because in practice most sales organizations employ both behavioral and outcome control (Oliver and Anderson 1994), this research recognizes that formal salesforce control systems reflect a combination of activity, capability, and outcome control. It is also noted that there are informal dimensions of salesforce control systems such as social, cultural, and self control (Jaworski 1988; Jaworski and McInnis 1989), but the focus of this dissertation is on the formal dimensions of salesforce control systems in order to draw more managerially actionable conclusions.

Most research of salesforce control systems are concerned with their consequences, with relatively little attention paid to the antecedents of a particular salesforce control system a company employs (Baldauf, Cravens, and Piercy 2005). Some proposed antecedents include environmental characteristics (e.g., Anderson and Oliver 1987; Krafft 1999; Jaworski 1988) and organizational and personal characteristics (e.g., Krafft 1999; Oliver and Anderson 1994). Although the role of the antecedents of salesforce control systems warrants further research attention, the interest of this research lies in the consequences of salesforce control systems where inconsistent findings abound.

A direct relationship between salesforce control systems and job outcomes has not been consistently demonstrated to date. The failure to arrive at consistent conclusions of the direct effects of salesforce control systems on job outcomes has led marketing

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researchers to search for contingent factors (e.g., Jaworski 1988; Ramaswami 1996).

Unfortunately, those studies generally have failed to find empirical support for proposed

moderators (e.g., Jaworski's [1988] notion of environmental fit). Alternatively, a few

researchers have empirically tested some potential mediators such as role ambiguity

(Challagalla and Shervani 1996) and learning /performance orientation (Kohli, Shervani,

and Challagalla 1998). The inclusion of mediators between salesforce control systems

and job outcomes appears to be more promising as at least partial support has been found.

However, additional work remains in revealing the complex nature of the relationship

between salesforce control systems and job outcomes. As Challagalla and Shervani

(1996, p. 91) suggest, the effect of salesforce controls is not likely to be direct:

> "The inability to consistently find effects of control on end-outcomes, such as
> performance and satisfaction, may lead to inappropriate conclusions about the
> efficacy of control systems. Such conclusions could be misleading, because
> control effects on end-outcomes may be *mediated* through other variables."

Despite the more promising mediation approach that has received some empirical

support in the literature, it should be noted that the mediating variables tested to date

demonstrate relatively weak explanatory power (e.g., Kohli, Shervani, and Challagalla

1998). A closer examination reveals that the mediators that have been tested to date have

attempted to identify universally effective behaviors/behavioral predispositions (e.g., role

perception, learning orientation, etc.) that mediate the impact of sales controls on job

outcomes. This approach appears to go counter to the contingency view of selling

effectiveness, which contends that selling effectiveness hinges on the alignment of

salesperson motivation and behavior with important boundary conditions (Spiro and

Weitz 1990; Weitz 1981). Because salesforce control systems are organizational

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variables that may impact the salesperson's motivation, adaptive selling behavior, and selling effort (Anderson and Oliver 1987; Spiro and Weitz 1990; Sujan, Weitz, and Kumar 1994), it is desirable to examine the contingent roles of these important mediating variables in an integrated fashion. This perspective has not been advanced and tested in previous salesforce control literature.

In summary, the literature on salesforce control systems provides a number of observations:

- The impact of salesforce control systems on job outcomes is not entirely direct.
- The partial mediation approach advanced in the literature has stronger empirical support compared to the contingency perspective using moderators only.
- All previous research has attempted to identify universally effective behaviors and/or behavioral predispositions as key mediators between salesforce control systems and job outcomes.
- No research has integrated adaptive selling, salesperson motivation, and selling effort as key mediators in the salesforce control context.

II. 2. Adaptive Selling

Adaptive selling refers to "the altering of sales behaviors during a customer interaction or across customer interactions based on perceived information about the nature of the selling situation" (Spiro and Weitz 1990, p.62). The concept of adaptive selling traces back to early research by Weitz (1978, 1981) and his colleagues (Weitz, Sujan, and Sujan 1986). Weitz (1978) developed a sales process model, also known as ISTEA model (i.e., develop impression, formulating strategies, transmitting messages, evaluating reactions, and making appropriate adjustments), which emphasizes a salesperson's impression formation and strategy formulation capabilities. The ISTEA model contends that selling effectiveness hinges on a salesperson's ability to collect and interpret information about each customer and to develop messages that are most effective in influencing that particular customer's decision. In other words, the advantage of personal selling over mass marketing tools such as advertisement is its ability to tailor a solution for customers who have heterogeneous needs. Following the ISTEA model, Weitz (1981) proposed a contingency framework of selling effectiveness in sales interactions that re-emphasizes the importance of adaptive selling because no single selling behavior can be equally effective across different situations. Because empirical evidence has generally failed to provide consistent support for a direct relationship between sales performance and salesperson behavioral predispositions, salesperson capability, and buyer-seller similarity (Weitz 1981), later research efforts re-direct marketers' attention to the salesperson's ability to detect, interpret, and react to the changing environment (Spiro and Weitz 1990; Weitz, Sujan, and Sujan 1986).

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Weitz's (1981) contingency framework and later research efforts (e.g., Goolsby, Lagace, and Boorom 1992; Spiro and Weitz 1990) spell out two sets of antecedent variables that may predict the practice of adaptive selling, namely salesperson characteristics (e.g., personality traits, motivation, capability, etc.) and organizational characteristics (e.g., management style). These researchers further posit that the effectiveness of adaptive selling is contingent on environmental factors (e.g., customer buying task). While stable personality traits such as self-monitoring, androgyny, and intrinsic reward orientation have been found to have a significant relationship with adaptive selling behavior, organizational variables such as management style have not received consistent empirical support to date (Spiro and Weitz 1990; Vink and Verbeke 1993). For instance, using *initiation of structure*, *production emphasis*, and *tolerance of freedom* as proxies for management style, Spiro and Weitz (1990) failed to find empirical support for the presumed relationship between management style and adaptive selling.

Because organizational variables (e.g., salesforce control systems) are easier to manipulate than stable personality traits, a more managerially relevant question is how and to what extent salesforce control systems may affect a salesperson's adaptive selling behavior. Some preliminary findings shed light on this perspective as certain types of control have been found to improve customer interaction involvement (e.g., Bonner 2005) or have a positive impact on a salesperson's practice of adaptive selling due to stronger salesperson-manager rapport (DelVecchio 1998) and opportunities for learning (Park and Holloway 2004). Moreover, sales controls have been found to have an impact on salespersons' intrinsic motivation, extrinsic motivation, and capability development (Cravens, Ingram, LaForge, and Young 1993; Oliver and Anderson 1994), all of which

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are key antecedents to adaptive selling (Spiro and Weitz 1990; Weitz et al. 1986).

Therefore, it is reasonable to presume that salesforce control systems, an important

management tool, may directly influence salespeople's adaptive selling behavior.

As for the impact of adaptive selling on job outcomes, few researchers have

investigated the effect of adaptive selling on job satisfaction. Theoretically, adaptive

selling entails active learning (Park and Holloway 2004), enhances salesperson-sales

manager trust (DelVecchio 1998), and increases salespersons' perceived competence and

autonomy (Anderson and Oliver 1987), all of which according to cognitive evaluation

theory would positively impact task enjoyment and job satisfaction (Deci and Ryan

1985). Due to the strategic implications of job satisfaction to salesforce retention and

sustainable competitive advantage (Brown and Peterson 1993), more empirical research

is needed on the relationships among salesforce control systems, adaptive selling, and job

satisfaction.

With respect to the impact of adaptive selling on job performance, empirical

evidence has been mixed (see Park and Holloway 2004 for a review). Although these

inconclusive findings can at least be partially attributed to the confounding effect induced

by the non-unidimensionality problem of Spiro and Weitz's (1990) original adaptive

selling scale (Marks, Vorhies, and Badovick 1996), an equally likely cause is the neglect

of important environmental factors that render adaptive selling more or less effective. It

has been noted (e.g., Spiro and Weitz 1990; Weitz et al. 1986) that adaptive selling is

more likely to be effective when potential benefits outweigh associated costs. One

important environmental factor is the nature of the selling task. Modern marketing

thought views the selling task as a combination of customer acquisition and customer

retention (e.g., Reinartz, Thomas, and Kumar 2005), which is also consistent with the concept of customer portfolio management (e.g., Johnson and Selnes 2004). To the extent that investment (e.g., adaptive selling effort) across the mix of different customers in a salesperson's client portfolio should be a function of customer characteristics (e.g., percentage of new customers), maximal payoff usually comes from satisfying new customers and converting them into relational partners (Johnson and Selnes 2004, 2005). In other words, when the selling task involves a higher percentage of new customers, adaptive selling should be more effective in contributing to profitability because adaptive selling can increase the salesperson's ability to relate to new accounts and reduce the new account's perceived uncertainty (Cannon and Perreault Jr. 1999; Hallen, Johanson, and Seyed-Mohamed 1991). Relational stage (e.g., Dwyer, Schurr, and Oh 1987) and buying task research (e.g., Porter, Wiener, and Frankwick 2003) also support this line of reasoning. For instance, during early relational stages, buyers typically have more concerns (i.e., uncertainty) about the seller's ability to meet the buyers' needs. Therefore, adaptive selling becomes critical for the salesperson to reassure and satisfy new leads particularly in the early stages of building relationships. As the buyer-seller relationship matures, the buyer-seller dyad typically has less uncertainty in the product or business process and, therefore, the need for adaptive selling diminishes, relative to new account acquisition (Dwyer, Schurr, and Oh 1987). Likewise, Porter, Wiener, and Frankwick (2003) found that adaptive selling is much more effective in situations of new buy compared to straight re-buy. Because the selling task of industrial salespeople typically includes a portfolio of customers across different relational stages and buying situations (Johnson and Selnes 2004; Reinartz, Thomas, and Kumar 2005), adaptive selling should

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not be studied in isolation of the contingent factors that affect the benefit to cost ratio of

engaging in adaptive selling behavior (Spiro and Weitz 1990).

In summary, the literature review on adaptive selling gives rise to a few research

questions that this dissertation intends to address:

- What organizational variables (i.e., antecedents) may predict the salesperson's practice of adaptive selling?
- What environmental factors set the boundary for the relative effectiveness of adaptive selling on job-related outcomes?
- What is the role of adaptive selling in the context of salesforce control systems?

II. 3. Salesperson Motivation

Salesperson motivation has been identified in terms of global I/E motivation (Anderson and Oliver 1987; Ingram et al. 1989; Weitz et al. 1986) due to their distinct relationships with various types of management control (e.g., Oliver and Anderson 1994) and job performance (e.g., Tyagi 1985). Ryan and Deci (2000, p. 70) define intrinsic motivation as "[A] natural inclination toward assimilation, mastery, spontaneous interest, and exploration that is so essential to cognitive and social development and that represents a principal source of enjoyment and vitality throughout life." Alternatively, these researchers (2000, p. 71) define extrinsic motivation as "[T]he performance of an activity in order to attain some separable outcome and, thus, contrasts with intrinsic motivation, which refers to doing an activity for the inherent satisfaction of an activity itself." It has been found that the global intrinsic motivation is an important antecedent to adaptive selling behavior because intrinsically motivated salespeople tend to view the selling process as an inherently rewarding experience (Spiro and Weitz 1990), whereas the global extrinsic motivation enhances selling effort due to expected contingent reward (e.g., Chowdhury 1993).

While earlier social psychology research subscribed to the view that I/E motivation is a stable trait (e.g., Amabile 1988), more recent theory development in this domain provides an alternative perspective – motivation as a state. One prominent representation of this view is the *Self-Determination Theory* (SDT) developed by social psychologists Ryan and Deci (2000). The central thesis of SDT is that work environments can facilitate or forestall I/E motivation to the extent that they accommodate an individual's needs for competence, relatedness, and autonomy. Moreover, SDT argues

that intrinsic motivation can facilitate the internalization of certain types of extrinsic motivation as long as they reflect an individual's conscious valuing of a behavioral goal (e.g., compensation or recognition). It is, however, unclear in the sales control literature whether salesperson motivation should be viewed as a stable trait or as a situationally influenced state as predicted by SDT. One recent study of salesperson motivation in the sales control context (Miao, Evans, and Zou 2007) provides preliminary evidence in support of SDT's prediction. Due to the important theoretical and managerial implications associated with the role of salesperson motivation in the sales control context, further investigation is warranted.

Another development in social psychology and sales literature is that the domain of I/E motivation has been suggested to include cognitive and affective dimensions that have distinct antecedents and consequences (Amabile, Hill, Hennessey, and Tighe 1994; Harter 1981; Miao and Evans 2007). Specifically, intrinsic motivation has been found to include challenge seeking and task enjoyment, whereas extrinsic motivation has been found to include compensation seeking and recognition seeking, and these first-order motivation components are conceptually and empirically distinct (Amabile, Hill, Hennessey, and Tighe 1994; Miao and Evans 2007; Miao, Evans, and Zou 2007). Moreover, SDT (Ryan and Deci 2000) contends that the increased cognitive capacity (e.g., challenge seeking) and elevated task enjoyment can accelerate the internalization of valued extrinsic rewards (e.g., compensation or recognition), suggesting potential causal relationships between certain I/E motivation components (Amabile, Hill, Hennessey, and Tighe 1994; Harter 1981). At the aggregate level of I/E motivation, these complex relationships would not have been detected. In the sales control context, for instance,

capability control may enhance a salesperson's task enjoyment (an affective component of intrinsic motivation) and compensation seeking (a cognitive component of extrinsic motivation) at the same time because of the learning experience and improved selling skills (Miao, Evans, and Zou 2007). Marketing researchers have also suggested that different types of behavioral control (i.e., activity and capability control) may have distinct impact on intrinsic motivation (Challagalla and Shervani 1996), but the global intrinsic motivation construct makes it difficult to detect such effects because behavioral control has been found to have a consistent positive impact on intrinsic motivation in the aggregate (Baldauf, Cravens, and Piercy 2005). In view of the critical role of motivation in sales management (e.g., Churchill, Ford, Hartley, and Walker 1985), it is important that these cognitive and affective motivation components be explored as distinct constructs to better understand the role of motivation in the sales control context.

In summary, the current status of salesperson motivation research gives rise to the following research questions:

- Should the salesperson's I/E motivation be viewed as a stable trait or as a contextually dependent state in the sales control context?
- What are the distinctive relationships between salesforce control systems and the cognitive and affective components of I/E motivation?
- What are the interrelationships across the components of I/E motivation?
- What are the integrated effects of I/E motivation components on adaptive selling, selling effort, and job outcomes?

CHAPTER III: RESEARCH MODEL AND HYPOTHESES

This chapter of the dissertation will develop the research framework and associated research hypotheses in three sections. The first two sections will advance a mediation perspective integrating adaptive selling, salesperson I/E motivation, and selling effort as key mediators between salesforce control systems and job outcomes. Specifically, the first section will develop hypotheses concerning the relationships between salesforce control systems and adaptive selling, salesperson I/E motivation, and selling effort. The causal relationships between I/E motivation components and adaptive selling and selling effort will also be examined. The second section will develop hypotheses regarding the integrated effects of adaptive selling, salesperson I/E motivation, and selling effort on salesperson job satisfaction, salesperson behavioral performance, and salesperson outcome performance. The third section will develop a contingency perspective for the moderating effects of *selling task* and *competitive intensity* on the mediation relationships depicted in the research framework.

III. 1. A Mediation Perspective – Antecedents

Salesforce Control Systems and Adaptive Selling

Salesforce control systems reflect a combination of activity, capability, and outcome

control (Challagalla and Shervani 1996). Because a given salesforce control system is

designed to influence employee behavior directed toward accomplishing company

objectives (Anderson and Oliver 1987), such control systems reflect distinct management

philosophy and style. Because management style or philosophy has been proposed as

organizational variables that may directly influence salesperson's adaptive selling

behavior (Spiro and Weitz 1990; Vink and Verbeke 1993), it is presumed that salesforce

control systems are likely to have a direct impact on salesperson's adaptive selling

behavior (Figure 3).

Figure 3
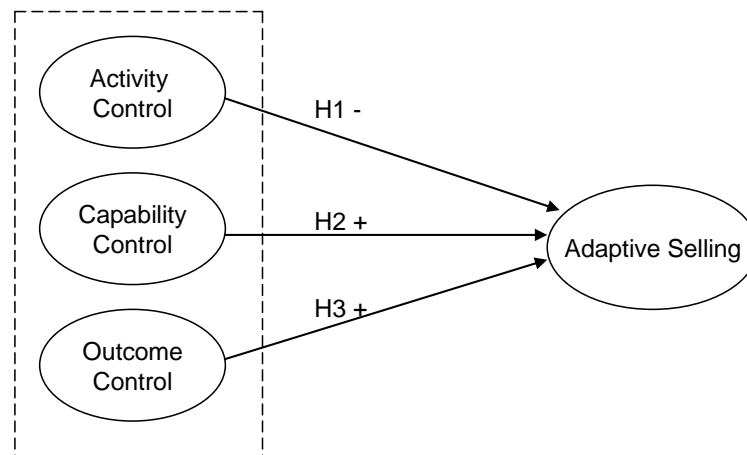
Activity control refers to the specification of the activities a salesperson is required to perform on a regular basis (Challagalla and Shervani 1996). As such, activity control is proximal in nature (Kohli, Shervani, and Challagalla 1998) where salesperson's daily activities (e.g., call rate or accounts to visit) are closely monitored and evaluated. Because specifying and monitoring salesperson's actions during the selling process is likely to reduce the salesperson's sense of autonomy and self-control (Ramaswami 1996), which according to SDT (Ryan and Deci 2000) will negatively impact a person's creativity on the job, salespeople under activity control tend to focus inwardly on required activities at the expense of market and customer information (Kohli, Shervani, and Challagalla 1998). The mechanistic nature of activity control will also discourage salespeople from experimenting with new approaches and, therefore, negatively impact salespeople's adaptive selling behavior. Similar arguments can be found in other streams of marketing research. Because activity control is a type of formalization and centralization that can detract from customer information collection and responsiveness (Kohli and Jaworski 1990), it is likely to have a negative impact on salesperson's adaptive selling. Likewise, research has also found that cross-functional team members who are required to carry out their actions strictly in accord with established rules and procedures tend to perform poorly in new product development due to their inward focus on satisfying the internal system at the expense of customer orientation (Bonner 2005). Taken together, the literature suggests a negative relationship between activity control and adaptive selling behavior.

H1: Activity control negatively impacts adaptive selling behavior.

In contrast to activity control that is focused on specific selling behaviors, capability control attempts to enhance the salesperson's performance by improving the salesperson's skills and abilities, which, in turn, lead to superior performance (Challagalla and Shervani 1996). In other words, capability control entails management commitment in setting learning goals for the salesperson, providing guidance and feedback for improvement, and compensating salespeople for their mastery/improvement of the necessary skills. Because capability control does not focus on immediate sales outcomes (e.g., sales volume) or require salespeople to engage in specific sales behaviors, salespeople are expected to meet learning as opposed to direct sales outcomes (Anderson and Oliver 1987; Challagalla and Shervani 1996). Capability control may engage salespeople in long-term personal development (Kohli, Shervani, and Challagalla 1998), working smarter rather than simply harder (Sujan, Weitz, and Kumar 1994), more skilled at communication with customers (Boorom, Goolsby, and Ramsey 1998), and more adaptation in sales encounters (Spiro and Weitz 1990).

Moreover, capability control has implications on salesperson's attribution processes. Under capability control, salespeople are evaluated by how well they master a certain level of skills and abilities. Therefore, salespeople tend to attribute their poor evaluation to lower levels of skills and abilities rather than lower levels of effort (Sujan, Weitz, and Sujan 1988; Weitz, Sujan, and Sujan 1986), which, in turn, should encourage salespeople to work smarter by analyzing and altering their strategies in future sales encounters.

The positive impact of capability control on adaptive selling is also suggested by cognitive evaluation theory (Deci and Ryan 1985) and SDT (Ryan and Deci 2000), both

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of which predict that work environments that are conducive to active learning tend to enhance employees' perceived competence and creativity on the job. Therefore, a positive relationship between capability control and adaptive selling is anticipated.

H2: Capability control positively impacts adaptive selling behavior.

The impact of outcome control on adaptive selling is somewhat ambiguous. On the one hand, because outcome control has often been characterized as a laissez faire approach (Anderson and Oliver 1987), the company shifts the risk to the salesperson by sharing rewards with the salesperson in direct proportion to his/her measurable outcome performance (e.g., sales volume). Due to the pressure to meet immediate outcome goals, an outcome-based control system tends to focus salespeople's attentions on activities that may lead to immediate sales at the expense of long-term customer satisfaction and necessary adaptive skills (Anderson and Oliver 1987). Other researchers seem to concur with this argument. For instance, Weitz, Sujan, and Sujan (1986) argue that salespeople who are primarily concerned about immediate sales outcomes tend to stick with a few "tried and tested" methods of selling that may lead to immediate payoffs. Especially when environmental uncertainty is high, a salesperson under outcome control may not be willing to experiment with different selling approaches because they want to ensure immediate payoffs with the least level of uncertainty. Spiro and Weitz (1990), in their scale development study of adaptive selling, also subscribe to this view that outcome control generally inhibits adaptive selling because of its "production emphasis."

Despite the prevailing argument in the literature suggesting that outcome control may negatively affect adaptive selling, more recent empirical evidence has suggested
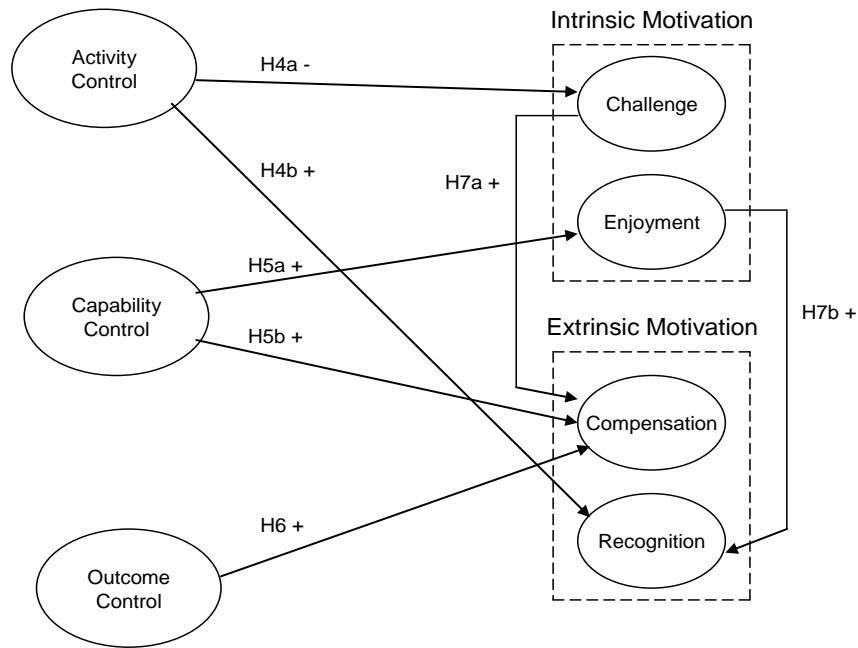
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otherwise in that outcome control was actually found to promote learning and improve customer orientation (Bonner 2005; Kohli, Shervani, and Challagalla 1998), both of which are positively related to adaptive selling (McIntyre, Claxton, Anselmi, and Wheatley 2000; Park and Holloway 2004). According to goal theory (Locke and Latham 1990), one possible interpretation of this finding is that clear and unambiguous outcome goals encourage salespeople to search for relevant information and adopt appropriate behavioral strategies (i.e., adaptive) in order to achieve outcome goals (Kohli, Shervani, and Challagalla 1998). Therefore, although under outcome control managers usually do not closely coach their salespeople, outcome control does seem to encourage salespeople to uncover effective selling techniques/strategies over time.

H3: Outcome control positively impacts adaptive selling behavior.

Salesforce Control Systems and Salesperson Motivation

One limitation of the extant salesperson motivation research is that I/E motivation has always been studied as a global construct, making it hard to detect more complex relationships between sales controls and salesperson motivation (Challagalla and Shervani 1996). Given the important role of motivation in sales research (e.g., Churchill, Ford, Hartley, and Walker 1985), this study will disaggregate I/E motivation into distinct cognitive and affective components such that a better understanding of salesperson motivation in the sales control context can be gained. The following sections will discuss the interrelationships between salesforce control systems and salesperson motivation (Figure 4).

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Figure 4

Intrinsic Motivation

Activity
Control

H4a -

Challenge

H4b +

H7a +

Enjoyment

H5a +

Capability
Control

H5b +

Extrinsic Motivation

H7b +

Compensation

H6 +

Recognition

Outcome
Control

Behavioral control includes activity and capability control (Challagalla and

Shervani 1996). Evidence indicates that behavioral control has a positive impact on

intrinsic motivation in the aggregate (see Baldauf et al. 2005 for a review). However,

Challagalla and Shervani (1996) note that activity control and capability control may

have differential, even opposite, effects on intrinsic motivation. Activity control is the

least autonomous type of control because it imposes strict guidelines on which routine

activities are to be performed and how they should be performed (Ramaswami 1996).

Although activity control may not need to diminish a salesperson's task enjoyment

(Amabile, Hill, Hennessey, and Tighe 1994) probably because it reduces role ambiguity

on the job (Jaworski and Kohli 1991), according to cognitive evaluation theory (Deci and

Ryan 1985) and SDT (Ryan and Deci 2000) activity control may reduce an individual's

cognitive need for meaningful and challenging tasks. While motivation theories in social

psychology suggest a negative relationship between activity control and challenge

seeking, some marketing researchers suggest an opposite relationship in the sales setting

because activity goals can make salespeople more concerned about being perceived as

competent (Kohli, Shervani, and Challagalla 1998). Nevertheless, given the

preponderance of empirical evidence in social psychology literature, a negative

relationship is presumed.

> **H4a**: Activity control negatively impacts salesperson's challenge seeking
> (intrinsic motivation).

A neglected area in salesperson motivation research is the relative influence of

behavioral control on a salesperson's extrinsic motivation. Because much of what

salespeople do in their jobs is at least partially determined by external rewards, it would

be ill-advised to presume that behavioral control designed to monitor and evaluate a

salesperson's job performance would be of little consequence to his/her extrinsic

motivation. Therefore, this study advances and tests a presumed relationship between

behavioral control and extrinsic motivation.

In sales environments that rely extensively on activity control, what the

salesperson does tends to be highly conspicuous to the immediate supervisor because

activity goals tend to be proximal in nature (Challagalla and Shervani 1996). Therefore,

close monitoring and frequent communication with the immediate supervisor tend to

increase salespeople's sensitivity to supervisor evaluations. This, in turn, can motivate the

salesperson to gain recognition of the supervisor, especially in environments where senior

salespeople serve as role models for the more junior sales staff (Kohli, Shervani, and

Challagalla 1998). Therefore, activity control may enhance a salesperson's propensity to seek social recognition of immediate supervisors or peers. Because activity rewards are usually fixed and are not directly tied to a specific sales outcome (e.g., sales volume), activity control is not expected to be significantly related to a salesperson's compensation seeking.

H4b: Activity control positively impacts salesperson's recognition seeking (extrinsic motivation).

Capability control has been suggested to impact intrinsic motivation primarily by promoting an enjoyable task environment (Challagalla and Shervani 1996; Ryan and Deci 2000). In their cognitive evaluation theory, Deci and Ryan (1985) reason that the source of task enjoyment (an affective dimension of intrinsic motivation) is *optimal capacity distance* that stretches one's capability potential but not to an overwhelming degree. In other words, tasks that are below a person's ability (i.e., tasks that are easily completed) will lead to boredom (less enjoyment), whereas tasks that far exceed one's capacities deprive one of task enjoyment. In the sales control context, therefore, managers need to have an accurate assessment of a salesperson's current capability such that an appropriate level of a capability goal can be assigned. Capability control requires management's commitment in time and effort to continuously assess the capabilities of the salesperson in order to establish meaningful capability goals. Thus, capability control should enable managers to have a more accurate picture of the salesperson's overall ability and potential. Because capability goals are set relative to a salesperson's current skill level, the salesperson should experience more control over the job outcomes, feel

more competent, and more in accord with management expectations, which according to

SDT (Ryan and Deci 2000) should all enhance job-related enjoyment.

> **H5a**: Capability control positively affects salesperson's task enjoyment (intrinsic motivation).

The ultimate goal of capability control is to improve the salesperson's long-term

performance (Anderson and Oliver 1987; Challagalla and Shervani 1996). It is logical to

presume that salespeople will seek external validation of the value of their improved

capability. In other words, salespeople will gauge their capabilities through external

events that have behaviorally relevant implications (e.g., improved sales performance,

Anderson and Oliver 1987). Because capability control rewards salespeople based on

their skill levels, increased compensation should be a logical indicator of improved

competence. Therefore, salespeople under capability control will deliberately turn to

compensation as a reliable form of feedback for the value of their improved competence

(Ryan and Deci 2000).

> **H5b**: Capability control positively affects salesperson's compensation seeking (extrinsic motivation).

Outcome control may be viewed as a market mechanism requiring relatively

lower levels of management involvement in the direct monitoring and supervision of

salespeople (Anderson and Oliver 1987). In outcome control the performance risk tends

to be shifted from management to the salesforce. Therefore, the need for immediate

compensation becomes salient (Cron, Dubinsky, and Michaels 1988). Outcome control is

therefore expected to have a positive impact on a salesperson's compensation seeking.

Since salespeople are not closely monitored by their supervisors in outcome control

(Anderson and Oliver 1987), outcome control is not expected to be significantly related to recognition seeking.

>**H6**: Outcome control positively affects salesperson's compensation seeking (extrinsic motivation).

Although it has been suggested that global intrinsic and extrinsic motivation may enhance each other's impact on performance (e.g., Thakor and Joshi 2005), their relationships at the first-order component level remain to be investigated. SDT (Ryan and Deci, 2000) argues that with increased levels of cognitive capacity and task enjoyment people will embrace relevant extrinsic goals as valuable and personally important. Therefore, salespeople who are challenge seeking may subsequently integrate compensation as an important indicator of their relative capability and, thus, there may be a causal path from the former to the latter. Similarly, when a salesperson enjoys the selling job, SDT suggests that the salesperson tends to integrate workplace recognition (i.e., relatedness) as personally important over time because it contributes to overall psychological well-being. Recent evidence in sales control context lends further credence to these purported relationships (Miao, Evans, and Zou 2007).

>**H7a**: Challenge seeking (intrinsic motivation) positively affects compensation seeking (extrinsic motivation).
>**H7b**: Task enjoyment (intrinsic motivation) positively affects recognition seeking (extrinsic motivation).

Salesforce Control Systems and Selling Effort

Selling effort is defined as "[T]he force, energy, or activity by which work is accomplished" (Brown and Peterson 1994, p.71), which includes both the duration of time spent working and the intensity of work activity itself. Since salesforce control

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systems are designed to monitor, evaluate, and compensate salespeople according to their

performance (Anderson and Oliver 1987), expectancy theory (Vroom 1964) would

predict that salesforce control systems will have an impact on selling effort. Therefore,

the presumed causal relationships between salesforce control systems and selling effort

are advanced (Figure 5).

Figure 5
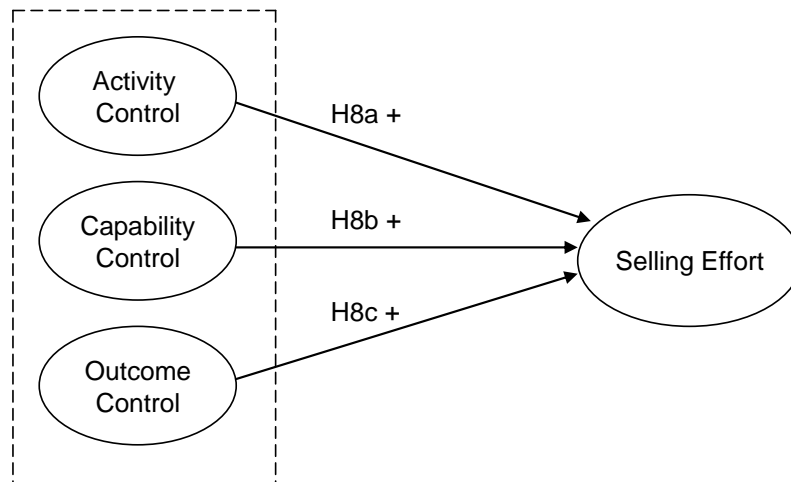
Activity control directs salespeople to perform certain selling activities both in

terms of what and how they are to be conducted (Ramaswami 1996). Therefore, activity

control is proximal in nature requiring close supervision by sales managers (Challagalla

and Shervani 1996), and it tends to elevate a salesperson's performance orientation

(Kohli, Shervani, and Challagalla 1998) through enhanced levels of selling effort (Sujan,

Weitz, and Kumar 1994). Since activity control compensates salespeople for their

fulfillment of required selling activities (e.g., call rate, number of accounts to visit),

activity control is expected to directly enhance selling effort due to the expectation that effort will lead to a given level of activity performance (Chowdhury 1993; Tyagi 1985).

Capability control aims to improve salespeople's selling skills and capabilities through constructive supervisor feedback and coaching during the selling process (Challagalla and Shervani 1996). As such, salespeople are more likely to be encouraged to learn through experimenting with different selling strategies in a trial-and-error fashion (Anderson and Oliver 1987; Kohli, Shervani, and Challagalla 1996). While capability control may not necessarily increase work intensity in a repetitive fashion as does activity control, it does require spending more time on the task because learning takes time (Anderson and Oliver 1987), thereby increasing overall selling effort. Empirical evidence supports this contention (Sujan, Weitz, and Kumar 1994).

Outcome control sets clear output goals that tie directly to salespeople's monetary compensation. As such, outcome goals tend to elevate salespeople's instrumentality belief that higher performance will lead to higher monetary reward (Tyagi 1985), thereby enhancing performance orientation and selling effort (Kohli, Shervani, and Challagalla 1998). Based on the above discussion, the following hypotheses are developed.

> **H8a**: Activity control positively affects selling effort.
> **H8b**: Capability control positively affects selling effort.
> **H8c**: Outcome control positively affects selling effort.

Salesperson Motivation and Adaptive Selling

This research disaggregates salesperson I/E motivation into distinct cognitive and affective first-order components informed by research in social psychology (e.g., Amabile, Hill, Hennessey, and Tighe 1994) and in sales management (e.g., Miao and

Evans 2007). Research in adaptive selling has traditionally considered intrinsic

motivation as a key antecedent but has not fully considered the role of extrinsic

motivation in this context (e.g., Weitz, Sujan, and Sujan 1986). To the extent that most of

what salespeople do at their jobs are at least partially determined by external rewards, it

would be ill-advised to assume that extrinsic motivation would have little impact on

adaptive selling. Therefore, this research will examine the impact of both intrinsic and

extrinsic motivation on adaptive selling (Figure 6).

Figure 6
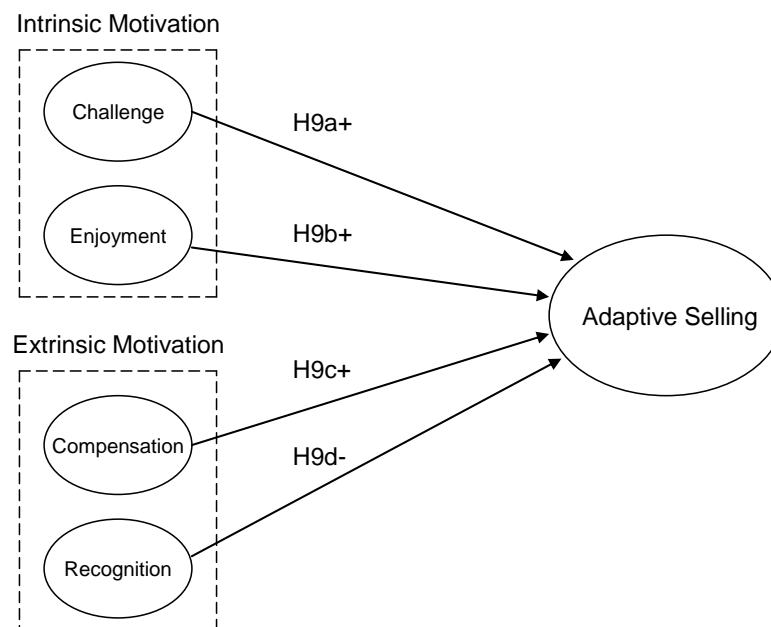
Amabile, Hill, Hennessey, and Tighe (1994) empirically demonstrate the inability

of the global I/E motivation constructs to capture the complex nomological net of the

cognitive and affective dimensions of motivation. Because the first-order cognitive and

affective components of motivation may have different antecedents and consequences in

the sales control context (e.g., Miao, Evans, and Zou 2007), it would be appropriate to examine their distinct impacts on adaptive selling separately. Challenge seeking is the cognitive component of intrinsic motivation (Amabile, Hill, Hennessey, and Tighe 1994). In cognitive evaluation theory, Deci and Ryan (1985) posit that actively seeking challenge in one's job is an important trait of intrinsic motivation. These researchers further point out that people who pursue challenges embedded in their jobs tend to have an internal attribution basis for their job outcomes, which, according to Sujan, Weitz, and Kumar (1994), will make salespeople work smarter across different selling situations (i.e., adaptive selling).

> **H9a**: Challenge seeking (intrinsic motivation) has a positive impact on adaptive selling behavior.

Task enjoyment is an affective component of intrinsic motivation. Csikszentmihalyi (1975) posits that task enjoyment is the hallmark of intrinsic motivation because for those who enjoy the activities related to a task, the reward is the ongoing experience of performing the task. According to cognitive evaluation theory (Deci and Ryan 1985), individuals who truly enjoy their tasks get great pleasure by exploring new approaches/strategies, thereby enriching their learning experience. In other words, those who truly enjoy their tasks may become more skilled at coping with different task situations and, thus, become more adaptive over time. In fact, those who have high levels of task enjoyment are more willing to accept failure because immediate outcome rewards become relatively less important or secondary (Weitz, Sujan, and Sujan 1986).

> **H9b**: Task enjoyment positively impacts adaptive selling behavior.

As a major component of extrinsic motivation, compensation seeking does not necessarily indicate a lack of task interest or task involvement (Amabile, Hill, Hennessey, and Tighe 1994). In fact, high performance was found to be linked to both compensation seeking and challenge seeking (Amabile 1988; Harter 1981). Therefore, it should be noted that people who are interested in high monetary compensation may not necessarily undercut their selling strategies but will seek out opportunities to learn and improve their skills. This contention is further supported by the positive relationship between compensation seeking and behavioral involvement in empirical studies in social psychology (Amabile, Hill, Hennessey, and Tighe 1994) and in sales control context (Miao, Evans, and Zou 2007) where people who seek high financial payoffs are more likely to invest time in mastering higher levels of skills. Therefore, compensation seeking is anticipated to have a positive impact on adaptive selling.

H9c: Compensation seeking positively impacts adaptive selling behavior.

Recognition seeking, in contrast to compensation seeking, is expected to have a negative impact on adaptive selling since it has been found that recognition seeking has a negative correlation with creativity (Amabile, Hill, Hennessey, and Tighe 1994). In the sales control context, salespeople who seek high recognition tend to be more responsive to their immediate supervisor's requirements as opposed to being more responsive to customer needs (Kohli, Shervani, and Challagalla 1998). Therefore, due to its inward focus on meeting internal requirements, recognition seeking may negatively impact the salesperson's customer orientation and make the salesperson less adaptive to customer needs.

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H9d: Recognition seeking negatively impacts adaptive selling behavior.

Salesperson Motivation and Selling Effort

Salesperson motivation and selling effort are conceptually distinct constructs where a causal relationship from motivation to selling effort has been demonstrated in salesforce and organizational behavior literature (Brown and Peterson 1994). *A priori*, this study presumes the established causal relationships of I/E motivation and selling effort but refines these interrelationships using the previously discussed cognitive and affective dimensions (Figure 7).

Figure 7

Intrinsic Motivation

Challenge

H10a+

Enjoyment

n.s.

Selling Effort

Extrinsic Motivation

H10b+

Compensation

H10c+
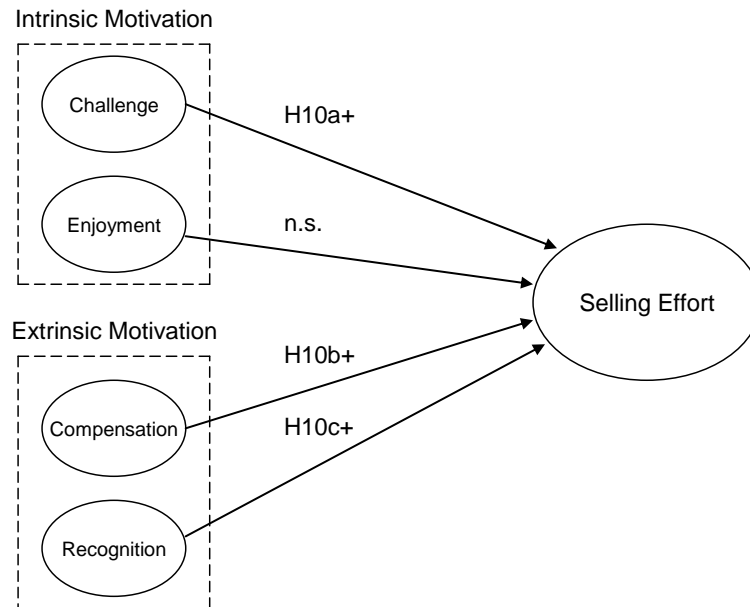
Recognition

Challenge seeking is a cognitive component of intrinsic motivation that motivates salespeople to continue striving in the face of failure (Sujan, Weitz, and Kumar 1994),

especially when the sales goals are difficult (Fang, Palmatier, and Evans 2004).

Therefore, it can be expected that those who are challenge seeking will not easily give up or be overwhelmed by difficulties encountered in the selling process. In fact, salespeople who are more inclined to be challenge seeking tend to work both hard (i.e., increased effort) and smart (i.e., more effective in using their time). Positive correlation between challenge seeking and time spent on performing tasks has also been reported in social psychology research (e.g., Amabile, Hill, Hennessey, and Tighe 1994). Task enjoyment is the hallmark of intrinsic motivation (Deci and Ryan 1985). For those who truly enjoy the selling job, the selling process becomes inherently rewarding due to the experience gained rather than being contingent on the rewards associated with outcome performance (Weitz, Sujan, and Sujan 1986). Because task enjoyment is not related to contingent rewards and is characterized by an internal locus of control (Ryan and Deci 2000), salespeople who truly enjoy the selling task are less likely to feel an urgency to demonstrate immediate outcome performance through intensified selling effort.

Empirical evidence also shows that task enjoyment is not directly related to time spent on the task (Amabile, Hill, Hennessey, and Tighe 1994). Therefore, no relationship between task enjoyment and selling effort is expected. Compensation seeking makes salient the instrumentality valence of the selling task (e.g., Tyagi 1985) where salespeople recognize the direct linkage between performance and contingent rewards, thereby increasing total effort on the job. The preponderance of empirical evidence in the sales literature supports this contention (Cron, Dubinsky, and Michaels 1988; Oliver and Anderson 1994; Tyagi 1985). Recognition seeking tends to focus salespeople's attention on the requirements of the immediate supervisor (Kohli, Shervani, and Challagalla 1998). Therefore, in order to

be perceived as competent by the supervisor, salespeople will be more likely to exert a higher level of effort in fulfilling the required activities that are socially conspicuous. Based on the above discussion, the following hypotheses are offered.

H10a: Challenge seeking positively affects selling effort.
H10b: Compensation seeking positively affects selling effort.
H10c: Recognition seeking positively affects selling effort.

III. 2. A Mediation Perspective – Consequences

This section develops the second part of the theoretical model that addresses the consequences of adaptive selling, salesperson motivation, and selling effort in an integrated fashion. The dependent variables of interest are *salesperson job satisfaction*, *behavioral performance*, and *outcome performance*. Job satisfaction is a widely studied construct in sales research due to its strategic implications to employee commitment, retention, and performance (e.g., Brown and Peterson 1993). Including both behavioral performance and outcome performance in the sales performance measure is appropriate given that behavioral performance is within the salesperson's control irrespective of stochastic external factors that may influence the sales outcome (Basu, Lal, Srinivasan, and Staelin 1985). Therefore, the dissertation model will examine the impact of the mediating variables on each of these three dependent variables.

Adaptive Selling and Job Outcomes

Figure 8 depicts the hypothesized relationships between adaptive selling and job outcomes. Locke (1976, p. 1300) defined job satisfaction as "[A] pleasurable or positive emotional state resulting from the appraisal of one's job or job experience." Although job satisfaction can be conceptualized as a multi-dimensional construct including satisfaction with one's job, supervisor, coworkers, payment conditions, promotional opportunities, and job security (Churchill, Ford, and Walker 1979), this research will focus on satisfaction with one's job itself, similar to recent marketing research (e.g., Ramaswami and Singh 2003). In a meta analysis by Brown and Peterson (1993), role stressors (i.e., role ambiguity and role conflict) were found to be the most significant predictors of job

satisfaction, whereas performance and job satisfaction do not appear to be correlated. The meta analysis found that when a salesperson can better manage role ambiguity or role conflict, overall job satisfaction should be enhanced. Because adaptive selling requires the salesperson to improvise in different selling situations, it can be inferred that a salesperson who is highly adaptive should be better able to manage role ambiguity because of his/her ability to collect and make sense of situational cues (Park and Holloway 2004). Therefore, adaptive selling may lead to increased job satisfaction. In addition, salespeople who practice adaptive selling are active learners of different selling strategies (Weitz, Sujan, and Sujan 1986). Consequently, as salespeople become more adaptive overtime, they are more likely to perceive their enhanced competence, experience more autonomy in applying learned skills, and develop better relations with customers, all of which should lead to increased job satisfaction (Sujan, Weitz, and Sujan 1988).

H11a: Adaptive selling positively impacts job satisfaction.

It is recommended that salesperson performance be measured along two positively related dimensions – behavioral performance and outcome performance (Cravens, Ingram, LaForge, and Young 1993) in order to differentiate controllable salesperson effort from uncontrollable external factors (Basu, Lal, Srinivasan, and Staelin 1985). This is especially important in the adaptive selling context given the mixed findings of its impact on sales performance in the literature (see Park and Holloway for a review). Behavioral performance refers to activities and strategies salespeople carry out

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in the selling process, whereas outcome performance represents the quantitative output as a result of both effort and environmental factors (Baldauf, Cravens, and Piercy 2005).

According to Behrman and Perreault (1982), the domain of behavioral performance includes non-selling behavioral performance (e.g., submitting sales report) and selling behavioral performance (e.g., sales presentation). In the context of this study the focus is on salesperson's selling behavioral performance because of its direct implications on the customer relationship (Dwyer, Schurr, and Oh 1987). Since adaptive selling requires the salesperson to customize a sales presentation/solution to individual customers with unique needs (Spiro and Weitz 1990; Weitz 1978, 1981), it is anticipated that adaptive selling has a positive impact on salesperson's behavioral performance. Although outcome performance can be influenced by stochastic factors that are not directly controllable by the salespeople, most evidence supports a positive relationship between adaptive selling and salesperson's quantitative output (e.g., Marks, Vorhies, and Badovick 1996; Spiro and Weitz 1990).

> **H11b**: Adaptive selling positively impacts behavioral performance.
> **H11c**: Adaptive selling positively impacts outcome performance.

Figure 8
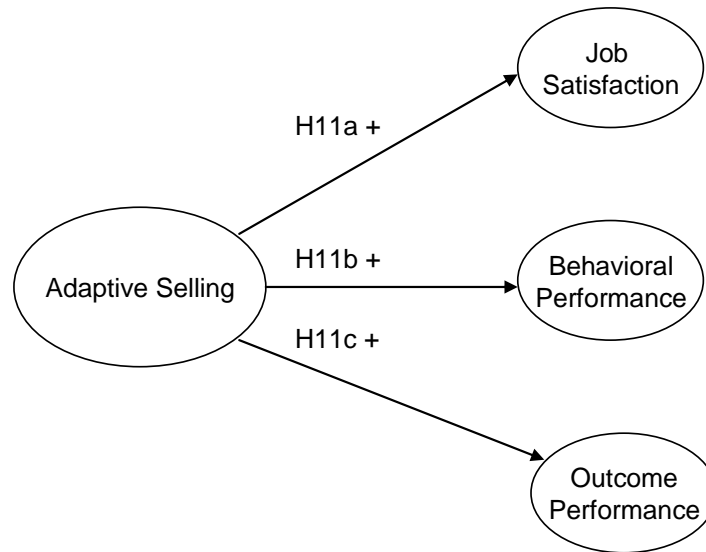
Salesperson Motivation and Job outcomes

Intrinsic motivation has been postulated to have a positive impact on job outcomes (job satisfaction and sales performance), whereas extrinsic motivation primarily enhances outcome performance (Anderson and Oliver 1987). With the cognitive and affective motivation components, however, a more robust representation of the motivation – job outcome relationship is possible (Figure 9).

Figure 9
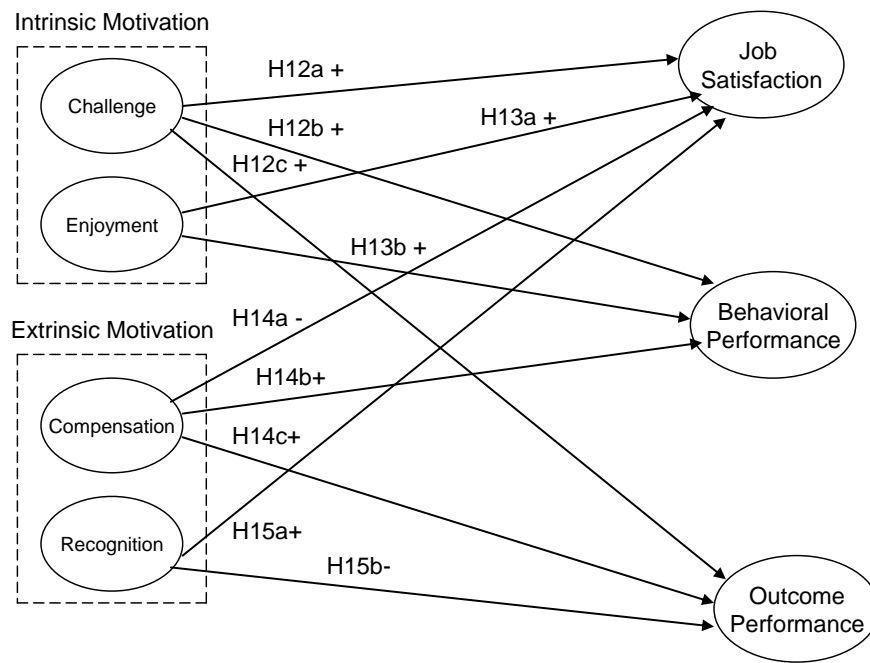
Because challenge seeking has been found to be positively correlated with both working smart and working hard (Amabile, Hill, Hennessey, and Tighe 1994), challenge seeking is expected to have a positive impact on behavioral and outcome performance. With respect to job satisfaction, cognitive evaluation theory (Deci and Ryan 1985) predicts that people who actively seek and meet task-related challenges are more likely to experience enhanced competence and perceived control over the task environment, which will lead to job satisfaction. Task enjoyment is the hallmark of intrinsic motivation (Csikszentmihalyi 1975). Because salespeople who intrinsically enjoy a selling career will find their job inherently interesting and rewarding (Weitz, Sujan, and Sujan 1986), task enjoyment should lead to job satisfaction. Researchers also found that salespeople who are inherently interested in a selling career tend to experiment with different

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strategies or techniques instead of sticking with a routine that has worked well in the past (e.g., Anderson and Oliver 1987; Sujan, Weitz, and Kumar 1994). Therefore, it is anticipated that task enjoyment will positively impact behavioral performance. Because the direct link between task enjoyment and outcome performance is unclear and may be dependent on other factors (Amabile, Hill, Hennessey, and Tighe 1994; Miao, Evans, and Zou 2007), a direct relationship of task enjoyment and outcome performance is not hypothesized.

Compensation seeking is a cognitive component of extrinsic motivation (Amabile, Hill, Hennessey, and Tighe 1994). Although salespeople who put high compensation as their top priority may experience enhanced competence through learning, they may fall short of relating to peers or supervisors (Anderson and Oliver 1987). In contrast, recognition seeking would have a positive impact on job satisfaction because positive feedback increases salespeople's satisfaction with their job (Jaworski and Kohli 1991). Compensation seeking is expected to enhance salesperson's behavioral and outcome performance because those who seek high compensation tend to work smart and hard (Amabile, Hill, Hennessey, and Tighe 1994). In contrast to the positive effect of compensation seeking on sales performance, recognition seeking has been found to have a negative impact on outcome performance. One possible explanation may be that those who are driven by recognition tend to be complacent with their current level of achievement and, thus, lose motivation to work hard. Recent empirical evidence in a study conducted by the author lends credence to these propositions (Miao, Evans, and Zou 2007).

H12: Challenge seeking *positively* impacts

a) job satisfaction,
b) behavioral performance,
c) outcome performance.
H13: Task enjoyment *positively* impacts
a) job satisfaction,
b) behavioral performance.
H14: Compensation seeking
a) *negatively* impacts job satisfaction,
b) *positively* impacts behavioral performance,
c) *positively* impacts outcome performance.
H15: Recognition seeking
a) *positively* impacts job satisfaction,
b) *negatively* impacts outcome performance.

Selling Effort and Job Outcomes

Increased selling effort in the form of longer work hours or increased call rate has been

shown to have a direct positive impact on outcome performance (Brown and Peterson

1994; Fang, Palmatier, and Evans 2004). While there is no *a priori* rationale for a direct

relationship between selling effort and behavioral performance (i.e., selling strategy),

there is some ambiguity about the relationship between selling effort and job satisfaction.

While some researchers argue for a direct positive impact of selling effort on job

satisfaction due to the inherent meaning of working hard (Brown and Peterson 1994),

most recent evidence reveals a "dual" mechanism where selling effort has a direct

negative but indirect positive impact on job satisfaction through outcome performance.

Using agency theory, Christen, Iyer, and Soberman (2006) argue that job satisfaction is a

proxy for utility and effort is a cost on the part of an employee. Due to the inherent

conflict of interest between the sales organization (principal) that wants the salesperson to

work hard and the salesperson (agent) who wants the financial payoff with the minimal

possible effort, agency theory would predict a direct negative but indirect positive impact

of selling effort on job satisfaction. The empirical evidence of Christen, Iyer, and

Soberman (2006) supports this contention. While recognizing contextual factors that may

moderate the relationships among selling effort – outcome performance – job satisfaction,

this study assumes the agency theory perspective on the relationship between selling

effort and job satisfaction. The above discussion is summarized in the following

hypotheses as is depicted in Figure 10.

> **H16a**: Selling effort positively affects outcome performance.
> **H16b**: Selling effort negatively affects job satisfaction.
> **H16c**: Outcome performance positively affects job satisfaction.

Figure 10
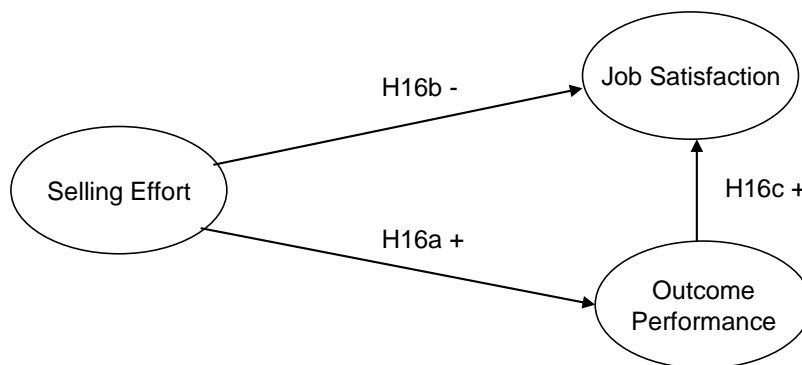
Direct Effects of Salesforce Control on Job outcomes

Since the effects of salesforce control on job outcomes are unlikely to be fully mediated

(Challagalla and Shervani 1996; Jaworski and Kohli 1991), the direct effects of

salesforce control on job outcomes are also explored (Figure 11).

Figure 11
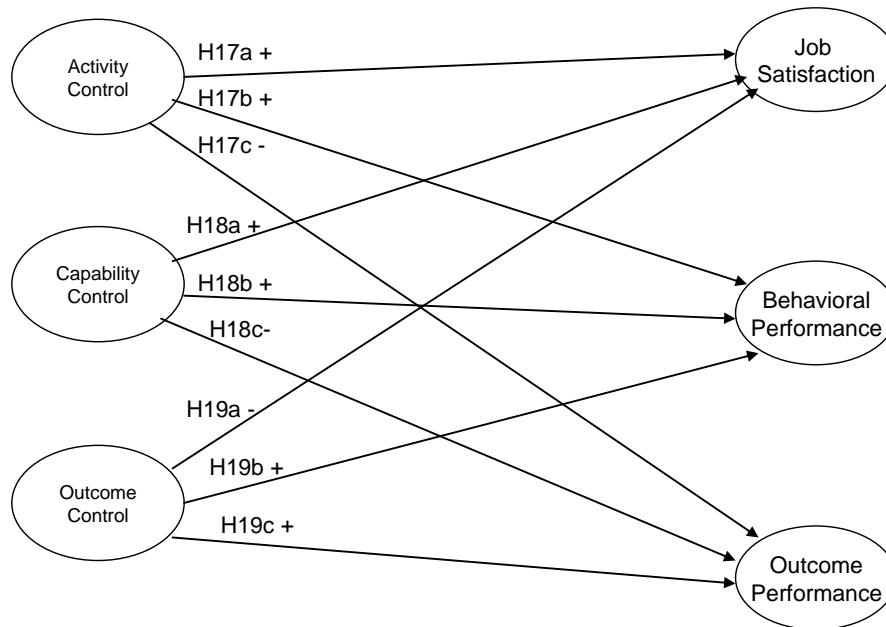
The majority of the sales control research suggests that activity control has a

positive impact on job satisfaction because it reduces role ambiguity and perceived risk

by salespeople (e.g., Challagalla and Shervani 1996). While some researchers have found

a negative impact of activity control on job satisfaction (e.g., Ramaswami 1996), the

preponderance of evidence supports a positive impact (e.g., Jaworski and Kohli 1991;

Oliver and Anderson 1994). Moreover, activity control is posited to positively impact

behavioral performance but may negatively impact immediate outcome performance due

to its inward focus which tends to reduce salespeople's direct selling time (Anderson and Oliver 1987; Oliver and Anderson 1994).

> **H17:** Activity control has
> a) a direct *positive* impact on job satisfaction,
> b) a direct *positive* impact on behavioral performance,
> c) a direct *negative* impact on outcome performance.

Capability control is intended to improve long-term skills (e.g., behavioral strategy) and to enhance perceived competence and task enjoyment, which according to cognitive evaluation theory (Deci and Ryan 1985) should lead to job satisfaction. The preponderance of evidence in marketing research concurs with this argument (e.g., Baldauf et al. 2005; Challagalla and Shervani 1996; Oliver and Anderson 1994). However, while capability control gradually improves salesperson's skills (i.e., behavioral performance), it may negatively impact short-term outcome performance because capability training takes time away from direct selling (Anderson and Oliver 1987). Empirical evidence lends further credence to this contention (e.g., Challagalla and Shervani 1996; Miao, Evans, and Zou 2007).

> **H18:** Capability control has
> a) a direct *positive* impact on job satisfaction,
> b) a direct *positive* impact on behavioral performance,
> c) a direct *negative* impact on outcome performance.

Outcome control appears to have a consistent direct positive impact on outcome performance (see Baldauf et al. 2005 for a review). However, outcome control is expected to have a direct negative impact on job satisfaction. Outcome control directs salespeople to focus more on selling outcomes rather than the selling process (Anderson and Oliver 1987). Most marketing researchers contend that outcome control tends to

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induce job stress (Jaworski and MacInnis 1989), to increase salespeople's dysfunctional

behavior (Ramaswami 1996), and to reduce job satisfaction (Oliver and Anderson 1994),

especially when environmental uncertainty is high (Basu, Lal, Srinivasan, and Staelin

1985). The impact of outcome control on behavioral performance is somewhat

ambiguous. Some researchers argue that salespeople under outcome control may not be

willing to experiment with and learn new selling approaches due to pressure to

demonstrate immediate results (Anderson and Oliver 1987; Weitz, Sujan, and Sujan

1986). Empirical evidence does not seem to concur as outcome control may actually

increase a salesperson's learning orientation (Kohli, Shervani, and Challagalla 1998) and

customer interaction quality (Bonner 2005). Therefore, it is expected that outcome

control will enhance a salesperson's behavioral performance.

> **H19:** Outcome control has
> a) a direct *negative* impact on job satisfaction,
> b) a direct *positive* impact on behavioral performance,
> c) a direct *positive* impact on outcome performance.

III. 3. A Contingency Perspective – Moderators

Selling Task and Competitive Intensity

The impact on performance of adaptive selling and selling effort should not be investigated independent of important boundary conditions. In the contingency framework developed by Weitz (1981), the nature of the selling task in terms of customer characteristics and the competitiveness of the selling environment constitute important moderators of selling effectiveness. The contingency perspective developed in this study, thus, considers the influence of these two boundary conditions.

The selling task can be described by the percentage of new customers in the client mix a salesperson serves (Johnson and Selnes 2005; Reinartz, Thomas, and Kumar 2005). To the extent that long-term growth and profitability stems from converting weaker customer relationships to stronger ties, relationship marketing investment (i.e., adaptive selling) should be directed toward new accounts, especially from a benefit versus cost perspective (Reinartz, Thomas, and Kumar 2005). As Johnson and Selnes (2004, p.8) contend: "[T]he costs incurred to gain customers pale in comparison to the revenues that customers generate over time."

From a relational exchange perspective, when a higher percentage of customers served by a salesperson are in early relational stages (i.e., new customers), more adaptation on the part of the salesperson is necessary in order to reduce the buyer's perceived uncertainty (Porter, Wiener, and Frankwick 2003), increase the salesperson's trustworthiness (Hallen, Johanson, and Seyed-Mohamed 1991), and enhance the buyer's relationship commitment to the salesperson (Morgan and Hunt 1994). Because the salesperson is often the key boundary-spanner between the sales organization and its

customers (e.g., Singh 1993), adaptive selling should be more effective when the selling

task involves a higher percentage of new accounts. In contrast, the effectiveness of

selling effort such as higher call rates will be significantly reduced when dealing with

new customers due to buyers' concerns with the seller's ability to adapt (Hallen,

Johanson, and Seyed-Mohamed 1991).

> **H20a:** When the selling task involves a higher percentage of new customers, adaptive selling has a stronger positive impact on outcome performance.
> **H20b:** When the selling task involves a higher percentage of new customers, selling effort has a weaker positive impact on outcome performance.

The moderating effect of competitive intensity on the selling effort – outcome

performance relationship is reasonable to anticipate. When the marketplace is

competitive, buyers have many alternatives. Therefore, the salesperson needs to exert a

much higher level of selling effort in order to achieve the same level of sales expected in

an otherwise noncompetitive environment, resulting in a weaker positive impact of

selling effort on outcome performance (Atuahene-Gima 1998). In contrast, a salesperson

that practices adaptive selling in a competitive environment may outperform competition

due to his/her ability to better satisfy customers' changing needs, other things being

equal. In a noncompetitive environment, however, the customers may not have too many

alternatives and therefore may be stuck with the selling firm. As such, the positive effect

of adaptive selling becomes less pronounced in a noncompetitive selling environment.

> **H21a**: The positive impact of adaptive selling on outcome performance is stronger when competitive intensity is high.
> **H21b**: The positive impact of selling effort on outcome performance is weaker when competitive intensity is high.

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III. 4. Covariates

Salespeople's outcome performance may be influenced by external variables beyond their direct control. Characteristics of the focal firm's product offerings (e.g., quality, price, and service) and environmental factors (e.g., market dynamism) are uncontrollable factors by the salespeople yet may directly influence sales performance (Cannon and Perreault Jr. 1999; Spiro and Weitz 1990). Moreover, salesperson's experience has been demonstrated to have an impact on sales performance (Cron, Dubinsky, and Michaels 1988). Therefore, these variables will be controlled for as covariates.

CHAPTER IV: METHODOLOGY

IV. 1. Overview

This research was conducted within the US manufacturing sector (SIC 20 – 39) using industrial salespeople as respondents and their sales managers as informants. This context is appropriate for this study because the proposed theoretical framework requires variability across selling contexts that employ different combinations of behavioral and outcome control.

The study employs a cross-sectional mail design because (1) it would be hard to recruit a large number of knowledgeable salespeople/sales managers in an experimental setting and (2) the study needs adequate sample variability to enhance generalizability across different industries and companies. Although cross-sectional data will limit the researcher's ability to interpret causal relationships among theoretical constructs, the proposed framework is derived from theory and, therefore, the causal inference is less of a concern compared to the hypothesized interrelationships among constructs. The multi-source data collected from sales managers and their salespeople can reduce the concern of common method variance (Podsakoff, MacKenzie, Lee, and Podsakoff 2003). Sales managers were pre-qualified for participation in this study through a professional marketing research company. A survey package including sales manager/salesperson surveys was then sent to each of the participating sales managers for distribution to up to three of their salespeople. A two-wave mailing was administered with appropriate coding on the surveys in order to match sales manager and salesperson data.

IV. 2. Sampling and Data Collection Procedures

A random name list of industrial sales managers from 4,000 independent companies with SIC code 20 – 39 was purchased from a leading list broker. To maximize sample variability, the list broker was instructed to provide only one sales manager from each of the 4,000 randomly selected companies. Therefore, the initial sample size of sales managers obtained from the list broker was 4,000. Next, a professional marketing research company was recruited to pre-qualify from the list sales managers who would agree to participate in the study. The pre-qualification procedure ensured that (1) the respondent is a sales manager, (2) he or she directly supervises salespeople, and (3) the sales manager is interested and willing to fill out the sales manager survey and to distribute salesperson surveys to up to three salespeople he or she directly supervises. To encourage participation, sales managers were promised to receive a copy of the summary of the study findings, and the participating sales managers and their salespeople will be eligible for a raffle for one of the ten $25 gift certificates.

The marketing research company contacted a total of 2,213 sales managers by telephone (1,561 sales managers were directly talked to on the phone and 652 were left voice messages with a toll free 800 call back number). This pre-qualification procedure generated a total of 471 qualified sales managers who subsequently provided a pool of 1,371 salespeople for this study. To ensure adequate variance of the moderator *selling task*, I randomly assigned 240 sales managers to condition 1 and 231 sales managers to condition 2 (Table 4.1) where sales managers in condition 1 were asked to identify salespeople who serve a higher percentage of new customers in their customer portfolio, whereas sales managers in condition 2 were asked to provide salespeople who deal with a

lower percentage of new accounts in their customer portfolio. Since the SIC codes (SIC 20 – 39) used in this study cover a wide range of industries, variance in competitive intensity was assumed and therefore no manipulation was administered to the moderating variable *competitive intensity*.

Table 4.1

Condition	Survey Color	Description
1	White	Salespeople with higher % of new customers in their client portfolio relative to average distribution
2	Blue	Salespeople with lower % of new customers in their client portfolio relative to average distribution

In order to match the multi-source data from salespeople and their sales managers, the sales manager and the salesperson surveys were appropriately coded such that the identification codes would not be so conspicuous to the salespeople, yet allowing the researcher to easily match the dyadic surveys. In addition, different colors of the surveys were used to differentiate respondents in two different conditions. Sales managers were instructed to follow the codes in completing the sales manager survey and in distributing surveys to the corresponding salespeople. To ensure salespeople's confidentiality, participating salespeople were asked to return the completed surveys directly to the university where the research is conducted.

Data collection began three days after the completion of the telephone pre-qualification. Specifically, an envelope enclosing a cover letter providing instructions to the sales manager, a copy of sales manager survey, and a postage-paid return envelope was sent to each of the 471 sales managers identified in the pre-qualification process.

Also enclosed in each envelope were three sets of salesperson cover letters, salesperson

surveys, and postage-paid return envelopes. Three weeks after the first mailing, follow-up

calls and a reminder package enclosing the same materials in the first mailing was sent to

those sales managers who had not responded or whose salespeople had not returned the

completed surveys. This two-wave mailing generated 223 completed salesperson surveys

(a response rate of 16.3%) and 100 completed sales manager surveys (a response rate of

21.2%) providing a total of 282 individual salesperson performance evaluations. Of these

responses, 195 matched data points were identified, for a combined response rate of

14.2%. Table 4.2 summarizes the data collection and response rate.

Table 4.2
Data Collection Summary

Target	Source	Data Received	Response Rate
Sales Managers	Sample of 471 pre-qualified sales managers across SIC codes 20 to 39[a]	100[b]	21.2%
Salespeople	Sample of 1371 salespeople provided by 471 pre-qualified sales managers	223	16.3%
Sales Manager-Salesperson Matched Data	Data received from both sources for matched dyads	195	14.2%

[a]A total of 2,213 sales managers were called by telephone, of whom 1,561 were talked to and 652 were left with voice messages and a toll-free 800 callback number

[b]The 100 completed sales manager surveys provided a total of 282 salesperson performance evaluations

The sample represented a diverse array of industries with SIC codes 20-39,

including aerospace, agriculture, automotive, biopharmaceutical, chemical products,

construction, electronics, food manufacturing, machinery and instruments, medical

supplies, and office products, etc. From the data reported by the sales managers, the

average number of employees per company was 1,079, with an average market share of

31.34%, and an average annual sales growth rate of 9.82%. The data reported by the salespeople indicated that the majority of salespeople are male (77.9%), which is consistent with sample characteristics from similar sales research (Fang, Palmatier, and Evans 2004; Miao, Evans, and Zou 2007). The average full-time sales experience is 16 years, and the salespeople fall into four age groups: less than 25 (3.6%), 26 – 39 (32.8%), 40 – 55 (41.5%), and 56 and over (22.1%). These salesperson characteristics indicate that the sample is composed primarily of experienced salespeople (Cron 1984). In order to assess potential non-response bias, I first compared the mean responses of matched (n=195) and unmatched salespeople (n=28) using a t test (e.g., Bettencourt, Brown, and MacKenzie 2005). No significant differences (i.e., $p > .10$) were found in salesperson characteristics (i.e., sales experience) or in any of the twelve latent constructs in the mediation model. Next, I compared the mean responses of matched (n=195) and unmatched (n= 87) sales manager data using a t test. No significant differences were found in company and industry characteristics (i.e., company size, product offerings, market share, competitive intensity, and market dynamism) or salespeople's performance. Therefore, these results provide surrogate information for non-response bias (Armstrong and Overton 1977), which is not likely a serious concern in this study.

IV. 3. Measurement Scales

Whenever possible, key constructs are measured using existing scales. All the items used to measure the constructs were close-ended with 7 point Likert-type scales (see appendix for salesperson survey and sales manager survey).

Salesperson – Reported Measurement Scales

Salespeople reported on salesforce control systems, adaptive selling behavior, I/E motivation, selling effort, job satisfaction, behavioral performance, outcome performance, percentage of new customers in the customer portfolio, competitive intensity of the selling environment, and demographic variables such as age, gender, and total full-time sales experience. Using salespeople to report on salesforce control systems is consistent with the literature (e.g., Challagalla and Shervani 1996; Jaworski and Kohli 1991; Oliver and Anderson 1994).

The measures for all three *sales control constructs* are adapted from Kohli, Shervani, and Challagalla (1998). Specifically, activity control ($\alpha = .863$), capability control ($\alpha = .920$), and outcome control ($\alpha = .935$) were each measured with five items with a 7-point Likert scale anchored with *Strongly Disagree* = 1 and *Strongly Agree* = 7.

The a*daptive selling* scale is adapted from Spiro and Weitz (1990) but focuses on the adaptive selling behavior dimension due to the non-unidimensionality problem of the original scale (Marks, Vorhies, and Badovick 1996). The 7-item adaptive selling behavior scale ($\alpha = .809$) asks salespeople's actual adaptive behavior in the selling process with a 7-point Likert scale anchored with *Strongly Disagree* = 1 and *Strongly Agree* = 7. Measures for the first-order I/E motivation were adapted for the sales context from

Amabile et al.'s (1994) scale development study on motivation. Specifically, challenge seeking (α = .908), task enjoyment (α = .901), compensation seeking (α = .871), and recognition seeking (α = .840) were each measured with 4 items using a 7-point Likert scale anchored with *Strongly Disagree* = 1 and *Strongly Agree* = 7. Selling effort (α = .733) was measured with three items adapted from Sujan, Weitz, and Kumar (1994). The items use a 7-point Likert scale anchored with *Strongly Disagree* = 1 and *Strongly Agree* = 7.

Job satisfaction (α = .919) was measured with four items adapted from Ramaswami and Singh (2003) using a 7-point Likert scale anchored with *Strongly Disagree* = 1 and *Strongly Agree* = 7. Behavioral performance (α = .765) and outcome performance (α = .862) were each measured with 5 items adapted from Cravens, Ingram, LaForge, and Young (1993) using a 7-point Likert scale anchored at *Needs Improvement* = 1 and *Outstanding* = 7. Competitive intensity (α = .827) was measured with 4 items using a 7-point Likert scale anchored with *Strongly Disagree* = 1 and *Strongly Agree* = 7 adapted from Jaworski and Kohli's (1993) study on market orientation. These items ask salespeople the extent to which their selling environment is competitive in terms of competing firms' ability to differentiate. Percentage of new customers in the customer portfolio was measured with a single item that asked the salesperson to provide an approximate percentage number.

Sales Manager – Reported Measurement Scales

Sales managers were asked to provide performance evaluations of their salespeople who participated in this study. Sales managers evaluated salespeople's behavioral performance ($\alpha = .813$) and outcome performance ($\alpha = .899$) with only minor wording changes from salesperson's survey. In addition to providing evaluations of salesperson performance, sales managers were also asked to provide background information of company and industry characteristics such as number of employees, relative product quality, price, service level, market share of the main product line, annual sales growth rate, and market dynamism. Single items were used to measure these variables.

IV. 4. Measurement Models

An overall measurement model including all twelve latent constructs was estimated using confirmatory factor analysis (CFA) in EQS 6.1 for windows. This measurement model was estimated by the procedure of maximum likelihood (ML) followed by reweighted generalized least square (ERLS) because ERLS estimates are equivalent to ML for normal data and superior to ML for non-normal data (Singh 1993; Zou and Cavusgil 2002).

Due to the large number of latent constructs relative to the sample size of 195, I conducted three sub sets of confirmatory factor analyses before subjecting all twelve latent constructs to the overall CFA estimate (e.g., Kim, Cavusgil, and Calantone 2006). Specifically, three sales control constructs were estimated in one CFA, followed by another CFA for adaptive selling behavior, selling effort, challenge seeking, task enjoyment, compensation seeking, and recognition seeking. A third CFA was estimated for job satisfaction, behavioral performance, and outcome performance. In the first CFA model, one item of activity control and one item of capability control were dropped due to significant cross loadings according to modification indices. The CFA model with the remaining items indicated an acceptable fit ($\chi^2_{(62)} = 111.812$, p<.01; Normed Fit Index [NFI] = .972, Comparative Fit Index [CFI] = .987, Root Mean-Square Error of Approximation [RMSEA] = .064).

Next, a second CFA model was estimated for the six mediating constructs depicted in Figure 1 – adaptive selling behavior, selling effort, challenge seeking, task enjoyment, compensation seeking, and recognition seeking. The modification indices indicated that two items of adaptive selling behavior, one item of compensation seeking,

and one item of recognition seeking had significant cross loading problems. Moreover, one adaptive selling item had a low loading (i.e., <.50). Therefore, these five items were dropped. The subsequently re-estimated CFA model demonstrated an acceptable fit ($\chi^2_{(174)}$ = 238.590, p<.01; Normed Fit Index [NFI] = .942, Comparative Fit Index [CFI] = .983, Root Mean-Square Error of Approximation [RMSEA] = .044).

A third CFA model was estimated for salesperson job satisfaction, behavioral performance, and outcome performance. While sales managers provided salespeople's behavioral and outcome performance evaluations, it has been demonstrated that a significant proportion of performance variance is associated with biases of the supervisor (e.g., halo or leniency) rather than with the "true performance" of the employee (Scullen, Mount, and Goff 2000), especially in settings where supervisor's knowledge of employee's behavior during customer encounters is incomplete (Bettencourt, Brown, and MacKenzie 2005). Given that sales managers have incomplete knowledge of salespeople's behavior during the selling process (Ramaswami 1996), the subjective performance rating obtained in this study is therefore subject to supervisor idiosyncratic biases. Therefore, following the recommendation of Scullen, Mount, and Goff (2000) that averaging performance ratings across several raters can significantly reduce the effects of such biases while keeping the true performance variance unchanged, I computed the average of behavioral and outcome performance rated by sales managers and salespeople themselves (inter-rater agreement ratio is greater than .80 as recommended by Boyer and Verma 2000) on an item-by-item basis (c.f., Bettencourt, Brown, and MacKenzie 2005). The averaged responses to each performance item were

then used in the CFA estimation[1]. After dropping one outcome performance item due to high cross loading, the CFA model demonstrated an acceptable fit ($\chi^2_{(62)}$ = 110.829, p<.01; Normed Fit Index [NFI] = .966, Comparative Fit Index [CFI] = .985, Root Mean-Square Error of Approximation [RMSEA] = .064).

Finally, an overall measurement model including all twelve latent constructs was estimated using the same procedure. The modification indices revealed that one outcome control item and one behavioral performance item had significant cross loading problems and were subsequently dropped. The final overall CFA model demonstrated a satisfactory fit ($\chi^2_{(879)}$ = 1164.881, p<.01; Non-Normed Fit Index [NNFI] = .982, Comparative Fit Index [CFI] = .984, Root Mean-Square Error of Approximation [RMSEA] = .041). All *a priori* factor loadings are positive, large, and significant (p < .001), suggesting convergent validity (Bagozzi and Yi 1988). In addition, the average variance extracted (AVE) for each construct exceeds .5, further demonstrating convergent validity (Fornell and Larcker 1981). To assess discriminant validity, two approaches were followed. First, for each pair of factors, a one-factor model was compared to a two-factor model using chi-square difference tests. If the two-factor model fits the data significantly better, the discriminant validity is established for the two factors (Bagozzi, Yi, and Philips 1991). The results indicated that all chi-square difference tests were significant and, thus, provided evidence of discriminant validity. Second, an alternative approach to testing discriminant validity was administered following Fornell and Larcker's (1981) recommendation. That is, the average variance extracted by each of the latent constructs is larger than its shared variance (i.e., squared intercorrelation) with other constructs

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[1] Sales manager repeated measure bias was ruled out using mixed models. See appendix.

(Fornell and Larcker 1981). These results support discriminant validity of all the latent constructs.

The descriptive statistics and construct validity tests are summarized in Table 4.3 and Table 4.4. Table 4.5 presents all multi-item constructs used in the final model and their factor loadings and t values.

Table 4.3

Construct Means, Standard Deviations, and Correlation Table (N=195)

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. ACTCNL	5.244	1.196	0.863											
2. CAPCNL	4.692	1.434	0.670**	0.920										
3. OUTCNL	5.249	1.389	0.689**	0.634**	0.935									
4. CHALLG	5.503	1.003	0.352**	0.349**	0.395**	0.908								
5. COMP	5.087	1.320	0.234**	0.21**	0.320**	0.204**	0.871							
6. JSAT	5.400	1.057	0.437**	0.371**	0.392**	0.473**	0.215**	0.919						
7. RECOG	4.685	1.341	0.189**	0.296**	0.315**	0.294**	0.184*	0.380**	0.840					
8. ENJOY	5.187	1.130	0.359**	0.371**	0.403**	0.494**	0.214**	0.703**	0.503**	0.901				
9. ADBEH	5.501	0.998	0.218**	0.132	0.209**	0.335**	0.123	0.406**	0.128	0.348**	0.809			
10. SEFFORT	5.099	1.080	0.183*	0.161*	0.232**	0.464**	0.254**	0.372**	0.325**	0.429**	0.386**	0.733		
11. BPERF	5.381	0.688	0.374**	0.245**	0.393**	0.388**	0.223**	0.440**	0.245**	0.365**	0.302**	0.343**	0.820	
12. OUTPERF	5.133	0.907	0.321**	0.172*	0.311**	0.242**	0.272**	0.371**	0.113	0.272**	0.243**	0.243**	0.673**	0.902

* Construct reliability is on the diagonal. Correlations flagged with "*" are significant at p< .05 (two-tailed) and with "**" are significant at p<. 01 (two-tailed)

** ACTCNL = Activity Control; CAPCNL = Capability Control; OUTCNL = Outcome Control; CHALLG = Challenge Seeking; COMP = Compensation Seeking; JSAT = Job Satisfaction; RECOG = Recognition Seeking; ENJOY = Task Enjoyment; ADBEH = Adaptive Selling Behavior; SEFFORT = Selling Effort; BPERF = Behavioral Performance (average rating of salesperson and sales manager); OUTPERF = Outcome Performance (average rating of salesperson and sales manager).

*** Measurement model fit indices: Chi-Square (df = 879) = 1164.881, p<.01; NNFI = .982; CFI = .984; RMSEA = .041

Table 4.4

Discriminant Validity (N=195)

	1	2	3	4	5	6	7	8	9	10	11	12
1. ACTCNL	**0.636**											
2. CAPCNL	0.449	**0.745**										
3. OUTCNL	0.475	0.402	**0.782**									
4. CHALLG	0.124	0.122	0.156	**0.717**								
5. COMP	0.055	0.044	0.102	0.042	**0.705**							
6. JSAT	0.191	0.138	0.154	0.224	0.046	**0.743**						
7. RECOG	0.036	0.088	0.099	0.086	0.034	0.144	**0.648**					
8. ENJOY	0.129	0.138	0.162	0.244	0.046	0.494	0.253	**0.699**				
9. ADBEH	0.048	0.017	0.044	0.112	0.015	0.165	0.016	0.121	**0.593**			
10. SEFFORT	0.033	0.026	0.054	0.215	0.065	0.138	0.106	0.184	0.149	**0.544**		
11. BPERF	0.140	0.060	0.154	0.151	0.050	0.194	0.060	0.133	0.091	0.118	**0.560**	
12. OUTPERF	0.103	0.030	0.097	0.059	0.074	0.138	0.013	0.074	0.059	0.059	0.453	**0.710**

* Bold numbers on the diagonal show the AVEs. Numbers below the diagonal are squared correlations

** ACTCNL = Activity Control; CAPCNL = Capability Control; OUTCNL = Outcome Control; CHALLG = Challenge Seeking; COMP = Compensation Seeking; JSAT = Job Satisfaction; RECOG = Recognition Seeking; ENJOY = Task Enjoyment; ADBEH = Adaptive Selling Behavior; SEFFORT = Selling Effort; BPERF = Behavioral Performance (average rating of salesperson and sales manager); OUTPERF = Outcome Performance (average rating of salesperson and sales manager).

*** Measurement model fit indices: Chi-Square (df = 879) = 1164.881, p<.01; NNFI = .982; CFI = .984; RMSEA = .041

Table 4.5

Measurement Model Items and Factor Loadings

Construct	Factor Loading[1]	t-Value
Activity control (Salesperson-reported)		
My manager informs me about the sales activities I am expected to perform	0.734	N/A
My manager monitors how I perform required sales activities	0.873	11.752
My manager informs me on whether I meet his/her expectations on sales activities	0.862	11.606
My manager readjusts my sales activities when necessary	0.698	9.269
Capability control (Salesperson-reported)		
My manager periodically evaluates the selling skills I use to accomplish a task (e.g., how I negotiate)	0.809	N/A
My manager provides guidance on ways to improve my selling skills and abilities	0.886	14.167
My manager evaluates how I make sales presentations and communicate with customers	0.886	14.150
My manager assists me by illustrating why using a particular sales approach may be effective	0.869	13.780
Outcome control (Salesperson-reported)		
My manager tells me about the expected level of achievement on sales volume or market share targets	0.830	N/A
My manager monitors my performance on achieving sales volume or market share targets	0.867	14.588
I receive frequent feedback on whether I am meeting expected achievement on sales volume or market share targets	0.931	16.437
My manager ensures that I am aware of the extent to which I attain sales volume or market share targets	0.907	15.740
Challenge seeking (Salesperson-reported)		
I enjoy tackling sales problems that are completely new to me	0.829	N/A
I enjoy trying to solve complex sales problems	0.862	13.888
The more difficult the sales problem, the more I enjoy trying to solve it	0.878	14.255
I prefer work that stretches my abilities	0.817	12.856
Task enjoyment (Salesperson-reported)		
What matters most to me is enjoying my selling job	0.839	N/A
It is important for me to be able to enjoy my selling job	0.836	13.548
I enjoy selling for the pleasure of it	0.806	12.827
It is the experience of selling that gives me the most pleasure	0.861	14.162
Compensation seeking (Salesperson-reported)		
I am strongly motivated by the money I can earn through my selling job	0.726	N/A
I sell because I want to make lots of money	0.914	11.251
Money is the main motivator of my selling job	0.868	11.118
Recognition seeking (Salesperson-reported)		
I want fellow workers to find out how good I really can be at work	0.890	N/A
To me, success means high respect from my supervisor	0.787	11.493
It is important that fellow workers look up to me	0.729	10.553

[1]Standardized factor loadings

Measurement model fit indices: Chi-Square (df = 879) = 1164.881, p<.01; NNFI = .982; CFI = .984; RMSEA = .041

Table 4.5 (con't)

Measurement Model Items and Factor Loadings

Construct	Factor Loading[1]	t-Value
Adaptive selling behavior (Salesperson-reported)		
I do *not* use a set sales approach	0.567	N/A
I vary my sales style from situation to situation	0.868	8.145
I use different sales strategies with different customers	0.930	8.301
I change my sales approach from one customer to another	0.656	6.898
Selling effort (Salesperson-reported)		
I work long hours to meet my sales objectives	0.559	N/A
I do not give up easily when I encounter a difficult customer	0.926	7.328
I work untiringly at selling a customer until I get an order	0.680	6.831
Job satisfaction (Salesperson-reported)		
My job is satisfying	0.855	N/A
My job is exciting	0.895	15.961
I am really doing something worthwhile in my job	0.855	14.734
The work I do gives me a sense of accomplishment	0.842	14.360
Behavioral performance (average of salesperson and sales manager responses)		
Listening attentively to identify and understand the real concerns of customers	0.815	N/A
Using established contacts to develop new customers	0.620	8.448
Communicating sales presentation clearly and concisely	0.751	10.626
Providing satisfying solutions to customers' problems	0.792	11.329
Outcome performance (average of salesperson and sales manager responses)		
Contribution to company's market share	0.903	N/A
Generating a high level of dollar sales	0.925	19.152
Generating sales of new products	0.693	11.190
Exceeding sales targets	0.830	15.366

[1] Standardized factor loadings

Measurement model fit indices: Chi-Square (df = 879) = 1164.881, p<.01; NNFI = .982; CFI = .984; RMSEA = .041

CHAPTER V: RESULTS

The results chapter is organized in three sections. The first section presents hypotheses

testing of the main effects and moderating effects depicted in Figure 1. The second

section establishes the critical mediating role of I/E motivation by comparing the

dissertation model with a rival model that treats salesperson I/E motivation as

independent variables (i.e., stable trait). The third section proceeds with a *post hoc*

analysis due to model respecification.

V. 1. Hypotheses Testing

The model depicted in Figure 1 was tested with the structural equation modeling methodology in EQS 6.1 for windows. Items for each latent construct in the overall measurement model (Table 4. 5) were averaged as a single indicator for the structural path model analysis. The five control variables – sales experience, relative product quality, service level, price, and market dynamism – were also included in the simultaneous estimation of the structural model. Like in the measurement model, the structural path model was estimated with the procedure of maximum likelihood (ML) followed by reweighted generalized least square (ERLS) (Singh 1993; Zou and Cavusgil 2002).

The initial structural path model demonstrated a moderate fit ($\chi^2_{(57)}$ = 152.034, p<.01; Normed Fit Index [NFI] = .911, Comparative Fit Index [CFI] = .939, Root Mean-Square Error of Approximation [RMSEA] = .094). Therefore, the modification indices were referred to for respecification of the structural model. The modification indices suggest that outcome control has a significant positive impact on challenge seeking and task enjoyment, in addition to its *a priori* hypothesized positive impact on compensation seeking. The sample characteristics reveal that the majority of salespeople in this study are quite experienced (i.e., average sales experience is 16 years). According to career stage theory (Cron 1984), experienced salespeople have typically grasped the know-how of selling. By being able to creatively use their skills to achieve superior results under outcome control, those salespeople are more likely to experience perceived competence and task involvement (Cron 1984; Cron, Dubinsky, and Michaels 1988), thereby leading to higher challenge seeking and task enjoyment. SDT (Ryan and Deci 2000) also suggests

that when outcome reward is interpreted as a confirmation of one's competence, it can actually enhance intrinsic motivation. Therefore, given the sample characteristics and the theoretical guidance, these two paths were added[2]. In addition, the modification indices suggest that capability control has a positive impact on recognition seeking. This is possible because capability evaluation is more subjective in nature (Challagalla and Shervani 1996), making salient the importance of favorable supervisor impression of one's selling capability. Therefore, the path of capability control – recognition seeking was also added. Finally, five significant paths from control variables to I/E motivation and performance were added during model respecification. The final calibrated structural model demonstrated an acceptable fit ($\chi^2_{(49)}$ = 96.778, p<.01; Normed Fit Index [NFI] = .943, Comparative Fit Index [CFI] = .969, Root Mean-Square Error of Approximation [RMSEA] = .072). Table 5.1 summarizes the structural model results.

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[2] Sales experience was examined as a moderator in *post hoc* analysis.

Table 5.1
Structural Model Results (N = 195)

Main Effects	Hypothesized Path	Coefficient[1]	t - Value	Conclusion
Hypothesis 1	Activity Control ⟶ Adaptive Selling	0.150	1.395	Not supported
Hypothesis 2	Capability Control ⟶ Adaptive Selling	-0.136	-1.341	Not supported
Hypothesis 3	Outcome Control ⟶ Adaptive Selling	0.027	0.248	Not supported
Hypothesis 4a	Activity Control ⟶ Challenge Seeking	0.174	1.855*	Opposite sign
Hypothesis 4b	Activity Control ⟶ Recognition Seeking	-0.107	-1.230	Not supported
Hypothesis 5a	Capability Control ⟶ Task Enjoyment	0.195	2.261*	Supported
Hypothesis 5b	Capability Control ⟶ Compensation Seeking	0.050	0.556	Not supported
Hypothesis 6	Outcome Control ⟶ Compensation Seeking	0.300	3.240**	Supported
Hypothesis 7a	Challenge Seeking ⟶ Compensation Seeking	0.040	0.530	Not supported
Hypothesis 7b	Task Enjoyment ⟶ Recognition Seeking	0.451	6.546**	Supported
Hypothesis 8a	Activity Control ⟶ Selling Effort	0.059	0.583	Not supported
Hypothesis 8b	Capability Control ⟶ Selling Effort	-0.100	-1.055	Not supported
Hypothesis 8c	Outcome Control ⟶ Selling Effort	-0.013	-0.127	Not supported
Hypothesis 9a	Challenge Seeking ⟶ Adaptive Selling	0.203	2.644**	Supported
Hypothesis 9b	Task Enjoyment ⟶ Adaptive Selling	0.263	3.097**	Supported
Hypothesis 9c	Compensation Seeking ⟶ Adaptive Selling	0.017	0.224	Not supported
Hypothesis 9d	Recognition Seeking ⟶ Adaptive Selling	-0.058	-0.714	Not supported
Hypothesis 10a	Challenge Seeking ⟶ Selling Effort	0.394	5.444**	Supported
Hypothesis 10b	Compensation Seeking ⟶ Selling Effort	0.143	2.062*	Supported
Hypothesis 10c	Recognition Seeking ⟶ Selling Effort	0.214	3.111**	Supported
Hypothesis 11a	Adaptive Selling ⟶ Job Satisfaction	0.146	2.662**	Supported
Hypothesis 11b	Adaptive Selling ⟶ Behavioral Performance	0.130	1.930*	Supported
Hypothesis 11c	Adaptive Selling ⟶ Outcome Performance	0.125	1.794*	Supported
Hypothesis 12a	Challenge Seeking ⟶ Job Satisfaction	0.086	1.405	Not supported
Hypothesis 12b	Challenge Seeking ⟶ Behavioral Performance	0.186	2.632**	Supported
Hypothesis 12c	Challenge Seeking ⟶ Outcome Performance	0.071	0.904	Not supported
Hypothesis 13a	Task Enjoyment ⟶ Job Satisfaction	0.539	8.543**	Supported
Hypothesis 13b	Task Enjoyment ⟶ Behavioral Performance	0.112	1.842*	Supported
Hypothesis 14a	Compensation Seeking ⟶ Job Satisfaction	0.021	0.387	Not supported
Hypothesis 14b	Compensation Seeking ⟶ Behavioral Performance	0.052	0.776	Not supported
Hypothesis 14c	Compensation Seeking ⟶ Outcome Performance	0.132	1.827*	Supported
Hypothesis 15a	Recognition Seeking ⟶ Job Satisfaction	0.039	0.646	Not supported
Hypothesis 15b	Recognition Seeking ⟶ Outcome Performance	-0.053	-0.863	Not supported

[1]Standardized path coefficient
* p<.05 (one-sided)
** p<.01 (one-sided)
Structural Model Fit Indices: Chi-Square (df=49) = 96.778, p<.01; NFI = .943; CFI = .969; RMSEA = .072

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Table 5.1 (con't)
Structural Model Results (N = 195)

Main Effects	Hypothesized Path		Coefficient[1]	t - Value	Conclusion
Hypothesis 16a	Selling Effort ⟶	Outcome Performance	-0.001	-0.016	Not supported
Hypothesis 16b	Selling Effort ⟶	Job Satisfaction	0.006	0.095	Not supported
Hypothesis 16c	Outcome Performance ⟶	Job Satisfaction	0.129	2.309*	Supported
Hypothesis 17a	Activity Control ⟶	Job Satisfaction	0.124	1.558	Not supported
Hypothesis 17b	Activity Control ⟶	Behavioral Performance	0.158	1.612	Not supported
Hypothesis 17c	Activity Control ⟶	Outcome Performance	0.191	1.841*	Supported
Hypothesis 18a	Capability Control ⟶	Job Satisfaction	0.048	0.645	Not supported
Hypothesis 18b	Capability Control ⟶	Behavioral Performance	-0.120	-1.327	Not supported
Hypothesis 18c	Capability Control ⟶	Outcome Performance	-0.133	-1.369	Not supported
Hypothesis 19a	Outcome Control ⟶	Job Satisfaction	-0.039	-0.505	Not supported
Hypothesis 19b	Outcome Control ⟶	Behavioral Performance	0.215	2.228*	Supported
Hypothesis 19c	Outcome Control ⟶	Outcome Performance	0.175	1.715*	Supported

Control Variable Path	Coefficient[1]	t - Value	Conclusion
Sales Experience ⟶ Outcome Performance	0.097	1.741*	Supported
Product Quality ⟶ Outcome Performance	0.135	2.133*	Supported
Service Level ⟶ Outcome Performance	0.083	1.138	Not supported
Price ⟶ Outcome Performance	0.047	0.781	Not supported
Market Dynamism ⟶ Outcome Performance	0.032	0.566	Not supported

Additional Significant Path By Modification Indices	Coefficient[1]	t - Value	Conclusion
Outcome Control ⟶ Challenge Seeking	0.296	3.167**	Supported
Outcome Control ⟶ Task Enjoyment	0.268	3.115**	Supported
Capability Control ⟶ Recognition Seeking	0.188	2.117*	Supported
Price ⟶ Challenge Seeking	0.14	2.044*	Supported
Sales Experience ⟶ Task Enjoyment	0.177	2.632**	Supported
Price ⟶ Compensation Seeking	0.251	3.539**	Supported
Service Level ⟶ Recognition Seeking	(-.142)	(-2.208)*	Supported
Service Level ⟶ Behavioral Performance	0.218	3.439**	Supported

[1]Standardized path coefficient
* p<.05 (one-sided)
** p<.01 (one-sided)
Structural Model Fit Indices: Chi-Square (df=49) = 96.778, p<.01; NFI = .943; CFI = .969; RMSEA = .072

Sales Control Systems and Mediating Variables

Hypotheses 1 – 10c investigate the impact of activity, capability, and outcome control on salesperson's adaptive selling behavior, selling effort, and I/E motivation, as well as the interrelationships between I/E motivation and adaptive behavior and selling effort.

H1 states that activity control negatively impacts adaptive selling behavior. This hypothesis was not supported because the path coefficient was not significant (standardized path coefficient [SPC] = .150, n.s.). Similarly, H2 (SPC = -.136, n.s.) and H3 (SPC = .027, n.s.) were not supported because capability control and outcome control did not have a significant impact on adaptive selling behavior. These results indicated that sales control does not seem to have a direct influence on salesperson's adaptive selling behavior. H4a predicts that activity control has a negative impact on challenge seeking, but the results indicated a significant positive relationship (SPC = .174, p < .05). This suggests that industrial selling is a unique environment where fulfilling required selling activities (e.g., call rate, sales report) demonstrates salespeople's ability to meet daily challenges (Kohli, Shervani, and Challagalla 1998). This positive relationship was also reported in recent sales control research (Miao, Evans, and Zou 2007) indicating that the objective activity goals may enhance a salesperson's challenge seeking on the job. H4b was not supported because activity control did not have a significant relationship with recognition seeking (SPC = -.107, n.s.). Instead, capability control was found to have a positive impact on recognition seeking, which indicates that the mastery of selling skills is more likely to gain supervisor's favorable appraisal compared to simply fulfilling required selling activities. H5a predicts that capability control has a positive impact on task enjoyment and it was supported (SPC = .195, p < .05). H5b, however, was not

supported because capability control did not have a significant impact on compensation seeking (SPC = .05, n.s.). H6 states that outcome control has a positive influence on salesperson's compensation seeking. This hypothesis was supported (SPC = .300, p < .01). H7a was not supported because challenge seeking was not related to compensation seeking (SPC = .04, n.s.). H7b was supported since task enjoyment had a significant positive impact on recognition seeking (SPC = .451, p< .01). H8a – 8c were not supported because activity control (SPC = .059, n.s.), capability control (SPC = -.100, n.s.), and outcome control (SPC = -.013, n.s.) did not have a direct impact on selling effort. H9a states that challenge seeking has a positive impact on adaptive selling and it was supported (SPC = .203, p < .01). Task enjoyment was found to have a significant positive impact on adaptive selling (SPC = .263, P < .01), in support of H9b. H9c and H9d were not supported because neither compensation seeking (SPC = .017, n.s.) nor recognition seeking (SPC = -.058) had a significant relationship with adaptive selling. H10a was supported because challenge seeking was found to have a significant positive impact on selling effort (SPC = .394, p < .01). Similarly, H10b and H10c were supported because compensation seeking (SPC = .143, p < .05) and recognition seeking (SPC = .214, p < .01) had a significant impact on selling effort.

The results of the relationships between sales control and mediating variables (i.e., adaptive selling, selling effort, and I/E motivation) indicate that sales control systems do not have a *direct* impact on salespeople's adaptive selling behavior or selling effort. Rather, sales control systems can influence these selling behavior *indirectly* through their impact on salespeople's I/E motivation.

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Mediating Variables and Outcomes

H11a – 16c examine the impact of the mediating variables (i.e., adaptive selling, selling effort, and I/E motivation) on the outcome variables (i.e., job satisfaction, behavioral performance, and outcome performance).

H11a states that adaptive selling has a positive impact on job satisfaction and it was supported (SPC = .146, p < .01). H11b and H11c were both supported because adaptive selling had a significant positive impact on behavioral performance (SPC = .130, p < .05) and on outcome performance (SPC = .125, p <.05). H12a was not supported because challenge seeking did not have a significant relationship with job satisfaction (SPC = .086, n.s.). H12b was supported because challenge seeking had a significant impact on behavioral performance (SPC = .186, p < .01). H12c was not supported since challenge seeking did not have a significant impact on outcome performance (SPC = .071, n.s.). H13a and H13b were supported because task enjoyment had a significant impact on job satisfaction (SPC = .539, p < .01) and on behavioral performance (SPC = .112, p < .05). Compensation seeking did not have a significant impact on job satisfaction (SPC = .021, n.s.) or on behavioral performance (SPC = .052, n.s.), and therefore H14a and H14b were not supported. H14c, however, was supported because compensation seeking had a significant positive impact on outcome performance (SPC = .132, p < .05). Recognition seeking was not found to have any significant relationships with job satisfaction (SPC = .039, n.s.) or outcome performance (SPC = -.053, n.s.), failing to support H15a and H15b. This may be due to the definition of recognition seeking that typically *only* looks at an employee's desire to seek approval from within the company as opposed to externally from the customers (e.g., Oliver and Anderson 1994). H16a and

H16b were not supported because selling effort was not found to have a significant impact on outcome performance (SPC = -.001, n.s.)[3] or on job satisfaction (SPC = .006, n.s.). Outcome performance was found to have a significant positive impact on job satisfaction (SPC = .129, p < .05), in support of H16c.

These results suggest that while certain dimensions of I/E motivation have an impact on some of the outcome variables, adaptive selling behavior has a significant impact on all three outcome variables including job satisfaction, behavioral performance, and outcome performance, highlighting the critical role of adaptive selling in the sales control context. It was somewhat surprising that selling effort was not found to have any significant relationship with outcome performance. This, however, is consistent with career stage theory that more experienced salespeople typically maintain their success by selling smart (i.e., adaptive selling) as opposed to selling hard (Cron, Dubinsky, and Michaels 1988).

Direct Impact of Sales Control Systems on Outcome Variables

Because the effects of sales control on job satisfaction and job performance are likely to be partially mediated (Challagalla and Shervani 1996; Jaworski and Kohli 1991), H17a – 19c examine the direct relationships between sales control and the three outcome variables.

H17a states that activity control has a direct positive impact on job satisfaction but it was not supported (SPC = .124, n.s.). While activity control did not have a significant impact on behavioral performance (SPC =.158, n.s.), thus rejecting H17b,

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[3] Selling effort was examined as a moderator in subsequent *post hoc* analysis.

H17c was supported because activity control has a direct positive impact on outcome

performance (SPC = .191, p < .05). Capability control was not found to have any direct

impact on job satisfaction (SPC = .048, n.s.), behavioral performance (SPC = -.120, n.s.),

and outcome performance (SPC = -.133, n.s.), rejecting H18a – H18c. This indicates that

the positive effect of capability control on job outcomes is not likely immediate because

it takes time to improve one's selling skills (Challagalla and Shervani 1996). While

outcome control did not have a significant impact on job satisfaction (SPC = -.039, n.s.),

thus rejecting H19a, it did have a direct positive impact on behavioral performance (SPC

= .215, p < .05) and on outcome performance (SPC = .175, p < .05), in support of H19b

and H19c. Figure 12 presents a simplified final model that includes *only* significant paths.

Figure 12
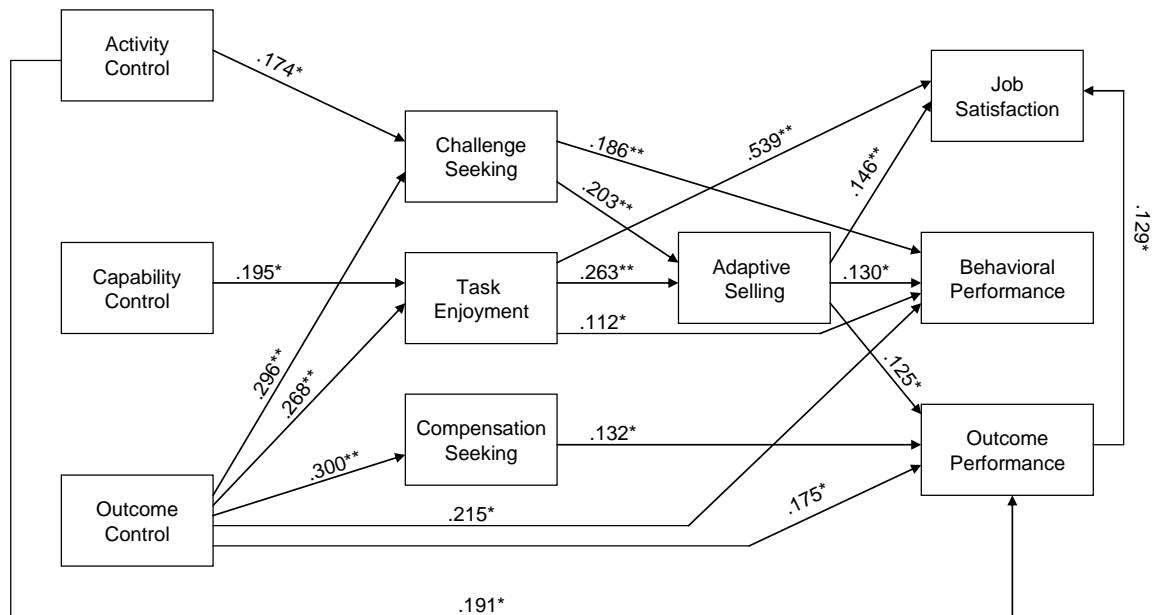
Structural Model Fit Indices:

Chi-Square (49) = 96.778, p<.01;

NFI = .943; CFI = .969; RMSEA = .072

• Significant at p < .05 (one-sided)

** Significant at p < .01 (one-sided)

Moderation Effects

The moderation effects of *competitive intensity* and *percentage of new customers* were tested using a multi-group analysis in SEM (e.g., De Wulf, Odekerken-Schroder, and Iacobucci 2001). The sample was split into sub-groups in terms of high versus low *competitive intensity* and *percentage of new customers*, respectively. Specifically, to test the moderation effects, I first set all paths of the structural models equal across high- and low groups. The chi-square statistic of this equal two-group model was then compared with the chi-square of a free two-group model where *only* the hypothesized moderation path was set free across two groups. With the difference of one degree of freedom, a significant change in chi-square will suggest the presence of moderation effects on the hypothesized path.

Because selling effort was not found to have a direct impact on outcome performance, H20b and H21b were not tested for moderation effects. H20a and H21a were tested using the multi-group methodology in SEM (Table 5.2). H20a states that adaptive selling has a stronger positive impact on outcome performance when the selling task involves a higher percentage of new customers. This hypothesis was not supported because the chi-square difference was not significant ($\Delta \chi^2_{(1)} = .014$, n.s.). H21a predicts that the positive impact of adaptive selling on outcome performance will be stronger when competitive intensity is high. The chi-square difference test indicated the presence of moderation effects ($\Delta \chi^2_{(1)} = 5.574$, p < .05) but opposite the hypothesized direction (low competitive intensity group SPC = .379, p < .05; high competitive intensity group SPC = .105, n.s.). This finding suggests that adaptive selling should be maximized when the selling environment is not highly competitive probably because attractive competitive

offerings tend to make interpersonal relationships between buyer and supplier (e.g.,

adaptiveness of the salesperson) much less effective (Wathne, Biong, and Heide 2001).

From the sales control's perspective, this finding challenges the notion that activity

control is appropriate when competition is low due to higher procedural knowledge of the

selling process (Ramaswami 1996). The results of this study indicate that when the

selling environment is not highly competitive, outcome control appears to be more

effective than activity control due to its stronger impact on adaptive selling, which results

in higher selling effectiveness.

Table 5.2
Moderation Effects

Moderator: Percentage of New Customers	Univariate Chi-Square Difference		Conclusion
Equal-Path Two-Group Models	d.f.[1]	119	
	χ^2	151.509	
H20a: Adaptive selling ⟶ outcome performance	d.f.	118	No moderation effects
	χ^2	151.495	
	$\Delta \chi^2_{(1)}$	0.014	
Moderator: Competitive Intensity			
Equal-Path Two-Group Models	d.f.	119	
	χ^2	145.585	
H21a: Adaptive selling ⟶ outcome performance	d.f.	118	Moderation effect exists[2]
	χ^2	140.011	
	$\Delta \chi^2_{(1)}$	5.574**	

[1] Control variables were included in the multi-group SEM
[2] Moderation effect is opposite the hypothesized direction
** Significant at p< .05 (one-sided)

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V. 2. A Rival Model

The dissertation model proposes that salesperson's I/E motivation mediates the effects of salesforce control on job outcomes. That is, I/E motivation is a state that is subject to the influence of immediate work environment to the extent that the selling tasks and management styles enhance or inhibit salesperson's perceived competence, relatedness, and autonomy (Ryan and Deci 2000). However, an alternative representation is that I/E motivation is a stable trait that cannot be easily changed by external influence such as sales control. This possibility is considered by comparing the proposed mediation model with a rival model that treats I/E motivation nomologically similar to sales control and control variables (cf, Jap 1999). Since these two models are nested, the rival model will be considered superior to the proposed mediation model if there is a significant improvement in chi-square. The results indicate that the rival model had a slightly better chi-square statistic ($\chi^2_{(44)} = 87.825$) compared with the mediation model ($\chi^2_{(49)} = 96.778$), but the chi-square difference between these two nested models is not statistically significant ($\Delta \chi^2_{(5)} = 8.953$, p > .10).

Next, following Morgan and Hunt's (1994) and De Wulf, Odekerken-Schroder, and Iacobucci's (2001) studies in evaluating rival models, four additional criteria were used in comparing the rival model with the mediation model: (1) overall fit, (2) parsimony, (3) percentage of significant parameters, and (4) R^2 of the endogenous constructs. With respect to overall fit, the rival model had slightly higher NFI (.948 versus .943) and CFI (.972 versus .969) than those of the proposed mediation model but a slightly worse RMSEA (.073 versus .072). To evaluate the parsimony sacrificed by the rival model relative to incremental improvement in NFI and CFI, Parsimonious Normed

Fit Index (PNFI) was calculated for both models (James, Mulaik, and Brett 1982). The PNFI for the mediation model is .340, which is superior to that of the rival model (PNFI = .306). Therefore, the rival model sacrificed 11% in parsimony in return for a mere gain of .05% in NFI and .03% in CFI, indicating the superiority of the mediation model (Morgan and Hunt 1994). Moreover, 46% of the paths in the rival model were significant as opposed to 52% in the mediation model (Table 5.3). Finally, the rival model explained 21.2% in R^2 of outcome performance compared to 23.2% R^2 explained by the hypothesized mediation model, whereas the R^2 explained in behavioral performance was the same (30.7%) in both models.

On the basis of these findings, the evaluation of the rival model strengthened the hypothesized mediation model (De Wulf, Odekerken-Schroder, and Iacobucci 2001; Morgan and Hunt 1994), suggesting that salesperson's cognitive and affective dimensions of I/E motivation may be influenced by the deployment of different salesforce control systems, and that these I/E motivation dimensions mediate the effects of sales control on adaptive selling behavior, selling effort, and job outcomes.

Table 5.3
A Rival Structural Model (N = 195)

Path	Coefficient[1]	t - Value	Conclusion
Activity Control ⟶ Adaptive Selling	0.148	1.406	Not supported
Capability Control ⟶ Adaptive Selling	-0.134	-1.363	Not supported
Outcome Control ⟶ Adaptive Selling	0.026	0.258	Not supported
Activity Control ⟶ Selling Effort	0.058	0.587	Not supported
Capability Control ⟶ Selling Effort	-0.099	-1.073	Not supported
Outcome Control ⟶ Selling Effort	-0.012	-0.131	Not supported
Challenge Seeking ⟶ Adaptive Selling	0.200	2.411**	Supported
Challenge Seeking ⟶ Compensation Seeking	0.199	2.694**	Supported
Task Enjoyment ⟶ Adaptive Selling	0.260	2.859**	Supported
Task Enjoyment ⟶ Recognition Seeking	0.498	7.641**	Supported
Compensation Seeking ⟶ Adaptive Selling	0.016	0.232	Not supported
Recognition Seeking ⟶ Adaptive Selling	-0.057	-0.724	Not supported
Challenge Seeking ⟶ Selling Effort	0.388	5.270**	Supported
Compensation Seeking ⟶ Selling Effort	0.141	2.140*	Supported
Recognition Seeking ⟶ Selling Effort	0.212	3.156**	Supported
Adaptive Selling ⟶ Job Satisfaction	0.144	2.670**	Supported
Adaptive Selling ⟶ Behavioral Performance	0.132	1.926*	Supported
Adaptive Selling ⟶ Outcome Performance	0.127	1.769*	Supported
Challenge Seeking ⟶ Job Satisfaction	0.083	1.293	Not supported
Challenge Seeking ⟶ Behavioral Performance	0.187	2.451**	Supported
Challenge Seeking ⟶ Outcome Performance	0.073	0.877	Not supported
Task Enjoyment ⟶ Job Satisfaction	0.526	7.957**	Supported
Task Enjoyment ⟶ Behavioral Performance	0.112	1.695*	Supported
Compensation Seeking ⟶ Job Satisfaction	0.021	0.407	Not supported
Compensation Seeking ⟶ Behavioral Performance	0.052	0.807	Not supported
Compensation Seeking ⟶ Outcome Performance	0.133	1.932*	Supported
Recognition Seeking ⟶ Job Satisfaction	0.039	0.668	Not supported
Recognition Seeking ⟶ Outcome Performance	-0.054	-0.887	Not supported
Selling Effort ⟶ Outcome Performance	-0.003	-0.042	Not supported
Selling Effort ⟶ Job Satisfaction	0.005	0.084	Not supported
Outcome Performance ⟶ Job Satisfaction	0.123	2.309*	Supported
Activity Control ⟶ Job Satisfaction	0.119	1.561	Not supported
Activity Control ⟶ Behavioral Performance	0.158	1.618	Not supported
Activity Control ⟶ Outcome Performance	0.194	1.855*	Supported

[1]Standardized path coefficient
* p<.05 (one-sided)
** p<.01 (one-sided)
*** Structural Model Fit Indices: Chi-Square (df=44) = 87.825, p<.01; NFI = .948; CFI = .972; RMSEA = .073

Table 5.3 (con't)
A Rival Structural Model (N = 195)

Path	Coefficient[1]	t - Value	Conclusion
Capability Control ⟶ Job Satisfaction	0.047	0.663	Not supported
Capability Control ⟶ Behavioral Performance	-0.120	-1.331	Not supported
Capability Control ⟶ Outcome Performance	-0.135	-1.384	Not supported
Outcome Control ⟶ Job Satisfaction	-0.039	-0.534	Not supported
Outcome Control ⟶ Behavioral Performance	0.215	2.312*	Supported
Outcome Control ⟶ Outcome Performance	0.177	1.772*	Supported
Sales Experience ⟶ Outcome Performance	0.097	1.723*	Supported
Product Quality ⟶ Outcome Performance	0.136	2.097*	Supported
Service Level ⟶ Outcome Performance	0.084	1.143	Not supported
Service Level ⟶ Behavioral Performance	0.217	3.417**	Supported
Price ⟶ Outcome Performance	0.047	0.800	Not supported
Market Dynamism ⟶ Outcome Performance	0.031	0.549	Not supported

[1]Standardized path coefficient
* $p < .05$ (one-sided)
** $p < .01$ (one-sided)
*** Structural Model Fit Indices: Chi-Square (df=44) = 87.825, $p < .01$; NFI = .948; CFI = .972; RMSEA = .073

V. 3. Post Hoc Analysis

In order to gain deeper insights into the theoretical relationships among the constructs in the dissertation model, two *post hoc* analyses were performed using multi-group analysis in SEM (e.g., De Wulf, Odekerken-Schroder, and Iacobucci 2001). Research indicates that salespeople with different sales experience tend to differ in the valence of their motivation (Cron 1984). Because during the model respecification sales experience appears to be an important salesperson characteristic that can alter the sales control – motivation relationship, sales experience was subsequently used as a moderator in the *post hoc* analysis. In addition, because sales control assumes that salespeople tend to shirk their work if not monitored (Ramaswami 1996), the impact of such control mechanisms on performance should be more pronounced when the salesperson is not expending adequate levels of effort. Therefore, the sample was split into high *selling effort* and low *selling effort* sub-groups to test the moderation effects of *selling effort* on all significant paths in the model.

Because the great majority of the sample appeared to be established and senior salespeople, I first deleted the seven cases where the salespeople fall into the age category of less than 25 years (i.e., exploration stage, see Cron 1984). The remaining sample was then split into approximately top 40% and bottom 40% using the salespeople's full-time sales experience. The mean full-time sales experience is 10.3 years (sd = 3.01) for the top sub-group and 28.1 years (sd = 6.9) for the bottom sub-group. Following the same procedures of the two-group moderation test used in hypotheses testing, I found three moderation effects of sales experience (Table 5.4).

Table 5.4

Post Hoc Analysis - Moderation Effects of Sales Experience

	Standardized Parameter Estimate[a]		
Path	Salespeople with an average of 10 years experience (n=76)	Salespeople with an average of 28 years experience (n=71)	Univariate Chi-Square Difference (df = 1)[b]
Activity Control ⟶ Challenge Seeking	0.139	0.223*	0.535
Capability Control ⟶ Task Enjoyment	0.132	.265**	0.040
Outcome Control ⟶ Compensation Seeking	0.227*	0.345**	0.268
Task Enjoyment ⟶ Recognition Seeking	0.465**	0.440**	0.052
Challenge Seeking ⟶ Adaptive Selling	0.188	0.236**	0.572
Task Enjoyment ⟶ Adaptive Selling	**0.400****	**0.025**	**2.946***
Adaptive Selling ⟶ Job Satisfaction	0.142*	0.194**	0.264
Adaptive Selling ⟶ Behavioral Performance	0.140	0.194**	0.010
Adaptive Selling ⟶ Outcome Performance	**0.252****	**0.097**	**2.929***
Challenge Seeking ⟶ Behavioral Performance	0.183*	0.292**	1.398
Task Enjoyment ⟶ Job Satisfaction	0.577**	0.529**	0.459
Task Enjoyment ⟶ Behavioral Performance	0.007	0.093	0.165
Compensation Seeking ⟶ Outcome Performance	0.129	0.160	0.053
Outcome Performance ⟶ Job Satisfaction	0.140*	0.125	0.013
Activity Control ⟶ Outcome Performance	0.117	0.147	0.006
Outcome Control ⟶ Behavioral Performance	0.203*	0.258**	0.011
Outcome Control ⟶ Outcome Performance	0.127	0.132	0.154
Outcome Control ⟶ Challenge Seeking	0.317**	0.278**	0.481
Outcome Control ⟶ Task Enjoyment	**0.361****	**0.146**	**3.109***
Capability Control ⟶ Recognition Seeking	0.145	0.276**	0.665

[a]Two-sided test
[b]Control variables included
* significant at the level of p<.10
** significant at the level of p<.05
Two-group model fit: Chi-Square (60) = 94.107 , p<.01; NFI = .920 ; CFI = .966; RMSEA = .089

It was found that salespeople with an average experience of 28 years differ from those salespeople with an average of 10 years experience in the following ways. First, outcome control does *not* have a significant positive impact on task enjoyment with salespeople with an average of 28 years of experience (standardized path coefficient [SPC] = .146, n.s.) as it does with salespeople with an average of 10 years of experience (SPC = .361, p< .05); second, task enjoyment *only* enhances adaptive selling for younger salespeople (SPC = .400, p<.05) but does *not* have a significant relationship with

adaptive selling for most senior salespeople (SPC = .025, n.s.); third, the positive impact of adaptive selling on outcome performance is much weaker among senior salespeople (SPC = .097, n.s.) compared to younger sales staff (SPC = .252, p< .05). No other moderation effects were found[4].

These different effects indicate that the relative effectiveness of salesforce control differs across sales experience. For salespeople who are sufficiently experienced, outcome control seems to be the most effective format in terms of maximizing adaptive selling behavior, outcome performance, behavioral performance, and job satisfaction through its effect on salespeople's challenge seeking, task enjoyment, and compensation seeking. In contrast, for senior salespeople who have an average of 28 years of experience, the impact of sales control on adaptive selling is rather weak at best, probably because those salespeople usually have lost interest in selling (Cron, Dubinsky, and Michaels 1988). However, because activity control and outcome control have almost equal magnitude of effect on outcome performance among senior salespeople, sales managers may put a relative emphasis on either approach dependent on the nature of the selling task. Capability control seems to be effective in increasing salespeople's job satisfaction but it is not as much related to adaptive selling, behavioral performance, or outcome performance. That is, for very experienced senior salespeople capability control does not enhance their adaptive skills or performance but is still effective in enhancing salespeople's job satisfaction due to perceived mastery of selling skills (Ryan and Deci 2000). Table 5.5 summarizes the overall effect of activity, capability, and outcome

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[4] Due to sample size constraints, significance level of p < .10 was used in *post hoc* tests.

control on adaptive selling, outcome performance, behavioral performance, and job

satisfaction across different sales experience groups.

Table 5.5

Comparison of Overall Effect of Salesforce Control
Across Different Sales Experience Groups

Salespeople with an average of 10 years' experience

	Total Effect on Adaptive Selling	Total Effect on Outcome Performance	Total Effect on Behavioral Performance	Total Effect on Job Satisfaction
Activity Control:	0.04	0.20	0.04	0.03
Capability Control:	0.08	0.02	0.03	0.12
Outcome Control:	0.20	0.27	0.34	0.26

Salespeople with an average of 28 years' experience

	Total Effect on Adaptive Selling	Total Effect on Outcome Performance	Total Effect on Behavioral Performance	Total Effect on Job Satisfaction
Activity Control:	0.04	0.19	0.04	0.03
Capability Control:	0.00	0.00	0.02	0.11
Outcome Control:	0.06	0.21	0.28	0.04

Although selling effort did not have a significant impact on outcome performance,

which is similar to some other recent studies (e.g., Hunter and Perreault Jr. 2007), three

moderation effects were detected (Table 5.6). First, it was found that *only* in the low

selling effort group that outcome control has a significant impact on salespeople's

compensation seeking (standardized path coefficient [SPC] = .398, p < .05) but in the

high selling effort group the impact is insignificant (SPC = .145, n.s.); second, *only* in the

low selling effort group was compensation seeking found to have a significant positive

impact on outcome performance (SPC = .209, p < .05) but not in the high selling effort

group (SPC = .020, n.s.); third, activity control has a significant positive impact on

outcome performance *only* in the low selling effort group (SPC = .245, p < .05) but not in

the high selling effort group (SPC = -.005, n.s.). Collectively, these moderation effects

suggest that salespeople who are not inherently hard workers tend to be more driven by

activity or outcome control and that they rely more on external regulation and/or extrinsic

rewards to achieve outcome performance (Table 5.7).

Table 5.6

Post Hoc Analysis - High Vs. Low Selling Effort

Path	Standardized Parameter Estimate[a]		
	Low Selling Effort Group (n=78)	High Selling Effort Group (n=77)	Univariate Chi-Square Difference (df = 1)[b]
Activity Control ⟶ Challenge Seeking	0.175	0.224*	0.065
Capability Control ⟶ Task Enjoyment	0.231**	0.213*	0.596
Outcome Control ⟶ Compensation Seeking	**0.398****	**0.145**	**2.740***
Task Enjoyment ⟶ Recognition Seeking	0.386**	0.469**	0.350
Challenge Seeking ⟶ Adaptive Selling	0.113	0.163	0.371
Task Enjoyment ⟶ Adaptive Selling	0.144	0.293**	1.315
Adaptive Selling ⟶ Job Satisfaction	0.179**	0.054	1.058
Adaptive Selling ⟶ Behavioral Performance	0.060	0.082	0.004
Adaptive Selling ⟶ Outcome Performance	0.044	0.133	0.727
Challenge Seeking ⟶ Behavioral Performance	0.290**	0.133	1.512
Task Enjoyment ⟶ Job Satisfaction	0.544**	0.523**	1.056
Task Enjoyment ⟶ Behavioral Performance	0.117	0.101	0.319
Compensation Seeking ⟶ Outcome Performance	**0.209****	**0.020**	**2.706***
Outcome Performance ⟶ Job Satisfaction	0.121	0.079	0.128
Activity Control ⟶ Outcome Performance	**0.245****	**-0.005**	**3.418***
Outcome Control ⟶ Behavioral Performance	0.208*	0.264**	0.041
Outcome Control ⟶ Outcome Performance	0.314**	0.135	2.321
Outcome Control ⟶ Challenge Seeking	0.182	0.238*	0.004
Outcome Control ⟶ Task Enjoyment	0.253**	0.201	0.465
Capability Control ⟶ Recognition Seeking	0.09	0.266**	0.574

[a]Two-sided test
[b]Control variables included
* significant at the level of p<.10
** significant at the level of p<.05
Two-group model fit: Chi-Square (72) = 90.523, p>.05; NNFI = .941; CFI = .980; RMSEA = .059

Table 5.7

Comparison of Overall Effect of Salesforce Control
Between High and Low Selling Effort Groups

High Selling Effort Salespeople

	Total Effect on Adaptive Selling	Total Effect on Outcome Performance	Total Effect on Behavioral Performance	Total Effect on Job Satisfaction
Activity Control:	0.04	0.00	0.04	0.01
Capability Control:	0.05	0.01	0.03	0.11
Outcome Control:	0.13	0.19	0.32	0.19

Low Selling Effort Salespeople

	Total Effect on Adaptive Selling	Total Effect on Outcome Performance	Total Effect on Behavioral Performance	Total Effect on Job Satisfaction
Activity Control:	0.04	0.25	0.04	0.04
Capability Control:	0.05	0.01	0.03	0.11
Outcome Control:	0.13	0.27	0.32	0.20

CHAPTER VI: DISCUSSION AND IMPLICATIONS

VI. 1. The Mediation Mechanism of Salesforce Control Systems

This dissertation addresses the overarching question "How do salesforce control systems influence salesperson's job-related outcomes?" by illustrating a complex partial mediation mechanism through which activity, capability, and outcome salesforce control systems may impact salesperson's behavioral and outcome performance, as well as job satisfaction. Compared to previous research using less robust predispositional mediators such as learning/performance orientation, this research explains a significantly higher amount of variance in job-related outcomes (e.g., 23.2% variance explained in outcome performance compared to a mere 6% in performance by Kohli, Shervani, and Challagalla 1998).

The results indicate that the effects of salesforce control systems on job-related outcomes are not entirely direct but have a complex three-step intermediary process. Specifically, salesforce control systems have distinct relationships with salesperson's cognitive and affective dimensions of I/E motivation suggesting that salesperson's I/E motivation can be cultivated on the job through the use of management tools. Depending on the relative emphasis on activity, capability, or outcome control, sales managers can influence the nature of salespeople's motivation to sell. Next, the cognitive (i.e., challenge seeking) and affective (i.e., task enjoyment) dimensions of intrinsic motivation mediate the effect of salesforce control on adaptive selling behavior. This indirect effect suggests that the extent to which sales control systems can enhance a salesperson's adaptive selling behavior depends on their ability to enhance intrinsic motivation. Finally,

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adaptive selling behavior has significant effects on behavioral and outcome performance, as well as job satisfaction. Therefore, the research results point to the critical mediating role of salesperson's motivation in enhancing salesperson's adaptive selling behavior and eventual job outcomes. The key issue in deploying salesforce control systems then becomes how should managers effectively use such control tools in maximizing salesperson's motivation and adaptive selling behavior, given specific boundary conditions.

Activity, capability, and outcome controls have distinct effects on the cognitive and affective dimensions of salesperson's I/E motivation. Specifically, the deployment of activity control focusing on the fulfillment of required activity (e.g., call rate or accounts visited) was found to increase, rather than decrease, the salesperson's challenge seeking – a cognitive dimension of intrinsic motivation. The social psychology literature would predict (e.g., Ryan and Deci 2000) that controlling one's task performance procedure may decrease one's challenge orientation; however, the sales context may be unique in that fulfilling activity quota is related to the salesperson's perceived competence and ability to meet daily challenges (Kohli, Shervani, and Challagalla 1998). This positive relationship has also been reported by a recent study in the sales control context (Miao, Evans, and Zou 2007). The positive impact of capability control on salesperson's task enjoyment – an affective dimension of intrinsic motivation – is consistent with the prediction of SDT (Ryan and Deci 2000) that developing one's perceived competency on the job and not focusing on importance of immediate outcomes can enhance one's interest in the task. In addition, capability control was found to have a positive relationship with the salesperson's recognition seeking – an affective dimension of

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extrinsic motivation. It appears that the subjective nature of capability evaluation rather than the objective activity or outcome goals (Challagalla and Shervani 1996) is more likely to elevate salesperson's motivation to seek positive appraisal from the supervisor. What's interesting is the fact that capability control has a "dual" impact on the salesperson's intrinsic and extrinsic motivation, in contrast to previous research that either suggested (Anderson and Oliver 1987) or found (Oliver and Anderson 1994) that sales control focusing on the salesperson's behavior *only* elevates the salesperson's intrinsic motivation. Given that task enjoyment (intrinsic motivation) is positively related to adaptive selling behavior and that recognition seeking (extrinsic motivation) is positively related to selling effort, the global I/E motivation could not have uncovered such complex ramifications. Although not hypothesized, outcome control was found to have a positive impact on challenge seeking and task enjoyment, in addition to the hypothesized positive impact on compensation seeking. This finding is likely a result of the characteristics of salespeople in this study where the great majority are sufficiently experienced. Career stage research (Cron 1984; Cron, Dubinsky, and Michaels 1988) suggests that those salespeople have typically mastered adequate selling skills and are interested in displaying their competence through the application of such skills in meeting sales goals. Therefore, outcome control would give those salespeople maximum autonomy in demonstrating their competence and maintaining a greater interest in meeting outcome goals by working smarter (Cron, Dubinsky, and Michaels 1988).

The results also demonstrate the interdependency among I/E motivators, adaptive selling, and selling effort. The indirect effect of salesforce control systems on adaptive selling is through challenge seeking and task enjoyment, both of which are dimensions of

intrinsic motivation, which is consistent with previous adaptive selling literature (e.g.,
Spiro and Weitz 1990). In addition, challenge seeking (intrinsic motivation),
compensation seeking (extrinsic motivation), and recognition seeking (extrinsic
motivation) collectively mediate the impact of salesforce control systems on selling
effort. Previous literature suggests that extrinsic motivation, not intrinsic motivation, is a
primary driver of selling effort (e.g., Weitz, Sujan, and Sujan 1986). The results of this
research illustrate that the cognitive dimension of intrinsic motivation – challenge
seeking – is also an important antecedent to selling effort. Selling effort does not seem to
be related to outcome performance in this particular study. Given that experienced
salespeople typically have higher average dollar sales volume and are less interested in
working harder than working smarter (Cron, Dubinsky, and Michaels 1988), this finding
is not completely surprising. Maybe working harder is more effective in driving up sales
volume *only* when salespeople are inexperienced (Cron 1984).

The cognitive and affective dimensions of I/E motivation have distinct
relationships with job outcomes. Specifically, challenge seeking and task enjoyment – the
two dimensions of intrinsic motivation – have a significant positive impact on behavioral
performance. This is consistent with the social psychology literature (Amabile, Hill,
Hennessey, and Tighe 1994; Ryan and Deci 2000) in that intrinsically motivated
individuals are more likely to be creative on the job by learning and applying effective
strategies. Task enjoyment was also found to have a positive impact on job satisfaction,
because being able to enjoy the task enhances one's overall well-being on the job (Ryan
and Deci 2000). Compensation seeking, the cognitive dimension of extrinsic motivation,
has a significant positive impact on outcome performance, whereas recognition seeking

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(an affective dimension of extrinsic motivation) does not. Therefore, the nature of extrinsic motivation instead of the global extrinsic motivation itself appears to be an important antecedent to outcome performance. Adaptive selling, enhanced by intrinsic motivation, has a significant positive impact on all three outcome variables – job satisfaction, behavioral performance, and outcome performance, reinforcing the status of adaptive selling as the single most important construct in sales management (Spiro and Weitz 1990).

While the influence of salesforce control systems is filtered through the complex mediation mechanism depicted in Figure 1, activity and outcome control also have direct effects on sales performance. Specifically, activity control was found to have a direct positive relationship with outcome performance. While Anderson and Oliver's (1987) salesforce control framework suggests that activity control may reduce outcome performance due to time spent on some of the less important activities (e.g., call report), my *post hoc* analysis reveals that this may *only* be true when the salesperson is already expending considerable effort. For those who show minimal effort, activity control can enhance outcome performance. Moreover, outcome control was found to have a direct positive relationship with both behavioral performance and outcome performance, which is consistent with the empirical findings in the literature that outcome control enhances learning orientation (i.e., more effective strategy, Kohli, Shervani, and Challagalla1998) as well as sales outcomes (Miao, Evans, and Zou 2007).

Overall, the dissertation results indicate that while having some direct influence, the salesforce control systems have an effect on salesperson's job outcomes through a complex three-step mediation process. The salesperson's cognitive and affective

dimensions of I/E motivation serve as critical mediators that subsequently have a significant impact on adaptive selling and job outcomes. The next section will address the important boundary conditions that provide crucial insights into the alignment of sales control and adaptive selling.

VI. 2. Boundary Conditions – Moderators

This section addresses the second overarching research question "What are the boundary conditions that affect the relative effectiveness of the mediation mechanism in salesforce control?" The results of this study reveal three important boundary conditions – *competitive intensity*, *sales experience*, and *selling effort* – that must be considered in understanding the relative effectiveness of salesforce control systems.

It was found that adaptive selling is much more effective when the competition level is low rather than high. This finding is somewhat counterintuitive in that lower competition means stable demand and/or few alternatives for customers that would result in sales regardless of adaptive selling behavior. The evidence that suggests adaptive selling to be more effective under low competitive intensity (thus should be maximized) goes counter to the contention that activity control may be more appropriate when the environment is stable (Anderson and Oliver 1987; Ramaswami 1996). According to the results of this study, outcome control delivers the most significant impact on adaptive selling among salespeople with an average of 10 years' experience and therefore would be the most effective control format when competition is low. Note that this may only be true when both boundary conditions are met: (1) most salespeople are sufficiently experienced, and (2) the competitive intensity is low. I next discuss the role of sales experience in aligning sales control with adaptive selling and job outcomes.

The effect of sales control on motivation and adaptive selling appears to differ across different experience groups. When salespeople are sufficiently experienced (i.e., average 10 years' experience), outcome control appears to have the most significant impact on adaptive selling through elevated challenge seeking and task enjoyment. For

senior salespeople (i.e., average 28 years' experience), however, outcome control is not related to task enjoyment – a main antecedent to adaptive selling – probably because those salespeople have lost enthusiasm and interest in their job (Cron, Dubinsky, and Michaels 1988). As a result, compared to experienced but younger salespeople, outcome control has a much lower impact on adaptive selling if used with senior salespeople. For those salespeople, activity control and outcome control seem to be equally weak in driving adaptive selling behavior but both are still effective in maintaining senior salespeople's outcome performance. The question as to which approach to use with senior salespeople still hinges on the third boundary condition – selling effort.

Across high versus low selling effort groups, it was found that the positive effect of outcome control on compensation seeking holds *only* when the salesperson displays low levels of selling effort. For the high selling effort salespeople, however, outcome control does not appear to be related to compensation seeking. By the same token, compensation seeking has a significant positive relationship with outcome performance *only* when the salesperson displays low levels of selling effort, but not so when the salesperson has already put a great deal of effort in selling. In addition, activity control directly relates to outcome performance *only* when selling effort is low, but not when the salesperson is a hard worker in the first place. These findings indicate that when the salesperson is not a hard worker, s/he is more easily motivated by external regulation (i.e., activity control) and extrinsic rewards (i.e., monetary compensation), which subsequently will improve outcome performance. For salespeople who are hard workers, it appears that they are more likely to be motivated by the intrinsic value of the selling job (challenge seeking and task enjoyment) that elevates adaptive selling, leading to

better behavioral performance, outcome performance, and higher job satisfaction. Because the direct effect of outcome control on outcome performance is not moderated by selling effort as is with activity control, activity control may be especially effective with senior salespeople who are expending lower levels of selling effort.

Collectively, the boundary condition analyses provide rich insights into management opportunities with the salesforce by deploying appropriate salesforce control systems. In summary, an emphasis on activity control may be most appropriate under the following conditions:

- The salesperson is a senior personnel

- The salesperson demonstrates a low level of selling effort

In contrast, an emphasis on outcome control may be most appropriate under these conditions:

- The salesperson is experienced

- The salesperson is expending a high level of selling effort

- The competitive intensity is low

Capability control appears to primarily enhance salesperson's job satisfaction and this effect is robust across all three boundary conditions. Therefore, capability control seems to be an effective tool in retaining employees when long-term employability is considered important by the company (Challagalla and Shervani 1996). Its relationships with outcome and behavioral performance, however, are much weaker and not likely immediate compared to activity or outcome control.

In conclusion, this research highlights the complexity and challenge in designing and deploying the salesforce control systems in an effective fashion. Without understanding the complex intermediary processes in an integrated fashion or ignoring important boundary conditions when deploying salesforce control systems will severely compromise the sales organization's ability to maintain competitive advantage in the contemporary marketplace.

VI. 3. Limitation and Future Research Directions

While multi-source data were collected, the design of this research is cross-sectional in nature. Therefore, the causal directions of the relationships among theoretical constructs rely on previous research. A more robust approach would require a longitudinal data collection that measures independent and dependent variables at different times. Another limitation of this research is that all respondents (sales managers and salespeople) come from manufacturing industries involving business-to-business selling in the United States. Moreover, given that the majority of salespeople in this study are very experienced, the extent to which the framework behaves among inexperienced salespeople remains to be investigated. Similarly, the generalizability of the proposed framework to other settings such as consumer marketing or cross-cultural selling could not be assumed without further empirical testing.

This dissertation also informs future research. First, like most research in the sales literature, this study operationalized adaptive selling with *only* adaptive selling behavior items, but the full domain of adaptive selling should also include adaptive knowledge (Spiro and Weitz 1990). The inclusion of adaptive knowledge is especially important when two salespeople who demonstrate same level of adaptive selling behavior don't have same level of adaptive knowledge. In other words, adaptive knowledge may not always result in adaptive selling behavior. A managerially important question is how to motivate salespeople to transform their adaptive selling knowledge into adaptive selling behavior. Furthermore, the extent to which the antecedents and consequences of these two dimensions differ can shed light on the leveraging of adaptive selling knowledge and adaptive selling behavior for enhanced sales performance. Moreover, this research

revealed, in a piecemeal fashion, some important boundary conditions that can influence the relative effectiveness of different types of salesforce control. However, a more systematic approach to analyzing boundary conditions is to use latent class models (Varki and Chintagunta 2004) that simultaneously identify and estimate varying relationships across latent segments due to unobserved industry-, company-, and salesperson-level heterogeneity. Toward this end, covariates reflecting cross-industry heterogeneity such as the selling activity taxonomy (Moncrief 1986) can provide deeper insights with the use of latent class models.

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APPENDIX

Sales Manager Repeated Measurement Bias

Because each sales manager rated more than one salesperson, I tested a series of linear mixed effects models that control for any random effects of the sales manager's repeated measurements (i.e., interdependency bias) on the parameter estimates that involve sales manager – salesperson pairs (Netemeyer, Maxham III, and Pullig 2005). The deviance (-2 log-likelihood criterion) between the nested fixed and mixed models is compared with a chi-square distribution with the degrees of freedom equal to the difference in the number of parameters between the two models. A significant improvement in fit of the mixed model will indicate the presence of sales manager repeated measurement bias.

Two sets of simplified mixed models were estimated using SPSS-Mixed Modeling Syntax. Specifically, for the dependent variable *behavioral performance*, *challenge seeking*, *task enjoyment*, *adaptive selling*, and *outcome control* were included as independent variables because these paths are significant in the main structural model depicted in Figure 1. It was found that the mixed model did not fit the data significantly better than the fixed model that did not control for sales manager repeated measurement effects (Δ in -2LL [$df_{DIFF} = 5$] = 5.906, $p > .10$). Next, the same procedure was performed on the dependent variable *outcome performance* using *compensation seeking*, *adaptive selling*, *activity control*, and *outcome control* as independent variables. Again, the mixed effects model accounting for the sales manager repeated measurements did not fit the data significantly better than the fixed model (Δ in -2LL [$df_{DIFF} = 5$] = 7.042, $p > .10$). Therefore, based on the above evidence, sales manager repeated measurement bias is not likely a serious concern in this study.

Salesperson Survey

Section A

In answering the following questions, please focus *ONLY* on **sales activities** (e.g., call rate, number of demos, customers to be contacted, reports to turn in, etc.) *Adapted from Kohli et al. (1998)*

	Strongly Disagree					Strongly Agree
	1	2	3	4	5	6	7
1 My manager informs me about the sales activities I am expected to perform	1	2	3	4	5	6	7
2 My manager monitors how I perform required sales activities	1	2	3	4	5	6	7
3 My manager informs me on whether I meet his/her expectations on sales activities	1	2	3	4	5	6	7
4 My manager readjusts my sales activities when necessary	1	2	3	4	5	6	7
5 I would be recognized by my manager if I perform sales activities well	1	2	3	4	5	6	7

In answering the following questions, please focus *ONLY* on **selling skills/abilities** (e.g., negotiation, communication, presentation, etc.) *Adapted from Kohli et al. (1998)*

	Strongly Disagree					Strongly Agree
	1	2	3	4	5	6	7
1 My manager periodically evaluates the selling skills I use to accomplish a task (e.g., how I negotiate)	1	2	3	4	5	6	7
2 My manager provides guidance on ways to improve my selling skills and abilities	1	2	3	4	5	6	7
3 My manager evaluates how I make sales presentations and communicate with customers	1	2	3	4	5	6	7
4 My manager assists me by illustrating why using a particular sales approach may be effective	1	2	3	4	5	6	7
5 I would be commended if I improve my selling skills	1	2	3	4	5	6	7

In answering the following questions, please focus *ONLY* on **sales volume** or **market share** targets *Adapted from Kohli et al. (1998)*

	Strongly Disagree					Strongly Agree
	1	2	3	4	5	6	7
1 My manager tells me about the expected level of achievement on sales volume or market share targets	1	2	3	4	5	6	7
2 My manager monitors my performance on achieving sales volume or market share targets	1	2	3	4	5	6	7
3 I receive frequent feedback on whether I am meeting expected achievement on sales volume or market share targets	1	2	3	4	5	6	7
4 My manager ensures that I am aware of the extent to which I attain sales volume or market share targets	1	2	3	4	5	6	7
5 I would be recognized by my manager if I perform well on sales volume or market share targets	1	2	3	4	5	6	7

Section B

What is the approximate sales volume **in dollars** that you have generated over the past 12 months? $_____

This part of the questionnaire asks about **your individual performance** during the past 12 months. Please circle the number that best represents your evaluation. *Adapted from Cravens et al. (1993)*

	Poor					Outstanding
	1	2	3	4	5	6	7
1 Listening attentively to identify and understand the real concerns of customers	1	2	3	4	5	6	7
2 Convincing customers that I understand their unique problems and concerns	1	2	3	4	5	6	7
3 Using established contacts to develop new customers	1	2	3	4	5	6	7
4 Communicating my sales presentation clearly and concisely	1	2	3	4	5	6	7
5 Providing satisfying solutions to customers' problems	1	2	3	4	5	6	7
6 Contributing to my company's market share	1	2	3	4	5	6	7

Salesperson Survey (con't)

	Poor					Outstanding	
7 Selling high profit-margin products	1 2 3 4 5 6 7
8 Generating a high level of dollar sales	1 2 3 4 5 6 7
9 Generating sales of new products	1 2 3 4 5 6 7
10 Exceeding sales targets	1 2 3 4 5 6 7

Section C

This part of the questionnaire asks about your **general attitude** towards a sales career. Please circle the number that best represents your evaluation. *Adapted from Amabile et al. (1994) and Ramaswami and Singh (2003)*

	Strongly Disagree					Strongly Agree	
1 I enjoy tackling sales problems that are completely new to me	1 2 3 4 5 6 7
2 I enjoy trying to solve complex sales problems	1 2 3 4 5 6 7
3 The more difficult the sales problem, the more I enjoy trying to solve it	1 2 3 4 5 6 7
4 I prefer work that stretches my abilities	1 2 3 4 5 6 7
5 I am strongly motivated by the money I can earn through my sales job	1 2 3 4 5 6 7
6 I am keenly aware of the income goals I have for myself	1 2 3 4 5 6 7
7 I sell because I want to make lots of money	1 2 3 4 5 6 7
8 Money is the main motivator of my selling job	1 2 3 4 5 6 7
9 My job is satisfying	1 2 3 4 5 6 7
10 My job is exciting	1 2 3 4 5 6 7
11 I am really doing something worthwhile in my job	1 2 3 4 5 6 7
12 The work I do gives me a sense of accomplishment	1 2 3 4 5 6 7
13 I am strongly motivated by the recognition I can earn from my supervisor	1 2 3 4 5 6 7
14 I want fellow workers to find out how good I really can be at work	1 2 3 4 5 6 7
15 To me, success means high respect from my supervisor	1 2 3 4 5 6 7
16 It is important that fellow workers look up to me	1 2 3 4 5 6 7
17 What matters most to me is enjoying my selling job	1 2 3 4 5 6 7
18 It is important for me to be able to enjoy my selling job	1 2 3 4 5 6 7
19 I enjoy selling for the pleasure of it	1 2 3 4 5 6 7
20 It is the experience of selling that gives me the most pleasure	1 2 3 4 5 6 7

Section D

This part of the questionnaire asks about the **general experience** of your job. Please circle the number that best represents your evaluation. *Adapted from Dholakia and Bagozzi (2002) and Moncrief (1986)*

	No Desire At All					Very Strong Desire	
1 My desire to reach my assigned goals can be described as …	1 2 3 4 5 6 7

	Very Infrequently					Very Frequently	
2 In a typical week, I plan and make sales presentations …	1 2 3 4 5 6 7
3 In a typical week, I have to overcome customer objections …	1 2 3 4 5 6 7

Salesperson Survey (con't)

	Very Infrequently					Very Frequently	
4 In a typical week, I need to identify the customer's key decision-making person …	1	2	3	4	5	6	7
5 In a typical week, I have to call on potential accounts …	1	2	3	4	5	6	7
6 In a typical week, I have to work with orders (e.g., write up orders, work with lost orders, expedite orders, handle back orders, etc.) …	1	2	3	4	5	6	7
7 In a typical week, I need to provide service to customers (e.g., test product, train customers, installation, maintenance, etc.) …	1	2	3	4	5	6	7
8 In a typical week, I need to manage feedback from customers and then relay information to management …	1	2	3	4	5	6	7
9 In a typical week, I need to perform tasks at the customer's location (e.g., inventory control and stocking shelves, point of purchase display and local advertising, etc.) …	1	2	3	4	5	6	7
10 In a typical week, I need to work with distributors …	1	2	3	4	5	6	7

	Strongly Disagree					Strongly Agree	
11 I receive incompatible requests from two or more people	1	2	3	4	5	6	7
12 I work with two or more managers who operate quite differently	1	2	3	4	5	6	7
13 I do things that are apt to be accepted by one person and not accepted by another	1	2	3	4	5	6	7
14 I often get assignments without adequate resources and materials to execute them	1	2	3	4	5	6	7
15 I feel certain about how much authority I have	1	2	3	4	5	6	7
16 I know what my responsibilities are	1	2	3	4	5	6	7
17 I know exactly what is expected of me	1	2	3	4	5	6	7
18 My desire to successfully achieve my assigned goals is quite intense	1	2	3	4	5	6	7

Section E

In a typical week, how many hours do you usually work?

_____ Hours

This section of the questionnaire asks about your **specific activities and beliefs** during the selling process. Please circle the number that best represents your evaluation.

	Strongly Disagree					Strongly Agree	
1 I am very flexible in the selling approaches I use	1	2	3	4	5	6	7
2 I tend to use a wide variety of selling approaches with different customers	1	2	3	4	5	6	7
3 I do **NOT** use a set sales approach	1	2	3	4	5	6	7
4 I vary my sales style from situation to situation	1	2	3	4	5	6	7
5 I use different sales strategies with different customers	1	2	3	4	5	6	7
6 I experiment with different sales approaches	1	2	3	4	5	6	7
7 I change my sales approach from one customer to another	1	2	3	4	5	6	7
8 I work long hours to meet my sales objectives	1	2	3	4	5	6	7
9 I do not give up easily when I encounter a difficult customer	1	2	3	4	5	6	7
10 I work untiringly at selling a customer until I get an order	1	2	3	4	5	6	7
11 Each customer requires a unique approach	1	2	3	4	5	6	7
12 I feel that most buyers can be dealt with in pretty much the same manner	1	2	3	4	5	6	7
13 I feel confident that I can effectively change my planned presentation when necessary	1	2	3	4	5	6	7
14 When I feel that my sales approach is not working, I can easily change to another approach	1	2	3	4	5	6	7

Salesperson Survey (con't)

	Strongly Disagree					Strongly Agree	
15 I am very sensitive to the different needs of my customers	1	2	3	4	5	6	7
16 It is easy for me to modify my sales presentation if the situation calls for it	1	2	3	4	5	6	7
17 I can easily use a wide variety of selling approaches	1	2	3	4	5	6	7

Section F

This section of the questionnaire asks about your knowledge of your **customers** and **the competition**. Please circle the number that best describes your assessment.

	Poor					Outstanding	
1 My knowledge in identifying distinct customer categories in terms of their characteristics and preferences is …	1	2	3	4	5	6	7
2 My knowledge in identifying distinct customer preferences is …	1	2	3	4	5	6	7
3 My knowledge in matching appropriate selling strategies with distinct customer categories is …	1	2	3	4	5	6	7
4 My knowledge in matching my solutions with distinct customer needs is …	1	2	3	4	5	6	7
5 My knowledge in adjusting my selling approaches when new customer information becomes available is …	1	2	3	4	5	6	7

	Strongly Disagree					Strongly Agree	
6 Competition in our industry is cutthroat	1	2	3	4	5	6	7
7 Price competition is the hallmark of our industry	1	2	3	4	5	6	7
8 Anything that one competitor can offer, others can match readily	1	2	3	4	5	6	7
9 Our competitors are relatively strong	1	2	3	4	5	6	7

Section G

Your answers to this section will help in categorizing overall responses. Therefore, your responses to this section are very important and will be used *only* for statistical purposes. Please provide your answers in the space provided.

1 Your gender: Male ____   2. What is your age? Less than 25 ____   26 - 39 ____
            Female ____   40 - 55 ____   56 and over ____

3 What is your highest degree? Doctorate ____ Master ____ Bachelor ____ High School ____ Under High School ____

4 Approximately what is the percentage of your customers you consider **NEW** customers? _____%

5 How long have you been working for your current employer? _____ years

6 Including your current job, how many years of total experience do you have as a full-time salesperson? _____ years

7 Approximately how many employees does your company have? _____

8 Please specify the zip code of your primary sales territory _____

	Very Low					Very High	
9 How would you rate your confidence in your responses to this questionnaire?	1	2	3	4	5	6	7

If you want to participate in a drawing for one of ten $25 amazon.com gift cards, please provide your name and contact information (or your business card): _____

Thank you very much for your cooperation! <u>Your responses will be kept strictly confidential</u>.
Please return this completed questionnaire in the postage-paid envelope we have provided.

Sales Manager Survey

This section asks about the characteristics of <u>Your Firm</u> and the <u>Industry</u> it is in.

How many employees does your company have? _____

	Much Lower				Much Higher		
Compared to your major competitors, the quality of your firm's primary product line is:	1	2	3	4	5	6	7
Compared to your major competitors, the price of your firm's primary product line is:	1	2	3	4	5	6	7
Compared to your major competitors, the level of customer service provided by your firm is:	1	2	3	4	5	6	7

Approximately what is your company's annual sales growth rate? _____

Approximately what is the market share of your company's primary product line? _____

What industry does your firm belong to? _____

What is the approximate number of competing firms in your industry? _____

	Very Low				Very High		
In our industry, competition intensity is:	1	2	3	4	5	6	7

	Very Slowly				Very Rapidly		
In our industry, customers' product preferences change:	1	2	3	4	5	6	7

Sales Manager Survey (con't)

This section asks about the performance of the three salespeople you have identified

Please evaluate **salesperson 1's** *qualitative* performance:	Poor → Outstanding
Listening attentively to identify and understand the real concerns of customers	1 2 3 4 5 6 7
Convincing customers that s/he understands their unique problems and concerns	1 2 3 4 5 6 7
Using established contacts to develop new customers	1 2 3 4 5 6 7
Communicating his/her sales presentation clearly and concisely	1 2 3 4 5 6 7
Providing satisfying solutions to customers' problems	1 2 3 4 5 6 7

Please evaluate **saleperson 1's** *quantitative* performance:	Poor → Outstanding
Contribution to your company's market share	1 2 3 4 5 6 7
Selling high profit-margin products	1 2 3 4 5 6 7
Generating a high level of dollar sales	1 2 3 4 5 6 7
Generating sales of new products	1 2 3 4 5 6 7
Exceeding sales targets	1 2 3 4 5 6 7
This salesperson's overall performance is …	1 2 3 4 5 6 7

Approximately what % of **salesperson 1's customers** are **NEW** customers for *him/her*? _____%

Please evaluate **salesperson 2's** *qualitative* performance:	Poor → Outstanding
Listening attentively to identify and understand the real concerns of customers	1 2 3 4 5 6 7
Convincing customers that s/he understands their unique problems and concerns	1 2 3 4 5 6 7
Using established contacts to develop new customers	1 2 3 4 5 6 7
Communicating his/her sales presentation clearly and concisely	1 2 3 4 5 6 7
Providing satisfying solutions to customers' problems	1 2 3 4 5 6 7

Please evaluate **saleperson 2's** *quantitative* performance:	Poor → Outstanding
Contribution to your company's market share	1 2 3 4 5 6 7
Selling high profit-margin products	1 2 3 4 5 6 7
Generating a high level of dollar sales	1 2 3 4 5 6 7
Generating sales of new products	1 2 3 4 5 6 7
Exceeding sales targets	1 2 3 4 5 6 7
This salesperson's overall performance is …	1 2 3 4 5 6 7

Approximately what % of **salesperson 2's customers** are **NEW** customers for *him/her*? _____%

Please evaluate **salesperson 3's** *qualitative* performance:	Poor → Outstanding
Listening attentively to identify and understand the real concerns of customers	1 2 3 4 5 6 7
Convincing customers that s/he understands their unique problems and concerns	1 2 3 4 5 6 7
Using established contacts to develop new customers	1 2 3 4 5 6 7
Communicating his/her sales presentation clearly and concisely	1 2 3 4 5 6 7
Providing satisfying solutions to customers' problems	1 2 3 4 5 6 7

Please evaluate **saleperson 3's** *quantitative* performance:	Poor → Outstanding
Contribution to your company's market share	1 2 3 4 5 6 7
Selling high profit-margin products	1 2 3 4 5 6 7
Generating a high level of dollar sales	1 2 3 4 5 6 7
Generating sales of new products	1 2 3 4 5 6 7
Exceeding sales targets	1 2 3 4 5 6 7
This salesperson's overall performance is …	1 2 3 4 5 6 7

Approximately what % of **salesperson 3's customers** are **NEW** customers for *him/her*? _____%

Telephone Pre-Qualification Script

Hello, may I speak to _____ **[ASK FOR NAME OF SALES MANAGER ON THE LIST].**

[IF NOT THERE, ASK FOR VOICE MAIL – LEAVE 800 NUMBER]

[IF NO ONE BY THAT NAME WORKS FOR THE COMPANY] May I please speak to your sales manager? **[RECORD NEW NAME ON THE SHEET]**

[IF GATEKEEPER IS SCREENING] This is _____ from Peters Marketing Research. This is not a sales call. I am calling you to see if _____ might be willing to participate in a research project conducted by the University of Missouri**.**

[IF GATEKEEPER WILL NOT LET YOU THROUGH, ASK IF YOU CAN LEAVE A VOICE MAIL MESSAGE. IF NOT ABLE TO GET PAST THE GATEKEEPER, THANK AND TERMINATE. CODE RF-1]

[IF YOU REACH THE PARTY]

Hello, this is _____ from Peters Marketing Research. This is not a sales call. I am calling you to see if you would be willing to participate in a research project conducted by marketing researchers at the University of Missouri. We would ask you and up to *three* of your salespeople to fill out a short survey that will be sent to you later from the University of Missouri. To thank you for your participation, you will be provided with a summary of research findings and will be entered to a raffle for one of the ten $25 gift certificates along with your salespeople. This research is about salesforce management and salesperson performance. Your expertise in industrial sales management will be very valuable in this project.

1. Would you be willing to participate?
   - ☐ (1) Yes
   - ☐ (2) No   **[CODE RF-2]**

[IF NO, THANK AND TERMINATE]

[IF YES] I would like to verify your name and address if I could**. [READ INFORMATION FROM THE SHEET-RECORD ANY CHANGES ON THE SHEET]** The survey will be mailed in about one week.

[IF CONCERNED ABOUT ANYTHING ELSE]:
Survey will take about 10-15 minutes to complete
Self-addressed, postage paid envelope will be provided for them to return the survey
Responses will be kept confidential.
Conducted by senior professors at the University of Missouri-Columbia
Professors have published a number of articles in the top marketing and management
research journals

[VOICE MAIL MESSAGE]
Hello, this is Lynn Smith from Peters Marketing Research. 1-800-529-6841. This is not a
sales call. I am calling you to see if you would be willing to participate in a research
project conducted by marketing researchers at the University of Missouri. You can
complete the survey by mail and to thank you for your participation, 10 participants will
be randomly selected to receive a $25 gift certificate, in addition to a top-line research
summary. This research is about salesforce management and salesperson performance
and your expertise in industrial sales management will be very valuable in this project.
Please call Lynn Smith at 1-800-529-6841. Thank you very much.

Sales Manager Cover Letter

Dear Sales Manager,

Thank you for agreeing via telephone to assist with our research on salesforce management and salesperson performance. Your participation in this study is critical to improving our understanding of effective salesforce management practices.

As a small token of thanks to your effort, you will be entered in a drawing for one of the ten $25 gift certificates along with your salespeople. We will also send you a top-line summary of our research findings suggesting how best performing companies are managing their sales forces, if you provide your e-mail address at the end of the survey.

We would appreciate 10 minutes of your time to complete the enclosed survey. First, please select up to _3_ salespeople who meet the following criterion:

- ○ Three salespeople who have a higher percentage of new accounts in their client portfolio relative to average distribution
- ○ Three salespeople who have a lower percentage of new accounts in their client portfolio relative to average distribution

In distributing the enclosed salesperson surveys, cover letters, and postage-paid return envelopes to your salespeople, please follow the label at the end of the salesperson's survey, where the _single_ digit after the _third_ dash refers to salesperson 1, 2, or 3.

Please provide your evaluations of the three salespeople according to their assigned numbers. Your responses will remain strictly confidential, and at no time will individual information about you or your firm be disclosed to anyone. We have provided a postage-paid return envelope addressed to University of Missouri for your convenience. If you have questions or concerns regarding the study, please feel free to contact us.

Thank you very much for your participation!

Sincerely Yours,

Dr. Kenneth R. Evans   C. Fred Miao
Fred E. Brown Chair in Business   Marketing Researcher
Dean of the Price College of Business   College of Business
University of Oklahoma   University of Missouri
evans@ou.edu   chenjie.miao@missouri.edu

Salesperson Cover Letter

Dear Salesperson,

Thank you for agreeing to participate in the research project conducted by the University of Missouri. You are among a select group of sales professionals whom we invited to participate in this study. Your contribution is critical to the success of this study. We want to assure you that your responses will be kept to the highest level of confidentiality and that the results will only be reported at an aggregate level (no individual will be identified in any way).

To thank you for your time, we will randomly draw 10 respondents who have completed the survey and each will receive a gift certificate $25 in value. If you decide to participate in the drawing, please provide your name and contact information at the end of the survey. Again, your name and contact information will be kept confidential and will not be used for any other purposes other than to notify you in the event your name is drawn for the gift certificate. Upon completion of the survey, please send it back to us directly in the postage-paid envelope.

The survey should take about 10 – 15 minutes to complete. There are no right or wrong answers to questions on this survey and as such we ask that you provide us information to the best of your knowledge. Please read the directions carefully in the beginning of each section before answering the questions.

Thank you for helping us in this important research project. If you have any questions, please do not hesitate to contact us via e-mail or telephone.

Sincerely Yours,

Dr. Kenneth R. Evans   C. Fred Miao
Fred E. Brown Chair in Business   Marketing Researcher
Dean of the Price College of Business   College of Business
University of Oklahoma   University of Missouri
evans@ou.edu   chenjie.miao@missouri.edu

Sales Manager Follow-Up Letter

Dear Sales Manager,

We are marketing researchers at the College of Business at University of Missouri. Three weeks ago we sent to you a package inviting you and three of your salespeople to participate in our research project on salesforce management and salesperson performance. This is a reminder of the research inquiry we have sent to you earlier. If you have not had a chance to read the package that we have sent to you earlier, we would like to invite you to consider participating in our research. As a small token of thanks to your effort, you will be entered in a drawing along with participating salespeople for one of the ten $25 gift certificates. We will also send you a top-line summary of our research findings suggesting how best performing companies are managing their sales forces.

We would appreciate 10 minutes of your time to complete the enclosed survey. First, please select up to *3* salespeople who meet the following criterion:

- Three salespeople who have a higher percentage of new accounts in their client portfolio relative to average distribution
- Three salespeople who have a lower percentage of new accounts in their client portfolio relative to average distribution

In distributing the enclosed salesperson surveys, cover letters, and postage-paid return envelopes to your salespeople, please follow the label at the end of the salesperson's survey, where the *single* digit after the *third* dash refers to salesperson 1, 2, or 3.

Please provide your evaluations of the three salespeople according to their assigned numbers. Your responses will remain strictly confidential, and at no time will individual information about you or your firm be disclosed to anyone. We have provided a postage-paid return envelope addressed to University of Missouri for your convenience. If you have questions or concerns regarding the study, please feel free to contact us.

Thank you very much for your participation.

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Top-Line Research Summary

Dear Sales Manager,

We are marketing researchers at the University of Missouri – Columbia who asked you to participate in our sales research project. We would like to thank you again for assisting us with this research project. Per your request, we are sending you a top-line summary of our research findings.

In reading this summary, please bear in mind some caveats. First, please be advised that the conclusion is based on a cross-industry study of salesforce management practice and, thus, the recommendations should be used with caution given the differences that may be due to the unique characteristics of your company and industry. Second, the great majority of the salespeople in this particular study are highly experienced (i.e., average full-time sales experience is 16 years) so the findings may not be equally applicable to an inexperienced sales staff. Nevertheless, we hope that you find the research findings to be helpful.

Again, we appreciate your participation in our research project. If you have any further questions, please feel free to contact us by phone or e-mail.

Sincerely Yours,

Dr. Kenneth R. Evans
Fred E. Brown Chair in Business
Dean of the Price College of Business
University of Oklahoma
evans@ou.edu

C. Fred Miao
Marketing Researcher
College of Business
University of Missouri
(573)882-3881
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Top-Line Research Summary (con't)

Our research findings reveal that companies typically manage their salesforce with a relative emphasis on one of the following three approaches:

■ **Outcome-based approach**: What salespeople do during the selling process is monitored infrequently with relatively little managerial direction. Salespeople are rewarded with a much higher proportion of incentive compensation such as commissions.

■ **Activity-based approach**: Supervisors attempt to control the routine activities undertaken by salespeople (e.g., call rate, number of accounts visited) by monitoring salespeople's actual behavior and rewarding salespeople on the basis of the performance of these required activities. Salespeople are compensated with a much higher proportion of fixed salary.

■ **Capability-based approach**: Supervisors set goals for the level of skills and abilities (e.g., presentation, negotiation, adaptive ability) salespeople must possess, monitoring their skills and abilities, providing guidance for continuous improvement, and rewarding salespeople on the basis of their demonstration of skills. Salespeople are compensated with a much higher proportion of fixed salary.

While in practice most companies tend to put a relative emphasis on one of these three salesforce management approaches, our research found salespeople characteristics and the industry-level of competitive intensity to be important conditions under which one particular approach is more effective than the others. Specifically, for salespeople who are in their mid-career stage (average full-time sales experience 10-20 years), the outcome-based approach appears to be most effective because this type of management practice was found to effectively elevate salespeople's perceived level of job challenge and interest in maintaining their accomplishments. This, in turn, motivated their adaptiveness in dealing with different customers leading to the highest sales outcomes and job satisfaction. The effectiveness of an outcome-based approach would be further enhanced when the competitive intensity is relatively lower in the firm's industry. In summary, we found that companies using outcome-based approach are generally more effective when:

■ The salespeople are in their mid-career stages

■ The salespeople are expending high levels of selling effort

■ The competitive intensity is low

Top-Line Research Summary (con't)

When managing salespeople who are in their late-career stage (average full-time sales experience 25 years plus), none of the three sales control approaches appear to be able to elevate their interest in selling or motivate their adaptive selling behavior with customers. An activity-based approach to sales control appeared to be most effective in achieving acceptable sales outcomes, especially when these salespeople are expending lower than average selling effort. In summary, companies managing their salesforce with an emphasis on an activity-based approach are generally more effective when:

- The salespeople are in their late-career stages

- The salespeople are expending low levels of selling effort

Lastly, our research found that *capability-based approach* (e.g., skill-based pay) generally makes salespeople in mid- and late-career stages more satisfied with their jobs. This is probably because these salespeople usually have achieved adequate skills. This type of reward system has often been linked to higher levels of perceived job security. However, its impact on sales performance is much lower than either the *activity-based approach* or *outcome-based approach*. The *capability-based approach* may be much more effective in improving sales performance of salespeople who are inexperienced and are early in their careers. Because very few salespeople in this study are early in their sales career, this is only a conjecture without empirical substantiation.

VITA

Chenjie Miao was born on February 20, 1973 in Shanghai, China. He received his Bachelor's degree in Business Administration from East China University of Science & Technology and his Master's degree in Business Administration from Grand Valley State University. Prior to earning his Ph.D. degree from University of Missouri – Columbia in Business Administration with an emphasis on marketing, he worked for General Motors (Shanghai, China) for three years in the capacity of production purchasing as well as for a logistics consulting company in the United States as an intern. He will join Clarkson University as an assistant professor of marketing beginning August 2007.