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THE IMPACT OF COACHING ON SALESPERSON’S PERFORMANCE AND
THE MECHANISMS THAT REGULATE THIS RELATIONSHIP

Claudio Eduardo Pousa

This document has been evaluated by a jury, composed of the following persons

François Coderre  President of the jury
Anne Mathieu  Research supervisor
Yves Lachance  External referee
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Sébastien Dubois  Member of the jury
Companies worldwide are facing a severe competition from an increasing number of domestic and foreign competitors, who put extra pressure on the achievement of market efficiency and performance. In this context, research and transference of managerial tools aimed at increasing performance has become decisive for organizations. One particular tool, the coaching of the sales force, has been largely praised by practitioners and scholars alike as a central managerial activity increasing employee’s performance. As salespeople’s performance is a key antecedent of organizational performance, research on sales coaching as a tool for increasing performance is critical.

Despite its importance, research on coaching has been scarce and inconsistent, and published work has been predominantly practice-driven and guru-led, lacking solid theoretical basis. Additionally, the relationship between coaching and performance has not received conclusive support, and the mediating variables linking coaching with performance have not been studied; these restrictions limited the explanations and predictive capacity of present models. This research tries to close the gap between what is presently known about coaching and what should be known in the opinion of both practitioners and scholars, by answering two general research questions: 1) does coaching by the sales manager have an impact on salesperson’s performance?; and 2) what are the mediating mechanisms that turn coaching by the sales manager into salesperson’s performance?

This dissertation presents a model based on two institutionalized\(^1\) theories, Leader-member Exchange (LMX) Theory and Goal-setting Theory; LMX is a dyadic, relational theory, useful to explain the high quality relationship developed between

\(^1\) Following Miner (2005) we use the term institutionalization to refer to those theories that are widely known, accepted and endorsed by the scientific community.
coach and coaché during the coaching intervention, and some of the proximal outcomes of this relationship; goal-setting theory is particularly useful in sales contexts, where salespeople have clearly defined goals, to understand how the coaching intervention can mobilize salesperson's cognition and motivation in order to achieve the goals.

The model explores the motivational and cognitive process enacted by the coaching intervention that have an impact on salesperson's performance, and proposes different ways through which coaching could be translated into increased performance; according to the model, the coaching intervention helps the salesperson to develop new task-specific strategies, which increases his capacity of adapting to different selling situations; additionally, the characteristics of the coaching intervention increases his goal commitment and his self-efficacy; in consequence, the salesperson will spend more effort, with greater persistence, and will choose better strategies; as a consequence of increased sales adaptability, new strategies, goal commitment, self-efficacy and effort, salesperson’s performance will also increase.

The model was tested using data collected early in 2011; a local Latin-American branch of a global industrial company and a Canadian bank accepted to participate in the study, and invitations to take a web-based survey were sent to their sales forces. I received 186 complete, usable responses, for a total response ratio of 40.43%, which were used to test the model using Structural Equation Modeling.

Results supported the main hypotheses; the conclusion of the dissertation is that the coaching intervention actually enacts motivational and cognitive mechanisms in the salesperson that allows him to increase his performance. These mechanisms are increased effort, adaptive selling, sales planning, new strategies, goal commitment and self-efficacy.
The dissertation contributes to the solution of the research problem in several ways. First, it proposes a model of coaching mediators, an issue that has not been addressed by previous research. The model represents an original perspective that advances the field of coaching research by enlarging our understanding of the processes addressed by the coaching intervention.

Second, the model proposes two complementary ways for achieving performance; one that considers the motivational aspects of the coaching intervention, where an increased performance is achieved through increased goal commitment and effort; the other one considers the cognitive aspects of the coaching intervention, where an increased performance is achieved through increased adaptive selling and sales planning behavior, and the development and implementation of new task-related strategies. These two ways are consistent with present research on adaptive selling and sales performance.

Third, the model is based on two institutionalized theories: LMX and Goal-setting Theory. The use of these theories is an original approach, useful to understand how coaching work in sales contexts. As the proposed model is not based on any particular practitioner’s model or set of experiences, it can potentially be generalized through a large series of organizational settings.

Finally, the results of this research contributes: 1) to the advancement of scientific knowledge through the development of an original, theory-based model of coaching mediators, as well as 2) to the solution of a managerial problem by providing practical insights to practitioners willing to implement successful coaching processes in their organizations.

Keywords: coaching, sales, LMX theory, Goal-Setting theory
RÉSUMÉ DE LA THÈSE

La thèse porte sur l’impact du coaching sur la performance des représentants de vente et sur l’identification des variables médiatrices qui expliquent la façon dont le coaching se traduit en performance.

Basée sur deux théories institutionnalisées (Leader-member exchange theory et Goal-setting theory) la thèse identifie des processus motivationnels et cognitifs qui sont sollicités comme suite à l’intervention de coaching faite auprès du représentant. La qualité de la relation entre le directeur des ventes (coach) et le représentant (coaché) facilite l’exploration des comportements envisageables qui, si mis en application, permettront au représentant d’atteindre ses objectifs.

Ainsi, après l’intervention de coaching, le représentant est plus motivé et plus outillé pour faire face aux défis qu’il rencontre; une motivation accrue est caractérisée par un engagement élevé envers les objectifs qui lui sont confiés, ce qui incite le représentant à déployer un effort accru dans la poursuite de ces objectifs, l’encourage à déployer des mécanismes cognitifs qui lui permettent de mieux adapter son comportement de vente, de planifier davantage ses actions commerciales et de mettre en place de nouvelles stratégies, toujours dans la perspective d’atteindre les objectifs spécifiés. Tous ces facteurs contribuent à accroître la performance de résultats du représentant.

La thèse présente une contribution théorique majeure. Elle fournit un cadre explicatif qui précise quels sont les facteurs intrinsèques sollicités chez le représentant qui sont mis à contribution et se traduisent en performance suite à une intervention de coaching.

Sur le plan managérial, la thèse permet aux directeurs des ventes de comprendre pourquoi leurs interventions de coaching devraient influencer le
comportement et les résultats des commerciaux; elle fournit aussi des lignes de conduite qui permettent aux praticiens d'évaluer l'efficacité d'une intervention de coaching en observant les comportements des commerciaux après leur intervention.

Mots clés : coaching, ventes, Théorie LMX, Théorie du goal
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Sébastien Dubois, Clara Antola and Luis Quinteros opened the doors to their companies and allowed me to collect the required data to analyze my model, thus making a significant contribution to my dissertation.

Finally, I would like to thank to the members of my dissertation jury for their contribution; their comments and observations greatly helped me improve my work.
INTRODUCTION

1. INTRODUCTION

Companies worldwide are presently facing a severe competition from an increasing number of domestic and foreign competitors. These competitors are putting additional pressure on the achievement of market efficiency and performance, thus forcing companies to struggle not only for market share but even for survival. In this context, research and transference of managerial tools aimed at increasing performance has become decisive for organizations. One particular tool, the coaching of the sales force, has been largely praised by practitioners as a central managerial activity increasing employee’s performance. As salespeople’s performance is a key antecedent for organizational performance, research on sales coaching as a tool for increasing salespeople’s performance becomes critical.

Coaching has been on the spotlight for many years now. One of the first books about coaching in organizations was published in the late 70’s (Fournies, 1978), and since then the subject has taken increased importance among practitioners until today. For example, Sales & Marketing Management magazine, the most influencing professional journal in selling and sales management, has steadily published an average of 4,6 articles per year during the last five years, praising coaching or giving advice on how to do it; a Google search\(^2\) on “business+coaching” has given more than 15 million hits of companies and individuals offering business coaching services, training programs, books, consulting and advice, and the same search at Amazon\(^3\) has given more than 5 800 books on the subject.

In the scientific literature, scholars have identified critical changes in the environment and challenges that affect the practice of selling and sales management

\(^2\) Done on February 9th, 2009
\(^3\) Done on the same date
in the twenty-first century. Accordingly, they have suggested that coaching should be strongly used by sales managers as a primary development tool focused on the individual development of salespersons (Ingram, LaForge and Leigh, 2002) and that they should spend more time identifying skill deficiencies and coaching subordinates to improve their effectiveness (Ingram, LaForge, Locander, MacKenzie, and Podsakoff, 2005). Both salespeople and sales managers agree that coaching skills are one of the most important attributes that effective sales managers must have (Deeter-Schmelz, Goebel and Kennedy, 2008; Deeter-Schmelz, Kennedy and Goebel, 2002), because it would impact sales representative development, which ultimately increase sales representative job performance and customer relationships development.

Despite the importance that coaching seems to have for scholars, scientific research on coaching has been scarce and inconsistent; it has been criticized for being predominantly practice-driven and guru-led, and lacking solid theoretical basis (Ellinger, Hamlin and Beattie, 2008; Grant and Cavanagh, 2004; Hamlin, Ellinger and Beattie, 2006). Additionally, throughout the coaching literature, researchers have used different definitions and underlying paradigms to study the phenomenon (Hamlin, Ellinger and Beattie, 2009; Ives, 2008), thus making difficult to integrate their research and to differentiate it from other research currents in management, leadership, organization development (OD) or human resource development (HRD) (Hamlin et al., 2009).

Furthermore, research on some of the critical coaching outcomes (as performance increases or behavioral changes) has not been conclusive. For example, Ellinger, Ellinger and Keller (2005) report significant positive associations between supervisory coaching behavior and supervisor’s perceptions of subordinates’ performance; however, performance was measured at group-level, while coaching behavior was measured at individual level, which impedes from establishing unequivocal causal relationships between coaching and performance at the same level of analysis; additionally, the person reporting the increased performance (the
manager) is interested in showing increased performance following his coaching intervention, thus biasing the measure.

Another problem is that research tried to find a correlation between coaching and performance, but didn’t provide an explanation of why performance should increase after a coaching intervention (Agarwal, Angst and Magni, 2006; Ellinger, Ellinger and Keller, 2003, 2005). In consequence, most of the largely praised coaching advantages (like increased motivation, job satisfaction, employee development or job performance) have not received adequate theoretical and empirical support.

These differences between what coaching is believed to do and what it is really known about it open many avenues for research. Based on my experience and a number of interviews with practitioners during my residency period, I have targeted two precise research objectives to develop my dissertation: 1) to establish the impact of coaching on performance and 2) to explain the mechanisms through which this happen.

Coaching is a complex, multidimensional construct (McLean, Yang, Kuo, Tolbert and Larkin, 2005; Rich, 1998) that can be studied at different levels of analysis, such as individual, dyadic, group and organization (Pousa, Mathieu and Ingham, 2007; Pousa, 2008). My research objectives simultaneously address two different levels of analysis (dyadic and individual) and two dimensions (the relationship itself and its consequences). Thus, a dyadic level theory (LMX) capable of explaining how the relationship works and an individual level theory (Goal-setting) capable of explaining how people achieve performance in goal-driven contexts, provide the best combination to address the problem and reach the objectives.
A critical part of the coaching process is the coaching relationship, and practitioners report that coaching allows them to establish high quality relationships with their salespeople based on trust and mutual respect; these variables are at the heart of LMX Theory and they help explain critical outcomes of high quality LMX relationships like satisfaction with supervision, overall satisfaction, organizational commitment and performance (Gerstner and Day, 1997).

Goal-setting Theory provides additional critical elements to explain how people achieve performance after a coaching intervention. According to the theory, goals affect actions and motivation, which ultimately affect performance. In sales contexts, salespeople have clearly defined goals, usually in terms of sales quotas. The sales manager, through a high quality coaching relationship based on trust and mutual respect, helps the salespeople discover and mobilize task-related knowledge in order to tackle the goals, thus increasing his skills, self-efficacy and commitment, which are precursors of motivation, effort and, ultimately, performance.

Finally, the association of two accepted and institutionalized theories into a single framework explaining the coaching phenomenon and generalizing its consequences on behaviors and performance could be a major contribution to the advancement of coaching theory and practice; it will allow me, not just to present another situationally-specific, guru-led, proprietary model, but to explain general behaviors of salespeople following a coaching intervention.

2. DOCUMENT STRUCTURE

In the first chapter, I elaborate on the managerial problem, based on two different and complementary sources of experiences and observations: my own experience of more than ten years as a consultant and coach, and the interviews that I have conducted with practitioners in different companies during my residency period. At the end of the chapter, I summarize what I have learned from these experiences
into two research questions that guide my doctoral reflection through the rest of the document.

In the second chapter, I present the literature review on coaching and sales coaching, and I elaborate on the problems that have not been tackled by the scientific research.

In the third chapter I present my research model, based on two complementary and widely accepted theories, Leader-Member Exchange (LMX) Theory and Goal-Setting Theory. The model integrates these two theories and provides an explanation of the mechanisms which are addressed by the coaching intervention and impact performance. In the last sections, I develop the hypotheses that are graphically expressed by the model.

The fourth chapter deals with the methodological aspects of the research; the chapter presents the epistemological perspective adopted (post positivistic) and a general review of the research design (non-experimental design, cross-sectional, correlational study); after that, the sampling decisions are presented, and the sub-sections of sample size, sampling unit and sampling method are developed; following, the measures section presents a brief review of the most comprehensive instruments found in the literature for each of the model variables and the ones that I will use to test the model; finally, a brief review of the ethical considerations is presented, followed by the chapter conclusions. Throughout the fourth chapter, a great deal of importance was given to the scientific aspects of the research and to justify with rational and scientific criteria each and every decision; also, great efforts were made to identify all possible sources of error and to find ways to eliminate them; although not specifically mentioned in any specific section, internal and external validity are central concerns of this planning phase and their discussion and consideration are imbricate in different sections and sub sections of the chapter.
Chapter five presents the analysis of the data collected at the beginning of 2011 by surveying salespersons from two companies that agreed to participate in the study; one is a Latin American branch of a global industrial company, and the other a large Canadian bank. Results suggest that the proposed, theoretical model adequately fits the sample data and support the main hypotheses.

Chapter six presents the discussion of these findings as well as the scientific and managerial implications and the conclusions of the dissertation.
CHAPTER 1
MANAGERIAL PROBLEM

1. INTRODUCTION

One of the mandatory requirements of the DBA Program is that the dissertation must start with the identification of a real managerial problem; through the dissertation, this problem must be researched and resolved, and new scientific knowledge must be developed; at the end of the dissertation, practical guidelines to managers must be given in order to allow them solve the problem.

In this chapter, I will elaborate on the first of the above mentioned steps: the identification of a managerial problem. First, I will briefly describe the two sources of information that I used to identify this problem: my own experience as a practitioner and the observations and information collected during my residency period. Based on these sources, I will elaborate on the three main problems that I have identified on sales coaching and the experiences that some practitioners shared with me regarding them. Finally, I will present these problems as research questions that will guide both my doctoral reflection and the proposition of a theoretical framework in the next chapter.

2. SOURCES USED TO DETERMINE THE MANAGERIAL PROBLEM

The personal data that nurtures my doctoral reflection spans a period of more than twenty years, and it is based on two complementary sources of experiences and observations:

1) My own experience as a practitioner and coach. After graduating in 1985, I have worked as a practitioner in managerial positions for different global organizations, mostly in Sales and Marketing areas. From 1995 to 2006, I have established a consulting firm, initially as a subsidiary of an American consulting company and later as an independent company, devoted to sales management consulting,
training and coaching. During those years I have developed sales training seminars and coaching projects for global companies with subsidiaries in Latin America\(^4\). As a result, I can account for having conducted hundredths of coaching sessions with marketing executives, sales managers and sales representatives in several countries in Latin America\(^5\).

2) My observations during the different interviews that I have conducted for my residency, during which I have interviewed practitioners from different companies, levels, areas of expertise (Human Resources, Sales & Marketing, and Certified coaching consultants) and countries.

My own experience as a practitioner and as a coach has given me first hand knowledge on what coaching is, how it works, and the positive consequences on salesperson’s behavior, development and results. With most of my clients I have developed a relationship that lasted for years and, thus, I was able to draw positive conclusions regarding the increased sales representatives’ job skills and capacity of action as a consequence of ongoing coaching programs. My experience supports the practitioners’ literature regarding the increment of salespersons’ performance and their expanded capacity to successfully face new challenges. This is one of the reasons why I am so enthusiastic with regard to coaching salespeople and I decided to do my doctoral research on this subject.

My experience also taught me that line people, like sales managers, do not have time to plan experiments, do research or analyze which solution gives better results. They need tools that have already been tested and developed off-line and that have already been supported by empirical research. Once this support has been obtained through scientific research, it must be translated into practical knowledge, so managers can quickly use it and put it to work. This need perfectly fits the characteristics of an applied research thesis like the one demanded by a DBA Program. Once new knowledge has been developed, the candidate must translate it into concrete, practical knowledge so it can be directly used by line managers.

\(^4\) As for example, Alcon Labs, Duke Energy Southern Cone, Electrolux, Ericsson and REUTERS Ltd.
\(^5\) Countries included Argentina, Uruguay, Peru, Chili and USA.
On the downside, my experience also underlined a great diversity of coaching approaches, and the lack of an understanding of how coaching really works. Practitioners’ literature, although practical and concrete, lacks specific scientific support about what mechanisms mediate between coaching and performance. It is widely accepted among practitioners that coaching increases motivation, satisfaction, development and performance, but what are the specific coaching behaviors that affect those variables? Coaching increases employees’ motivation, so they will probably be willing to work harder, and thus increase their performance. But in the case of salespeople, is working harder the only path towards increased performance? Unfortunately, there is no simple answer to those questions, and as scientific research has not identified the mechanisms mediating between coaching and performance, each coach must find its own answers.

The observations during my residency period validated this last assertion. In one of the interviews, a Regional Sales Manager for Latin-America said that he has received several coaching training courses at USA, given by different consulting firms. He complained that each firm have presented a different model, with different techniques, variables and approaches, and it was up to the participants to synthesize that knowledge and to adapt it to their own style or working environment.

My observations also provided me with new points of view, and expanded my own experience with other managers’ experiences, thus helping me validate some of my conclusions, and add new understandings to the coaching phenomena. In that sense, it was very useful to include managers from different industries, organizations, levels, countries and origins because they have provided me with valuable complementary experiences and points of view.
3. MANAGERIAL PROBLEM

In this section, I will elaborate on three principal problems regarding the use and implementation of sales coaching in organizations, and I will enlighten my conclusions with evidence collected during my residency. The three problems that I have identified are the lack of clear evidence linking coaching to increased performance, the need to identify the mediating mechanisms between coaching and performance, and the special characteristics of salespeople that make sales coaching different from just coaching employees.

3.1 Unclear link between coaching and performance

One of the most accepted statements in coaching practice is that coaching positively affects performance. Practitioners have largely praised coaching as a key managerial activity that increases employee performance (Corcoran, Petersen, Baitch, and Barret, 1995; Fournies, 1978; Kinlaw, 1989; Richardson, 1996; Whitmore, 1985) but they have not supported this proposition with empirical evidence.

Scientific research, on the other hand, has not provided definite answers; little research have focused on the coaching-performance relationship, and the few studies that have researched this relationship, have used subjective, single-item measures of performance, thus reducing the reliability and validity of the study (Agarwal et al., 2006; Ellinger et al., 2003, 2005).

As a consequence of this lack of support, practitioners agree that coaching affects employees' satisfaction and motivation, and accept that it must also affect performance, but without solid empirical evidence. During my residency, one of the interviewed managers surfaced this problem; she was an experienced Human Relations professional who has directed the implementation and control of the
coaching process in one of the Fortune 500 companies\textsuperscript{6} for more than eight years. She explicitly stated that Human Relations professionals have a number of shared paradigms in their profession, for example the assumption that coaching positively affects performance; in this case, she expressed that she couldn't find any scientific study supporting the relationship, although it is widely accepted within the HR community.

This lack of evidence has a number of practical implications regarding the use of coaching in organizations. First, why should an organization implement a coaching program? The accepted knowledge says that coaching has positive impacts on a number of behavioral and outcome variables, such as motivation, satisfaction, employee development and performance. But, is that so? Do companies have enough empirical evidence supporting that last assertion in order to take this type of decision? If there is no support backing up the consequences of coaching, other than popular and accepted knowledge, then there will be quite difficult for organizations to understand why they should embark in a new coaching initiative or why should they continue to support an existing coaching program.

Second, is it profitable for an organization to implement a coaching program? Implementing these kind of programs usually imply spending resources to hire external consultants, provide training to managers, develop internal coaching capabilities, create new control mechanisms, evaluate and reward improvements, etc. If the impact on the results is unknown, companies will be hesitant to invest to develop coaching in their organizations, as they will be unable to measure the return on the investment. The importance of measuring both the impact and quality of a coaching initiative is beginning to appear as a concern in some practitioners’ publications (Bennett and Bush, 2009).

\textsuperscript{6} Fortune 2008 ranking was accessed on February 19, 2009 at the following address: http://money.cnn.com/magazines/fortune/fortune500/2008/full_list/index.html
Third, if the impact of coaching on performance is unclear, how would companies commit managers to the coaching program, specially those managers with direct responsibility on results? During my residency, one of the managers said that, at their organization, sales managers used coaching as a current managerial activity, but when they were urged to close sales, they promptly abandoned coaching and jumped to directive behaviors or went out to sell with the salesperson.

The consequences of coaching can have important repercussions on organizations' decisions. However, as long as these consequences are not clearly established, practitioners won't be able to determine whether coaching can really help them manage their companies or it's just another management fad.

3.2 Mediating mechanisms not fully identified

Another problem has to do with the meaning of coaching and the mechanisms through which coaching acts. Throughout different organizations, I found that coaching has a different meaning; when confronted with the question of what coaching is, managers give different definitions and there is no clear agreement on what coaching is and is not. When I was working as a consultant I found that managers used coaching as a synonym for training, listening, giving support, giving feedback, giving advice, mentoring, counseling or managing; later on, I found that, even in the scientific literature, coaching was frequently used to describe some of the previously mentioned constructs. During one of my residency interviews, one of the managers acknowledged these divergences and suggested that finding the right meaning for coaching could be a thesis in itself.

Even though this last suggestion was quite interesting, I believe that it would be quite unfortunate to dedicate a whole thesis to find the meaning of this construct. Instead, in the second chapter of this document (Literature Review) I will propose a definition of coaching based on my experience, my residency observations, the
practitioners' literature and the scientific research, and I will use it to frame my research and develop my model.

This lack of agreement on what coaching is or is not has a considerable impact on the operationalization of the coaching process; if managers do not agree on what coaching is or is not, how could they agree on how coaching works, and further, what to do during a coaching intervention and how to do it?

One of the critical incidents that influenced my reflection happened when I was teaching a course on coaching at a MBA program in a Latin-American country. One of the students was a Commercial Manager at one of the most well-known global companies of consumer electronics; at a certain moment he interrupted the class to state that all managers do coaching every day. When I requested him to explain to us his coaching technique, he said: “Well, you know, you see the guy arriving at the morning with an ugly look in his face, so you take him by the arm and tell him ‘Come on, let’s take a coffee and you tell me what’s wrong’...”. Obviously, this manager was using coaching as a synonym of listening and supporting, thus giving the salesperson the possibility of a cathartic conversation. Is that how coaching works? Did this manager’s intervention help the salesperson achieve a higher performance? Would an independent observer qualify this conversation as a coaching intervention? Unfortunately, we could only speculate about the answer to these questions, because coaching has many different meanings, and no scientific research has yet proposed a model explaining how coaching works.

During my residency, one of the managers, a Regional Sales Manager for one of the Latin-American regions at a global information and news services company, stated that he usually coached his sales representatives, but he found a lot of unexplained variability in his coaching results. Sometimes the salesperson accepted his suggestions and changed his/her behavior; some other times, he/she did not; and in some cases, the salesperson wouldn’t accept them immediately, but some days
later, he/she would effectively do. This manager, as many others that I have encountered, was not sure what was happening during and after the coaching intervention, and what were the variables that he was affecting through the coaching intervention that led the salesperson to change and improve his/her performance. After an unsuccessful coaching intervention, it was very difficult for him to make the right attributions, because he was not sure if it was his fault as a coach (who didn’t act upon the right variables) or the sales representative’s (who didn’t respond to the right stimulus).

These examples, and many others, led me to the conclusion that more knowledge is needed regarding what happens with the coaché during and after a coaching intervention. Practitioners do not agree on what are the variables affected by the coaching intervention, and unfortunately, scientific research has not given further answers yet. Nevertheless, this is a central issue in coaching research; for practitioners, “… identifying mediators is invaluable because this information can be used to modify an intervention or for adapting its principles to another area … mediators answer the question as to why an intervention worked” (Latham, 2007, p. 64). Once we have a clearer understanding of how coaching affects the salesperson behavioral and motivational variables, we will be able to develop prescriptive models to guide managers in their interventions. But to arrive at that stage, further research is needed regarding the mechanisms through which coaching acts to help salespeople achieve higher performance. This conclusion will guide another one of my research questions, which will be later presented in this chapter.

3.3 Particularities in coaching salespeople

Most of the scientific research on coaching was done in general organizational settings and scholars have studied different aspects of coaching employees throughout the organization. However, I propose that coaching salespeople is different and presents additional challenges than coaching other employees in the
organization. I base my speculation on the following two aspects, which are further developed:

a) Salespeople's role and work are different than other employees' and, accordingly, sales managers leading sales teams face additional challenges than those managers leading other teams;

b) The process of generating value and achieving expected performance levels is radically different for salespeople than for other employees in the organization.

3.3.1 Differences in salespeople's role and work

It is generally accepted in organizations that salespeople are different from other employees and that their role has changed, evolved and became more complex than it was during the twentieth century; lately, many scientific papers have been devoted to understand these changes and their impact on salespeople roles and profiles (Jones, Brown, Zoltners and Weitz, 2005; Ingram et al., 2002, 2005; Marshall, Goebel and Moncrief, 2003; Marshall, Moncrief and Lassk, 1999; Moncrief, 1986; Moncrief, Marshall and Lassk, 2006; Sharma, 2001).

Salespeople perform a difficult job, usually away from the facility where the rest of the employees work, they have more latitude and discretionality regarding the use of their time, they have variable remuneration schemes, and they work at the boundaries of the organization (Ingram et al., 2005). In order to cope with these additional work challenges, salespeople must have different personal characteristics than other employees in the organization, as for example, higher self-motivation, self-leadership or resistance to rejection.

Furthermore, the particularities of sales work impact not only the personal characteristics of the salespeople, but also the way in which they should be led and managed. According to the scientific literature, leading salespeople presents
additional challenges than leading employees in other less complex and dynamic business environments (Ingram et al., 2005) for the following reasons:

1) Salespeople usually operate in social, physical and psychological isolation from other employees in their organization. In these situations, sales manager's leadership and self-leadership are more important than in situations where this isolation does not exist;

2) Salespeople work at the boundaries of the organization. Thus, they represent the company for customers and others outside the company, and they represent the client for the people inside the company. In this double role, they usually receive conflicting demands from all of these parties. Giving adequate answer to these conflicting demands requires additional leadership and abilities, compared to other employees who work within the limits of the organization;

3) Salespeople are usually required to work in extended formal and informal teams. These teams can extend nationally and even globally, and are formed by people working in the same or other organizations. Leading this type of teams call for additional leadership and abilities, compared to those needed by other people operating within the confines of the organization;

4) Salespeople usually have part of their compensation plan tied to short-term financial results, such as sales volume. Thus, salespeople tend to focus on the achievement of short-term goals, such as monthly quota. However, most companies are also interested in long-term results, such as customer satisfaction and retention, and some are including these items in their performance metrics. Leading people who are evaluated and rewarded simultaneously for the achievement of short- and long-term results presents additional challenges than leading people with fewer and more straightforward performance metrics.

The previous points enumerate unique aspects of the salespersons’ job conditions leading to greater leadership challenges. Other environmental conditions, particular to the sales organization could be added to the above-mentioned list. Rapid changes in products, shortened product development cycles, channels restructuration and changes in buying processes, are all affecting the way a sales force should be lead and managed (Ingram et al., 2005).

In the following chapter, I will elaborate on the differences between sales leadership, sales management and sales coaching. They are different, although related
constructs, as sales coaching for example is one of the activities that a sales manager must perform to conduct a sales force. Accordingly, as sales coaching is an activity within sales leadership, and leading a sales force is different than leading regular employees, I conclude that coaching salespeople is different and presents additional challenges than coaching other employees in the organization.

3.3.2 Differences in value generation and performance achievement

The second difference concerning sales coaching refers to differences in the process of generating value and achieving work performance because, in the particular case of salespeople, their performance is mediated by their client's decisions.

In general organizational settings, employee task performance is directly observed and measured by his supervisor, and it is not externally mediated; after the coaching intervention the employees are more motivated, thus they put greater effort on their tasks; as a consequence of working harder, the observed behavioral performance is higher, and the conclusion is that their performance has risen.

In sales contexts, however, there are two important differences. First, the salesperson has to identify the customer's needs and present him a solution that covers those needs; if the customer finds enough value in the salesperson's proposition, then he will choose to make business with him; otherwise, he will turn to another provider. This means that the salesperson's behavior is not the only determinant of his performance; his performance will be affected by the client's evaluations of the salesperson's proposal, the comparison to other proposals, and the customer decisions. The salesperson's performance is mediated by the client's decisions.
Second, in sales settings working harder is only part of the performance equation. In competitive markets, customers do not take their purchasing decisions based on the salesperson that works the hardest, but based on the best value proposal, for which the salesperson is called to work smarter (Sujan, Weitz and Kumar, 1994). As a consequence, coaching models that only work on salesperson’s motivation and effort are not considering a complete picture. For achieving its full potential, the coaching intervention must affect both aspects of the salesperson’s behavior: working hard and working smart. Accordingly, in the next chapter, I will present a theoretical framework that considers these two aspects of the salesperson value generation process. Therefore, I consider that this model is more complete and explains better the consequences of coaching than present research on coaching, which has not considered the dimension of the salesperson value generation process.

4. RESEARCH QUESTIONS

In the previous section, I have elaborated on three specific managerial problems, which have been validated by practitioners during my residency period. These problems deal with the lack of hard evidence linking coaching with performance, the need for an explanation of how coaching might impact performance, and the fact that coaching salespeople is different from coaching other employees and, thus, models capturing the complexities of sales force value generation are required.

I have also stated that the scientific literature has neither provided evidence supporting the practitioners’ assumptions nor theoretical models explaining the phenomena. Although this last statement will be further supported in the next chapter through an extensive literature review, for the purpose of this chapter it is important to underline the lack of scientific explanations to the managerial problems already identified.
According to Chevrier (2006) this conscious gap between what it is known and what it should be known about a certain problem, constitutes a valid research problem. In this case, the subjective issue of *what should be known about sales coaching* is supported by its social and scientific pertinence. As I have previously shown, there is a real interest among practitioners to solve the above-mentioned problems, thus providing social pertinence; these problems are also incorporated in the scientific concerns, thus providing scientific pertinence (Chevrier, 2006).

Consequently, I will focus my doctoral reflection on the following research questions:

*Research question #1: Does coaching by the sales manager have an impact on salesperson’s performance?*

*Research question #2: What are the mediating mechanisms that turn coaching by the sales manager into salesperson’s performance?*

5. CONCLUSIONS

In this chapter, based on my experience and the observations made during my residency period, I have identified three specific problems regarding coaching. These problems have been validated by practitioners during my residency period, thus providing social pertinence. I also presented some of the literature review conclusions (which will be further developed in the next chapter) concerning the importance of coaching for scholars and the lack of a complete scientific body of knowledge; this provides additional scientific pertinence to the identified problems. The simultaneous presence of social and scientific pertinence indicates that this is a valid research problem, and in consequence, I have proposed two research questions to focus my doctoral reflection on them.

In the following chapter, I will elaborate on the coaching literature and I will show the existing gaps in scientific research; in chapter 3, I will propose a model for
sales coaching, based on two institutionalized theories, Leader-Member Exchange Theory and Goal-setting Theory, and I will develop the model hypothesis; finally, in chapter 4, I will present the methodology used to test the model and its hypotheses.
CHAPTER 2
LITERATURE REVIEW

1. INTRODUCTION

In the previous chapter I have stated the importance that coaching has in managers’ practice and literature. In the scientific literature, scholars have also praised coaching as a critical managerial activity increasing employee performance.

Recently scholars identified three critical emerging changes in the environment and challenges that affect the practice of selling and sales management: increased complexity, collaboration and accountability (Ingram et al., 2005). These changes led to increased customers expectations from salespeople, heavier cognitive demands on salespeople, reduced response time, increased breath and depth of communication between salespeople and customers, customized solutions and the emergence of customers as co-producers of rendered services (Jones et al., 2005).

As a consequence of these changes, scholars have suggested that sales managers should shift their style from commanding to coaching (Marshall et al., 2003), that coaching should be strongly used by sales managers as a primary development tool focused on the individual development of salespersons (Ingram et al., 2002) and that they should spend more time identifying skill deficiencies and coaching subordinates to improve their effectiveness (Ingram et al., 2005).

In recent scientific studies, coaching skills have been identified by sales managers and sales representatives as one of the most important attributes that effective sales managers must have (Deeter-Schmelz et al., 2008; Deeter-Schmelz et al., 2002). According to these exploratory studies, sales coaching would impact sales representative development, which ultimately impact sales representative job performance and customer relationships development.
Despite its importance, scientific research on coaching has been sparse and inconsistent. Scholars have scarcely explored different aspects of the coaching phenomena, as antecedents (Ellinger 2003; Graham, Wedman and Garvin-Kester 1993; McLean et al., 2005; Rich 1998), core coaching processes (Ellinger and Bostrom 1999; Graham, Wedman and Garvin-Kester 1994) and outcomes (Agarwal et al., 2006; Ellinger 2003; Ellinger et al., 2003); lately, different ways of integrating these researches have been proposed (Pousa 2008; Pousa et al., 2007), taking into account the different levels and dimensions addressed (Figure 1).

Figure 1
Multidimensional multi-level framework

<table>
<thead>
<tr>
<th>Levels of analysis</th>
<th>Dimensions</th>
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<tbody>
<tr>
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<td>Antecedents</td>
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However, throughout the coaching literature, researchers have used different definitions and underlying paradigms to study the phenomenon, thus making it
difficult to integrate their research and to differentiate it from other research currents in management and leadership (Hamlin et al., 2009; Ives, 2008). Furthermore, some of the critical coaching outcomes (as performance increases or behavioral changes) have not been researched exhaustively or have not received conclusive support (Agarwal et al., 2006; Ellinger et al., 2005).

Several conclusions could be drawn from the previous paragraphs. First, that coaching has an increasing importance for both practitioners and scholars; second, that empirical research have not produced yet results that could strongly influence the practice of coaching; and third, that there is a growing need for coaching models grounded in solid theoretical bases.

2. DEFINITION OF COACHING

2.1 Review of coaching definitions

Coaching has been variously defined as a process for improving work performance (Fournies, 1978); as a one-to-one process of helping others to improve, to grow and to get to a higher level of performance, by providing focused feedback, encouragement and raising awareness (Corcoran et al., 1995; Hargrove 1995; Heslin, Van De Walle and Latham, 2006; Orth, Wilkinson and Benfari 1987; Richardson 1996; Whitmore 1985); and as a developmental process that enables and empowers people (Evered and Selman 1989) and opens new opportunities for learning through which improved performance is attained (Ellinger and Bostrom 1999; Ellinger et al., 2003).

A recent study has identified 36 different definitions for coaching in the scientific literature, which have been further categorized into four variants of coaching practice within this industry: coaching, executive coaching, life coaching and business coaching (Hamlin et al., 2009). Within each category the definitions
were further scrutinized to find their commonalities regarding purpose and processes. The authors conclude that "there is little substantive difference between the four variants of coaching as presented in many 'practice-based' books" (Hamlin et al., 2009). Results of this study are shown in Table 1.

**Table 1**
Conceptualizations of the Variants of Coaching

<table>
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<tr>
<th>Categories/Variants of Coaching</th>
<th>Derived Unified Perspectives/Composite Conceptualizations of Coaching</th>
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<tbody>
<tr>
<td>'Coaching'</td>
<td>... is a helping and facilitative process that enables individuals, groups/teams and organizations to acquire new skills, to improve existing skills, competence and performance, and to enhance their personal effectiveness or personal development or personal growth.</td>
</tr>
<tr>
<td>'Executive Coaching'</td>
<td>... is a process that primarily (but not exclusively) takes place within a one-to-one helping and facilitative relationship between a coach and an executive (or a manager) that enables the executive (or a manager) to achieve personal-, job- or organisational-related goals with an intention to improve organisational performance</td>
</tr>
<tr>
<td>'Business Coaching'</td>
<td>... is a collaborative process that helps businesses, owner/managers and employees achieve their personal and business related goals to ensure long-term success.</td>
</tr>
<tr>
<td>'Life Coaching'</td>
<td>... is a helping and facilitative process-usually within a one-to one relationship between a coach and a coaché-which brings about an enhancement in the quality of life and personal growth of the coaché, and possibly a life changing experience.</td>
</tr>
</tbody>
</table>

Hamlin et al., 2009

Other scholars do not agree with this last study's conclusions, as they have identified deeper differences, for example, between coaching and executive coaching, two of the most researched constructs. Kilburg (1996), one of the most respected scholars in executive coaching, has defined *executive coaching* as:
“... a helping relationship formed between a client who has managerial authority and responsibility in an organization and a consultant who uses a wide variety of behavioral techniques and methods to help the client achieve a mutually identified set of goals to improve his or her professional performance and personal satisfaction and, consequently, to improve the effectiveness of the client's organization within a formally defined coaching agreement.” (Kilburg, 1996, p. 142).

This working definition pinpoints several distinctive characteristics of executive coaching. First, the person receiving executive coaching is not an employee or a sales representative, but a higher level manager; second, the coach helps this manager to achieve a set of mutually identified goals; when coaching employees however, the goals are not chosen by the coaché but assigned by the employee’s manager or the organization; third, through this process the executive improves his or her performance and personal satisfaction; when coaching employees, the focus is to improve only their performance, while increased personal satisfaction could be achieved as an involuntary by-product of the interaction; and four, the executive coaching relationship is developed under a formal agreement, while coaching is not. There are also some similarities between coaching and executive coaching. They both take the form of an ongoing relationship, with the general intention of helping the coaché to improve and reach higher levels of performance. The differences, however, outnumber the similarities.

In a recent study, D’Abate, Eddy and Tannenbaum (2003) developed a nomological network of characteristics that are used to define developmental interactions constructs, such as coaching, executive coaching, mentoring, and others. Different constructs were systematically analyzed using this nomological network, in order to clarify their meanings. The study shows that there has not been enough consistency in the description of coaching and executive coaching, and suggest that researchers have often refer to different characteristics when describing the same construct. However, there are some clear differences between them. Specifically, coaching is more strongly associated with specific developmental goals (like
acquiring specific skills or knowledge), while executive coaching is more strongly associated with general developmental goals; coaching is usually provided by someone belonging to the organization (internal), while executive coaching is provided by someone belonging to other organization (external); coaching interventions are more informal or unstructured, while executive coaching interventions are more programmatic or formal; regarding the behaviors exhibited by the coach, coaching is more associated with the demonstration of appropriate behavior by the coach and the provision of practical application, while executive coaching is more associated with the provision of specific information; regarding the emotional support related with the intervention, coaching is more associated with actions aimed at enhancing the confidence and reducing the stress or anxiety of the person receiving coaching, while executive coaching is more associated with the provision of aid and friendship to the receiver of the intervention. Although both constructs share other characteristics, there are enough differences to suggest that coaching and executive coaching are different constructs.

As it was portrayed in this section, scientific research provides us with a large number of different definitions for coaching, and scholars don't even agree whether they are different or not. This makes it difficult for a new researcher to adhere to one particular definition, and additional precautions must be taken to identify the precise definition of coaching that fits a particular coaching context. In particular, to define what coaching is in sales contexts I will have to use additional research studies regarding underlying paradigms. In the next section I will delve into these paradigms and into three underlying axes identified by Ives (2008) that will help me define sales coaching.

2.2 Different paradigms associated with coaching

Throughout the scientific research, two different and competitive coaching paradigms can be identified. The first one is what it is called the control-dominate-
**prescribe** paradigm, in which the coach "directs, controls and prescribes the behavior of the employee" (Ellinger and Bostrom, 1999, p. 753). This paradigm was also depicted as the *boss-as-expert model* (Richardson, 1996), because the manager providing coaching acts as an expert, who diagnoses the problematic situation and gives the employee specific directives on what to do to solve the problem. In this paradigm, the *locus* of knowledge remains with the manager, who *directs* the employee towards the solution that the manager himself has identified, and the main focus of this coaching activity is to *train* the employee. We can probably track this paradigm back to sports coaching, which is at the origin of coaching in business and organizations (McLean *et al.*, 2005), and was initially considered as a group of managerial techniques to motivate people and train them in job skills (Evered and Selman, 1989). Some of the early research in coaching was based in this paradigm (Good, 1993; Rich, 1998).

The second one considers an *empowerment* paradigm for coaching, in which the coach "encourages and motivates employees to learn, and helps to surface and test assumptions ... is highly learner-centered and focuses on collaboration and discovery" (Ellinger and Bostrom, 1999). In this paradigm, the coach is a *resource* who uses his knowledge and skills to help people a) became aware of their flaws and responsibilities, b) propose changes and solutions, and c) commit themselves with their implementation (Richardson, 1996; Whitmore, 1985). One of the most important tools used in this kind of coaching processes is *questioning*; through the use of precise questions, the coach guides the salesperson's reflection, helping him to diagnose the problem and to propose the solution (Whitmore, 1985). Accordingly, the *locus* of knowledge is located now within the employee, and the coach becomes a facilitator of employee discovery, learning and development (Ellinger and Bostrom, 1999; Evered and Selman, 1989; McLean *et al.*, 2005). Recent research in coaching has privileged this paradigm (Agarwal *et al.*, 2006; Ellinger *et al.*, 2003; Yukl and Lepsinger, 2004).
Pousa (2008, may) proposed that the *directive coaching paradigm* was commonly accepted by practitioners and scholars during the early stages of coaching research (the 70's and the 80's); by the turn of the century there was a shift in scholars' mindset towards a *developmental coaching paradigm*, even though some of the scientific research continued to include directive behaviors as part of the coaching construct definition and measuring instruments (Ellinger *et al.*, 2003, 2005; Graham *et al.*, 1993). Recently, Ives (2008) confirmed this chronology and added a third paradigm that includes the recently adopted *therapeutic and personal development paradigm*; he further contributed to the clarification of coaching paradigms by proposing three axes of analysis across which coaching approaches could be defined. These axes are a) directive versus non-directive, b) personal-developmental versus goal-focused, and c) therapeutic versus performance-driven.

The first axe (directive versus non-directive) addresses the degree of intervention and directive behavior showed by the manager when acting as a coach. As it was stated at the beginning of this section, two clear paradigms emerge from the literature base on coaching: a directive versus a non-directive paradigm. The first one describes interventions where the coach acts as an expert and provides both the diagnosis and the solution, thus leaving only a passive role to the coaché. Non-directive approaches, on the contrary, transfer control and responsibility from the coach to the coaché; the coach uses insightful questions that lead to reflection, raised awareness and self-discovery (Ives, 2008; Latham, Almost, Mann and Moore, 2005). Recent research has identified that effective non-directive coaching behaviors (such as facilitating and empowering) correlate with effective managerial behaviors; on the contrary, being too authoritarian and directive have been identified as ineffective behaviors (Ellinger *et al.*, 2008; Hamlin *et al.*, 2006).

The second axe (personal development versus goal-focused) addresses the characteristic that some coaches “adopt a pragmatic approach towards their client’s problems, while others adopt an exploratory style that seeks to uncover the
underlying issues” (Ives, 2008, p. 106). Coaches using a development-focused approach usually address deeper dimensions of personality and see the coachés as the recipients of therapy. Coaches using a solution-focused approach help coachés reframe their challenges as practical problems, support solution construction and help them discover the required internal and external resources to overcome the problems (Ives, 2008).

Finally, the last axe (therapeutic versus performance-driven) recognizes that some coaching approaches are concerned with establishing a therapeutic relationship between coach and coaché, while others approaches addresses the need of increasing the coaché performance. Therapeutic approaches use psychotherapy techniques, address coaché’s feelings, and are ultimately designed to ameliorate dysfunctional behaviors; performance-driven approaches are focused on changing actions towards goal achievement (Ives, 2008).

These three axes provide a unique framework for understanding and classifying the different coaching approaches found in the scientific literature, and also to define with precision what sales coaching is and is not. Regarding the first axe (directive versus non directive) Ellinger et al. (2008) and Hamlin et al. (2006) have found that the most effective coaching behaviors are those attached to non-directive coaching; they have also found that ineffective managerial and coaching behaviors are associated with authoritarian, directive, controlling, autocratic and intimidating behaviors. Thus, effective coaching is non-directive.

Regarding the second axe (personal-developmental versus goal-focused), in sales contexts the sales manager is mainly concerned with helping salespeople achieve goals and expected performance, rather than promoting salesperson’s personal development (which can result as a by-product of the solution-focused process). Sales coaching happens in a working context, and it is one of the different managerial activities that managers perform in order to manage their sales forces
(Ingram et al., 2005). The whole purpose of the sales effort is to achieve organizational goals, and sales coaching activities must be subordinate to this general purpose; thus, sales coaching is goal-focused.

Regarding the third axe (therapeutic versus performance-driven) the sales manager provides coaching in order to help the salesperson develop new task-related skills and competences; it is not his main interest to coach salespeople to provide therapeutic support or personal development, but to increase the salesperson’s capabilities of facing work-related challenges. Through the coaching intervention the coach helps salespeople think through issues themselves and find adequate solutions to their work-related problems; thus, salespeople are better equipped to face their client’s demands and achieve their goals. Thus, the sales coaching process is performance-driven.

According to the last three paragraphs, sales coaching can be characterized as a non-directive, goal-focused and performance-driven intervention led by the sales manager (Figure 2).

![Figure 2](image_url)

Figure 2
Sales coaching defined through Ives’ axes

(Ives, 2008)
2.3 **Sales coaching compared to other sales constructs commonly used in the sales and leadership literature**

2.3.1 *Sales Leadership, Sales Management, Supervising and Sales Coaching*

Leadership, management and supervision are three constructs that are sometimes used interchangeably in the scientific literature, although they have important differences (Ingram *et al.*, 2005). These differences are expressed by the type of activities performed when leading, managing or supervising, and the frequency of use of each one at each managerial level in the organization (Ingram *et al.*, 2005).

Regarding the type of activities, sales leadership involves setting a general strategic direction for the sales organization, defining and articulating a vision, establishing core values, developing the organization's culture, and inspiring others; sales management and supervision have a more precise and operational focus. They are concerned with the planning, implementation and control of a sales program, and typical activities comprise recruiting and selecting salespeople, conducting training, coaching, and evaluating and rewarding the sales representatives (Ingram *et al.*, 2005).

Regarding the frequency of use, managers in higher-level positions in the sales organization usually devote more time to leadership activities, even though they also perform managerial and supervising activities; likewise, field managers must also engage in some leadership activities, while most of their time they perform managerial and supervising activities (Ingram *et al.*, 2005).

Accordingly, sales-coaching is a specific activity performed within the context of sales management by managers at different levels in the sales organization, and a different construct than sales management, sales leadership or supervising.
2.3.2 Sales coaching versus feedback

In some studies, scholars have tended to define coaching as a way of providing feedback (Agarwal et al., 2006; Good, 1993; Rich, 1998; Yukl and Lepsinger, 2004). Even though practitioners and scholars agree that providing feedback is one of the observable coaching behaviors, it is not the only one, and effective coaching comprises additional behaviors like asking questions, raising awareness or encouraging people to think through issues by themselves. In this section I will elaborate on these two concepts, feedback and coaching, and I will show that they are two different constructs, although providing feedback is one of the observable behaviors associated with coaching.

Early research on sales management has identified supervisory feedback as a useful mechanism that sales managers could use for controlling salespeople’s performance (Jaworski and Kohli, 1991). However, scholars have identified different types of feedback according to its locus (feedback on salesperson’s output or on salesperson’s behavior) and its valence (positive or negative feedback), and concluded that different types of feedback may differ in their impact on salespeople’s job-related variables. For example, through the use of negative feedback the sales manager can help clarify salesperson’s role, and through the use of positive feedback he can impact salespersons’ satisfaction and performance (Jaworski and Kohli, 1991).

As I am going to make a distinction between “giving feedback” and “giving coaching”, it is worth exploring what the sales manager does when he “gives feedback”. As an example, I have extracted the following two items from Jaworski and Kohli’s (1991, p. 200) measurement instrument: 1) “I find my manager’s feedback on how to improve sales very useful”; and 2) “I disregard my manager’s suggestions on how to improve sales” (italics added). From these two items we can deduce that, when giving feedback, the sales manager: 1) tells the salesperson what is wrong; and 2) tells or suggests him what to do to remedy the situation. Through this
behavior the sales manager identifies both the problem and the solution, while the salesperson performs only a passive role in this process. Referring to Ives' (2008) axes, it is clear that *giving feedback* alone is a directive behavior.

Giving feedback was also identified as one of the constructs of coaching, together with trust and role modeling by the sales manager (Rich, 1998). However, practitioners and scholars also proposed that, in a coaching intervention, it is more effective to ask questions to assist the salesperson to think through the problems, raise awareness of his own flaws, and propose solutions and changes, than to tell him what to do (Richardson, 1996; Whitmore, 1985; Yukl and Lepsinger, 2004). Accordingly, recent research has defined the coaching construct as conformed by eight different behaviors, including "providing feedback" and "questioning to encourage employees to think through issues themselves" as distinctive behaviors (Ellinger et al., 2003). When we compare "providing coaching" to "giving feedback", we see that "providing coaching" proposes an active role to the salespeople as they are responsible for identifying both the problem and the corresponding solutions.

In consequence, giving feedback is one of the behaviors that the sales managers show when providing coaching to a salesperson; but, to be considered as *coaching* they must show other complementary behaviors. So, every time sales managers provide coaching, they also provide feedback; the reciprocal, however, is not true. Not every time that they give feedback, they provide coaching. Thus, when the sales manager has to interact with the salesperson to correct a situation, he can choose to either 1) just *give feedback*, telling the salesperson what the problem is and what to do about that; or 2) give him *coaching*, that is, asking questions and helping the salesperson to think through the issues and come up with a solution.
3. ANTECEDENTS OF SALES COACHING

3.1 Review of coaching antecedents

Scientific research has identified three types of antecedents of coaching a) the skills that managers must have in order to conduct the activity, b) the proper organizational climate for coaching, and c) the situations that trigger a coaching situation.

Regarding the skills that managers must have, Orth et al. (1987) proposed that managers are not born coaches and that they have to learn how to coach through experience, observation and training. This learning will help them to create a proper climate for coaching, and to conduct effective coaching interventions. To create a climate that contributes to a free and open exchange of ideas, managers must express concern for helping employees, temporarily suspend their judgment, listen emphatically, develop a trustful and respectful relationship, and be supportive. To conduct effective coaching interventions managers must have four types of skills: observational, analytical, interviewing and feedback skills. These skills will allow the coach to monitor employee’s performance against established goals and expectations, to identify opportunities to expand employee’s capabilities and increase performance, to determine when coaching is the right strategy to be used, to ask reflective questions, to listen actively, and to provide feedback likely to produce behavioral changes (Orth et al., 1987). Even though they provided examples and advice of what managers should do, they neither provided a list of specific and observable behaviors nor theoretical or empirical support for this list of skills.

Also regarding the required skills to conduct coaching processes, Graham et al. (1993) found that coaching skills can be learned by managers through training activities. They used previous research by Schelling (Schelling, 1991, quoted in Graham et al., 1993) who identified “eight themes associated with successful sales
managers, [which] collectively referred to as 'coaching skills' ... serve to define the relationship between a sales managers and the sales group" (Graham et al., 1993, p. 3). These eight coaching skills are: 1) to communicate clear performance objectives, 2) to provide regular performance feedback, 3) to consider all relevant information when appraising performance, 4) to observe performance with clients, 5) to know the sales staff well enough to help them develop self-improvement plans, 6) to recognize and reward high performance, 7) to provide help, training and guidance and 8) to build a warm, friendly relationship (Graham et al., 1993, 1994). They conducted a research prior and after a management training course in coaching skills, and they found a statistically significant increase on the ratings of the managers' coaching behaviors three months after the course (Graham et al., 1993).

Regarding the organizational climate for coaching, Evered and Selman (1989) proposed that creating an organizational culture for coaching is a critical activity for managers; they have a responsibility in changing from the prevailing prescriptive managerial paradigm (control-dominate-prescribe paradigm) to an empowerment paradigm, in order to create the proper climate for coaching. Coaching will rise in a management culture that rewards and values employee development (Ellinger et al., 2005), based on partnership and commitment (Evered and Selman, 1989). For this to happen, organizations must clearly define what they expect from managers as developmental agents, and provide them with training in employee development, support and resources (Ellinger et al., 2005).

More recently, Ellinger (2003) identified the types of situations that trigger coaching interventions, and characterized them as 1) Gaps, deficiencies and discrepancies, 2) Political, and 3) Developmental. The first group gathers employees' poor performance, mistakes or inappropriate behavior as catalysts for coaching interventions. The second group comprises problematic situations of high visibility, high stakes for the employee or the organization, or negative consequences for the manager. The third one is the result of employees participating in new assignments or
projects, transitions to other positions, or need for development. The author concludes that:

"... coaching interventions [are] the result of multiple catalysts. Although coaching has been traditionally viewed as a tool or technique for improving deficiencies or addressing problem situations, this research indicates that managers ... also become involved in coaching interventions because of the potential to help employees grow and develop ..." (Ellinger, 2003, p. 16).

3.2 Antecedents of coaching and the theoretical framework

The previous review has showed that the organizational climate and adequate manager coaching skills create the conditions for coaching to arise; however, the real triggers for coaching interventions are situations where a gap in performance is either observed or expected. It is important to note that in all three categories of Ellinger’s (2003) study, the concept of gap is always present; it expresses the difference between what it is expected from the employee and the employee’s actual or potential performance. In Ellinger’s (2003) first type of situations (Gaps, deficiencies and discrepancies) there is an actual performance problem; in the second one (Political) there is an actual or potential performance problem of high political visibility; and in the third one (Developmental) the employee could face potential performance problems as a result of being assigned to new tasks. In all three situations, coaching is used as a tool or technique to remedy actual or potential performance problems by helping the employee develop new competences, awareness, skills or task-related strategies.

Orth et al. (1987) have also identified the concept of gap (although they didn’t use this word) when they proposed that managers must develop observational skills in order to monitor employee’s performance against established goals and expectations.
In sales contexts, salespeople are normally subject to goals, demands and expectations, and they are measured against them; they usually have monthly sales quotas to achieve, they face clients and customers demanding better prices and higher service levels, and they have to tackle new demands when they are assigned to new territories, accounts or product lines. All these demands can be easily assimilated to Ellinger’s categories and might trigger sales coaching interventions in order to achieve the expected performance. According to Goal-setting theory, goals and demands also trigger cognitive processes in order to achieve the expected performance; they motivate employees to exert more effort, to persist in activities through time, to direct their attention to relevant behaviors and to develop new task-related strategies (Miner, 2005). This reasoning gives further support to my choice of Goal-setting as a highly significant theory to model sales coaching process.

4. CONSEQUENCES OF SALES COACHING

4.1 Review of coaching consequences

Practitioners have largely praised the positive consequences of coaching on job satisfaction, performance, commitment, and employee development. The rationale for this statement is that in a coaching context, people will feel more valued and respected by their employers, thus they will tend to be more loyal and work harder; in addition, more developed people will have higher job-related competences, perform better and obtain higher customer satisfaction (Ellinger et al., 2005). Two recent qualitative studies provide some support to these statements; both salespeople and sales managers agree that coaching skills impact sales representative development, which ultimately increase sales representative job performance and customer relationships development (Deeter-Schmelz et al., 2002, 2008).

However, few scholars have studied the consequences of coaching through published research in scientific journals. Ellinger et al. (2005) explored the
consequences of coaching in logistic contexts; they examined the extent to which coaching was used at 18 distribution centers in the United States, and the impact of managerial coaching behavior on warehouse worker job satisfaction and job-related performance. They concluded that 1) the extent to which managerial coaching behavior was present in the sample was low, 2) managerial coaching behavior was a significant predictor of job satisfaction, and 3) managerial coaching behavior was a significant predictor of job-related performance but to a much lesser extent.

In this study, a regression model explained 40% of the variance in warehouse worker job satisfaction, with managerial coaching behavior being the most significant predictor; supervisor hours of training for current job position was also found to be a significant predictor of warehouse worker job satisfaction (Ellinger et al., 2005) (Table 2).

Table 2
Supervisory coaching impact on job satisfaction

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Standard β</th>
<th>T-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisory coaching behavior</td>
<td>0.61</td>
<td>16.04</td>
</tr>
<tr>
<td>Warehouse worker hourly wage rate</td>
<td>0.01</td>
<td>0.11</td>
</tr>
<tr>
<td>Warehouse worker hours of training</td>
<td>0.05</td>
<td>1.32</td>
</tr>
<tr>
<td>Warehouse worker months in current position</td>
<td>-0.02</td>
<td>-0.49</td>
</tr>
<tr>
<td>Supervisor hours of training for current position</td>
<td>0.10</td>
<td>2.58</td>
</tr>
<tr>
<td>Supervisor span of control (number of subordinates)</td>
<td>0.04</td>
<td>0.80</td>
</tr>
<tr>
<td>R²</td>
<td>0.40</td>
<td></td>
</tr>
</tbody>
</table>

Ellinger et al., 2005

Another regression model explained 18% of the variance in warehouse worker job performance, with five significant variables accounting for most of this variance: warehouse worker hourly wage rate, warehouse worker hours of training for current
job position, supervisor span of control (number of subordinates), supervisor hours of training for current job position, and finally, supervisor coaching behavior (Ellinger et al., 2005) (Table 3).

Table 3
Coaching impact on employee performance

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Standard β</th>
<th>T-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisory coaching behavior</td>
<td>0.13</td>
<td>2.94</td>
</tr>
<tr>
<td>Warehouse worker hourly wage rate</td>
<td>0.35</td>
<td>6.39</td>
</tr>
<tr>
<td>Warehouse worker hours of training</td>
<td>0.20</td>
<td>4.45</td>
</tr>
<tr>
<td>Warehouse worker months in current position</td>
<td>-0.08</td>
<td>-1.54</td>
</tr>
<tr>
<td>Supervisor hours of training for current position</td>
<td>0.16</td>
<td>3.50</td>
</tr>
<tr>
<td>Supervisor span of control (number of subordinates)</td>
<td>-0.20</td>
<td>-3.83</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.18</td>
<td></td>
</tr>
</tbody>
</table>

Ellinger et al., 2005

Although Ellinger et al.'s (2005) work is a valuable study for being one of the few having investigated coaching impact on job satisfaction and performance its reliability and generalizability might be questioned. First, the measures were taken at different levels of analysis; warehouse worker job satisfaction and warehouse worker perception of managerial behavior were measured at individual level, but job-related performance was measured at group level; each manager gave an overall performance evaluation for his subordinates as a whole rather than for each individual worker. Second, the managers gave their perception of job-related performance rather than objective performance measures; as the person reporting the performance measures is the most interested person in showing increased performance (as a consequence of his effort of changing his managerial style to coach the employees), the measure lacks strong credibility. Third, the performance measure was highly specific of warehouse contexts; the manager was asked if the employees applied the fundamental
procedures for 1) safely moving products through the facility, 2) handling product without injury to co-workers, 3) operating materials handling equipment, 4) properly handling products when storing and 5) moving and handling products without damage; even though these measures can be valid in logistics contexts, they are not the usual measures to evaluate performance in organizational settings, thus reducing the generalizability of results. Fourth, even though the results for job satisfaction seem quite solid, those for performance are not conclusive; the regression with job performance as a dependent variable only explained 18% of its variance, and manager coaching behavior (although significant) was the factor with less impact on the dependent variable. As a general conclusion, it could be said that Ellinger et al.'s (2005) results are promising, but not conclusive. Further research could help shed more light in the relationship between managerial coaching and performance.

Lately, another research by Agarwal et al. (2006) also studied the relationship between managerial coaching behavior, job satisfaction and performance. Building on Leader-Member Exchange Theory and Social Cognitive Theory, they proposed that 1) the coaching provided by the manager will impact employee performance, after controlling for job satisfaction; and 2) coaching is a behavior reflective of a deep, fundamental shift in managerial philosophy, thus middle-level managers' coaching will be affected by the coaching received from high-level managers.

They proposed that, in an organization that uses coaching as a current managerial activity, middle-level managers will learn to coach after receiving themselves coaching from their high-level managers; based on Social Cognitive Theory they proposed that modeling is a dominant process through which individuals immersed in a social context learn; accordingly, middle-level managers will observe, select and emulate coaching behaviors after their elders’ and, thus, will learn how to coach.
A complementary theory (LMX Theory) was used to explain the developmental, high-quality coaching relationship that is established between the manager and the subordinate; it also provided a rationale to propose that the quality of a middle-manager’s upward dyadic relationship will be reflected in his downward dyadic relationships as well.

Their multi-level model proposed that job satisfaction directly influences sales performance of both the salesperson and the middle-level manager; coaching intervenes in two ways: 1) through a direct effect on performance, and 2) moderating the relationship between job satisfaction and performance. They found that “the extent to which supervisors follow a coaching-oriented style of management explains significant variance in the sales performance of supervisees, after controlling for the variance explained by their job satisfaction” (Agarwal et al., 2006, p. 22). The moderating effect, on the contrary, was not supported.

This research is very significant because it is one of the few studies trying to test the relationship between coaching and performance; furthermore, it is the only one adopting a multi-level perspective. However, the main goal of their research was to analyze how coaching diffuses in a social context, through behavioral modeling and learning; their choice of Social Cognitive Theory perfectly fits this goal. However, their focus of attention differs from my research interests; they were not interested in identifying any mediating mechanisms that could explain the impact of coaching on performance, while this is the main interest of my dissertation; this difference explains our different choices of theoretical frameworks: they chose a multi-level, social theory, grounded in a messo paradigm, while I chose an individual level, cognitive theory, grounded in a micro paradigm. Nevertheless, it is very interesting to underline the similarities in our interpretation of the coaching relationship: a high quality, trust-based relationship between a manager and a collaborator, which can be understand as a leader-member exchange (LMX) relationship.
In this introduction I have briefly presented what is known about the consequences of coaching from a scientific perspective; the conclusion is that few studies have tested the relationship between coaching and performance, and in consequence there is not an extensive and consistent support for this relationship. Furthermore, even though Ellinger et al. (2005) and Agarwal et al. (2006) pioneer studies are promising, some strong critics could be posed regarding their measuring instruments; finally, these studies proposed a direct relationship between coaching and performance, without delving into the key mediating variables.

4.2 Coaching consequences and the theoretical framework

In the previous section I have presented some differences between Agarwal et al.'s (2006) research goals and mine's, which justify our different choices of supporting theories (Social Cognitive Theory versus Goal-setting Theory); additionally, I have also underlined our similarities in our conception of what the coaching relationship is and how it works, which supported our choice of the same theory to explain this relationship, LMX Theory.

Furthermore, I have presented Ellinger et al.'s (2005) findings of the positive relationship between supervisory coaching and job satisfaction. Even though the authors didn't make any theoretical speculation of their results, the relationship between managerial coaching behavior and warehouse worker job satisfaction can be easily explained using LMX Theory. Through the LMX perspective, coaching can be understood as a high quality supportive relationship between the manager and the subordinates, based on mutual trust, liking and respect (Agarwal et al., 2006); in high quality relationships, the manager provides more resources, support and feedback to subordinates, thus facilitating more cooperative interactions and subordinate development (Gertsner and Day, 1997; House and Aditya, 1997; Ilies, Nahrgang and Morgeson, 2007; Miner, 2005). Scientific research has provided empirical evidence of the positive impact of LMX on satisfaction with supervision, overall employee
satisfaction, organizational commitment and role clarity (Gerstner and Day, 1997). Meta-analysis also showed that LMX is more strongly related to subjective performance ratings than to objective measures of performance and turnover; it was speculated that new and more complex models could be necessary in order to clarify the relationships between LMX and objective outcomes (Gerstner and Day, 1997).

This line of reasoning, based on the published works of respected scholars, gives further support for my choice of LMX as a highly significant theory to explain the coaching relationship and its positive consequences.

5. CONCLUSIONS

Coaching has been largely praised by both scholars and practitioners as a key managerial activity to be performed by sales managers in order to effectively respond to changes and challenges in the twenty-first century. However, scientific research has been scarce and inconsistent; studies have been based on different coaching definitions and paradigms, and few of them are grounded in solid theoretical bases; most research have studied the phenomenon at the individual level of analysis, but few studies focused on dyadic, group or organizational levels of analysis, as it can be appreciated in Figure 1; finally, some studies analyzed the relationship between coaching and proximal and distal outcomes, as satisfaction and performance, but without questioning which the mediators to these relationships were.

This last gap is probably one of the most critical deficiencies found in the coaching literature; identifying the mediators in any relationship is invaluable because this knowledge can be used to answer the question as to why the intervention worked, to modify or improve it in the future, and to generalize its principles to other settings (Latham, 2007, p. 64); as the scientific literature has not provided concrete answers as to which the coaching mediators are, practitioners have to rely on other
practitioners' models and advices, thus introducing a big variance in the achievement of coaching benefits.

This critical problem is specifically addressed by my research through the second research question: what are the mediating mechanisms that turn coaching by the sales manager into salesperson's performance?; to answer it, I propose a model of coaching mediators, grounded in LMX and Goal-setting Theory, which is further presented and developed in the next chapter.
CHAPTER 3
THEORETICAL FRAMEWORK

1. INTRODUCTION

In this chapter, I will present a research model based on two institutionalized and complementary theories, Leader-Member Exchange (LMX) Theory and Goal-Setting Theory. These two theories are complementary, in the sense that each one of them explains a critical part of the coaching intervention; LMX theory is a relational theory that can help us better understand how a high quality relationship between the coach and the coaché might impact salesperson's behavioral variables; goal-setting theory is a situationally specific, cognitive based psychological theory, congruent with the present trends in motivational theory, which can help us understand how sales goals and job demands turn into salesperson's actions and performance.

In the next sections I will elaborate on the two theories that support my model, I will present my theoretical model and, based on these theories, I will further elaborate on the significant mediating variables that explain how coaching affects performance and their supporting hypotheses.

2. THEORETICAL FOUNDATIONS

2.1 Why two theories to explain sales coaching?

In this research work, I am trying to test if the coaching intervention has an impact on individual salesperson performance (Research question #1) and to explain what the mediating mechanisms are (Research question #2). The first question delves into the consequences of coaching at individual level (distal outcomes); the second one, looks for an explanation of the mechanisms mediating this relationship (proximal outcomes). Both research subjects are essentially micro subjects, dealing
with the behaviors of individuals and small groups in organizations (Miner, 2005), but the first one is circumscribed to the individual level of analysis while the second one includes a dyadic perspective. Accordingly, the theoretical framework must allow the researcher to address *simultaneously* both levels (individual and dyadic) and both dimensions (proximal and distal).

The choice of a particular theory or theories depends on the nature of the phenomenon under study. In this case, sales-coaching presents several particular characteristics, as for example:

a. The coach and the coaché develop a high-quality relationship, based on mutual trust and respect (Rich, 1998).

b. This coaching relationship allows them to work in an open and collaborative way, characterized by exchange in the form of greater empowerment, commitment, harder work and increased tolerance for errors (Kinlaw, 1989; Richardson, 1996; Whitmore, 1985).

c. Salespeople have clearly defined and challenging goals (in the form of sales quotas), and they usually have to achieve these goals in order to get their monthly rewards, in the form of variable salary, commissions and bonuses.

d. Salespeople also have to fulfill the demanding expectations of different stakeholders, as for example the clients, who usually demand better service levels, increased communication, customized solutions and their participation as co-producers of rendered services (Jones *et al*., 2005).

Leader-member Exchange Theory is the most significant theory for explaining the high-quality exchanges that take place in a coaching relationship and their positive consequences on behavioral salesperson variables. LMX theory establishes that a manager can develop high-quality relationships or exchanges with some of his subordinates, “characterized by high levels of trust, interaction, support and formal and informal rewards” (Ilies *et al*., 2007); the quality of this relationship affects important leader and member attitudes, behaviors and outputs (Gertsner and Day, 1997; House and Aditya, 1997; Ilies *et al*., 2007). As I have concluded in the
end of the previous chapter, research by other respected scholars (Agarwal et al., 2006; Ellinger et al., 2005) provides additional support for my choice of theory.

However, one central characteristic of salespeople's work is their subordination to externally set, short- and long-term goals, in the form of sales quotas, sales and marketing goals, and increasing demands from clients, customers and other stakeholders. In sales contexts, the coaching process is a solution-focused, performance-driven intervention, aimed at helping the salespeople achieve these goals and demands. Accordingly, Goal-setting Theory provides significant clues to explain how sales-coaching affects salespeople's behaviors that allow them to achieve high goals. The main principle of Goal-setting Theory is that goals affect actions (Latham, 2007; Locke and Latham, 1990); when people is committed to demanding goals, they adapt their behavior in order to reach these high goals by exerting more effort, by persisting in their course of action, by mobilizing their stored knowledge and by developing new task-related strategies (Latham and Locke, 2007; Locke and Latham, 2002, 2006).

In the next sections, I will elaborate on each of these two theories and I will show how they could be integrated into a single theoretical framework to model what happens with a sales representative's behavior as a consequence of the coaching intervention.

2.2 Leader-Member Exchange Theory

The theoretical formulations proposed by George Graen in the 70's focused on the dyad created by a superior and one subordinate, thus guiding research to what was initially called Vertical Dyad Linkage (VDL) and later adopted the name of Leader-Member Exchange (LMX) theory (Miner, 2005). The theory departed from the assumption that leaders manifest one consistent leadership style (Average Leadership Style) to posit that they develop different types of relationships with
different subordinates (Dansereau, Graen and Haga, 1975; Liden and Graen, 1980). In the VDL conception, two types of dyadic relationships between a superior and a subordinate are important: high- and low-quality relationships. In high-quality relationships, superiors rely more on interpersonal exchange, rather than formal authority, thus providing more resources and higher levels of assistance; accordingly, the subordinates are willing to accept more responsible tasks, to give more time and effort, and to accept more risks related to receiving less-than-equitable extrinsic rewards for their effort (Miner, 2005). Subordinates also reciprocate high LMX relationships by going beyond required in-role behavior more frequently and engaging in citizenship behaviors, thus maintaining a balanced social exchange (Ilies et al., 2007).

Initial research on VDL focused on the validation of the existence of differentiated dyads within a work group. These researches found that, contrary to the prevailing assumptions of the Ohio State and Michigan studies about the homogeneity of leadership behavior (average leadership style), effective leadership processes occurred when managers developed differentiated relationships with their subordinates (Graen and Uhl-Bien, 1995). Building on VDL findings, LMX research analyzed the impact of high-quality dyads on organizational outcome variables (Gerstner and Day, 1997; Graen and Uhl-Bien, 1995; House and Aditya, 1997; Miner, 2005). Key findings of this stage of theory development documented "significant, positive relationships between quality of exchange (LMX) and many outcome variables of interest" (Graen and Uhl-Bien, 1995, p. 229). A recent meta-analysis showed significant positive correlations between the LMX construct and satisfaction with supervision, overall satisfaction, organizational commitment and role clarity (Gerstner and Day, 1997). This study also showed that LMX is more strongly related to subjective performance ratings and member affective outcomes, than to objective measures of performance and turnover. Accordingly, it was speculated that new and more complex models could be necessary in order to clarify the relationships between LMX and objective outcomes (Gerstner and Day, 1997).
Later researches on LMX theory development focused on how more effective leadership processes could evolve through the development of effective leadership relationships, shifting the focus from a relationship between superiors and subordinates to a partnership among dyadic members (Graen and Uhl-Bien, 1995; Gerstner and Day, 1997). Significantly, in a coaching intervention, the differences between manager and subordinate blur and they became equals trying to tackle a performance problem.

LMX is a relevant theory to study sales coaching for several reasons. Scholars proposed that LMX theory “has evolved into one of the more interesting and useful approaches for studying hypothesized linkages between leadership process and outcomes” (Gerstner and Day, 1997). Sales coaching is a different construct than sales management, sales leadership or supervising, but it is still one of the activities that managers perform within their role to help salespeople achieve their goals and increase performance; sales coaching is a one-to-one (dyadic) process having a direct impact on salespersons’ behaviors and outcomes. Practitioners report that coaching allows them to establish a high quality relationship with employees and salespeople, based on trust and mutual respect (Richardson, 1996; Whitmore, 1985); sales coaching goes beyond the contingent-reward model by relying on personal exchanges and disposition, empowerment, and willingness to accept responsibility and risk. These variables also describe what happens in high LMX relationships; in these relationships the managers use more leadership (influence without authority) than supervision (influence based upon only authority) (Dansereau et al., 1975), thus allowing for a greater latitude to negotiate their respective roles; they influence the behavior of the member through interpersonal exchanges, and offering the subordinates more job latitude, influence in decision-making, open and honest communication, support, confidence and consideration (Dansereau et al., 1975).

High-quality LMX relationships are also characterized by high degrees of mutual trust, respect and obligation between both parties; leaders provide higher
amounts of information, influence, confidence, concern, support and assistance; they also give their subordinates higher levels of latitude to perform their jobs, thus contributing to their job enrichment; subordinates reciprocate by taking additional responsibilities, developing ownership feelings toward the unit and its goals, and providing more effort and commitment on the pursuit of larger mutual interests (Dansereau et al., 1975; Graen and Uhl-Bien, 1995; Gerstner and Day, 1997; House and Aditya, 1997; Ilies et al., 2007; Lee, 2005; Liden and Maslyn, 1998; Sparrowe and Liden, 1997).

“LMX theory may be more accurately viewed as a theory of dyadic relationships and their subjective consequences, rather than a theory that focuses primarily on leadership” (Gerstner and Aditya, 1997, p. 435). Accordingly, LMX theory can provide a useful theoretical framework to analyze the sales coaching relationship, and some of the proximal outcomes of this relationship like satisfaction or commitment (Table 4). However, to provide explanations regarding how other distal, objective outcomes (e.g.: performance) are affected, new and more complex models are required (Gerstner and Day, 1997). Gerstner and Day (1997) found that LMX is more strongly correlated to subjective performance ratings than to objective performance; additionally, measures for LMX varied across leaders and members, thus affecting their correlation with performance (Table 4).

<table>
<thead>
<tr>
<th>Correlates</th>
<th>r</th>
<th>Corrected r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance ratings (Leader LMX)</td>
<td>.41</td>
<td>.55 (a)</td>
</tr>
<tr>
<td>Performance ratings (Member LMX)</td>
<td>.28</td>
<td>.30 (b)</td>
</tr>
<tr>
<td>Objective performance</td>
<td>.10</td>
<td>.11 (b)</td>
</tr>
<tr>
<td>Satisfaction with supervisor</td>
<td>.62</td>
<td>.71 (a)</td>
</tr>
<tr>
<td>Overall satisfaction</td>
<td>.46</td>
<td>.50 (a)</td>
</tr>
<tr>
<td>Organizational commitment</td>
<td>.35</td>
<td>.42 (a)</td>
</tr>
</tbody>
</table>

a : Correlation were corrected for unreliability of both LMX and criterion measures
b : Correlations were corrected for only unreliability of LMX measure

Gerstner and Day, 1997
LMX can provide a significant theoretical framework to analyze the coaching relationship and the proximal outcomes but, due to some particular characteristics of salespeople, a second theory could greatly increase our comprehension of the phenomenon. Like no other employee in the organization, salespeople are motivated and directed towards the completion of sales quotas and other goals, and rewarded for their achievement. Fulfilling the expectations and demands of customers and markets present additional challenges to salespeople’s regular work; they usually have to adapt their style and strategies to cope with these demands, and develop new knowledge, competences and strategies. These elements are not contemplated in the LMX framework, so another complementary theory must be added in order to have a more solid model. Locke and Latham’s Goal-setting theory (1990) provide additional valuable explanations about the behavior of people committed to a challenging goal and the actions that a person can take in order to achieve it.

2.3 Goal-setting Theory

Goal-setting theory was developed inductively by Edwin Locke and Gary Latham over a twenty-five-year period spanning from the mid 70’s to the 90’s (Latham, 2007). It evolved from a single, core hypothesis (goals affect actions) to a complete, empirically-grounded theory explaining how clearly defined goals help people achieve high levels of performance (Locke and Latham, 1990). Today, it is a theory with high external and internal validity, strongly supported by research in laboratory and field settings, and its practical utility has been demonstrated across a wide range of applications and countries (Miner, 2005; Locke and Latham, 2006). Goal-setting effects “generalize across a wide range of tasks, settings, subjects, countries, criteria and time spans” (Locke and Latham, 1990, p. 46). Comparative assessments of goal-setting theory in relation to other theories of work motivation by Miner (1984), Pinder (1984) and Lee and Earley (1988) have highly rated it on different criteria, including both the criterion of validity and usefulness in application (studies cited in Locke and Latham, 1990 and Latham, 2007).
According to Goal-setting Theory, performance is a function of both ability and motivation, thus there are four mechanisms that affect the relationship between goals and performance: 1) higher goals motivate people to put greater effort and persistence on their pursuit; 2) higher goals motivate people to direct their attention to goal-related actions and away from non-goal-relevant activities; 3) in order to accomplish the tasks, people must have the requisite task knowledge and skills, so they will be able to “pull” these stored task-relevant skills when needed; and 4) when confronted with new and complex tasks, people will engage in the development of new knowledge or new task related strategies (Locke and Latham, 2002, 2006).

Other central variables in Goal-setting Theory are: 1) feedback, which people need to track their progress toward the goal; 2) people’s commitment to the goal, which is enhanced by people’s perceptions of their capacity of reaching the goal (self-efficacy) and the perceived goal importance; 3) task complexity or the extent to which it is difficult to perform the task or to acquire task-related knowledge in new tasks; and 4) situational constraints (Locke and Latham, 2002, 2006).

Goal-setting Theory is relevant for the study of sales-coaching for several reasons. First, the theory presents a framework for analyzing how goals affect actions, and ultimately, performance. In a sales context, salespeople have clearly defined goals, usually in terms of sales quotas, and the coaching intervention tries to influence salespeople’s behaviors in order to help them achieve their goals. Second, the theory’s significant mediators are effort, persistence, task knowledge and skills, and the development of new task specific strategies; through the coaching intervention, the coach helps the salesperson develop specific strategies to accomplish a difficult task or to service a difficult client, thus increasing the salesperson’s skills and motivation, which are precursors of effort and persistence.

In the next sections, I will bring together LMX and Goal-setting theories and I will present an operable and complete model of sales coaching, which will help us:
1) understand how sales coaching might affect behavioral salespersons’ variables and outcomes; 2) propose testable hypotheses; and 3) expand present knowledge on coaching and sales coaching.

3. A MODEL FOR SALES COACHING ANALYSIS

In this section, I will first elaborate on the dynamics of the coaching intervention and the variables associated with the different aspects of the coaching conversation; I will base this description on a comprehensive integration and summary of four different sources of knowledge: 1) an extensive scientific literature review covering the areas of coaching, sales management, leadership, work motivation, LMX Theory and Goal-setting Theory among others; 2) the observations that I have done during my residency period; 3) my personal experience of more than ten years acting as a consultant in the areas of sales coaching, sales management and sales force training; and 4) the practitioners literature on coaching and sales coaching. Following this, I will present a theory-based model depicting the mediating variables linking coaching to performance; finally, I will introduce the structure of the rest of this document.

According to both practitioners and scholars, during the sales-coaching intervention the sales manager and the salesperson tackle a problematic situation in order to find alternative courses of action that will help the salesperson overcome the problem and increase his performance. The coaching intervention is goal-focused and performance-driven in the sense that coach and coaché work together to solve a specific performance problem; the central aspects of sales-coaching in an organizational setting has to do with helping the salespeople achieve their goals and increase their performance.

In order to do this, the sales manager enacts his role as a coach by asking questions in order to allow the salesperson diagnose the problematic situation by
himself, and to propose alternative courses of action; the coach acts as a facilitator of salesperson’s discovery. One consequence of this intervention is that the salesperson, with the help of the coach, develops new task-specific strategies that will allow him to overcome the problematic situation and, eventually, achieve the goal and increase his performance.

Another positive consequence is that, during the sales-coaching intervention, the sales manager abandons his directive role and shares the responsibility of finding a solution with the salesperson; the increased trust and quality of the relationship allow them to reach more openness and a greater latitude in the negotiation of their mutual roles; the salesperson is treated as a knowledgeable partner in this discovery process, and they work out alternative options together; when they agree to a solution, the salesperson has an increased feeling of ownership with the solution, and greater commitment.

Finally, after having participated in this trustful and open intervention, having discussed the situation and the prospective alternative solutions extensively with the sales manager and having mutually agreed upon the best prospective solution, the salesperson realizes that he has been a central actor of this process; he has contributed with his knowledge to find a solution, and he knows what actions he has to implement in the following weeks to solve the problem; thus, his self-efficacy is greatly increased.

As a consequence of this type of sales-coaching intervention, the salesperson has new task-related plans to tackle the problem, is more committed to reach the goal, and is convinced that he has the capacity of reaching the goal (higher self-efficacy), thus he is more motivated to put more effort in the goal pursuit and to try new strategies, thus increasing in the end his own performance.
The relationships described in the previous paragraphs are shown in Figure 3 and they will be further developed and justified in following sections of this document.

![Figure 3](image)

Proposed model of sales coaching mediators

In the next sections, based on Leader-Member Exchange Theory and Goal-setting Theory, I will elaborate on some key coaching consequences, as goal commitment, effort, new task-specific strategies and self-efficacy and I will propose testable hypotheses.

3.1 Goal Commitment

3.1.1 Goal commitment in the context of Goal-setting Theory

Commitment is a central construct in Goal-setting Theory since its early developments, and a necessary condition for achieving performance after a hard goal is established (Donovan and Radosevich, 1998; Hollenbeck and Klein, 1987; Klein, Wesson, Hollenbeck and Alge, 1999; Locke and Latham, 1990). In fact, if a person is not really trying to achieve a goal, the goal itself will not have much effect on
subsequent action (Locke and Latham, 1990); only someone who is genuinely trying to achieve a goal will engage in concrete actions to achieve it and, thus, can be described as committed to that goal (Locke and Latham, 1990).

Goal commitment is defined as *one's determination to reach a goal* (Locke and Latham, 1990) and implies the extension of effort, over time, toward the accomplishment of an original goal and emphasizes an unwillingness to abandon or to lower the goal (Hollenbeck and Klein, 1987; Wright, O’Leary, Cortina, Klein and Hollenbeck, 1994).

Early Goal-setting Theory developments have proposed that goal commitment act as a moderator of the relationship between goal difficulty and task performance, such that “higher levels of goal commitment lead to a stronger relationship between performance goals and subsequent performance” (Donovan and Radosevich, 1998).

Despite its centrality to the Theory and to the effects of goals on performance, early research on goal-setting has not given special attention to goal commitment; in a meta-analysis examining the role of goal commitment in goal-setting research, Hollenbeck and Klein (1987) report that in the majority of the reviewed studies (66 out of 109) no mention was made to that variable, and in another 12% of the studies, goal commitment was only mentioned but not measured or assessed. Nevertheless, in the following years, instruments for measuring goal commitment were developed and refined (Hollenbeck, Klein, O’Leary and Wright, 1989; Klein, Wesson, Hollenbeck, Wright and DeShon, 2001; Tubbs, 1993; Wright et al., 1994) thus facilitating the research of goal commitment in the context of Goal-setting Theory.

Two main confrontations emerged from the literature of goal commitment in the context of Goal-setting Theory. The first one refers to how to measure goal commitment, and the second one to the real effect of goal commitment as a moderator variable.
Regarding the first confrontation, two different measures of goal commitment were proposed and used throughout the literature; one is a self-report measure of goal commitment and the other one is an absolute discrepancy measure of the difference between personal and assigned goals (Wright et al., 1994). Hollenbeck et al. (1989) developed a 9-item self-report measure of goal commitment and demonstrated its internal consistency using a 4-, 7- and 9-item version of the measure; lately, by means of a meta-analysis, they proposed an improved 5-item measure, which is purer and more efficient than the previous 9-item version (Klein et al., 2001). Consistent with the literature on attitudes, this self-reported measure included items reflecting cognitive, affective and behavioral components of the goal commitment attitude; accordingly, it was proposed to be a better measure in comparison with the goal discrepancy alternative (Tubbs, 1993; Tubbs and Dahl, 1991; Tubbs and Ekeberg, 1991), which presents the practical and empirical problems of discrepancy's measures (Wright et al., 1994).

The second of the two confrontations concerns the real effect of goal commitment as a moderator variable, and the relationship between goal difficulty, goal commitment and performance. As I have stated previously, early research in goal setting has not paid much attention to the assessment of goal commitment (Hollenbeck and Klein, 1987) but a recent meta-analysis shows that this situation has reverted (Klein et al., 1999). In 1998, Donovan and Radosevich published a shocking meta-analysis that reported a nearly completely lack of support for the moderating effect of goal commitment in the goal difficulty-performance relationship, effect that accounted only for 3% of the performance variance (Donovan and Radosevich, 1998). This study was quickly followed by new meta-analysis and further conceptual clarifications of the role and effect of goal commitment on performance and the relationship between goal difficulty and performance (Klein et al., 1999). This last meta-analysis not only found support for the expected moderator effect, but also found support for the direct effect of goal commitment on performance under
particular circumstances. As these findings are particularly applicable to a sales context and to the process of sales-coaching, I will elaborate on them using Figure 4.

Figure 4
Goal difficulty, goal commitment and performance

Klein et al., 1999

The primary effect of goal commitment is to moderate the relationship between goal difficulty and performance; however, this moderation hypothesis assumes a big variance in both commitment and difficulty (Klein et al., 1999). This means that "a strong linear relationship should be evident between goal difficulty and performance when commitment is high, and goal difficulty should be unrelated to performance when commitment is low" (Klein et al., 1999). Figure 4, shows these relationships by means of the two continuous lines. This effect has been tested throughout the literature, and confirmed by different studies and meta-analysis (Hollenbeck, Williams and Klein, 1989; Klein et al., 1999; Locke and Latham, 1990, 2002, 2006)
However, goal commitment also has a direct effect on performance; "if goal level is held constant statistically ... commitment will have a direct positive effect on performance" (Locke and Latham, 1990, p.130).

This last assertion is represented by the square black dots on Figure 4; for an average level of goal difficulty, goal commitment has a direct, positive effect on performance (Klein et al., 1999). Furthermore, if goal level is held constant (for example, assigning all the subjects a difficult goal) goal commitment will directly affect performance. It is important to note, that this is the case in most sales contexts; salespeople usually have challenging goals (namely, sales quotas), and even though the quota level can vary for each concerned individual, that level is placed at the highest possible level for each sales representative, in order to maximize their performance. Consequently, in a sales context where salespeople have challenging sales quotas, goal commitment will not act as a moderator between goal difficulty and performance, but as a direct influence.

3.1.2 Antecedents of goal commitment

Due to its centrality in the context of Goal-setting Theory, different studies have delved into the antecedents of goal commitment; in an early assessment of these antecedents, Hollenbeck and Klein (1987) used past empirical research and Vroom's (1964) Expectancy Theory to develop a model of the antecedents and consequences of commitment to difficult goals (Figure 5).

After Hollenbeck and Klein (1987) presented their theoretical model, subsequent studies have shown that situational factors (as making the goal public) and personal factors (as having a high need for achievement or an internal locus of control) were valid antecedents of goal commitment (Hollenbeck et al., 1989); more recently, a meta-analysis showed that both the expectancy of achieving a difficult
goal and the attractiveness of its achievement were valid proximal antecedents of goal commitment (Klein et al., 1999).

The same meta-analysis found significant support for different distal antecedents of goal commitment, as ability ($r_c = .18$), volition ($r_c = .40$), goal specificity ($r_c = .19$), task experience ($r_c = .24$), and both the provision ($r_c = .13$), and the type of feedback ($r_c = .30$) (Klein et al., 1999).

Other studies also found that high-quality LMX relationships positively influence high goal commitment; based on Hollenbeck and Klein’s model (1987), Klein and Kim (1998) showed that, *in a goal-setting context, LMX was the primary determinant for goal commitment*. In fact, they found that “a strong dyadic
relationship between supervisor and salesperson was necessary for the latter to be committed to performing at a higher level" (Klein and Kim, 1998).

3.1.3 Coaching and goal commitment

Further to the impact of high-quality LMX relationships on goal commitment (Klein and Kim, 1998), there is another concept in Goal-setting Theory that can explain coaching impact on commitment: goal intensity.

Goal intensity refers to the "amount of thought or mental effort that goes into formulating or conceptualizing the goal or a plan of action to realize it" (Locke and Latham, 1990, p. 148). Goal intensity might be a powerful causal factor of goal commitment because it "makes people more aware of how the goal might be attained and thus leads to the formation of better plans and higher self-efficacy" (Locke and Latham, 1990, p. 149). These concepts have a strong relationship with what happens in a coaching intervention; during the coaching intervention the coach raises the employee's awareness about what is he doing wrong and what can he do to improve his performance (Richardson, 1996; Whitmore, 1985), thus leading to the agreement of implementation plans aimed at solving a problematic situation. Recent research has found that predeciding on what to do to achieve a goal (that is, establishing implementation intentions), help people take the agreed upon actions and reach the goals (Gollwitzer, 1999).

Research on implementation intentions have shown that having good intentions to reach hard goals are not enough for achieving them; however, when people prepare plans in advance and identify future situations to use those plans, they are more effective in taking the proper actions to reach the goals (Gollwitzer, 1999). It seems that the cognitive process of predeciding what actions to take and where and when to take them, promotes a more attentive mind-set, makes them more aware when the situation arrives, strengthens their attitudes towards the right actions, makes
them more committed to the goals, and help them pursue the goals more effectively (Brandstätter, Lengfelder and Gollwitzer, 2001; Gollwitzer, 1999; Gollwitzer and Brandstätter, 1997; Henderson, de Liver and Gollwitzer, 2008). The positive effects of predeciding increase when the cognitive load of the main task is higher (meaning, when the task is difficult), as is the case of salespeople leading sales process and sales interviews with customers (Gollwitzer, 1999). This implementations intentions act as "a mental link ... between a specific future situation and the intended goal-directed response ... thus, holding an implementation intention commits the person to goal-directed behavior once the appropriate situation is encountered" (Latham and Pinder, 2005, p. 498).

To summarize these last sections, scientific research has identified supervisory feedback, supervisory supportiveness, and high quality LMX relationships as valid antecedents for goal commitment; I have also proposed that sales-coaching can be understood as a high quality LMX relationship, in which the supervisor gives feedback and support to help the salesperson increase his performance. Additionally, during the coaching intervention the coach helps the salesperson diagnose the problematic situation, find the right solution, and commit to specific actions that will allow him solve it; goal intentions are worked out into implementation intentions, thus the salesperson will more likely use the agreed upon behaviors when a future problematic situation arises, showing increased goal-commitment. Accordingly, I propose that:

$$H_1: \text{The coaching provided by the sales supervisor positively influences salesperson's goal commitment.}$$

3.1.4 Consequences of goal commitment

Research on goal commitment has identified it as a mediator of the relationship between goal difficulty and performance, especially when there is a great
variance in goal difficulty; however, when goal difficulty is high and there is little variance in goal difficulty among individuals, goal commitment has a direct effect on performance. Accordingly, I propose that more committed individuals will be willing to put higher effort in goal pursuit, and that higher effort will have a direct impact on performance. To support my speculation, I will use 1) studies dealing with goal commitment construct definition and measurement, and 2) studies dealing with effort as one direct effect of goal difficulty. In the next paragraphs I will elaborate on the definition and measurement of goal commitment, to conclude that goal commitment directly affects effort; in the following section, I will elaborate on Goal-setting Theory to conclude that effort is one of the direct goal mechanisms presented by the theory, which directly impacts on performance.

The first group of studies refers to goal commitment definition and measurement. Goal commitment refers to "one's determination to reach a goal" (Locke and Latham, 1990) and implies the extension of effort, over time, toward the accomplishment of an original goal and emphasizes an unwillingness to abandon or to lower the goal (Hollenbeck and Klein, 1987; Wright et al., 1994). This definition makes a link between commitment and effort, in the sense that one way of observing a committed person is through the effort that this person shows in the pursuit of a goal.

According to this definition, several measuring instruments were developed (Hollenbeck et al., 1989; Klein et al., 2001). These instruments refer to the level of effort that a person is willing to put into a task in order to reach a goal ("I am willing to put forth a great deal of effort beyond what I'd normally do to achieve this goal"), and the level of persistence in pursuing the goal ("I am strongly committed to pursuing this goal" or in the reversed item "It wouldn’t take much to make me abandon this goal") (Hollenbeck et al., 1989). The consequence of these items is that goal commitment has a direct positive effect on both effort and persistence of effort, which are two direct mechanisms in Goal-setting Theory (Locke and Latham, 1990).
3.2 Effort

At the end of the previous section I proposed that goal commitment will have a direct influence on effort; to support this affirmation, I elaborated on the instruments measuring goal commitment and the items formulations. In this section I will continue elaborating on effort, based on what Goal-setting Theory has found about it; I will conclude the section proposing that increased goal commitment (achieved after the coaching intervention) will positively impact salesperson's effort, which in turn will positively impact sales performance.

3.2.1 Effort in the context of Goal-setting Theory

Goal-setting Theory has identified three direct goals mechanisms which correspond to the three attributes of motivated action: arousal or intensity, choice or direction, and duration (Locke and Latham, 1990, 2002, 2006). This means that goal committed individuals will put a greater effort to reach a goal (intensity), will persist longer in the pursuit of the goal (duration), and will choose the actions that lead better to goal achievement (direction) (Locke and Latham, 1990, 2002, 2006). Intensity of effort, persistence and direction "operate virtually automatically once there is commitment to the goal and the individual decides to act to achieve it" (Locke and Latham, 1990, p. 95)

Even though these are motivational factors, they can not be understood separately from other cognitive factors. Goals define, for the individual, a desirable standard of performance towards which actions are directed. When actions fall short of the desired outcome, they lead to negative performance evaluations or self-evaluations, and consequently are labeled as ineffective or unsatisfactory; following this assessment, the committed individual will engage on higher effort in order to eliminate the source of dissatisfaction (Locke and Latham, 1990). It is important to note that "only when ... ideas become goals, based on beliefs about what is important
or what one wants to attain ... do they affect action; cognitive awareness ... is a necessary element in goal setting, but it is not sufficient to motivate action” (Locke and Latham, 1990, p.87). The previous paragraphs suggest that there is a necessary initial step of commitment towards a goal that the person wants to obtain, which mobilizes the person cognitive resources allowing him to identify the actions to be taken, and motivating him to undertake those actions with intensity, persistence and direction of effort.

An early research by Locke, Cartledge and Knerr (1970) proposed a theoretical model to explain how these cognitive and emotional factors interact. This model proposes that knowledge of existents (such as knowledge of results from previous activities) trigger cognition processes in which the person evaluates the previous results against previous goals, objectives or values; this evaluation triggers emotional responses and reactions (positive if the evaluation is favorable; negative otherwise) which leads the person to establish new goals and actions to reach them. This process, as originally proposed by their authors, is depicted in Figure 6 (Miner, 2005, p.163).

**Figure 6**
Locke, Cartledge and Knerr’s model

```
| Existent (previous outcomes) | Cognition (evaluation) | Emotional reaction | Goal setting | Actions |
```

Miner, 2005

For example, in the case of a salesperson who is experiencing problems with a client (existents), he would evaluate this previous outcomes against company’s
standards of performance or customer satisfaction expected levels (cognition) and will be unpleased or dissatisfied with his results (emotional reaction); in consequence, he will establish particular goals with this client to increase his performance (goal setting) and will commit to deploy more effort or to develop a new strategy (actions).

As I have stated previously, intensity of effort is one of the three attributes of motivated action and one of the principal goal mechanisms identified by Goal-setting Theory. Intensity of effort typically refers to the amount of effort put forward in a task by a committed individual. Research has found that people given a hard, demanding goal provided greater effort than those with lower or do-your-best goals in both physical and cognitive tasks, thus leading to an increased performance (Locke and Latham, 1990).

The second attribute of motivated action is persistence of effort. Persistence of effort typically refers to the effort that a person maintains over time when pursuing a goal; persistence indicates how many time was spent on an activity or how many attempts the person has done to solve a problem or achieve a goal, but it indicates nothing regarding the intensity of effort deployed in the activity (Locke and Latham, 1990); research has found that people committed to specific, challenging goals will work longer at a task than people with other type of goals (Locke and Latham, 2002).

Persistence can also be expressed as endurance or tenacity to make physical or psychological effort; research has shown that people committed to hard goals in negotiating or bargaining situations are less willing to compromise their results and will use more time to arrive to an agreement, thus showing higher psychological endurance and tenacity; the result of this increased tenacity is that they normally arrive at better deals (better performance) than subjects told to do their best (Huber and Neale, 1987; Neale and Bazerman, 1985).
The third attribute of motivated action is direction or choice of action. It refers to the “arousal, discovery and/or use of task-relevant knowledge and strategies” (Locke and Latham, 2002, p. 707). The choice of a particular strategy to attack a goal by a committed individual is a complex process into which cognition and motivation interact. Research has identified different mechanisms through which direction is enacted.

In the first one, people are challenged by a demanding goal for a task that they usually do, which presents no additional demands. In this case, they use the knowledge and skills that they have already developed, which are automatically retrieved from their memory, and there is no additional conscious planning or development of new knowledge; they possess the knowledge and it is only a matter of retrieving an automated behavior and working hard (Locke and Latham, 1990, 2002, 2006). These plans and strategies are usually depicted as *stored universal plans* (SUP) (Locke and Latham, 1990).

In the second case, it is not a matter of using automated skills or behaviors, but they have to draw from a repertoire of skills that they have used in other related contexts, and adapt them to the present challenge (Locke and Latham, 1990, 2002, 2006). These plans and strategies are usually depicted as *stored task-specific plans* (STSP) (Locke and Latham, 1990).

Finally, in the third case, people are called to perform a new task for which stored knowledge is not directly applicable. In this case, they will engage in deliberate planning to develop strategies that will enable them to reach the goal (Locke and Latham, 1990, 2002, 2006). These plans and strategies are usually depicted as *new task-specific plans* (NTSP) and involve an intensive and purposeful cognitive activity (Locke and Latham, 1990). This third situation will be treated more extensively in a further section (3.3 Task-related strategies).
3.2.2 Antecedents of effort

Commitment and effort are two central variables in sales management research, and different studies have been able to establish a relationship between them; an early research by Chonko (1986) proposed that organizational commitment would be positively related to work effort, as well as effort would be positively related to performance; based on Chonko’s model, Ingram, Lee and Skinner (1989) found support for the relationship between job commitment and effort, and Sager and Johnston (1989) identified organizational commitment and job satisfaction as the main antecedents of salespeople’s perceived effort. Another early research by Oliver and Brief (1983, p. 14) found that “the most significant correlate of goal commitment is one’s expectation that the goal is attainable through effort expenditure”. It can be speculated that if people commit to a goal because they think that they could achieve it through effort once they are committed to the goal they would spend enough effort to achieve it.

Goal-setting Theory explained the main effect of hard goals in the fact that “hard goals lead to greater effort and persistence than easy goals, assuming the goals are accepted” (Locke and Latham, 1990, p. 29); there are two important underlying assumptions in the theory. First, that people must be committed to the goal to exert effort to reach it; committed people will exert more effort than non-committed people. Second, the theory posits that, if people are committed to the goal, they will exert more effort to achieve high goals (and consequently, less effort to achieve easy or do-your-best goals); the assumption is that, once they are committed, high variance in goal demands will explain high variance in deployed effort.

In sales contexts, however, salespeople’s goals and quotas are set at the highest level possible in order to maximize performance. In this case, there is no variance in goal demands to justify high variance in the effort deployed; when goals
are always high, and set to the maximum possible level, variance in effort could only be explained by variance in goal commitment (Figure 7).

Accordingly, I propose the following hypothesis:

\( H_2(a): \text{Salesperson's goal commitment will positively influence the intensity of effort deployed to achieve the goal.} \)

\( H_2(b): \text{Salesperson's goal commitment will positively influence the persistence of effort deployed to achieve the goal.} \)

\( H_2(c): \text{Salesperson's goal commitment will positively influence the direction of effort deployed to achieve the goal.} \)
3.2.3 Consequences of effort

The link between high goals and performance is at the core of Goal-setting Theory, and the mediating effect of effort is well documented in the scientific literature (Locke and Latham, 1990, 2002, 2006). Early research on goal-setting found that, when people spend more energy on a task (considering any of the dimensions of motivated action: intensity of effort or persistence of effort) they achieve higher performance (Earley, Wojnaroski and Prest, 1987), and subsequent studies confirmed these findings (Fang, Palmatier and Evans, 2004; Latham and Pinder, 2005; Locke and Latham, 1990, 2002, 2006). Early research on sales and sales management also confirmed the positive effect of working hard on sales performance (Brown and Peterson, 1994; Ingram et al., 1989; Sujan et al., 1994).

Accordingly, I propose that:

\[ H_{3(a)}: \text{Salesperson's intensity of effort will positively influence his performance.} \]

\[ H_{3(b)}: \text{Salesperson's persistence of effort will positively influence his performance.} \]

\[ H_{3(c)}: \text{Salesperson's direction of effort will positively influence his performance.} \]

3.3 Task-related strategies

3.3.1 Task-related strategies in the context of Goal-setting Theory

In the previous section I have presented the three dimensions of motivated action (intensity, persistence and direction) and their mediating effect between goals and performance within the context of Goal-setting Theory. According to the theory,
these three mechanisms operate almost automatically once the individual is assigned a goal and is committed to achieve it (Locke and Latham, 1990).

However, the three automated mechanisms of intensity, persistence and direction of effort are not always sufficient to attain the goal. Sometimes, when the individual is faced with new or different challenges, the automatic mechanisms of providing more effort or using known strategies (either SUP or STSP) do not guarantee goal achievement; the committed individual must engage in a conscious process of developing new task-related strategies or new task-specific plans (NTSP) in order to tackle the challenge (Locke and Latham, 1990, 2002, 2006).

New task-related strategies “are directional mechanisms that entail methods of performing a task extending beyond the relatively automatic mechanisms inherent in effort, persistence, and direction ... to conscious problem solving and creative innovation” (Miner, 2005, p.164); new task-related strategies are cognitive mechanisms but of a less automatic, and therefore less direct, type than those discussed in the previous section (Locke and Latham, 1990). This means that the individual must engage in a conscious, explicit and purposeful process of discovering better ways of performing a task.

The development of new task-specific strategies presents an alternative way to providing more effort, specially suited for complex tasks (Locke and Latham, 1990); as a salesperson faces new problems and the tasks become more complex “universal plans and simple task-specific plans become progressively less adequate by themselves to ensure goal achievement, while problem solving and the development of task-specific plans become progressively more important” (Locke and Latham, 1990, p.293). Therefore, Goal-setting Theory proposes two alternative ways through which goals affect performance: a direct, motivational path of providing more effort and an indirect, cognitive path of finding new ways to perform actions; these two ways can be easily identified in the model presented in Figure 1: the superior path
exploits the behavior of a committed salesperson providing more effort to achieve the goal in simpler, less challenging tasks; the inferior path shows the alternative behavior of the same salesperson developing new task strategies to tackle new or complex selling situations.

3.3.2 Antecedents of task-related strategies

Research on Goal-setting Theory has found that high goals act as stimulants to planning and strategy development. For example, salespeople with high behavioral and performance goals increased their communication with supervisors (Kim, 1984); other studies showed that people actively seek information from their supervisors during participative discussions (Campbell and Gingrich, 1986) or work together with the supervisors to develop new strategies (Chesney and Locke, 1988, cited by Locke and Latham, 1990).

In the context of Goal-setting Theory, scholars have narrowed the key antecedents of NTSP to two relevant interventions: participation and feedback (Locke and Latham, 1990).

Participation "would facilitate the development of productive NTSP on complex tasks when the knowledge of superior and subordinate together is greater than the knowledge of either one alone" (Locke and Latham, 1990, p. 316). The study of Campbell and Gingrich (1986), for example, manipulated participation regarding task knowledge and strategies among computer programmers, and found that participation enhanced their performance when writing complex programs. Other studies supported the fact that participation increase performance through NTSP, especially in field studies which involved "naturally occurring, more complex activities" (Locke and Latham, 1990, p.316).
Feedback also “influence performance on complex task by providing information that contributes to task understanding and facilitates the selection and evaluation of stored plans and the development of new task specific plans” (Locke and Latham, 1990, p. 318) and it will be more effective in increasing the individual’s performance, when it is more directed to strategy development.

3.3.3 Coaching and task-related strategies

I have already proposed that during the coaching intervention the coach helps the salesperson diagnose a problematic situation, find the right solution, and commit to specific actions that will allow him solve it and achieve his goals; during this intervention, the coach provides feedback to the salesperson and they explore alternative options to tackle a problematic situation; the coach asks questions to raise the salesperson’s awareness and to make him propose alternative actions to achieve the goals; eventually, they analyze the options and agree to a solution (Ellinger et al., 2003; Ellinger and Bostrom, 1999; Evered and Selman, 1989; McLean et al., 2005; Rich, 1998; Richardson, 1996; Whitmore, 1985; Yukl and Lepsinger, 2004).

I have also characterized sales coaching as a collaborative, non-directive, solution-focused and performance-driven intervention led by the sales manager, which can be model using LMX Theory. The sales coaching relationship between the sales manager and the salesperson, as depicted using LMX Theory, presents mutual increased communication, participation in the discussions and decision making, openness, and the mutual sharing of critical information. As these variables match up with those identified in the previous section as NTSP’s antecedents, I propose that:

\[ H_4: \text{The coaching provided by the sales supervisor positively influences salesperson's development of new task-related strategies.} \]
3.3.4 **Consequences of task-specific strategies**

Goal-setting Theory proposes that the performance effects of specific, challenging goals on complex tasks are mediated through their effects on the development of NTSP. Research on Goal-setting has found extensive support for this relationship (Locke and Latham, 1990, 2002, 2006; Seijts and Latham, 2001) and more recently additional research on implementation intentions provided new insights on how and why this effect is achieved; as these insights might prove significant the present research work, they will be developed in this section.

During the coaching intervention the coach raises the employee's awareness about what is he doing wrong and what can he do to improve his performance (Richardson, 1996; Whitmore, 1985); through questioning he helps sales representatives to think through issues by themselves (Ellinger et al., 2003) and come up with alternative actions to implement, aimed at solving a problem, increasing their performance and achieving the goals. At the end of the coaching intervention, the coach and the sales representative agree upon specific actions, which will be implemented by the salesperson in his next interactions with the clients. Recent research has found that *predeciding* on what to do to achieve a goal (that is, establishing implementation intentions), help people effectively implement the agreed upon actions and reach the goals (Gollwitzer, 1999); when people prepare plans in advance and identify future situations to use those plans, they are more effective in taking the proper actions to reach the goals (Gollwitzer, 1999).

Research suggests that the cognitive process of predeciding what actions to take, where and when to take them, promotes a more attentive mind-set, makes people more aware when the situation arrives, strengthens their attitudes towards the right actions, makes them more committed to the goals, and help them pursuit the goals more effectively (Brandstätter et al., 2001; Gollwitzer, 1999; Gollwitzer and Brandstätter, 1997; Henderson et al., 2008). The positive effects of predeciding
increase when the cognitive load of the main task is higher (meaning, when the task is difficult), as is normally the case of salespeople leading sales process and sales interviews with customers (Brandstätter et al., 2001; Gollwitzer, 1999). This implementations intentions act as "a mental link ... between a specific future situation and the intended goal-directed response ... thus, holding an implementation intention commits the person to goal-directed behavior once the appropriate situation is encountered" (Latham and Pinder, 2005).

The fact of exploring alternatives and agreeing on specific actions to implement during the coaching intervention helps the salesperson not only to have NTSP in his repertoire but to use them more effectively when the problematic situation arrives, thus increasing his performance and the achievement of goals. Accordingly, I propose that:

\[ H_5: \text{Salesperson's development of new task-specific strategies will positively influence his performance.} \]

3.4 Self-efficacy

Self-efficacy is a construct derived from Social Cognitive Theory, a theory that proposes a reciprocal causation model, in which individual behavior, cognition and the environment dynamically interact and influence each other (Gist and Mitchell, 1992). The concept of self-efficacy blossomed during the 70s in the psychological literature, and it proved useful to explain how people acquired and regulated their behaviors in order to cope with circumstances and achieved outcomes (Bandura, 1977). Perceived self-efficacy is concerned with "judgments of how well one can execute courses of action required to deal with prospective situations" (Bandura, 1982, p. 122).
The resulting evidence from different meta-analysis shows that beliefs of own efficacy significantly contribute to individual and group motivation and performance (Bandura and Locke, 2003). The results of one of these recent meta-analysis showed a significant weighted average correlation between self-efficacy and work-related performance of 0.38, after being adjusted for sample size outliers and extreme values (Stajkovic and Luthans, 1998); this effect alone represents a greater gain in performance than that obtained in meta-analysis examining only the effect of goal-setting or feedback on performance (Stajkovic and Luthans, 1998), thus providing a scientific justification for including the construct in a model exploring salesperson’s performance.

Additionally, “expectations of personal mastery affect both the initiation and persistence of coping behavior” (Bandura, 1977, p. 193); people with high self-efficacy will initiate actions to cope with a given situation, will spend more effort, will persist longer and will make better choices of activities and settings, compared to people with low self-efficacy (Bandura, 1977, 1982; Stajkovic and Luthans, 1998). This provides a rationale for including the construct of self-efficacy in a coaching model that includes commitment, effort and new task strategies as its main mediators.

3.4.1 Self-efficacy in the context of Goal-setting Theory

Self-efficacy is a pervasive concept in Goal-setting Theory, having an impact on many of its key variables like for example goal choice, goal commitment or effort; individuals showing high self-efficacy set higher goals than those with lower self-efficacy; they are more committed to the goals, work harder and have more persistence (Locke and Latham, 1990).

Self-efficacy beliefs also affect “the attentional and thinking process in the evoking appraisal of STSP” (Locke and Latham, 1990, p. 302); people with higher self-efficacy showed more efficiency when developing NTSP, thus leading to better
suited NTSP; when confronted with failure, people with higher self-efficacy better controlled their self doubts, persist longer in the goal pursuit, systematically tested alternative task-related plans and eventually obtained higher performance (Latham and Locke, 2007; Latham and Seijts, 1999; Latham and Pinder, 2005; Locke and Latham, 1990, 2002, 2006; Seijts and Latham, 2001).

Early research on goal-setting had identified self esteem (instead of self-efficacy) as an antecedent of goal commitment (Hollenbeck and Klein, 1987). However, these are two different constructs; “self-efficacy and self-esteem are not synonymous. Self-esteem refers to how one feels about one's self, whereas self-efficacy refers to how one appraises one's ability about a specific set of tasks…” (Latham and Wexley, 1994, p. 207). For example, a salesperson can have a high self-esteem, because he is happy with the way he has managed his career and personal life; however he can have a low self-efficacy to solve a problematic situation with one of his clients. The opposite is also true: a salesperson can have a low self-esteem because he is going through a difficult personal period, but at the same time have a high self-efficacy to perform the daily tasks at his work. Scholars quickly identified self-efficacy as the right construct to be used within the theory, and used it consistently through all their researches.

3.4.2 Antecedents of self-efficacy

Self-efficacy research proposed that people base their expectations of personal efficacy on four major sources of information: past performance accomplishments, vicarious experience, verbal persuasion and physiological states (Bandura, 1977). However, self-efficacy is “a comprehensive summary or judgment of perceived capability of performing a task” (Gist and Mitchell, 1992, p. 184). This means that people might use the four sources of information (enactive, vicarious, exhortative and emotive), but it is the individual’s cognitive appraisal and integration of these sources which ultimately defines his level of self-efficacy (Bandura, 1977); research
has identified three different processes through which the four sources of information are transformed into perceptions of efficacy: 1) the analysis of task requirements; 2) the attributional analysis of past experience; and 3) the assessment of personal and situational resources and constraints. These sources are shown in Figure 8.

3.4.3 Coaching and self-efficacy

In the previous section I have presented self-efficacy as a "superordinate judgment of performance capability that is induced by the assimilation and integration of multiple performance determinants" (Gist and Mitchell, 1992, p. 188) such as enactive mastery, vicarious experience, verbal persuasion and physiological arousal; these determinants can be integrated through three independent assessment processes: analysis of task requirements, attribution of experience, and assessment of personal and situational factors. In this section I will propose that sales-coaching can influence these three processes to increase salesperson's self-efficacy.
In the context of performance appraisal, coaching has been identified as a valid mechanism "to instill the desire within employees to continuously improve performance" (Latham and Wexley, 1994, p. 206) by acting upon two key variables: an employee's outcome expectancies and his self-efficacy. Therefore, the authors proposed that "the job of coaching is to strengthen an employee's self-efficacy regarding a specific task so that there is an inextinguishable sense of commitment that is resilient to drawbacks and rejections" (Latham and Wexley, 1994, p. 208).

Gist and Mitchell (1992) proposed that when an individual is engaged in an analysis of his own efficacy, he asks himself three questions: what are the demands required by the task at hand, what can he offer to perform it, and how can he integrate the performance determinants to arrive at a self-efficacy judgment. The coaching intervention naturally leads to influence these judgments, but the attentive coach can tacitly address these questions through specific strategies; additionally, the dynamics of the coaching intervention provides information aimed at increasing the salesperson self-efficacy. I propose that the coaching intervention can potentially influence the salesperson's self-efficacy in at least three different ways.

During the coaching intervention, the manager and the salesperson work together to tackle a problematic situation and to arrive at specific solutions that the salesperson will implement in the weeks following the intervention. During this conversation, they delve into the problematic situation and discuss extensively about what is happening, how they arrived at the situation, what alternatives have been already tried, what results have they rendered and what are the options that could be tried out in the future (Kinlaw, 1989; Richardson, 1996; Whitmore, 1985); the thorough discussion about options covers the different alternatives and actions to be taken, the resources needed, the support required by the salesperson, and his confidence in implementing the actions; finally, they agree upon a set of actions, which will be implemented in the weeks to come, and they schedule the next coaching conversation (Kinlaw, 1989; Whitmore, 1985).
The content of this coaching intervention is one of the ways in which it can influence the salesperson's self-efficacy. Talking about the problematic situation, the actions already taken, their consequences and the possible actions to take, provides information that gives the individual a more thorough understanding of the task environment, its attributes, complexity and the way that these factors could be addressed. This is one of the strategies for changing self-efficacy identified by Gist and Mitchell (1992).

The process of the coaching intervention can also increase the salesperson's self-efficacy. During the coaching intervention, the sales manager uses questioning to raise awareness and to help the salesperson think through issues by himself (Ellinger et al., 2003; Whitmore, 1985). In the dynamics of coaching, there is a shift in the power balance between the leader and the subordinate; the manager abandons his position of authority, also depicted as the-boss-as-expert model (Richardson, 1996), and becomes a facilitator of employee discovery, learning and development (Ellinger and Bostrom, 1999); the locus of knowledge rests with the employee, who is now is a better position to understand what can he offer to perform the tasks at hand and how can he use his past experiences to perform.

Finally, the coaching intervention conveys normative information. The coaching intervention consumes more resources and takes more time than a directive intervention; it takes longer to help the salesperson come up with a solution than to tell him what to do; it also takes a lot of detachment from the sales manager to abandon his position of authority and move to a high quality LMX relationship, characterized as a partnership among dyadic members (Graen and Uhl-Bien, 1995; Gerstner and Day, 1997). Thus, the salesperson receives unspoken signals indicating that he is a valuable and capable member of the dyad, and that the manager believes in his capacity to diagnose the problematic situation and to propose an intelligent solution to implement.
The content and process of the coaching intervention, as well as the normative information conveyed match with the strategies proposed in the literature to increase employee’s self-efficacy (Gist and Mitchell, 1992; Stajkovic and Luthans, 1998).

Accordingly, I propose that:

\[ H_6: \text{The coaching provided by the sales supervisor positively influences salesperson's self-efficacy.} \]

3.4.4 Consequences of self-efficacy

3.4.4.1 Self-efficacy and commitment

Research has extensively found consistent support for the relationship between self-efficacy and goal commitment, through a number of different clinical, educational and organizational settings; people showing high self-efficacy are more committed to their goals, and thus they work harder and persist longer even in the presence of failures and drawbacks; additionally, people with high self-efficacy show increased attentional and cognitive processes when evoking and retrieving stored task-related plans (either SUP or STSP), thus they are able to make better strategic choices when pursuing their goals (Latham and Locke, 2007; Latham and Seijts, 1999; Latham and Pinder, 2005; Locke and Latham, 1990, 2002, 2006; Seijts and Latham, 2001).

It was proposed that “practitioners should focus on ways to increase participant’s self-efficacy on task the participants perceive are complex as this increases goal commitment and subsequent performance” (Seijts and Latham, 2001, p. 304); the effect of self-efficacy on work-performance, through the mediating effect of increased commitment and better strategies, is so important that many scientific
studies made suggestions in line with the previous quotation to reap its benefits (Gist, 1987; Gist and Mitchell, 1992; Stajkovic and Luthans, 1998).

Accordingly, I propose that:

\[ H_7: \text{Salesperson's self-efficacy positively influences salesperson's goal commitment.} \]

3.4.4.2 Self-efficacy and new task-related strategies

Similarly, research has found consistent support for the relationship between self-efficacy and the development of new task-specific strategies, in a number of different clinical, educational and organizational settings; people with high self-efficacy show higher cognitive capabilities when developing new plans than people with low self-efficacy; they are capable of more effective analytic thinking, thus generating more and better alternative courses of action (Latham and Locke, 2007; Latham and Seijts, 1999; Locke and Latham, 1990, 2002, 2006; Seijts and Latham, 2001; Stajkovic and Luthans, 1998). Accordingly, I propose that:

\[ H_8: \text{Salesperson's self-efficacy positively influences salesperson's development of new task-specific strategies.} \]

4. CONCLUSIONS

Practitioners and scholars alike have largely praised the benefits of coaching in organizational contexts; scientific research on coaching, however, has been scarce and inconsistent; the relationship between coaching and performance has not received conclusive support, and the mediating variables have not been researched at all. This research tries to close the gap between what is presently known about coaching and what should be known in the opinion of both practitioners and scholars.
Accordingly, I have developed a model explaining the consequences of sales coaching on sales representative behavior and subsequent performance; the coaching intervention helps the salesperson to develop new task-specific strategies, which increases his capacity of adapting to different selling situations; additionally, the characteristics of the intervention increases his goal commitment and his self-efficacy; in consequence, he will be ready to spend more effort, with greater persistence, and making better choices of stored strategies. These mediating variables will ultimately increase salesperson’s performance (Figure 9).

The research exposed in this paper presents a number of advantages over the existing scientific research on sales-coaching. First, it proposes a model of coaching mediators, which represents an original perspective that can potentially advance the field of coaching research by enlarging our understanding of the cognitive and motivational processes addressed by the coaching intervention.

Second, the model is based on two institutionalized theories, as LMX and Goal-setting Theory. As such, it is not based on any particular practitioner’s model or
set of experiences, and it can potentially be generalized through a large series of organizational settings.

Third, the model addresses two complementary ways for achieving performance; one that considers the motivational aspects of the coaching intervention, where an increased performance is achieved through increased goal commitment, intensity of effort and persistence of effort; and another one that considers the cognitive aspects of the coaching intervention, where an increased performance is achieved through a better adaptability to different sales situations (direction of effort) and the development and implementation of new task-related strategies. These two ways are consistent with present research on adaptive selling and sales performance, which could be achieved through the alternative ways of working harder or working smarter.

As a final comment, it can be said that the results of this research can address the advancement of scientific knowledge, through the development of an original, theory-based model of coaching mediators, and simultaneously provide practical recommendations to practitioners willing to implement successful coaching processes in their organizations.
CHAPTER 4
METHODOLOGY

1. INTRODUCTION

In this chapter, I will discuss and present different aspects of my research planning; in other words, how I expect to measure and test the proposed model.

The chapter starts presenting the epistemological perspective adopted (post positivistic) and a general review of the research design (non-experimental design, cross-sectional, correlational study); after that, the sampling section is presented, and the sub-sections of sample size, sampling unit and sampling method are developed; following, the measures section presents a brief review of the most comprehensive instruments found in the literature for each of the model variables and which are the ones that I will use to test the model; finally, a brief review of the ethical considerations is presented, followed by the chapter conclusions.

Imbricate in different sections and sub sections I discuss important validity aspects, as for example how to increase the study’s statistical power (Sample size), how to reduce systematic errors (Sampling unit) or how to increase the reliability of the results (Measures).

2. EPISTEMOLOGICAL PERSPECTIVE

In previous chapters I have already identified two significant theories that can potentially enable a deep understanding of the coaching phenomenon in sales settings: LMX Theory and Goal-Setting Theory; based on these theories I have selected meaningful variables explaining how coaching affect salesperson’s motivation, cognition and behavior, and I have developed a conceptual model linking predictor and criterion variables.
The reasoning expressed in the previous paragraph adheres to a post-positivist epistemology, a research paradigm that accepts the existence of a single reality, which can be captured and understood by the researcher. The post-positivist paradigm uses deductive logic to go from the general (theories) to the particular (reality) through the development of hypotheses, and believe that time- and context-free generalizations are possible (Tashakkori and Teddlie, 1998). Post-positivists believe in the value-ladenness of inquiry (although research is influenced by the values of investigators, these influences can be controlled) and in the theory-ladenness of facts (research is influenced by the theory or framework that an investigator uses) (Tashakkori and Teddlie, 1998).

This research paradigm usually relies in what is known by the name of fixed research designs, a type of research where most of the research decisions are taken before data is collected; fixed designs are theory driven (Robson, 2002), thus decisions about variables, hypothesis, measures, sampling and type of analysis are all taken before any data is collected. In the next sections I will present, develop and justify these decisions in the context of my dissertation.

3. RESEARCH DESIGN

Previous research on coaching has relied on non-experimental designs to test the relationship between supervisory coaching and satisfaction or performance (Agarwal et al., 2006; Ellinger et al., 2003). This is not an innocent choice, considering that supervisory coaching is a behavior that a manager has to develop through years of training and practice; supervisory coaching is not an independent variable that could be easily manipulated in a laboratory setting. Thereby, researchers have identified non-experimental settings in sales (Agarwal et al., 2006) or logistics (Ellinger et al., 2003) as the better design choice.
In non-experimental designs the phenomenon under study is not deliberately manipulated or changed by the researcher, who simply measures predictor and criterion variables in order to establish a correlation between them; in my case, I invited salespeople working for a large American industrial company and a Canadian bank to answer a web-based survey; all measures were taken, in practice, over a small period of time (cross-sectional study), and the measures were used to test the model using structural equation modeling (correlational study).

Data was collected using a web-based, self-administered questionnaire; these type of questionnaires present several advantages over the traditional pencil and paper surveys; web-based questionnaires are cost-effective, easier and faster to administer, because there are no physical movement of formularies through the mail; the researcher can easily control who has or has not answered, therefore I sent mail remainders only to people concerned; and errors due to coding and data entry were greatly reduced.

The web-based questionnaire used existing measuring scales; the corresponding scale items and psychometric properties are presented in the Measures section.

4. SAMPLING

4.1 Sample size

The question regarding the determination of sample size is one of the most frequently asked by novel researchers (Cohen, 1976; Robson, 2002). However, “the answer is not straightforward, as it depends on many factors” (Robson, 2002, p.161). Some of these factors include population size and limited research resources; certain statistical tests, software and procedures that require a minimum numbers of cases,
below which they cannot be used (Robson, 2002); and also, issues of significance levels, statistical power and acceptable error levels must be taken into account.

In this section I will present the different methods recommended in the scientific literature to calculate sample size, like different rules of thumb and sizes associated with different statistical calculations; following this, I will finally present an extensive discussion on how to calculate sample size based on statistical power and effect sizes, and I will end the section calculating the required sample size to test my model for different levels of statistical significance and statistical power.

4.1.1 Estimating sample size using different rules of thumb

Rule of thumb is one of the ways to estimate sample size. A rule of thumb frequently proposed in the literature is the use of a minimum of 15 participants per variable (Robson, 2002). Unfortunately, the literature indicates nothing regarding the number of items used to measure each variable; whether is a single item or multiple items, the number of respondents remains fifteen per aggregated concept. Following this rule, my model measures eight different variables (coaching, commitment, intensity of effort, persistence of effort, focus of effort, self-efficacy, new task strategies and performance), so a minimum number of 120 respondents (8 x 15 = 120) should be attained.

Also, it has been suggested that previous research could provide clues of sample size; based on what other scholars have used, a new researcher could potentially use similar sizes when planning his work. In coaching research, Ellinger et al. (2003) have found a correlation of $r = .33 \ (p < .03)$ between supervisory coaching behavior and warehouse employee performance, using a sample of 438 warehouse employees and 67 supervisors in 18 distribution facilities; in one of the few multilevel coaching studies available, Agarwal et al. (2006) found that “coaching explains a substantial amount of variance [of respondent’s performance], from 36%
between teams reporting to different middle managers to 29% for middle managers reporting to different executives”; in this study, they surveyed 328 sales employees and 93 managers.

The conclusion, after analyzing previous research, is that there is a large variance between studies concerning sample sizes, which range from 100 to 400 respondents. It is also interesting to underline that scholars do not justify their decisions regarding sample size; most of the time, it looks like they have taken convenience samples depending on the possibilities of their research fields. Accordingly, these values can be used just as references, but other methods should be used to determine sample size with scientific criteria.

4.1.2 Estimating sample size according to the statistical technique used

The use of specific analysis techniques might also demand minimum sample sizes. Structural Equation Modeling (SEM) in general “requires a larger sample relative to other multivariate approaches [as] some of the statistical algorithms used by SEM programs are unreliable with small samples” (Hair et al., 2006, p. 740). Hair et al. (2006) propose several guidelines to address the issue of sample size in SEM, subject to the following five considerations:

1. Multivariate distribution of the data,
2. Estimation technique,
3. Model complexity,
4. Amount of missing data, and
5. Amount of average error variance among the reflective indicators.

They suggest that models containing up to five constructs, each with more than three observable items and high item communalities (.60 or higher) can be adequately estimated with samples ranging from 100 to 150 cases; if communalities
are smaller (ranging from .45 to .55), with some constructs containing fewer than three items, then sample size should be increased to about 200 cases; with lower communalities, and multiple under identified constructs (fewer than three items), then the minimum sample size ranges in the order of 300; finally, with more than six factors, some of them using less than three items, and multiple low communalities, then sample size should exceed 500 cases (Hair et al., 2006, p. 742).

Other scholars suggest that sample size in SEM should be between 200 and 250, and models should consider three observable items per latent variable; smaller samples could lead to convergence problems, while samples exceeding 500 cases can potentially become too sensitive (Cadieux and Levesque, 2004; Hayduk, 1987).

Applying these concepts to my model a sample size of about 200 respondents would seem adequate; nevertheless, these are general guidelines that could orient the researcher in estimating an approximate sample size. In the next section I will develop the concepts of statistical power and effect sizes, which will allow me to determine the required sample size based on statistical, objective and phenomenon-specific considerations.

4.1.3 Estimating sample size using statistical power and effect sizes

Another way of estimating sample size in the design phases of a research project is through the use of statistical power calculations. Generally speaking, the power of a statistical test is the probability that it will yield statistically significant results (Cohen, 1976). Most multivariate techniques, including the one that I will be using in my dissertation, are based on the statistical inference of a population's values from a randomly drawn sample of that population. When using statistical inference methods to accept or to reject a hypothesis, the researcher must specify the acceptable levels of two different types of statistical errors: type I and type II errors, also called alpha and beta errors respectively.
Type I error, or alpha error, is the probability of rejecting $H_0$ while it should have been accepted, or the fact of finding an effect that is not there; the researcher minimizes this type of error by selecting a small significance criterion $\alpha$, usually at .01 or .05 levels. As the researcher draws conclusions from a small sample that doesn’t exactly mirror the population, he can say that “if the null hypothesis is true, the probability of the obtained sample results is no more than $\alpha$” (Cohen, 1976, p. 2); since $\alpha$ is a small value, he rejects the null hypothesis at a small ($\alpha$) significance level.

On the other hand, type II error or $\beta$ error is the probability of accepting $H_0$ while it should have been rejected, or the failure of finding an existing effect; $\beta$ error is also known as the complement of power (1-power), since it represents the error rate of failing to reject a false null hypothesis (Cohen, 1976).

A researcher might want to reduce type I error, for example by choosing a small $\alpha$ value like .01 or .05, and also to reduce type II errors, by reducing $\beta$ or increasing the power of the test. However, $\alpha$ and $\beta$ (or power, the complement of $\beta$) levels are interrelated and are not independent from one another; the power of a statistical test depends upon three parameters: the significance criterion $\alpha$, the reliability of the sample results (which is always dependent upon the sample size), and the effect size or the degree to which the phenomenon is present in the researched population (Cohen, 1976; Hair et al., 2006).

The relationship between these factors is such that, other things being equal, the more stringent the significance criterion $\alpha$, the smaller the power of the statistical test; also, the larger the sample size, other things being equal, the smaller the error and the greater the precision of the results, that is, increases in sample size increase statistical power. Hence, it was suggested that, when planning the research, the researcher must simultaneously consider these factors in order to determine a sample
size, which would render reliable results (enough statistical power) and which can detect effects larger than a certain threshold (Cohen, 1976; Hair et al., 2006).

4.1.3.1 Setting alpha and beta levels

A critical decision that the researcher has to make, concerns the levels of alpha and beta type errors that he is ready to accept. The researcher could be tempted to reduce both errors type to a minimum level, say for example .01. However, as reductions in \( \alpha \) levels cause increases in \( \beta \) errors, reducing both parameters simultaneously would lead to huge increases in sample size in order to detect effects larger than a certain effect size threshold. Accordingly, “the behavioral scientist must set desired power values as well as desired \( \alpha \) significance criteria on the basis of the consideration of the seriousness of the consequences of the two kinds of errors and the cost of obtaining the data” (Cohen, 1976, p. 55-56).

Conventional research guidelines in marketing and behavioral sciences research suggest \( \alpha \) significance criteria levels of .05 or .10 (Hair et al., 2006). However, as it was discussed earlier, low levels of \( \alpha \) (as for example .01) can greatly reduce power for a given sample size; accordingly, if increasing sample size is not feasible, it was proposed as a better trade-off to use less stringent significance levels (e.g.: .10) in order to reach adequate power levels (Cohen, 1976; Hair et al., 2006). Accepting research designs with low statistical power is not recommended; in low power studies, the rejection of the null hypothesis at conventional significance levels (type I error) is unlikely, even if the null hypothesis is false (Sawyer and Ball, 1981). Accordingly, if the null hypothesis is not rejected, it is very difficult to assess whether there is a negligible relationship between variables in the population, or the research design did not provide enough sensitivity to detect a relationship that is actually present in the population (Sawyer and Ball, 1981).
Cohen (1976, p. 56) proposes the convention of setting power values at .80, which has been uncontested and accepted as a tacit standard in behavioral sciences research. Setting power at .80 means that the β error is set at .20; if α is set at the usual level of .05, the relative seriousness of these two types of errors is of the order of 4 (.20/.05=4), meaning that type I errors are four times more serious than type II errors; this decision accords with the conventional scientific view that “failure to find is less serious than finding something that is not there” (Cohen, 1976, p. 56, italics added). Other authors agree with this position; if a study’s power is low or no effect was initially found, further research could replicate the study with new significance levels and statistical power in order to detect size effects that the first study failed to detect (Sawyer and Ball, 1981).

Thereby, following generally accepted prescriptions in social sciences research, I will set α and β levels at .05 and .20 respectively.

4.1.3.2 Effect size

As it was discussed earlier, research planning involves first specifying the acceptable levels of types I and II statistical errors (setting α and β levels), and then determining the required sample size that would allow the detection of effects larger than a certain threshold. Scientific literature uses the concept of effect size to describe to what degree the expected phenomenon is present in the population, to evaluate the strength of a relationship among variables in the population, or to assess the degree to which the null hypothesis is false (Cohen, 1976; Hair et al., 2006; Sawyer and Ball, 1981). Effect size and sample size are inversely related; the larger the effect size, other things being equal, the smaller the sample required to detect it; inversely, smaller effect sizes demand bigger sample sizes to be detected.

There are two main families of effect sizes: the $r$ family of product-momentum correlations, and the $d$ family of difference between means (Rosenthal
The first family includes Pearson $r$ when variables are continuous, $\phi$ when the variables are dichotomous, point biserial $r$ when one is continuous and one dichotomous, and $\rho$ when both variables are ordinal; the second family includes Cohen’s $d$, Hedges’ $g$, and Glass’ $\delta$, all of which compare the difference between means in the numerator but use different measures of variance in the denominator (Rosenthal and DiMatteo, 2001; Sawyer and Ball, 1981; Wang and Yang, 2008). All these measures share the characteristic of being pure (dimensionless) and standardized numbers, thus making it easier to compare effect sizes across studies and using standard tables to assess the size of effects (Cohen, 1976). In the case of my theoretical model, all variables are continuous; hence Pearson’s correlations ($r$) will be used further on to assess effect sizes.

Earlier in this text it was stated that larger effect sizes would be more easily detected than smaller ones; but, what means large and small in statistical terms? Cohen (1976) provides landmarks of small, medium and large effects for different statistical tests; when variables are continuous, Pearson’s $r$ is indicative of the strength of the relationship, and the square of this correlation coefficient is “the proportion of variance (PV) in either of the two variables which may be predicted by (or accounted for, or attributed to) the variance of the other using a straight-line relationship” (Cohen, 1976, p. 78). Measures of PV are usually more easily comprehensible than other indices as a relative magnitude of association between variables (Cohen, 1976), thus it will be used as an aid to determine what large or small effects are.

When establishing landmarks of how large or how small an effect is, it must be done relatively to the discipline where the researcher develops his work. In most of the behavioral sciences research, the highest correlational coefficients range in the order of .50 to .60, meaning that only a quarter or a third of the total variance of the dependent variable could be accounted for (Cohen, 1976); scholars support the
opinion that the state of development of much of the behavioral sciences research is such that the magnitude of variance explained would not be expected to be large (Cohen, 1976; O’Grady, 1981; Sawyer and Ball, 1981; Wang and Yang, 2008). Accordingly, a correlation coefficient of .50 between two variables, or a PV of .25, could be considered as a large effect size in the behavioral sciences (Cohen, 1976).

*Medium* effect sizes refer to a correlation coefficient of .30, meaning that 9% of the variance in the dependent variable is attributable to a linear variation of the independent variable; “many of the correlation coefficients encountered in behavioral sciences are of this order of magnitude, and ... this degree of relationship would be perceptible to the naked eye of a reasonably sensitive observer” (Cohen, 1976, p. 80).

Finally, *small* effect sizes are associated with a correlation coefficient of .10, implying that only 1% of the variance in the dependant variable is explained (Cohen, 1976). Even though this effect is indeed small, it is not too small when measurement issues are considered. When the researcher operationalizes his theoretical constructs and develop measurement instruments, he cannot dismiss the impact of some errors; usually, some measurement unreliability or lack of fidelity to the construct are likely to be present; accordingly, measures do not perfectly correlate with their respective constructs, thus reducing the correlation between constructs as measured; for example, two constructs expected to have a theoretical correlation of .25 can render a measured correlation of .10 if each of the measuring instruments correlate only 63% with the pure construct (.25 x .63 x .63 = .10) (Cohen, 1976; O’Grady, 1981).

4.1.3.3 *Effect sizes in coaching and leadership research*

When determining how large or small an effect size could be for a certain study, the researcher might call upon theory for some help in answering this issue, or use his critical assessment of prior research in the area for further help (Cohen, 1976). The proposed model (Figure 9) seeks to find the mediators between coaching and
salesperson's performance, based on two theoretical frameworks: Goal-setting Theory and LMX Theory. Accordingly, I will delve into the relationships between variables proposed by the theoretical framework and previous research, in order to identify the corresponding effect sizes.

Generally speaking, previous research on the impact of coaching on performance has rendered medium to large effect sizes. Agarwal et al. (2006) have found Pearson’s correlations of .60 between manager’s coaching intensity and employee’s sales performance (n=328), and .54 between senior manager’s coaching intensity and middle manager’s performance (n=93); Ellinger et al. (2003) have found a correlation of .33 between supervisory coaching behavior and warehouse employee performance (n=67). Meta-analysis on the impact of LMX quality on performance ratings have found corrected correlations of .50 when LMX quality was evaluated by the manager (n=1909) and .30 when it was evaluated by the employee (Gerstner and Day, 1997).

Regarding the speculated mediating effect of commitment and effort, research have found a large effect size between LMX quality and goal commitment (r=.46, n=105) (Klein and Kim, 1998), a medium effect size between job commitment and effort (r=.37, n=231) (Ingram, Lee and Skinner, 1989), and a medium effect between effort and performance in Ingram et al. (1998) (r=.42, n=231) and Brown and Peterson (1994) (r₁=.24, n₁=999; r₂=.27, n₂=1124).

The mediating effect of new task-related strategies between coaching and performance is far less explored in the scientific literature. Nevertheless, goal-setting researchers have found that the impact of personal goals on analytic strategies is medium to large (r=.40) and the impact of analytic strategies on performance is large (r=.56) (Wood and Bandura, 1989, cited in Locke and Latham, 1990).
Finally, the impact of coaching on self-efficacy has not been previously explored; nevertheless, a meta-analysis by Gerstner and Day (1997) found that LMX quality has a medium impact on member's competence ($r_{\text{corrected}}=.28$, $n=3880$), where member competence was evaluated through both self- and supervisor ratings of member's general ability or expertise, and experimental manipulations of member's competence. Other studies found that self-efficacy has a large effect on goal commitment ($d_{\text{observed}}=.76$, $d_{\text{corrected}}=.82$, $n=620$) (Wooford, Goodwin and Premack, 1992), and a medium effect on analytic strategies ($r_1=.35$, $r_2=.41$) (Wood and Bandura, 1989, cited in Locke and Latham, 1990).

A synthesis of previously mentioned effect sizes is shown in Figure 10.

4.1.3.4 Determination of sample size

Based on the previous sections, the next step is to determine the sample size of a non-experimental study, which will try to unveil medium effect sizes with

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7 The dimensionless number $d$ expresses the standardized difference of means between two groups; $d$ values of .80 are considered as large effect sizes, while .50 are medium and .20 are small (Cohen, 1976).
acceptable levels of significance criterion and statistical power. Following Cohen (1976), I present hereby a table providing the required sample sizes for alternative high statistical power levels (ranging from .70 to .90), usually accepted significance criterion levels (.01, .05 and .10) and medium effect sizes (ranging from .20 to .40) (Table 5).

<table>
<thead>
<tr>
<th></th>
<th>Statistical power = .70</th>
<th>Statistical power = .80</th>
<th>Statistical power = .90</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ES = medium</td>
<td>ES = medium</td>
<td>ES = medium</td>
</tr>
<tr>
<td>$r = .20$</td>
<td>200</td>
<td>246</td>
<td>319</td>
</tr>
<tr>
<td>$\alpha_{.01}$</td>
<td>200</td>
<td>246</td>
<td>319</td>
</tr>
<tr>
<td>$r = .30$</td>
<td>87</td>
<td>107</td>
<td>138</td>
</tr>
<tr>
<td>$\alpha_{.05}$</td>
<td>117</td>
<td>153</td>
<td>213</td>
</tr>
<tr>
<td>$r = .40$</td>
<td>48</td>
<td>58</td>
<td>75</td>
</tr>
<tr>
<td>$\alpha_{.10}$</td>
<td>81</td>
<td>112</td>
<td>162</td>
</tr>
<tr>
<td></td>
<td>36</td>
<td>49</td>
<td>71</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>27</td>
<td>39</td>
</tr>
</tbody>
</table>

Cohen, 1976

Such a table is useful in the planning phases of any research; it suggests that, for my research project, a sample of 150 to 200 individuals could allow me to identify Pearson’s correlation coefficients as low as .20 (medium effect sizes), with the normally accepted significance criterion ($\alpha=.05$) and high statistical power (higher than .80). Considering that other less sophisticated methods (like rules of thumbs or methods associated with the statistical techniques used) also suggest similar sample sizes, I will aim at a sample of 150-200 usable questionnaires for testing my model.

4.2 Sampling unit

Regarding sampling unit, decisions must be made as to who to interrogate in order to obtain precise and accurate information of the model's variables. Precision of estimate describes the degree to which the sample fully represents the population
and shows minimal random fluctuations or sampling error (Cooper and Schindler, 2001) and it will be addressed in the next section, Sampling method. Accuracy refers to the degree to which bias is absent from the sample; an accurate sample does not present systematic bias, which has been defined as “the variation in measures due to some known or unknown influences that ‘cause’ the scores to lean in one direction more than another” (Cooper and Schindler, 2001, p. 165).

Systematic bias or systematic measurement errors are issues of important consideration that have drawn a lot of attention in the scientific marketing literature. Two main sources of systematic measurement errors can be identified: errors associated with the measuring instruments themselves, and errors associated with the selected method for collecting data. I will address the first type of errors in the Measures section; in this one, I will develop issues concerning method type errors, how they can affect my results and the strategies that could be used to reduce them.

Method type errors concern systematic errors that are introduced in the measurement procedure due to the selection of certain type of data collecting instruments or certain type of respondents, and have been traditionally considered as one of the main sources of measurement error; methods may exert a systematic effect on the observed correlation between measures, thus posing a rival explanation for this correlation (Podsakoff, McKenzie, Lee and Podsakoff, 2003). The amount and direction of this effect vary and can either inflate or deflate the observed relationships between constructs, thus leading potentially to Type I and Type II errors (Cote and Buckley, 1987, 1988; Podsakoff et al., 2003)

Podsakoff et al. (2003) classify the potential sources of common method biases into those produced by 1) a common source or rater, 2) item characteristics, 3) item context, and 4) measurement context. In the following sub-sections I will address these method errors, how they could affect my research and what will I do to reduce or eliminate them.
4.2.1 *Method effects produced by a common source or rater*

When a common source or rater is used, the same respondent provides the measure of the predictor and criterion variables; in this situation, a self-report bias might result from any artifactual covariance between these variables due to the fact that the person providing both answers is the same (Podsakoff *et al.*, 2003). Different theories and effects have been used to explain these covariances, such as consistency motif, social desirability, leniency bias, acquiescence, and negative affectivity (Podsakoff *et al.*, 2003; Spector, 1987, 1994, 2006).

*Consistency motif* suggests that people tries to maintain consistency between their cognitions and attitudes; accordingly, when answering a questionnaire, they might search for similarities in the questions and try to show consistency and rationality in their responses, thus introducing covariances that might not exist otherwise. *Social desirability* suggests that people's need for social approval and acceptance can be achieved by showing socially accepted and appropriate behaviors; accordingly, respondents might bias their answers in order to show themselves in a favorable light, despite their real behaviors or attitudes. *Leniency* is the tendency to rate known or appreciated people higher than they should. *Acquiescence* is the tendency to agree (or to disagree) with attitude statements regardless of their content, thereby having the tendency to mark most answers in the positive (or negative) side of the scale. Finally, *negative affectivity* is a mood-dispositional dimension that reflects some people's predisposition to experience a variety of negative emotions that lead to a general negative view of their contexts.

Research has typically accepted that common method variance (CMV) might inflate or deflate correlations between constructs (Cote and Buckley, 1987; Podsakoff *et al.*, 2003), but lately scholars have proposed that CMV *does not automatically affect or distort* these correlations (Schmidt, 1994; Spector, 1987, 1994, 2006). In different studies, Spector (1994, 2006) showed that neither self-reports methodology
nor social desirability, negative affectivity or acquiescence are general sources of correlation that might inflate CMV. Additionally, self-reports can provide the best measure of people's perceptions of work and feelings about work, much more reliable than some multisource methods where non incumbent sources (like co-workers or superiors) provide data on incumbent's job characteristics; co-worker or supervisor ratings might be useful to control for self-rating biases, but have been shown to have less discriminant validity than incumbent's own ratings, thereby introducing new biases (Spector, 2006).

As it can be seen from the previous paragraphs, scholars do not agree on the effects produced by a common source or rater. However, overwhelmingly, studies have relied in common raters and taken measures to reduce the possibility of bias. In this dissertation, most of those measures were taken; for example, questions were presented in separate and different screen, thus reducing the accessibility of responder to previous answers (consistency motif), and scales used negative worded items, thus reducing acquiescence. Other measures will be presented in following sections.

4.2.2 Method effects produced by item characteristics

Additional sources of potential method bias are those associated with characteristics of the items themselves, like item social desirability, item complexity and/or ambiguity, scale format and anchors, and negatively worded items (Podsakoff et al., 2003).

Item desirability states the fact that some items in a questionnaire might possess more social desirability than others; attentive respondents might bias their answers to these items, thus becoming a potential source of artifactual variance.

Item complexity and/or ambiguity refer to the ambiguous or complex wording of some items, due to the use of words with many meanings, technical jargon,
colloquialisms or unfamiliar words; the problem with these types of items is that respondents are forced to develop their own idiosyncratic meanings, which might increase either random answers or respondent's own systematic response tendencies (e.g., affectivity, leniency, etc.).

*Scale formats and scale anchors* refer to the fact that some questionnaires rely on the use of the same format (e.g., Likert scales, semantic scales) and/or the same anchors (e.g., 'strongly agree' versus 'strongly disagree') throughout the whole questionnaire; although it might be argued that this standardization makes it easier for the respondent to answer the questionnaire, it "may also increase the possibility that some of the covariation observed among the constructs examined may be the result of the consistency in the scale properties rather than the content of the items" (Podsakoff *et al.*, 2003, p. 884). In order to reduce these effects, some questionnaires propose *negatively worded items*, which should provoke a more controlled and thoughtful answer (Podsakoff *et al.*, 2003).

These potential sources of additional method variance can be controlled by following scholars' recommendations for item construction, like avoiding vague words or concepts, keeping questions simple, specific and concise, and avoiding the use of double-barreled questions or complicated syntax (Tourangeau, Rips and Rasinski, 2000, cited by Podsakoff *et al.*, 2003). In the case of my research, I will use measuring instruments that have been developed following accepted procedures and have been largely tested and used by seasoned researchers throughout many decades; all items are formulated using a simple syntax, wording have been kept simple and respondents are familiar with the terminology used; some scales use negatively worded items (reversed items) in order to reduce acquiescence, and different anchor points (almost never-almost always, strongly disagree-strongly agree) has been used in the Likert scales; accordingly, it is not expected that these instruments will add additional method variance to my results.
4.2.3 Method effects produced by item context

Common method biases produced by item context refer to biases emerging from respondents' reaction to the place where the item was placed within a questionnaire. These effects can be ascribed to item priming effects, item embeddedness, context-induced mood and scale length.

*Item priming effects* refer to the fact that, when the respondent answers questions in a certain order some aspects of his/her work and motivations become more salient, thus potentially conditioning the answers to the following questions.

*Item embeddedness* implies that responses to (neutral) items can be affected by the context in which they are embedded; neutral items placed in blocks of positive (negative) evaluative items could be rated similarly to the items they were embedded in, thus introducing an spurious covariance. Similarly, the respondents' moods, whether stable or induced by the wording of some items in the questionnaire, might influence their response to questionnaire items, independent of the content of items themselves; this effect is called *context-induced mood*.

*Scale length* can also potentially introduce additional biases, although scholars do not fully agree of which type; short scales might reduce bias provoked by respondent fatigue and carelessness (compared to longer questionnaires), but they might also increase respondents' accessibility to previous answers, thereby increasing the possibility that responses to previous items will influence responses to current items.

These potential sources of additional method variance can be controlled by following scholars' recommendations for item and questionnaire construction; in the case of my research I will use measuring instruments that have been largely tested throughout the years in the development of institutionalized theories (e.g., Goal-
setting Theory); items have been neutrally formulated in order to reduce context-induced moods and the questions have been carefully placed in order to reduce item embeddedness; regarding scale length, special care has been taken to keep the questionnaire not too long in order to reduce fatigue and carelessness; the use of an electronic questionnaire also allows to keep different sections in different screens, thus reducing respondent’s accessibility to previous answers. All these measures will help me to keep method effects produced by item context under control.

4.2.4 Method effects produced by measurement context

Finally, some contextual factors can potentially introduce an artifactual covariation between constructs, like the time and location of the measurement or the use of certain data collection instruments. 

In cross-sectional studies, the fact of collecting all the data at the same point in time may increase the likelihood that responses to predictor and criterion variables co-exist in respondents’ short-term memory, thus increasing the probability of artifactual covariance between constructs; also the use of some instruments, like face-to-face interviews, can bias the results as interviewer characteristics, expectations or verbal idiosyncrasies are well recognized as potential sources of method bias (Podsakoff et al., 2003).

This artifactual covariation between predictor and criterion variables can be safely eliminated from the threats to my research; I observed that many respondents completed the questionnaire in more than one session, thus reducing the possibility that responses to predictor and criterion variables could co-exist in respondents’ short-term memory; additionally, data was collected using electronic media, thus eliminating bias due to interviewer characteristics or verbal idiosyncrasies; finally, special care was taken in order to avoid collecting data near dates when particular events take place (e.g.: annual evaluation and assessment).
4.2.5 Selection of sampling unit and steps taken to reduce systematic errors

The previous section presented some potential threats to the validity of my research produced by systematic errors, and the steps taken in order to reduce these threats.

In summary, due to the type of information required, salespeople are the best source of information available. Although a single rater was used to gather predictor and criterion information, a great care was taken to avoid any artifactual covariances that could act as alternative explanations.

Additional potential threats concerning the potential errors introduced by item characteristics or context were also addressed; I used measuring instruments that have been consistently and extensively used after decades of organizational research; thus, it is not expected that these instruments added additional method variance to my results.

Finally, the use of a computer-administered questionnaire helped me to control for method effects produced by the measurement context.

4.3 Sampling method

In the previous section I have stated that the sample should provide both precise and accurate information, with precision referring to the absence of sampling errors and accuracy referring to the absence of systematic errors; thereby, I have presented the steps to be taken in order to reduce systematic errors and increase the accuracy of the obtained information. In this section, I will elaborate on the population of the study, the type of sampling strategy used, how respondents were identified and addressed, and how the selected sampling method affects sampling errors.
In a previous section (Research design), while justifying the decision of using a non-experimental design, I said that coaching is a managerial behavior that cannot be simulated or stimulated in a laboratory situation, but a behavior that a manager has to develop through years of training and practice; accordingly, in non-experimental designs, the phenomenon under study is not deliberately manipulated or changed by the researcher, but measured in order to establish a correlation between predictor and criterion variables. This type of research calls to work with respondents (salespeople) reporting to managers who show coaching behaviors; not any coaching behavior, but coaching behaviors that are aligned with the paradigms and visions expressed in previous chapters of this dissertation. This practically rules out the use of a probabilistic sample because of the complexity of identifying the population and drawing a sample out of it; for example, in order to identify the population first I should have to survey salespeople’s managers and determine whether they adhere to the prescribed coaching paradigm or not, then I should have to select the right managers, identify the salespeople that report to them, and finally draw a probabilistic sample out of them; by any means, the time and resources required for this are well beyond the scope of a doctoral dissertation. Thus, it will be much more convenient to use a non-probabilistic sample of salespeople who report to managers showing the expected coaching behaviors.

Research literature proposes different methods to extract a non-probabilistic sample out of a given population, like quota, dimensional, convenience, purposive and snowball sampling (Cooper and Schindler, 2001; Robson, 2002). Given the characteristics of the problem under study, the best sampling strategy is to use a purposive sample of salespeople who report to managers who show non-directive, solution-focused and performance-driven coaching behaviors; in this type of sampling method the researcher selects a sample according to his own judgment as to typicality or interest, and a sample is built up which enables the researcher to satisfy the specific needs of a research project (Robson, 2002). In my case, I identified two organizations, a large American industrial organization and a large Canadian bank,
whose managers regularly use non-directive, solution-focused, performance-driven coaching as a managerial strategy; salespeople were first contacted by their managers in order to notify them about the study and demand their collaboration, and were later contacted by the researcher who introduced the goals and characteristics of the study, guaranteed the confidentiality of responses and provided links to the web-based questionnaires.

The use of a non-probabilistic sample could raise questions regarding whether the conclusions of the study could be used in different settings. Although one of the necessary conditions to external generalizability is the use of probabilistic samples, this criteria has not been respected in most organizational research; Schwab recognizes this when he expresses that “almost all of the empirical studies published in our journals ... use convenience samples ... thus if one took generalization to a population using statistical inference seriously, one would recommend rejecting nearly all manuscripts submitted” (Schwab, 1985, p. 173, cited by Robson, 2002, p. 267). In qualitative research, where researchers strongly rely on non-probabilistic samples, scholars have proposed to talk of transferability rather than generalizability (Guba and Lincoln, 1989); other scholars have stressed the importance of aspects like the presumed universality of the phenomenon studied as factors enabling the generalizability of results to other contexts when nonrandom samples are used (Maxwell, 1997). In the case of this study, there are no reasons to infer that the salespeople working for these companies are any different from other generic salespersons in the variables that could explain responses to coaching behaviors; thus, the use of a convenience sample does not preclude the possibility of generalizing the expected results to a larger population of salespeople reporting to managers using non-directive, solution-focused, performance-driven coaching approaches.

Sampling error arises when the researcher does not select or survey the entire population; time and resources constraints drive the researcher to work with a sample of the population and to extrapolate the conclusions drawn from the sample to the
entire population with a certain confidence level; however, as different samples could be drawn from the same population, different results could be obtained from each of them, because "each sample shares some similarities with the population, but none ... perfectly replicates its population" (Cooper and Schindler, 2001, p. 175); thereby, sampling error "reflects how the particular sample is not going to match the total population on all the measured dimensions" (Wyner, 2007, p. 6). Sampling errors are usually addressed when probabilistic samples are used; in the case of non-probabilistic samples, discussion about sampling errors could be safely skipped, as the whole purposive population will be selected.

5. QUESTIONNAIRE AND DATA COLLECTION PROCEDURES

Data was collected using a web-based, self-administered questionnaire containing an introductory letter and five sections (Annex 1); salespeople received an introductory e-mail message from the contact person in each of the companies; following this contact, I sent another e-mail to these people inviting participants to complete the survey (Annex 2); in this mail, the academic aspects of the research were emphasized, as well as the confidentiality of all the information provided by the participants; the mail thanked them for their participation, explained the general purpose of the study, guaranteed the confidentiality of their responses, and provided an hyperlink to the electronic questionnaire.

Participants answered the survey on-line, thus there was no physical recovery of completed questionnaires. Progress was checked using the web-site tools, and a reminder was sent two weeks before the initial mail to those participants who hadn't completed the questionnaire.
6. MEASURES

In this section I present the instruments that I used to test my model, which posits that the coaching provided by the sales manager to the salespeople in order to help them achieve their (specific and difficult) sales goals, will influence salespersons' performance through the mediating effect of goal commitment, effort, self-efficacy and the development of new task strategies.

In order to identify the best instruments, I have reviewed the scientific research literature on coaching, sales, LMX and goal-setting; I have selected the instruments more closely reflecting the underlying constructs presenting the best psychometric properties; when one than more instruments presented similar characteristics, I have privileged those measures used in the coaching and/or sales literature (rather than those in the goal-setting or LMX literature), and those widely accepted and used by recognized scholars.

For each of the required measures I present the most comprehensive instruments used in the pertinent literature, justify my choice and present the instruments' items and psychometric properties.

6.1 Supervisory coaching behavior

In the second chapter of this dissertation, I showed that coaching research has relied on multiple definitions and underlying paradigms for coaching, thus making delicate to compare different research currents and findings; further to this, I defined sales coaching as a non-directive, goal-focused and performance-driven intervention led by the sales manager.

One of the most comprehensive measures of supervisory coaching behavior, which is also based on this same definition, is the instrument developed by Ellinger et
al. (2003). Based on the findings of prior qualitative critical incident research that explored the way exemplary managers coach their employees (Ellinger and Bostrom, 1999; Ellinger, Watkins and Bostrom, 1999) they identified eight central coaching behaviors. Behaviors were operationalized and items were developed to measure to which extent the manager showed each behavior (1=almost never, 7=almost always); an initial principal component analysis rendered good psychometric properties, with scores ranging from .77 to.88 and a standardized Cronbach’s alpha of .94. Further, a confirmatory factor analysis indicated that all lambda coefficients were significant (t>1.96) and in the specified direction, while other measures supported the unidimensionality of the instrument ($\chi^2=134.54$, GFI=0.93, CFI=0.96, IFI=0.96, RMR=0.03) (Ellinger et al., 2003). The operationalization of coaching behaviors, measurement items and factor loadings are shown in Table 6.

Table 6
Supervisory coaching behavior scale

<table>
<thead>
<tr>
<th>Operationalization of Supervisory Coaching Behavior</th>
<th>Item</th>
<th>Factor loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Personalizing learning situations with example, using analogies and scenarios</td>
<td>1. My supervisor uses analogies, scenarios and examples to help me learn</td>
<td>.83</td>
</tr>
<tr>
<td>2. Encouraging learners to think out of the box by encouraging them to see other perspectives, and by providing other perspectives and experiences</td>
<td>2. My supervisor encourages me to broaden my perspectives by helping me to see the big picture</td>
<td>.88</td>
</tr>
<tr>
<td>3. Providing observational, reflective and third-party feedback to learners</td>
<td>3. My supervisor provides me with constructive feedback</td>
<td>.88</td>
</tr>
<tr>
<td>4. Seeking feedback from learners about their progress</td>
<td>4. My supervisor solicits feedback from me to ensure that his/her interactions are helpful to me</td>
<td>.88</td>
</tr>
<tr>
<td>5. Providing resources, information and material to learners, and removing roadblocks and obstacles they perceive to be in their way</td>
<td>5. My supervisor provides me with resources so I can perform my job more effectively</td>
<td>.83</td>
</tr>
<tr>
<td>6. Posing outcome, results-oriented questions, or context-specific questions to encourage learners to think through issues themselves</td>
<td>6. To help me think through issues, my supervisor asks questions, rather than provide solutions</td>
<td>.77</td>
</tr>
<tr>
<td>7. Setting goals and expectations with learners and communicating their importance to learners</td>
<td>7. My supervisor sets expectations with me and communicates the importance of those expectations to the broader goals of the organization</td>
<td>.79</td>
</tr>
<tr>
<td>8. Stepping into another person’s shoes to experience their perspective</td>
<td>8. To help me see different perspectives, my supervisor role-plays with me</td>
<td>.75</td>
</tr>
</tbody>
</table>

Ellinger et al., 2003
Ellinger et al.’s (2003) instrument was developed following accepted prescriptions in the marketing literature of scale development (Churchill, 1979), is unidimensional and presents good psychometric properties (Anderson and Gerbing, 1982; Gerbing and Anderson, 1988). Additionally, the eight central coaching behaviors capture the different characteristics of the coaching definition; for example, behaviors number 6 (Posing outcome, results-oriented questions to encourage learners to think through issues by themselves) and number 3 (Providing observational, reflective and third-party feedback to learners) load on the characteristics of non-directive behavior; behaviors number 5 (Providing resources, information and material to learners, and removing roadblocks and obstacles they perceive to be in their way) and number 2 (Encouraging learners to think out of the box … to see other perspectives, and by providing other … experiences) clearly load on the characteristics of solution-focused behavior; finally, behaviors number 7 (Setting goals and expectations with learners and communicating their importance to learners) and number 4 (Seeking feedback from learners about their progress) load on the characteristics of performance driven behavior.

Thereby, I measured supervisory coaching behavior using this instrument.

6.2 Goal commitment

Goal commitment is defined as one’s determination to reach a goal (Locke and Latham, 1990) and implies the extension of effort over time toward the accomplishment of a goal and emphasizes the unwillingness to abandon or lower the goal (Hollenbeck and Klein, 1987; Wright et al., 1994).

Two different measures of goal commitment were proposed and used throughout the goal-setting literature; one is a self-report measure of goal commitment (Hollenbeck et al., 1989a) and the other one is an absolute discrepancy
measure of the difference between personal and assigned goals (Tubbs, 1993; Tubbs and Dahl, 1991).

There has been some discussion in the literature regarding which of the two measures better captures the goal commitment construct, and the controversy was set favoring Hollenbeck’s et al. self-report measure; Tubbs’ discrepancy measure was criticized for presenting theoretical, practical and empirical issues (Wright et al., 1994). Theoretical issues arise because the discrepancy measure lacks fidelity to the construct definition (content validity), it has low discriminant validity when compared to the construct ‘personal goals’, does not consider the sign of the deviation between assigned and personal goals (thus, implying that the reaction to assigned goals that are higher or lower to one’s personal goals is similar), and because its larger effect sizes compared to the self-report measure can be assigned to “a number of reasons that have nothing to do with construct validity” (Wright et al., 1994, p. 797); practical problems refer to the limited usefulness of the discrepancy measure for goal-setting research purposes; additionally, in sales settings assigned goals are always set at the maximum achievable level and salesperson’s remuneration is tied to the achievement of these goals; accordingly, lower personal goals would mean aiming at lower salary, and higher personal goals would look unrealistic; thereby, personal goals wouldn’t probably present high differences compared to assigned goals, and thus, a discrepancy measure will probably show little variation and low sensitivity; finally, empirical problems refer to the need to rule out of the analysis other variables to which variance can be attributed; for example, level of ability and/or past performance can be instrumental in the establishment of personal goals, and thus they should be partialled out when using a discrepancy measure (Wright et al., 1994).

Concerning the self-report measure, Hollenbeck et al. (1989a) developed a 9-item self-report measure of goal commitment and demonstrated its internal consistency using a 4-, 7- and 9-item version of the measure. Some debate regarding
the dimensionality of this measure followed, thereby a later and larger study was conducted to analyze and refine the measure (Klein et al., 2001); this study was the first to combine meta-analytic and multi-sample confirmatory factor analysis techniques to test a measurement model; it revealed a five item scale that represents better the unidimensional construct of goal commitment, with high psychometric properties ($\chi^2=68.52$, NNFI=0.95, RMSEA=0.07, GFI=0.99, CFI=0.98, $\alpha=0.74$), and equivalence throughout different conditions, such as measuring timing (prior versus during/after), goal origin (assigned versus self-set) and task complexity (low versus moderate versus high); the proposed five-item scale appears to be highly stable and robust across a variety of settings and conditions (Klein et al., 2001). Items are presented in Table 7; they are measured in a 5-point Likert scale anchored by strongly agree/strongly disagree, with negative items recoded so that a high score on the scale is indicative of high goal commitment.

Table 7
Goal commitment 5-item refined scale

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. It’s hard to take this goal seriously (R)</td>
<td>.56</td>
</tr>
<tr>
<td>2. Quite frankly, I don’t care if I achieve this goal or not (R)</td>
<td>.66</td>
</tr>
<tr>
<td>3. I am strongly committed to pursuing this goal</td>
<td>.63</td>
</tr>
<tr>
<td>4. It wouldn’t take much to make me abandon this goal (R)</td>
<td>.65</td>
</tr>
<tr>
<td>5. I think this is a good goal to shoot for</td>
<td>.53</td>
</tr>
</tbody>
</table>

(R): reverse item. All factor loadings are significant at the $p<.01$ level

Klein et al., 2001

6.3 Effort

Goal-setting Theory posits that people committed to specific, difficult goals exert more effort in order to achieve these goals. This motivational mechanism can be characterized by the three attributes of motivated action: intensity of effort,
persistence and direction; *intensity of effort* refers to the *amount of effort* put forward in a task by the committed individual; *persistence of effort* refers to the effort a person *maintains over time* when pursuing a goal; and direction refers to the *arousal and use of task-relevant knowledge and strategies* (Locke and Latham, 1990).

In sales contexts, Sujan *et al.* (1994) measured effort using three items "assessing the salesperson’s persistence in job-related activities plus a report of how many hours a week on average the salesperson worked" (Sujan *et al.*, 1994, p. 42); Cronbach’s alpha was .77. The scale was later used by Fang *et al.* (2004) to validate goal-setting concepts in sales settings with Chinese and American salespeople. Items wording, Cronbach’s alpha and factor loadings are shown in Table 8.

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor loadings (China)</th>
<th>Factor loadings (USA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In a typical week, how many hours do you work?</td>
<td>.83</td>
<td>.52</td>
</tr>
<tr>
<td>2. I am motivated to work long hours to meet my sales objectives</td>
<td>.69</td>
<td>.86</td>
</tr>
<tr>
<td>3. I am motivated not to give up easily when I encounter a difficult customer</td>
<td>.72</td>
<td>.63</td>
</tr>
<tr>
<td>4. I am motivated to work untiringly at selling to a customer until I get an order</td>
<td>.75</td>
<td>.67</td>
</tr>
</tbody>
</table>

Fang *et al.*, 2004

According to the definitions used in Goal-setting Theory, the first two items of the scale (Table 8) tap into the *intensity of effort* that a salesperson puts forward in the task of selling (measured as the number of hours devoted to the general task of selling), while the last two items tap into the attribute of *persistence of effort*.
(measured as the willingness to continue working in order to sell to difficult customers). In order to have reliable measures for both intensity and persistence of effort, with at least three items per each scale, I adapted Sujan et al. (1994) and Fang et al. (2004) scales to those presented in Table 9.

| Table 9 |
| Scale items for intensity of effort and persistence of effort |
| **Intensity of effort** |
| 1. I am motivated to work long hours to meet my sales objectives |
| 2. I am motivated to work intensely |
| 3. I am motivated to put a great deal of effort to achieve my sales goals |
| **Persistence of effort** |
| 1. I am motivated not to give up easily when I encounter a difficult customer |
| 2. I am motivated to work untiringly at selling to a customer until I get an order. |
| 3. I am motivated to persist in my selling efforts until I achieve my goals. |

The third attribute of motivated action, *direction of effort*, “orient the individual toward goal-relevant activities ... and away from goal-irrelevant ones ... activating stored knowledge and skills that the individual possesses that are perceived as relevant to the task” (Locke and Latham, 1990, p. 92). This means that, when the committed salesperson faces different selling situations or a particular interaction with a customer, he/she will activate different knowledge and skills, and select the most relevant actions to achieve his/her goals. In the marketing literature, Sujan (1986) and Sujan et al. (1994) “conceptualized the direction chosen to channel efforts as ‘working smart’ ... they further conceptualized two important dimensions of working smart: adaptive selling and sales planning” (Fang et al., 2004, p. 190).

Adaptive selling is defined as “the altering of sales behaviors during a customer interaction or across customer interactions based on perceived information
about the nature of the selling situation” (Weitz, Sujan and Sujan, 1986, p. 175); following Fang et al. (2004) I used a reduced adaptive selling scale, adapted from Spiro and Weitz’s (1990) scale, which is shown in Table 10.

Table 10
Adaptive selling scale

<table>
<thead>
<tr>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. When my sales approach is not working in a sales situation, I can change to other sales approaches</td>
</tr>
<tr>
<td>2. I experiment with different sales approaches</td>
</tr>
<tr>
<td>3. I use a wide variety of selling approaches</td>
</tr>
<tr>
<td>4. Basically I use the same sales approach with most customers (R)</td>
</tr>
<tr>
<td>5. I vary my sales style from situation to situation</td>
</tr>
</tbody>
</table>

(R): reversed item. $\alpha=.84$ (China), .89 (USA)

Fang et al., 2004

Salespeople also exert direction of effort when they engage in planning activities (Fang et al., 2004; Sujan, 1986; Sujan et al., 1994). Planning activities allow them to “determine the suitability of sales behaviors and activities” (Sujan et al., 1994) in order to achieve their goals; the most comprehensive measure of sales planning was developed by Sujan et al. (1994) and later adapted by Fang et al. (2004) (Table 11).

Table 11
Planning for the sale scale

<table>
<thead>
<tr>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I tend to never know what I will do from day to day (R)</td>
</tr>
<tr>
<td>2. I tend to plan my work very carefully in advance</td>
</tr>
<tr>
<td>3. I tend to spend a lot of time on planning</td>
</tr>
<tr>
<td>4. I tend to list the steps necessary for getting an order</td>
</tr>
</tbody>
</table>

(R): reversed item. $\alpha=.88$ (China), .77 (USA)

Fang et al. (2004)
Accordingly, I used Fang et al. (2004) version of Planning the sale and Adaptive selling items to measure direction of effort.

6.4 Self-efficacy

Self-efficacy is a construct derived from Social Cognitive Theory, which proved to be useful to explain how people acquire and regulate their behaviors in order to cope with circumstances and achieve outcomes (Bandura, 1977); perceived self-efficacy is concerned with “judgments of how well one can execute courses of action required to deal with prospective situations” (Bandura, 1982, p.122).

Research on goal-setting has relied on a limited number of measures of self-efficacy; one of the most widely used is the one developed by Locke, Frederick, Lee and Bobko (1984). Following Bandura’s conceptualization of the two dimensions of self-efficacy (magnitude and strength) they developed a scale measuring respectively 1) the agreement of the respondent regarding the achievement of different levels of performance (the total number of “yes, I can do it” that a respondent would say when faced with increasing goal-levels), and 2) the declared probability of achieving those goal-levels (Locke et al., 1984). This scale was further adapted and used in goal-setting research, in different experimental settings; the scale allow for (five) different operationalizations of self-efficacy, all of which proved to be highly correlated showing high convergent and predictive validities (Lee and Bobko, 1994); its conception proved useful for assessing participant’s self-efficacy when goal levels were manipulated, but scholars continued to adapt it and to develop new approaches to self-efficacy measurement.

In the context of sales research, scholars followed Bandura’s (1984) prescriptions and developed domain-specific scales for measuring self-efficacy. One of the first attempts was Chowdhury’s (1993) 20-item scale for measuring self-efficacy on the context of sales negotiation activities (α=.92); the newly developed
scale proved to have high convergent and discriminant construct validity when compared to sphere of control, personal efficacy and interpersonal control scales (Chowdhury, 1993). Later, this scale was adapted by Sujan et al. (1994) to assess self-efficacy in general sales settings; they reduced it to a 7-item scale and rephrased it to suit salesperson’s day-to-day sales activities. This scale was further refined by Krishnan, Netemeyer and Boles (2002) (4-item, \(\alpha=.88-.90\)) and Wang and Netemeyer (2002) (3-item, \(\alpha=.83-.90\)). Comparison of the three scales is provided in Table 12.

Table 12
Self-efficacy scales used in sales contexts

<table>
<thead>
<tr>
<th>Sujan et al. (1994), 7-items</th>
<th>Krishnan et al. (2002), 4-items</th>
<th>Wang and Netemeyer (2002), 3-items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generally speaking ...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. ... I am good at selling</td>
<td>1. I feel I am very capable at the task of selling</td>
<td>1. I feel I am very capable at the task of selling</td>
</tr>
<tr>
<td>2. ... It is difficult for me to put pressure on a customer (R)</td>
<td>2. I know the right thing to do in selling situations</td>
<td>2. I feel I have the capabilities to successfully perform this job</td>
</tr>
<tr>
<td>3. ... I know the right thing to do in selling situations</td>
<td>3. I feel I have the capabilities to successfully perform this job</td>
<td>3. Overall, I am confident of my ability to perform my job well</td>
</tr>
<tr>
<td>4. ... I find it difficult to convince a customer that has a different viewpoint than mine (R)</td>
<td>4. Overall, I am confident of my ability to perform my job well</td>
<td></td>
</tr>
<tr>
<td>5. ... I feel that I’m not well-suited for selling (R)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. ... I am good at finding out what customers want</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. ... It is easy for me to get customers to see my point of view</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(\alpha=.77) (R): reversed item</td>
<td>(\alpha=.88-.90) (2 studies)</td>
<td>(\alpha=.83-.90) (2 studies)</td>
</tr>
</tbody>
</table>
A critical voice could be raised to the sensibility of the refined scales of Krishnan et al. (2002) and Wang and Netemeyer (2002). For example, Wang and Netemeyer's (2002) study 1 rendered a mean self-efficacy of 6.03 with a standard deviation of .97, and the study 2 a mean of 6.35 with a standard deviation of .66; these mean values seem too high for a scale anchored between 1 and 7, and the variation coefficient \( VC = \text{variance/mean} \) is under the .15 threshold meaning that there is a very small variability of the sample around the mean values (Cadieux and Levesque, 2004, p. 34); after all, would a salesperson accept that he/she is not very capable at the task of selling (item 1)? Or that he/she doesn't have the capabilities to successfully perform the job (item 2)? In this case, common method variance due to item desirability is quite likely to appear; these items might present high social desirability, thereby attentive salespeople might bias their answers to them by raising their scores, thus becoming a potential source of artifactual variance.

A similar critique could be expressed to items 1 through 5 of Sujan et al.'s (1994) scale; however, the scale includes items other than salesperson’s capabilities, like items 6 (I am good at finding out what customers want) and 7 (It is easy for me to get customers to see my point of view), which can capture different aspects of the construct, thereby increasing its validity. Thus, I used Sujan et al.’s (1994) scale to measure salesperson’s self-efficacy beliefs in my research.

6.5 New task-related strategies

Further to the three automated mechanisms of purposive action (intensity, persistence and direction of effort) Goal-setting Theory posits that the committed individual will engage in a conscious process of developing new task-related strategies when faced with new or different challenges for which the known strategies do not guarantee goal achievement; new task-related strategies are “directional mechanisms that entail methods of performing a task extending beyond the relatively
automatic mechanisms inherent in effort, persistence and direction ... to conscious problem solving and creative innovation” (Miner, 2005, p. 164).

Throughout the Goal-setting literature, new task-related strategies have not been consistently measured with one scale; on the contrary, each study has relied on specific measures according to the type of experimental situation designed. For example, Earley, Northcraft, Lee and Lituchy (1990) used a stock-investment computer simulation to assess the impact of feedback on goal-setting outcomes; task strategies have been measured using two methods: in the first one, the researchers examined how the individual used the data base, and what type of information he sought; in the second one, they evaluated (ex post) the quality of the individual’s strategies based on the correctness of his purchase decisions.

Experimental designs in Goal-setting research have proposed many different tasks to the participants, like listing uses for common objects, toy assembly or the resolution of arithmetic calculations and anagrams; accordingly, the methods used to measure the development of new task-related strategies have greatly varied from one study to another. Similarly, non-experimental designs found that committed die-casting workers, miners, truck drivers and hole-drilling crews develop new strategies to reach their goals, such as running their machines at faster speed, improving the quality of their behaviors, use radios to coordinate truck loading or prearranging the holes to be drilled; nevertheless, no scale of new task-related strategies have been developed and consistently used throughout the research literature.

Research in sales coaching has not addressed the development of new task-related strategies and, thus, no specific scale has been developed. Nevertheless, scholars agree to say that during the coaching intervention the coach asks questions to raise salesperson’s awareness and helps her/him to propose alternative courses of action to tackle difficult situations and reach the goals (Ellinger et al., 2003; Ellinger and Bostrom, 1999; Evered and Selman, 1989; McLean et al., 2005; Rich, 1998;
Accordingly, I propose an initial scale to measure the development of new task-related strategies in a coaching context (Table 13); this scale is a self-report measure where the respondent (the salesperson) states his/her agreement with five items reflecting the help that the salesperson receives from the coach to develop strategies that allow him/her to tackle task-related problems and reach sales goals; the scale uses a seven-point Likert scale, anchored at 1=strongly disagree and 7=strongly agree.

<table>
<thead>
<tr>
<th>Items</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I find new ways to solve the problems with my customers</td>
<td></td>
</tr>
<tr>
<td>2. I can develop new task-related strategies</td>
<td></td>
</tr>
<tr>
<td>3. I can tackle my client's problems differently</td>
<td></td>
</tr>
<tr>
<td>4. I can learn new ways of dealing with my sales tasks</td>
<td></td>
</tr>
<tr>
<td>5. I can identify alternative task strategies to reach my sales goals</td>
<td></td>
</tr>
</tbody>
</table>

6.6 Performance

Scholars used many different measures of performance, ranging from behavioral to outcome performance and from subjective and self-reported measures to objective measures of performance. In coaching research Agarwal et al. (2006) used a self-reported, single-item measure of performance (As a result of my manager's coaching support, I would rate my sales performance over the last few months as ...) with anchor values of much less effective and much more effective (Agarwal et al., 2006, p.16); in a study of managerial coaching behaviors in logistics organizations, Ellinger et al. (2003) measured employee performance through the manager's perception of employee performance; the manager was asked if the employees applied the fundamental procedures for 1) safely moving products through
the facility, 2) handling product without injury to co-workers, 3) operating materials
handling equipment, 4) properly handling products when storing and 5) moving and
handling products without damage; the managers provided responses through a 7-
point Lickert scale (1=strongly disagree, 7=strongly agree); in a research about the
impact of goal-setting on the performance of sales agents, Wotruba (1989) used
objective measures of performance, like dollar earnings, new potential customers
identified and year-end earnings.

Previous examples show that scholars relied in both subjective and objective
measures of performance, and a seminal article by Churchill, Ford, Hartley and
Walker (1985) clearly manifests the dispute about the appropriate way of measuring
performance; some authors argue that self-reports measures of performance might be
upward biased, while others believe that even if self-report measures might be
upward biased there is no reason to suspect that the amount of bias varies
systematically across salespeople (Churchill et al., 1985). Later research have
suggested that subjective and objective measures of performance are not
interchangeable, and that their correlation indicates no convergent validity (Bommer,
Johnson, Rich, Podsakoff and Mackenzie, 1995); convergent validity is important for
both hypotheses test validity and theory construction; if objective and subjective
measures of performance do not share a great deal of variance, their convergent
validity is low, and the reliability of any study using these measures could be greatly
reduced; the above mentioned meta-analysis found a corrected correlation of .39,
suggesting that the measures are not interchangeable (Bommer et al., 1995). A later
meta-analysis specifically focused on salesperson performance, found a corrected
correlation of .45 between objective and subjective measures, indicating that both
measures only share about 20% of variance (Rich, Bommer, Mackenzie, Podsakoff
and Jonhston, 1999); taking into consideration the most optimistic results, the meta-
analysis found that "two thirds of the variance in manager’s subjective ratings are
explained by factors other than objective sales productivity" (Rich et al., 1999, p. 49),
suggesting that sales managers define salesperson performance more broadly than
just objective sales productivity; for example, when specific salespeople's behaviors (e.g.: organizational citizenship behavior) are considered, the percentage of variance explained rises to 44%-65% (Mackenzie, Podsakoff and Fetter, 1991, 1993).

Unfortunately, the companies participating in the study didn’t agree to provide secondary data of salespeople’s performance. Accordingly, I collected a measure of subjective performance, as reported by the respondents.

This measure has been obtained from Fang et al. (2004), and it is shown on Table 14.

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor loadings (China)</th>
<th>Factor loadings (USA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am very effective in contributing to my firm’s market share</td>
<td>.81</td>
<td>.87</td>
</tr>
<tr>
<td>2. I am very effective in selling products with the highest profit margins</td>
<td>.81</td>
<td>.82</td>
</tr>
<tr>
<td>3. I am very effective in generating a high level of dollar sales</td>
<td>.74</td>
<td>.92</td>
</tr>
<tr>
<td>4. I am very effective in quickly generating sales of newly introduced products</td>
<td>.72</td>
<td>.81</td>
</tr>
<tr>
<td>5. I am very effective in identifying major accounts in my territory</td>
<td>.79</td>
<td>.82</td>
</tr>
<tr>
<td>6. I am very effective in selling to major accounts</td>
<td>.79</td>
<td>.87</td>
</tr>
<tr>
<td>7. I am very effective in exceeding annual sales targets and objectives</td>
<td>.77</td>
<td>.84</td>
</tr>
</tbody>
</table>

Fang et al., 2004

### 6.7 Control variables

"With non-experimental strategies, it is often essential to explore the effects of other variables when seeking to understand the basis of a ... relationship" (Robson, 2014).
The procedure usually begins by establishing the relationship between the hypothesized variables to later subdivide the data using the values of a new variable, and review the relationship for each of the sub-groups; this new variable is usually referred to as the test (or control) variable.

Previous research has suggested that socio-demographic and other contingency variables could affect coaching outcomes (Onyemah, 2009). For the conceptual model that I have developed, it would be worth examining whether gender, age or tenure affect salesperson’s responses to coaching. Accordingly, gender (male, female), age, years of formal education and tenure (years in the company, years in the sales position, and years of selling experience) will be used as control variables.

6.8 Scale translation

The original scales were developed in English; however, the two companies demanded some local adaptations. In the case of the Canadian bank, the sample consisted of English and French speaking respondents; in the case of the American manufacturer, there were Spanish speaking respondents.

English scales were translated into French and into Spanish using the parallel-blind technique (Guthery and Lowe, 1992; Mathieu, Bruvold and Ritchey, 2000); two sets of translators were used: one for the English to French version, and the other for the English to Spanish version. In the parallel-blind technique, two translators independently translated the scale from the source into the target language; after that, the translators compare their versions and work out their differences into a final version; the quality of the final result is high because it combines the advantages of individual results with a collaborative effort. Translated scales are presented in Appendix 1.
7. ETHICAL CONSIDERATIONS

This research was developed under the guidelines of the ethical research code currently in use at University of Sherbrooke. The individual respondents are subject to a minimal risk, their participation is voluntary and the confidentiality of their responses is guarantee.

Before the respondents started to answer the questionnaires, they received the information stating their free-determination and participation, the confidentiality of responses and the possibility of quitting the study without any consequences. By following the hyperlink to the electronic form the respondents accepted participating in the study.

Furthermore, the data was stored by the researcher in one, private location; neither company had access to the individual responses or the data base, and no link was made between any single participant and his individual results.

8. CONCLUSIONS

This chapter has dealt with the methodological planning required to conduct my research. The goal of the whole research project is twofold; first, to find support to the relationship between coaching and performance, and second, to identify the mediating mechanisms between coaching and performance. To achieve these goals, a model was proposed, based on LMX and Goal-setting theories, and this chapter explained how the research was conducted in order to collect the data required to test this model.

Throughout the chapter, a great deal of importance was given to the scientific aspects of the research and to justify with rational and scientific criteria each and every decision; also, great efforts were made to identify all possible sources of error
and to find ways to eliminate them; although not specifically mentioned in any specific section, internal and external validity are central concerns of this planning phase and their discussion and consideration is imbricate in different sections and sub sections of the chapter. Figure 11 uses Maxwell's (1997) and Robson's (2002) conceptual framework to illustrate some key aspects of my research.

Figure 11
Research framework

Adapted from Maxwell, 1997 and Robson, 2002
CHAPTER 5
RESULTS

1. INTRODUCTION

This chapter presents the analysis of the data collected at the beginning of 2011 as well as the results drawn from that analysis. First, an assessment of the measuring model using confirmatory factor analysis is presented, followed by the results of the structural model. Both analyses were done using AMOS 17 program.

When assessing measuring models, scholars have usually split complex models (those with five or more constructs) using some underlying logic; Fang et al. (2004) for example, used three models to measure seven constructs, grouping goal-setting variables, behavioral variables and performance variables; other studies used similar procedures (Palmatier et al., 2007) grouping variables according to some logic within the model itself. In this case, the theorized, complex model of coaching mediators (nine constructs) was split into two measuring models following its underlying logic: 1) a motivational theorized path, including the constructs of coaching, self-efficacy, goal commitment, effort and performance, and 2) a cognitive theorized path, including the constructs of coaching, new strategies, adaptive selling, sales planning, self-efficacy and performance.

After the measuring models were assessed, two structural models (following the same logic) were used to test the hypotheses. Results are discussed for both models, and evidence supporting the hypotheses is shown. The conclusions of the chapter express that all hypotheses are supported, with the exception of one.
2. SAMPLE

Data was collected during the months of March and May of 2011. Two companies agreed to participate in the study, providing the salespeople's e-mails and an introduction to them explaining the company's interest in their participation; one company was a large Canadian bank and the other one a Latin-American subsidiary of a large American manufacturing company.

Concerning the Canadian bank, 373 invitations were sent to Personal Banking Advisors and Financial Planners; with regard to the American manufacturer, 87 salespeople were invited to participate; these individuals were serving a broad spectrum of industrial sectors, like energy, manufacturing, oil and gas, and others. After invitations were sent, 186 complete, usable responses were received for a total response rate of 40.43%.

Responses were evenly distributed between male (48.9%) and female (51.1%) respondents, providing an even representation of the whole population; concerning their sales experience, the sample presented a mean value of 14 years with a standard deviation of 9.40 and maximum values of 39; these values indicate a great diversity and heterogeneity of salespeople, covering a broad range of experienced and inexperienced individuals.

Concerning tenure in the position, the sample presented a mean value of 7 years with a standard deviation of 7 and maximum values of 35; again, these values indicate a great diversity and heterogeneity of salespeople, from individuals who have just accessed the position with others having held the position almost for a lifetime.

Finally, concerning tenure with the company, the sample presented a mean value of 10 years with a standard deviation of 10 and maximum values of 39; these values also indicate a great diversity and heterogeneity of salespeople, from
individuals who are new to the company while others have been working for it almost for a lifetime.

Results suggest that the sample adequately represents a larger population of salespeople, with a significant gender mix (almost 50/50) and covering people new to the sales profession, the position and the company with people who are very experienced and have been holding the same position in the same company for more than 30 years.

3. ASSESSMENT OF THE MEASURING MODELS

Confirmatory factor analysis was used to estimate the properties of the two models. Measurement models were estimated by restricting each scale’s item loading on its a priori specified factor, and correlation among factors was allowed (Gerbing and Anderson, 1988). Items showing standard regression weights lower than .50 were eliminated; all items were retained for the coaching, performance, goal commitment, new strategies and effort scales; item one, six and seven were retained for the self-efficacy scale; items one, two, three and five were retained for the adaptive selling scale; and items two, three and four were retained for the sales planning scale.

The analysis showed a very high correlation between intensity and persistence of effort, suggesting that scale’s items were loading on a single factor rather than two. Although there is a theoretical difference between this two constructs (intensity of effort and persistence of effort) this difference is subtle and participants didn’t seem to discriminate that much; their answers suggest that they considered the two constructs as one; additionally, scientific literature usually treated these two constructs as one compound measure of effort, naming it working hard (Sujan et al., 1994); accordingly, all six items were allowed to load into one single construct, and
for the rest of this dissertation effort will be considered as a construct including three items of persistence and three items of intensity.

The fit indexes for both models were good. The results for the first model are $\chi^2 = 690.6, p<.01$; Comparative Fit Index (CFI) = .92; root mean square error of approximation (RMSEA) = .07, with a 90% confidence interval around RMSEA of LO90 = .06 and HI90 = .08; Incremental Index of Fit (IFI) = .92; and Tucker Lewis Index (TLI) = .91.

The results for the second model are $\chi^2 = 535.4, p<.01$; CMIN/DF = 1.72; CFI = .94; RMSEA = .06, with a 90% confidence interval around RMSEA of LO90 = .05 and HI90 = .07; IFI = .94; and TLI = .93.

It is important to remark that the classical $\chi^2$ measure (also called Minimum Discrepancy Measure, or CMIN) is highly influenced by the size of the sample and the complexity of the model; for that reason, it is preferred to divide CMIN by the degrees of freedom (DF) and use CMIN/DF as a parsimony measure which should be between 1 and 3 (Cadieux and Levesque, 2011); for this model CMIN/DF = 1.91.

It is also important to remark that the Root Mean Square Error of Approximation (RMSEA) takes into account the error or approximation in the population and tries to determine how well the model would fit the population covariance matrix (if it were available) using optimally chosen parameters (Byrne, 2010). This discrepancy, as measured by the RMSEA, is also sensitive to the complexity of the model (number of estimated parameters); values as high as .80 represent reasonable errors of approximation in the population (Byrne, 2010). Other scholars also called for the use of a confidence interval to assess the precision of RMSEA estimates; narrow intervals would make the case for a good precision of the RMSEA value; additionally, top interval values (HI90 RMSEA) lower than or in the
proximity of the critical values of .80 further support the assertion of reasonable errors of approximation in the population (Byrne, 2010).

It must be noted that RMSEA values for both models are under the limit of .08, which was suggested as an acceptable limit for this measure (Byrne, 2010). Furthermore, superior limits of the confidence interval for both models are at or under this value of .08 which is highly desirable.

Another index that is usually presented in the literature is the Goodness of Fit Index (GFI); it was proposed that this index was quite influenced by the model complexity, and thus, it should be analyzed together with the Parsimony GFI (PGFI) which takes into account the complexity (i.e. number of estimated parameters) of the hypothesized model; combinations of GFI in the vicinity of .90 and PGFI in the .50s are indicators of adequate fit (Byrne, 2010). For the first model GFI = .86 and PGFI = .67 and for the second model GFI = .83 and PGFI = .68, which suggest an acceptable adequacy.

Measures also indicate that all factor loadings for both models were significant (p < .01), demonstrating convergent validity of the measures. The reliability of each multi-item scale is above .70 (Table 15). Final scales and item loadings for all the constructs are shown in the appendix. Globally, the results indicate that the measures are valid and reliable.
Table 15
Constructs’ mean values, standard deviation, Cronbach alpha and correlations

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Coaching</td>
<td>5.12</td>
<td>1.34</td>
<td>.94</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goal Com.</td>
<td>5.48</td>
<td>1.11</td>
<td>.48</td>
<td>.76</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effort</td>
<td>5.63</td>
<td>1.33</td>
<td>.64</td>
<td>.62</td>
<td>.95</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adapt. Sell.</td>
<td>5.70</td>
<td>1.15</td>
<td>.58</td>
<td>.49</td>
<td>.79</td>
<td>.93</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales plan</td>
<td>4.88</td>
<td>1.15</td>
<td>.36</td>
<td>.28</td>
<td>.45</td>
<td>.50</td>
<td>.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-effic.</td>
<td>5.79</td>
<td>.99</td>
<td>.38</td>
<td>.48</td>
<td>.57</td>
<td>.62</td>
<td>.52</td>
<td>.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New strat.</td>
<td>5.79</td>
<td>1.05</td>
<td>.35</td>
<td>.42</td>
<td>.60</td>
<td>.66</td>
<td>.50</td>
<td>.75</td>
<td>.94</td>
<td></td>
</tr>
<tr>
<td>Performance</td>
<td>5.43</td>
<td>.93</td>
<td>.37</td>
<td>.58</td>
<td>.62</td>
<td>.54</td>
<td>.45</td>
<td>.68</td>
<td>.58</td>
<td>.90</td>
</tr>
</tbody>
</table>

Cronbach’s alphas are presented in the main diagonal
All correlations are significant at 0.01 level (2-tailed)

4. RESULTS

After the measurement models were deemed to be acceptable, two structural models were estimated, one for the hypothesized motivational effect of coaching on salesperson’s performance and another one for the cognitive effect. Analysis and results are presented in the following sub-sections.

4.1 Motivational model

The motivational model took into account the motivational effects of coaching on salesperson’s behavior and on his performance. The model included the following constructs: coaching, self-efficacy, goal commitment, effort and performance. The fit indexes ($\chi^2 = 811.9$, p.<.01; CMIN/DF = 2.21; CFI = .89;IFI = .89; TLI = .88; RMSEA = .08) suggest that the hypothesized model acceptably fit the data (Byrne, 2010). Table 16 summarizes the results.
Table 16
Motivational path model: Hypothesized main effects

<table>
<thead>
<tr>
<th>Hypothesized path</th>
<th>Standard path coefficient</th>
<th>t-Value</th>
<th>Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coaching → Goal commitment</td>
<td>.38</td>
<td>4.68**</td>
<td>H₁</td>
</tr>
<tr>
<td>Goal commitment → Effort (persistence and intensity)</td>
<td>.80</td>
<td>9.18**</td>
<td>H₂a, H₂b</td>
</tr>
<tr>
<td>Effort (intensity and persistence) → Performance</td>
<td>.59</td>
<td>7.13**</td>
<td>H₃a, H₃b</td>
</tr>
<tr>
<td>Coaching → Self-efficacy</td>
<td>.37</td>
<td>3.47**</td>
<td>H₆</td>
</tr>
<tr>
<td>Self-efficacy → Goal commitment</td>
<td>.64</td>
<td>4.73**</td>
<td>H₇</td>
</tr>
<tr>
<td>R² (Goal commitment)</td>
<td>.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R² (Effort)</td>
<td>.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R² (Performance)</td>
<td>.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R² (Self-efficacy)</td>
<td>.14</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** p < .01

4.1.1 The motivational impact of coaching on performance

Results show that there is a significant impact of coaching on salesperson performance through the mediating effect of goal commitment and effort. Coaching provided by the supervisor positively affected salesperson goal commitment (β = .38, p < .01) in support of H₁; goal commitment affected salesperson’s deployed effort (β = .80, p < .01), supporting H₂a and H₂b; and the deployed effort resulted in an increased sales performance (β = .59, p < .01), supporting H₃a and H₃b.

The fact that the construct of effort was treated as a compound construct (measuring both intensity and persistence) should lead to reformulate H₂a and H₂b into one compound hypothesis (Salesperson’s goal commitment will positively influence the intensity and persistence of effort deployed to achieve the goal), as well as H₃a and H₃b (Salesperson’s intensity and persistence of effort will positively influence his performance). Nevertheless, as hypothesized, increased performance is
achieved through increased goal commitment and effort, due to the coaching intervention.

Also, as hypothesized, supervisory coaching affects salesperson's self-efficacy ($\beta = .37, p < .01$) in support of H6; and self-efficacy affects goal commitment ($\beta = .64, p < .01$) in support of H7.

To test the effect of the control variables, links were added from gender, tenure and experience to performance; in the presence of the model, these links were non significant, suggesting that there is no effect of the control variables on performance when the model variables are considered.

Finally, the direct effect of coaching on performance was tested by adding a direct path between these constructs in the proposed model. Data showed that, in the presence of the mediating variables, this path is non-significant, suggesting that the hypothesized full mediation model explains better the variance of performance than the direct path (Figure 12).

**Figure 12**

![Motivational path model](image)
4.2 Cognitive model

The cognitive path model took into account the cognitive effects of coaching on salesperson's behavior, and consequently in their performance. The model included the following constructs: coaching, self-efficacy, goal commitment, adaptive selling, sales planning, new task strategies and performance. The fit indexes ($\chi^2 = 858.13$, p<.01; CMIN/DF = 2.17; CFI = .87; IFI = .87; TLI = .86; RMSEA = .08) suggest an adequate fit of the data to the hypothesized model (Byrne, 2010). Table 17 summarizes the results.

<table>
<thead>
<tr>
<th>Hypothesized path</th>
<th>Standard path coefficient</th>
<th>t-Value</th>
<th>Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coaching $\rightarrow$ Goal commitment</td>
<td>.39</td>
<td>4.91**</td>
<td>$H_1$</td>
</tr>
<tr>
<td>Goal commitment $\rightarrow$ Adaptive selling</td>
<td>.66</td>
<td>6.89**</td>
<td>$H_{2c}$</td>
</tr>
<tr>
<td>Goal commitment $\rightarrow$ Sales planning</td>
<td>.48</td>
<td>4.79**</td>
<td>$H_{2c}$</td>
</tr>
<tr>
<td>Adaptive selling $\rightarrow$ Performance</td>
<td>.18</td>
<td>2.42*</td>
<td>$H_{3c}$</td>
</tr>
<tr>
<td>Sales planning $\rightarrow$ Performance</td>
<td>.19</td>
<td>2.26*</td>
<td>$H_{3c}$</td>
</tr>
<tr>
<td>Coaching $\rightarrow$ New strategies</td>
<td>n.s.</td>
<td>n.s.</td>
<td>$H_4$</td>
</tr>
<tr>
<td>New strategies $\rightarrow$ Performance</td>
<td>.51</td>
<td>5.48**</td>
<td>$H_5$</td>
</tr>
<tr>
<td>Coaching $\rightarrow$ Self-efficacy</td>
<td>.33</td>
<td>3.78**</td>
<td>$H_6$</td>
</tr>
<tr>
<td>Self-efficacy $\rightarrow$ Goal commitment</td>
<td>.52</td>
<td>6.11**</td>
<td>$H_7$</td>
</tr>
<tr>
<td>Self-efficacy $\rightarrow$ New strategies</td>
<td>.94</td>
<td>8.63**</td>
<td>$H_8$</td>
</tr>
<tr>
<td>$R^2$ (Goal commitment)</td>
<td>.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$ (Adaptive selling)</td>
<td>.44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$ (Sales planning)</td>
<td>.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$ (New strategies)</td>
<td>.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$ (Performance)</td>
<td>.44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$ (Self-efficacy)</td>
<td>.11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .05
** p < .01
4.2.1 *The cognitive impact of coaching on performance*

Results show that there is an impact of coaching on salesperson performance, through the mediating effect of cognitive variables such as adaptive selling, sales planning and new strategies. Coaching provided by the supervisor positively affected salesperson goal commitment ($\beta = .39$, $p < .01$) in support of $H_1$; goal commitment affected salesperson's adaptive selling ($\beta = .66$, $p < .01$) and sales planning ($\beta = .48$, $p < .01$), supporting $H_{2c}$; and the cognitive resources mobilized through adaptive selling behavior and sales planning resulted in an increased sales performance ($\beta = .18$, $p < .05$ and $\beta = .19$, $p < .05$ respectively), supporting $H_{3c}$.

Also, as hypothesized, supervisory coaching affects salesperson's self-efficacy ($\beta = .33$, $p < .01$) in support of $H_6$; self-efficacy affects goal commitment ($\beta = .52$, $p < .01$) in support of $H_7$ and it also affects new strategies ($\beta = .94$, $p < .01$) in support of $H_8$. Finally, new strategies positively affect performance ($\beta = .51$, $p < .01$) in support of $H_5$ (Figure 13).

Figure 13
Cognitive path model
Support for the relationship between coaching and new strategies was not found, as this relationship was not significant. Apparently, the effect of coaching on new strategies is completely mediated through the effect of self-efficacy.

To test the effect of the control variables, links were added from gender, tenure and experience to performance; in the presence of the model, these links were non significant, suggesting that there is no effect of the control variables on performance when the model variables are considered.

Finally, the direct effect of coaching on performance was tested by adding a direct path between these constructs in the proposed model. Data showed that, in the presence of the mediating variables, this path is non-significant, suggesting that the hypothesized full mediation model explains better the variance of performance than the direct path.

5. CONCLUSIONS

Data collected at the beginning of 2011 with two different sets of salespeople working at two different companies (a Bank and an industrial manufacturer) in two different countries was used to test the hypothesized model.

First, the data was used to evaluate the psychometric properties of the measuring instruments. The measuring models showed acceptable adequacy, indicating that the measures were valid and reliable.

After the measurement models were deemed to be acceptable, two structural models were estimated, one for the hypothesized motivational effect of coaching on salesperson’s performance, and another one for the cognitive effect. Results indicate
that the model fits the data adequately, supporting all the hypotheses with the exception of $H_4$.

In the next chapter, I will discuss these results, and elaborate on its scientific and practical consequences.
CHAPTER 6
DISCUSSION

1. INTRODUCTION

Results presented in the previous chapter suggest that the hypothesized model adequately adjust to the data collected, thus providing a plausible explanation to the relationship between coaching and performance.

In this chapter I present the scientific and managerial contributions of the research, as well as its limits and the directions for future research.

2. SCIENTIFIC CONTRIBUTIONS

2.1 The impact of coaching on salesperson’s performance

The first research question of this dissertation explored whether the coaching provided by the sales managers has a positive impact on salesperson’s performance. Results show that the proposed models of coaching mediators can explain between 35% and 43% of the variation in salesperson’s performance. These results support other initial studies on the relationship between coaching and performance; Ellinger et al. (2005) found that supervisory coaching could explain 18% of the variance of warehouse employee performance; Agarwal et al. (2006) found that coaching at different levels of a sales organization could explain between 23% and 36% of coachees’ performance; finally, Trépanier (2010) found that the coaching provided to customer service employees in two different Canadian banking institutions explained 13% of these employees performance.
The results of my research not only allow me to answer my first research question, but also to validate that the theoretical framework chosen to model the coaching intervention was adequate. I proposed that LMX was the most significant theory to explain the high quality exchanges that take place in a coaching relationship and the positive consequences on salesperson’s behavior and performance; LMX theory establishes that a manager can develop high-quality relationships or exchanges with some of his subordinates, “characterized by high levels of trust, interaction, support and formal and informal rewards” (Ilies et al., 2007); the quality of this relationship affects important leader and member attitudes, behaviors and outputs (Gertsner and Day, 1997; House and Aditya, 1997; Ilies et al., 2007). LMX meta-analysis found that high quality relations between leaders and followers can explain between 9% and 30% of followers’ performance ratings (Gerstner and Day, 1997); my results suggest that coaching by the sales manager can explain between 35% and 44% of salesperson’s performance; they go in the same direction and have similar magnitude than those found in LMX and coaching research.

Based on this evidence, I conclude that supervisory coaching has a clear effect on salesperson’s performance, and that the coaching intervention can explain significant variance in salesperson’s performance. My research conclusions contribute to the few scientific studies trying to test the relationship between coaching and performance, in particular in the field of sales force research, as well as to the little body of theory comprising coaching practices and consequences; additionally, my research contributes to the rising stream of coaching research using the Social Exchange framework.

2.2 Mediators between coaching and performance

The second research question of this dissertation aimed at identifying the mediating variables that can explain an increase of performance after a coaching
intervention. LMX theory provided limited answers at this respect, so I enlarged my theoretical framework by integrating LMX theory to Goal-setting theory. Goal-setting theory posits that when a person is committed to achieve high goals, he puts into play motivational and cognitive mechanisms to aim at these goals and, thus, he can achieve improved performance. These mechanisms translate into increased intensity and persistence of effort, choosing actions directed towards the goals (and neglect actions not directed towards them), as well as the development of new ways to do the things. In the case of salespeople, scholars used the terms *work harder* and *work smarter* to refer to these two mechanisms.

2.2.1 *Motivational mediators*

Building on Goal-setting theory, I proposed that the coaching intervention would increase salesperson’s intensity and persistence of effort through the mediation of goal commitment and self-efficacy, and that increased intensity and persistence of effort would result in increased performance. Results supported these hypotheses; beta loadings were all significant, and the variance of supervisory coaching explained 74% of the variance of goal commitment, 14% of self-efficacy, 64% of effort and 35% of performance.

These results further support my decision of using two complementary theories to build my theoretical framework; Klein and Kim (1998) showed that in a goal-setting context, LMX was the primary determinant for goal commitment; other research on LMX Theory found that both the provision and the type of supervisory feedback increase goal commitment (Klein *et al.*, 1999). Evidence show once again that LMX is a valid theory to understand coaching relationships and their consequences on proximal (goal commitment) and distal (performance) variables.
Further to these results, Goal-setting theory posits that committed salespeople will exert more effort in order to achieve their goals, thus increasing their performance. Results show that as a consequence of supervisory coaching and increased commitment, salespeople actually exert more effort and increase their performance; this supports my rationale that Goal-setting theory is a valid theoretical framework to model coaching mediators in sales contexts.

The analysis of the data also showed a very high correlation between intensity and persistence of effort, suggesting that scale’s items were loading on a single factor rather than two. Goal-setting theorists have claimed that intensity and persistence of effort are two distinctive dimensions of motivated action, and when they designed experimental settings to test the theory, they also designed specific measures to observe these two dimensions (Locke and Latham, 1990). On the other hand, when intensity and persistence of effort were used by sales and sales management researchers, they considered them as part of only one compound construct: working hard (Fang et al., 2004; Sujan et al., 1994).

Results from my data suggest that, although there is a theoretical difference between intensity of effort and persistence of effort, this difference is so subtle that respondents don’t seem to discriminate that much between them; their answers suggest that they considered the two constructs as one. My decision of letting the six scale items load into one single measure of effort fits with the current stream of sales research, which used the same items and let them load into a unique construct named working hard.

This decision should lead to merging hypotheses $H_{2a}$ and $H_{2b}$ into one compound hypothesis (Salesperson’s goal commitment will positively influence the intensity and persistence of effort deployed to achieve the goal), as well as merging $H_{3a}$ and $H_{3b}$ into another compound hypothesis (Salesperson’s intensity and persistence of effort will positively influence his performance). Again, merging the
hypotheses is coherent with present research in sales and sales management, where scholars refer in their hypotheses to the compound construct simply as *effort* (Fang *et al*., 2004; Sujan *et al*., 1994).

Nevertheless, merging these hypotheses doesn't change the underlying hypothesized effect that increased performance is achieved through increased goal commitment and effort due to the coaching intervention.

The results found through the analysis of motivational mediators are new in coaching research; so far, scholars have only tried to test the relationship between coaching and performance and no single study have tried to identify mediators between them. This is a *major* contribution of this research: coaching acts through increased goal commitment and self-efficacy, which lead to an increased deployed effort by the salesperson, which finally translates into increased performance.

### 2.2.2 Cognitive mediators

Also building on Goal-setting theory, I proposed that the coaching intervention has a cognitive effect on the salesperson that allows him to increase his performance. According to Goal-setting theory this cognitive effect manifests in two distinctive ways: 1) the committed individual chooses the actions that are directed towards the goals, and neglects the actions that are not; goal-setting theorists call this choice *direction of effort*; I proposed that, in line with developments in the sales field, in the case of salespeople this choice can be understand as a way of *working smart*. The behavior of working smart, or choosing the actions that help the salesperson achieve his goals, is characterized in the literature as a combination of *adaptive selling* (adapting the sales behavior to fit the situation and demands of the customers) and *sales planning* (plan the sales activities to achieve the goals); and 2) when the committed individual is called to perform tasks for which his present knowledge is not directly applicable or adaptable, he will engage in a deliberate process of
developing new strategies that will enable him to face the situation and achieve the goals; in my model I named this construct *new task strategies*.

Results from my data suggest that the cognitive effect of coaching works as hypothesized. Coaching positively impacts goal commitment and self-efficacy, and these variables positively impact adaptive selling and sales planning, which in turn positively impact performance. All beta loadings are positive and significant, and the variance of supervisory coaching explains 56% of the variance of goal commitment, 11% of self-efficacy, 44% of adaptive selling, 23% of sales planning and 44% of performance.

Additionally, coaching also impacts positively salesperson’s performance, through the full mediating effect of self-efficacy and new strategies; beta loadings are also positive and significant, and the explained variance of self-efficacy is 11% and of new strategies is 10%.

On the down side, I didn’t find support for H4 (*The coaching provided by the sales supervisor positively influences salesperson’s development of new task-specific strategies*). Although the coaching intervention, as depicted using LMX theory, presents mutual increased communication, participation in the decision-making process, and sharing of critical information, thus leading to the open and mutual analysis of new strategies, support for this rationale was not found in the data. However, data suggests that coaching positively impacts new strategies through the full mediating effect of self-efficacy. A possible explanation for these results is twofold.

First, I didn’t analyze the *content* of the coaching interventions, but the *impact* on the behavioral variables; it is possible that some or all of the managers are not *directly* addressing the development of new strategies in their coaching interventions and, accordingly, the respondents don’t establish a *direct* link between the manager
interventions and their capacity of developing new strategies. After the coaching intervention, however, they report that they are capable of developing these new strategies to a great extent (Mean = 5.79, s. d. = 1.05) and that they use these strategies to achieve higher performance ($\beta = .51$, $p < .01$). These results allow thinking that, although coaching does not directly impact new strategies, it has a distal effect on them.

The second explanation considers the effect of self-efficacy in the development of new strategies. It is possible that, after the coaching intervention, salespeople feeling more confident on their capability of performing new tasks (because of a higher self-efficacy) put into play new strategies that allow them to achieve higher performance; hence, the development of new strategies is not a direct consequence of the coaching intervention, but one mediated by their increased confidence in their abilities to perform the task (higher self-efficacy).

Concerning self-efficacy, I presented this construct as "a superordinate judgment of performance capability that is induced by the assimilation and integration of multiple performance determinants" (Gist and Mitchell, 1992, p. 188). These determinants can be integrated through the analysis of task requirements, attribution of experience and assessment of personal and situational factors; I proposed that the coaching intervention can influence these three processes, and thus, can improve salesperson's self-efficacy. Previous research on coaching has not addressed its impact on self-efficacy, but a meta-analysis of LMX theory suggests that LMX has a positive impact on member's competence (measured using self-reports) (Gerstner and Day, 1997), a concept that can be depicted as being close to self-efficacy. In line with these studies, my results provide support for the impact of coaching on salesperson's self-efficacy and suggest that coaching can explain between 11% and 14% of the variance in salesperson's self-efficacy.
The results found through the analysis of cognitive mediators are also new in coaching research; through increased goal commitment and self-efficacy, salesperson’s adaptive selling behavior and sales planning increase and positively increase performance; increased self-efficacy also permits salesperson to develop new strategies which also impact performance. No previous research tried to identify any type of mediators between coaching and performance, and thus, this is another major contribution of this research.

3. MANAGERIAL IMPLICATIONS

In the first chapter of this dissertation I underlined that, even though there is an extended agreement on the positive impacts of coaching, there is a lack of understanding of how coaching really works; the relationship between coaching and performance has not received much attention from the part of sales researchers, and the mechanisms through which coaching acts has not been identified.

In the previous section I showed that my dissertation provides answers to these questions from a scientific perspective; in this section, I present the managerial implications of my findings.

3.1 The impact of coaching on salesperson’s performance

One of the first gaps that I encountered when I was trying to identify the managerial problem was the unclear link between coaching and performance; one of the most accepted statements in coaching practice is that coaching positively impacts performance, but few scientific studies researched this subject and provided support for this relationship. During my residency period, some of the practitioners that I interviewed told me that this was a shared paradigm among HR professionals, which
has not received extensive support. This lack of evidence has a number of practical implications regarding the use of coaching in organizations.

One first question that may arise is why should an organization implement a coaching program? A coaching program demands the mobilization of many human and financial resources; as all organizations have limited resources, those assigned to the coaching program must be detour from other projects; such a decision must be taken based on solid empirical data in order to evaluate the return of these investments in terms of money, increased productivity or higher efficiency. If there is no evidence supporting the increase in performance as a consequence of coaching other than popular and accepted knowledge, then there will be quite difficult for organizations to understand why they should embark in a new coaching initiative, why should they invest in a coaching program, or why should they continue to support an existing coaching program.

A second, related question is what the return of a coaching program is, or how profitable is it for an organization to implement a coaching program? Implementing these kind of programs usually imply spending resources to hire external consultants, provide training to managers, develop internal coaching capabilities, create new control mechanisms, evaluate and reward improvements, etc. If the impact on the results is unknown, companies will be hesitant to develop coaching programs in their organizations, as they will be unable to measure the return on the investment.

Finally, a third question might concern establishing standards to measure the effectiveness of a coaching program. Once the coaching program is in place, what changes should be expected in terms of sales force performance? What the standard to which compare any future performance increase is?

One of the managerial contributions of my research consist on providing clues to answer some of these questions; my data supports the accepted statement that
coaching impacts performance; this impact is positive and strong, thus managers coaching subordinates must obtain a noticeable and measurable increase in performance as a result of the coaching process. These results are based on a general model using widely accepted theories, and tested in a non-experimental design using real salespeople; results can be generalized to other salespeople as there is no reason that suggests that the samples could be different from the general population.

Another managerial contribution of my research is the quantification of the impact of coaching on performance; my data suggests that the proposed model of coaching mediators can explain between 35% and 43% of the variance on salesperson’s performance; these results, together with other existing researches rendering similar results, allow the practitioners to quantify the impact of a coaching initiative on the organization’s performance and evaluate what the return of the coaching investment could be.

The findings concerning the relationship between coaching and salesperson’s performance constitute an important contribution to this managerial problem.

3.2 Improving sales manager coaching behavior

The dissertation also provides guidelines to managers willing to increase their coaching behaviors; a careful analysis of the items of the instrument measuring provides clues as to what behaviors should be developed to be a better coach.

For example, asking questions during the coaching intervention instead of telling the salesperson the answer to the problems increases the efficacy of the intervention. When the coach asks questions, he promotes the salesperson’s critical thinking of a given problematic situation; the salesperson increases his awareness of the problem and his responsibility in finding a solution; his commitment to the selected solution is higher and his resistance to an imposed solution is greatly
reduced; his motivation is also increased, as he feels a greater feeling of ownership to the chosen solution; finally, the increased awareness, commitment and ownership will positively affect his behavior, leading to better exchanges with his customers and increased results.

Another item suggests that the use of role playing during the coaching intervention also increases its efficacy. When the coach uses role playing to illustrate a situation or to practice the implementation of a solution, he directly affects the implementation intentions of the salesperson; having role-played the future situation with his coach, the salesperson is better prepared to face that (or a similar) situation with his customers; the process of predeciding what actions to take and to practice them though role-playing promotes a more attentive mind-set, makes them more aware when the situation arrives, strengthens their attitudes towards the right actions, makes them more committed to them and help them pursue the goals more effectively. The positive effects of predeciding and practicing increase when the cognitive load of the task is higher (meaning, when the task is difficult), as is the case of salespeople leading sales process and sales interviews with customers, in particular in business-to-business settings.

The coach can also increase his efficacy by using analogies and scenarios to promote learning. The use of analogies and scenarios help the salesperson to prepare himself to future situations, promoting a more attentive mind-set and acting as a mental link between a specific future situation and the intended response; it triggers the appropriate salesperson’s responses once the situation is encountered.

Finally, the coach can increase his efficacy by explicitly exploring new strategies during the coaching intervention; when the sales manager and the salesperson explore new alternative ways to answer to potential problematic situation, the salesperson is better equipped to face this new situation when they arrive, he is better prepared to adapt some of this new strategies to similar situations, can adapt
more his selling behavior, can provide better answers to his customers and increase his results.

3.3 Preparing and planning the coaching intervention

The previous section suggested some supervisory behaviors that can increase the coach's efficacy when leading a coaching intervention; the use of questioning instead of providing answers, role-playing, using analogies and scenarios, and exploring new strategies are all different activities that can positively affect the coach's impact on salesperson's results.

However, experience suggests that in the short time-pan of a coaching intervention (typically between 30 minutes to one hour) the coach is subjected to a high cognitive load; he has to conduct the intervention towards the development of the salesperson, consider the actual or potential problematic situations related to sales goals and performance, and facilitate the salesperson's critical thinking and awareness, while following the guidelines provided in the previous section (asking questions, using role-playing, providing analogies, etc.). Experience suggests that trying to do all this without an adequate preparation is very difficult.

Accordingly, planning the coaching intervention is also a critical step towards increasing the coach's efficacy. Prior to the coaching session, the manager can plan his intervention based on the attitudes and behaviors that he wants to arouse; he must decide on how to use the information available and how to conduct the intervention to increase salesperson's goal commitment and self-efficacy in order to promote increased motivation and cognitive awareness and contribute to an increase in salesperson's performance. His knowledge of the salesperson and his working environment will allow him to determine the questions to ask to maximize its impact, the type of situations that the salesperson is finding more challenging, and the degree of effort that should be raised to cope with the situations and reach the goals.
Good coaches prepare their interventions in advance in order to make optimal use of the limited time of the coaching intervention and increase their efficacy.

3.4 Mediators between coaching and performance

Another problem that I found during my residency period concerned the identification of mediating variables between coaching and performance. Neither practitioners' literature nor scientific research have provided explanations of what the mechanisms enacted by the coaching intervention are, so there are no explanations of why an increase in performance should follow a coaching intervention. This lack of guide and explanations leads to a great variety of coaching styles and different interventions; some of these interventions are doubtfully tagged as coaching by the performing managers; for example, one manager, when describing his coaching interventions said: “Well, you know, you see the guy arriving at the morning with an ugly look in his face, so you take him by the arm and tell him ‘Come on, let's take a coffee and you tell me what's wrong'...”; obviously, this manager was using coaching as a synonym of listening and support, thus giving the salesperson the possibility of a cathartic conversation; although I don't doubt the impact of this kind of conversations, the question remains as whether this is coaching or not, and whether this is effective to increase salesperson’s performance or not.

Other managers complained about a great variability in their coaching results, and the impossibility of making adequate attributions because of a lack of understanding of how coaching works. For example, a Regional Sales Manager stated that he usually coached his sales representatives, but he found a lot of unexplained variability in his coaching results. This person has received training on coaching techniques at the USA several times, but the different consultants facilitating these workshops proposed different models, based on their particular experiences, without solid evidence of a clear identification of the critical mediators in the coaching
process. Accordingly, this manager, as well as many others that I have interviewed, was not sure what was going on during and after the coaching intervention, and what were the variables that he was affecting through the coaching intervention that led the salesperson to change and improve his/her performance. After an unsuccessful coaching intervention, it was very difficult for him to make the right attributions, because he was not sure if it was his fault as a coach (who didn’t act upon the right variables) or the sales representative’s (who didn’t respond to the right stimulus).

This is an important gap in coaching practice and research; for practitioners, the identification of mediators “...is invaluable because this information can be used to modify an intervention or for adapting its principles to another area ... mediators answer the question as to why an intervention worked” (Latham, 2007, p. 64). My residency led me to the conclusion that present models in coaching are incomplete, hence practitioners don’t know why a coaching intervention worked or didn’t.

The dissertation’s results provide major answers to this problem. They suggest that the coaching intervention increases salesperson’s goal commitment and self-efficacy; as a consequence of increased goal commitment and self-efficacy, salespeople are willing to work harder when pursuing their goals, to adapt more their selling behavior to respond to particular situations with their clients, to plan their sales activities better, and to develop new tasks-related strategies in order to face work-related challenges; as a consequence of increased effort, adaptability, planning and new strategies, their performance increases.

These findings present a breakthrough in coaching research and practice; these are answers to practitioners’ problems, based on rigorous, theory-based, quantitative, empirical research; these findings guide practitioners to the variables that must be enacted on by the coaching intervention that will affect salesperson’s performance.
3.5 Assessing the effects of the coaching intervention

At the end of the coaching intervention, the coach could easily ask probing questions concerning the salesperson's degree of commitment toward the assigned goals, as well as salesperson's confidence in his ability to perform the expected tasks; if the intervention was successful, the salesperson's answers should show a high level of commitment towards his goals, as well as a high confidence in his abilities to perform the tasks as expected (high self-efficacy); if the answers arise the coach's suspicion that the salesperson is not highly committed towards his goals, or doesn't have a high perception of task efficacy, then the coach can make an early detection of these problems and foresee that that individual will not exert the expected behaviors and will not achieve the expected goals; this early detection allows the coach to correct the situation before the problems will show up and before it's too late to achieve the results.

Days after the coaching intervention, the coach can also observe the behavior of the salesperson; if the coaching intervention was successful, the individual will deploy greater effort in his tasks, will persist longer when faced with client's rejection, will work longer hours in order to achieve the goals, will show more adaptability and flexibility when faced with different demands from the clients, will be more organized in his sales efforts (higher sales planning), and will arrive with better task-strategies when faced with new situations; if one or more of these behaviors is not detected by the coach, he can foresee that the goals will not be achieved, and make attributions as to why some of the behaviors are not present; these attributions will allow him to make the necessary corrections to future coaching interventions.

In summary, the findings of this dissertation give answers to the main managerial problems detected during my residency; not only it provides a quantifiable impact of coaching in salesperson's performance, but it explains as well
how the coaching intervention works. The identification of mediators is a major contribution to the practitioners' practice, because it allows them to diagnose immediately after the coaching intervention if it worked, and also to observe specific aspects of salespeople's behavior to determine whether the coaching intervention has had the expected impact on his motivation and cognition or not.

4. LIMITS

Perhaps one of the first limits that must be addressed concerns the use of a purposive sample. The decision of using a non-experimental design with a purposive sample was justified by saying that coaching was a managerial behavior that cannot be simulated or stimulated in a laboratory situation, but a behavior that a manager had to develop through years of training and practice; additionally, this type of research calls to work with respondents (salespeople) reporting to managers who show not any coaching behavior but coaching behaviors that are aligned with the paradigms and visions expressed in previous chapters of this dissertation. These conditions ruled out the use of a probabilistic sample because of the complexity of identifying the population and drawing a sample out of it.

Given the characteristics of the problem under study, the best sampling strategy was to use a purposive sample of salespeople who report to managers showing non-directive, solution-focused and performance-driven coaching behaviors.

The use of a non-probabilistic sample could raise questions regarding whether the conclusions of the study could be used in different settings. Although one of the necessary conditions to external generalizability is the use of probabilistic samples, this criteria has not been respected in most organizational research; Schwab recognizes this when he expresses that "almost all of the empirical studies published in our journals ... use convenience samples ... thus if one took generalization to a
population using statistical inference seriously, one would recommend rejecting nearly all manuscripts submitted" (Schwab, 1985, p. 173, cited by Robson, 2002, p. 267). In qualitative research, where researchers strongly rely on non-probabilistic samples, scholars have proposed to talk of transferability rather than generalizability (Guba and Lincoln, 1989); other scholars have stressed the importance of aspects like the presumed universality of the phenomenon studied as factors enabling the generalizability of results to other contexts when nonrandom samples are used (Maxwell, 1997). In the case of this study, there are no reasons to infer that the salespeople working for these companies are any different from other generic salespersons in the variables that could explain responses to coaching behaviors; thus, the use of a convenience sample does not preclude the possibility of generalizing the expected results to a larger population of salespeople reporting to managers using non-directive, solution-focused, performance-driven coaching approaches.

A second limit of the research concerns the content of the coaching intervention. It was proposed that, according to the scientific literature, during the coaching intervention the coach helps the salesperson diagnose a problematic situation, find the right solution, and commit to specific actions that will allow him solve it and achieve his goals; during this intervention, the coach provides feedback to the salesperson and they explore alternative options to tackle a problematic situation; the coach asks questions to raise the salesperson’s awareness and to make him propose alternative actions to achieve the goals; eventually, they analyze the options and agree to a solution (Ellinger et al., 2003; Ellinger and Bostrom, 1999; Evered and Selman, 1989; McLean et al., 2005; Rich, 1998; Richardson, 1996; Whitmore, 1985; Yukl and Lepsinger, 2004). All this led to propose that the coaching intervention positively impacts the development of new task-specific strategies (H₄).

Nevertheless, data didn’t support H₄; apparently, the effect of coaching on new task strategies is fully mediated through increased self-efficacy. It is possible that the lack of support for H₄ is due to the effect that some or all of the managers are
not *directly* addressing the development of new strategies in their coaching interventions and, accordingly, the respondents don't establish a *direct* link between the manager interventions and their capacity of developing new strategies. As the research didn't explore the content of the coaching interventions but the effect on the mediating variables, this speculation cannot be confirmed, and it remains a limit of the research.

5. DIRECTIONS FOR FUTURE RESEARCH

The results of this research support all the hypotheses with the exception of H₄. The evidence suggests that the proposed mediators work as hypothesized, and that the selected theories adequately explain the phenomenon; future research could analyze the content of different coaching interventions to verify if this is a valid reason for the lack of support to H₄ or not. If future research finds differences in the content of coaching interventions, a new question that can be posed is whether the model of coaching mediators remains valid for these different coaching interventions.

Finally, the dissertation proposed a general model of coaching mediators in sales contexts; however, although Goal-setting theory is particularly useful to understand the behavior of salespeople, subordinated to demanding goals, it is a general theory that can explain the behavior of *any employee* subjected to high goals; future research could test the model in general organizational contexts (other than sales contexts) to see if the model is applicable to the general process of coaching employees.
CHAPTER 7
CONCLUSIONS

The initial step of any DBA dissertation is the identification of a managerial problem for which the scientific research has not yet provided answers. In the first chapter it was said that one of the most accepted statements in coaching practice is that coaching positively affects performance. Scientific research, however, did not provide definite answers to this statement, as little research focused on exploring the coaching-performance relationship. Accordingly, organizations find very difficult to evaluate the feasibility or the return on the investment of a coaching program, or even to establish standards to measure the effectiveness of a coaching program; furthermore, managers leading coaching processes in their companies cannot determine either if their efforts are rendering the expected results or even if it is effective to continue using their time to provide coaching to salespeople.

A second problem, related to the first one, is that no scientific study has identified the mediating variables affected by the coaching intervention that explain an increase of salesperson’s performance. For practitioners, knowing which the mediators of any given intervention are is critical; knowing mediators allow them to correct an intervention or to adapt it to other contexts and understand why an intervention worked or not. Initial research led to the conclusion that present models in coaching are incomplete, hence managers don’t know what changes they should observe after a coaching intervention to know if the salesperson could increase his performance.

These two problems were confirmed during the residency work, through interviews with managers from different companies, areas, levels and countries. Managers complained that they were experiencing a great variability in their
coaching results, that they were not sure what to observe to say if an intervention has been successful or not, or even if they were making good use of their limited time.

These two problems led to define two research questions; the first one, whether the coaching provided by the sales managers have an impact on salesperson’s performance; and the second, what the mediating variables between coaching and performance are.

To answer these research questions two significant and complementary theories, LMX and Goal-setting, were identified; they are complementary in the sense that each one of them explains a critical part of the coaching intervention; LMX theory is a relational theory that showed how a high quality relationship between the coach and the coaché impact salesperson’s behavioral variables; goal-setting theory is a situationally specific, cognitive based psychological theory, congruent with the present trends in motivational theory, which showed how coaching affects these behavioral variables and transforms them into increased performance.

Building on these two theories, the dissertation presented a model of coaching mediators that posited that after a coaching intervention the salesperson will be more motivated to pursuit the goals and he will show higher self-efficacy; as a consequences of higher goal commitment and self-efficacy, the salesperson will exert more effort (in intensity, persistence and adaptability) and will develop new strategies to face the challenges; as a result of these, his performance would increase.

After identifying the corresponding measures in the scientific literature data was collected using two samples of salespeople; one sample consisted of salespeople working for a large Canadian bank, and data was collected using an English and a French version of a web-based questionnaire; the other sample consisted of salespeople of a Latin American branch of a large American industrial company, and data was collected though a web-based questionnaire, this time in Spanish. After
assessing the psychometric properties of the instruments and the adequacy of the measuring model, the data was used to test the model using structural equations modeling. Results indicated that the model adequately fit the data; the main hypotheses were supported.

From a scientific point of view the contributions of this dissertation are very significant. First of all, data supports the accepted statement that coaching impacts performance; this impact is positive and strong, and the theorized model explained between 35% and 44% of salesperson’s performance. These results go in the same direction and are of similar magnitude as some other embryonic scientific work in the field of sales coaching. These results are based on a general model using widely accepted theories, and tested in a non-experimental design using real salespeople; results can be generalized to other salespeople as there is no reason that suggests that the samples could be different from the general population. This is an important contribution to the emerging field of sales coaching research.

However, the main scientific contribution concerns the identification of the mediating mechanisms between coaching and performance. Data suggest that two important, proximal consequences of supervisory coaching in sales contexts are increased salesperson’s goal commitment and self-efficacy. These proximal outcomes influence salesperson’s performance through two complementary mechanisms: increased motivation and cognition. A more motivated person is ready to deploy more intensity and persistence of effort in the task, which translates into increased performance; a person with increased cognitive awareness, shows higher adaptive selling behavior and sales planning, and develops an increased number of new strategies, all variables that contribute to achieve increased performance.

These are major contributions of the dissertation; this is the first scientific study conducted with the goal of identifying mediators between coaching and performance. The study used a model based on two institutionalized theories, and was
tested using data from salespeople working at two different companies, in two different industries, in two different countries and speaking three different languages; although a purposive sample was used, there are no reasons to believe that results can’t be generalized to others sales contexts.

The final step of any DBA dissertation is the provision of answers to the initial managerial problem as well as guidelines to the managers affected by the problem. From a managerial point of view the dissertation contributes to the science and practice of management at both organizational and individual levels.

The dissertation quantifies the potential impact on salesperson’s performance caused by a coaching process; results suggest that the proposed model of coaching mediators can explain between 35% and 44% of salesperson’s performance; this is an important contribution at an organizational level of aggregation because it allows organizations to measure the return in the investment of any coaching project, and to establish standards to measure the efficacy of a coaching initiative.

At an individual level of aggregation, the dissertation provides managers with clear guidelines as to how to use the results to improve their coaching interventions. The coaching intervention arouses in the salesperson higher goal commitment and self-efficacy, as well as motivational and cognitive mechanisms that result in increased performance. Accordingly, when preparing to provide coaching, the manager must identify how he will direct the intervention and how he will use the available information in order to act upon these variables.

It was also suggested that at the end of the coaching intervention, the coach could ask probing questions concerning the salesperson’s degree of commitment toward the assigned goals, as well as his perception of confidence regarding his ability to perform the expected tasks; if the intervention was successful, the salesperson’s answers should show a high level of commitment towards his goals, as
well as a high self-efficacy; if the answers don’t satisfy the coach, then he can make an early detection of these problems and correct the situation before it’s too late to achieve the results; additionally, days after the coaching was provided, the coach can observe the behavior of the salesperson; if the coaching intervention was successful, the individual will deploy greater effort in his tasks, will show more adaptability and flexibility when faced with different demands from the clients, will be more organized in his sales efforts (higher sales planning), and will arrive with better task-strategies when faced with new situations; if one or more of these behaviors is not detected by the coach, he can make the necessary corrections to future coaching interventions.

These are practical and concrete guidelines emerging from this research that can help managers improve the efficacy of their coaching interventions. Future research could continue building on these results and expanding the scientific and practical knowledge of coaching in sales organizations.
REFERENCES


# APPENDIX 1
## MEASURING SCALES

<table>
<thead>
<tr>
<th>Supervisory coaching (Ellinger et al., 2005)</th>
<th>My supervisor uses analogies, scenarios and examples to help me learn</th>
<th>Mon supérieur utilise des analogies, des scénarios et des exemples pour faciliter mes apprentissages</th>
<th>Mi supervisor usa analogías, escenarios y ejemplos para ayudarme a aprender.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ce1</strong></td>
<td>My supervisor encourages me to broaden my perspectives by helping me to see the big picture</td>
<td>Mon supérieur m'encourage à élargir mes perspectives en m'aidant à voir la vue d'ensemble</td>
<td>Mi supervisor me alienta a aumentar mi perspectiva ayudándome a ver el “big picture”</td>
</tr>
<tr>
<td><strong>ce2</strong></td>
<td>My supervisor provides me with constructive feedback</td>
<td>Mon supérieur me donne de la rétroaction constructive</td>
<td>Mi supervisor me da “feedback” constructivo</td>
</tr>
<tr>
<td><strong>ce3</strong></td>
<td>My supervisor solicits feedback from me to ensure that his/her interactions are helpful to me</td>
<td>Mon supérieur me demande de la rétroaction pour s'assurer que ses interactions me sont utiles.</td>
<td>Mi supervisor me pide “feedback” para asegurarse de que sus interacciones me son útiles.</td>
</tr>
<tr>
<td><strong>ce4</strong></td>
<td>My supervisor provides me with resources so I can perform my job more effectively</td>
<td>Mon supérieur m'offre des ressources afin que je puisse effectuer mon travail de manière plus efficace</td>
<td>Mi supervisor me provee recursos para que yo pueda hacer mi trabajo de manera más eficaz.</td>
</tr>
<tr>
<td><strong>ce5</strong></td>
<td>My supervisor asks questions rather than provide solutions, to help me think through issues.</td>
<td>Mon supérieur me pose de questions plutôt que de fournir des solutions afin de m'aider à réfléchir aux problèmes.</td>
<td>Para ayudarme a pensar los problemas, mi supervisor me hace preguntas en lugar de ofrecerme soluciones.</td>
</tr>
<tr>
<td><strong>ce6</strong></td>
<td>My supervisor sets expectations with me and communicates the importance of those expectations to the broader goals of the organization</td>
<td>Mon supérieur me fait participer à la définition des objectifs à atteindre et me sensibilise à leur importance dans l'atteinte des objectifs globaux de l'organisation</td>
<td>Mi supervisor fija sus expectativas conmigo y comunica la importancia de esos objetivos para con los logros generales de la organización.</td>
</tr>
<tr>
<td><strong>ce7</strong></td>
<td>My supervisor role-plays with me to help me see different perspectives</td>
<td>Mon supérieur utilise des jeux de rôles pour que je puisse voir diverses perspectives.</td>
<td>Para ayudarme a ver diferentes perspectivas, mi supervisor utiliza el role-playing.</td>
</tr>
</tbody>
</table>
### Goal commitment (Klein et al., 2001)

| gc1 | It's hard to take these goals seriously (R) | Il est difficile de prendre les objectifs qui m'ont été fixés au sérieux. | Es difícil tomar estos objetivos en serio. |
| gc2 | Quite frankly, I don't care if I achieve these goals or not (R) | Franchement, je ne m'inquiète pas si j'atteins les objectifs fixés ou non. | Francamente, no me importa si alcanzo estos objetivos o no. |
| gc3 | I am strongly committed to pursuing these goals | Je suis fortement engagé à poursuivre les objectifs qui m'ont été fixés. | Estoy altamente comprometido a alcanzar estos objetivos |
| gc4 | It wouldn't take much to make me abandon these goals (R) | Il ne m'en faudrait pas beaucoup pour que j'abandonne la poursuite des objectifs qui m'ont été fixés. | No hace falta mucho para que abandone estos objetivos |
| gc5 | I think these are good goals to shoot for | Je pense que ces buts méritent d'être poursuivis. | Pienso que estos son buenos objetivos a apuntar. |

### Self efficacy – Sales scale (Sujan et al., 1994)

| se1 | Generally speaking, I am good at selling | En général, je suis bon pour la vente. | En términos generales, soy bueno para la venta. |
| se2 | Generally speaking, it is difficult for me to put pressure on a customer (R) | En général, il est difficile pour moi de mettre de la pression sur un client. | En términos generales, me es difícil presionar al cliente. |
| se3 | Generally speaking, I know the right thing to do in selling situations | En général, je sais quoi faire dans des situations de vente. | En términos generales, sé qué es lo que corresponde hacer en situaciones de venta. |
| se4 | Generally speaking, I find it difficult to convince a customer that has a different viewpoint than mine (R) | En général, je trouve difficile de convaincre un client qui a un point de vue différent du mien. | En términos generales, me es difícil convencer a un cliente que tiene un punto de vista distinto del mío. |
| se5 | Generally speaking, I feel that I am not well-suited for selling (R) | En général, je sens que je ne suis pas très apte pour la vente. | En términos generales, siento que no soy muy apto para la venta. |
| se6 | Generally speaking, I am good at finding out what customers want | En général, je suis habile dans la découverte de ce que les clients veulent. | En términos generales, soy bueno para encontrar qué quiere el cliente. |
| se7 | Generally speaking, it is easy for me to get customers to see my point of view | En général, je trouve facile de faire valoir mon point de vue auprès de mes clients. | En términos generales, me es fácil hacerle ver al cliente mi punto de vista. |
### Effort – intensity and persistence (Fang et al., 2004)

<table>
<thead>
<tr>
<th></th>
<th>Effort Description</th>
<th>French Description</th>
<th>Spanish Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ei1</td>
<td>I am motivated to work long hours to meet my sales objectives.</td>
<td>Je suis motivé à travailler de longues heures afin d’atteindre mes objectifs de vente.</td>
<td>Estoy motivado a trabajar muchas horas para cumplir mis objetivos de venta.</td>
</tr>
<tr>
<td>ep1</td>
<td>I am motivated not to give up easily when I encounter a difficult customer.</td>
<td>Je suis motivé à persévérer lorsque je rencontre un client difficile.</td>
<td>Estoy motivado a no rendirme fácilmente ante un cliente difícil.</td>
</tr>
<tr>
<td>ep2</td>
<td>I am motivated to work untiringingly at selling to a customer until I get an order</td>
<td>Je suis motivé à travailler sans répit auprès d’un client jusqu’à ce que je décroche sa commande.</td>
<td>Estoy motivado a trabajar incansablemente vendiéndole a un cliente hasta obtener el pedido</td>
</tr>
<tr>
<td>ei2</td>
<td>I am motivated to work intensely.</td>
<td>Je suis motivé à travailler intensément.</td>
<td>Estoy motivado a trabajar intensamente.</td>
</tr>
<tr>
<td>ei3</td>
<td>I am motivated to put a great deal of effort to achieve my sales goals.</td>
<td>Je suis motivé à mettre beaucoup d’effort pour atteindre mes objectifs de vente.</td>
<td>Estoy motivado a esforzarme mucho para alcanzar mis objetivos de venta.</td>
</tr>
<tr>
<td>ep3</td>
<td>I am motivated to persist in my selling efforts until I achieve my goals.</td>
<td>Je suis motivé à persévérer dans mes efforts de vente jusqu'à ce que j'atteigne mes objectifs.</td>
<td>Estoy motivado a persistir en mis esfuerzos de venta hasta alcanzar mis objetivos.</td>
</tr>
</tbody>
</table>

### Effort – direction (adaptive selling) (Fang et al., 2004)

<table>
<thead>
<tr>
<th></th>
<th>Effort Description</th>
<th>French Description</th>
<th>Spanish Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ea1</td>
<td>I can change to other sales approaches when my present approach in a sales situation does not work.</td>
<td>Je peux changer d'approche dans une situation de vente quand mon approche actuelle ne fonctionne pas.</td>
<td>Puedo cambiar a otras tácticas de venta cuando en una situación de ventas mi enfoque no funciona.</td>
</tr>
<tr>
<td>ea2</td>
<td>I experiment with different sales approaches.</td>
<td>J'expérimente différentes approches de vente.</td>
<td>Experimento con diferentes tácticas de venta.</td>
</tr>
<tr>
<td>ea3</td>
<td>I use a wide variety of selling approaches.</td>
<td>J'utilise une grande variété de tactiques de vente.</td>
<td>Utilizo una amplia gama de tácticas de venta.</td>
</tr>
<tr>
<td>ea4</td>
<td>I basically use the same sales approach with most customers (R)</td>
<td>J'utilise essentiellement la même stratégie de vente avec la plupart de mes clients.</td>
<td>Básicamente utilizo la misma táctica de venta con la mayoría de los clientes.</td>
</tr>
<tr>
<td>ea5</td>
<td>I vary my sales style from situation to situation.</td>
<td>Je varie mon style de vente selon la situation.</td>
<td>Vario mi estilo de venta según la situación.</td>
</tr>
</tbody>
</table>
### Effort – direction (planning for the sale) (Fang et al., 2004)

<table>
<thead>
<tr>
<th>Code</th>
<th>Statement</th>
<th>French</th>
<th>Spanish</th>
</tr>
</thead>
<tbody>
<tr>
<td>ep1</td>
<td>I tend to never know what I will do from day to day (R)</td>
<td>J’ai tendance à ne jamais savoir ce que je ferai d’un jour à l’autre.</td>
<td>Tiendo a no saber nunca qué voy a hacer de un día para el otro.</td>
</tr>
<tr>
<td>ep2</td>
<td>I tend to plan my work very carefully in advance</td>
<td>J’ai tendance à planifier mon travail très soigneusement à l’avance.</td>
<td>Tiendo a planificar mi trabajo cuidadosamente con anticipación.</td>
</tr>
<tr>
<td>ep3</td>
<td>I tend to spend a lot of time on planning</td>
<td>J’ai tendance à passer beaucoup de temps à la planification.</td>
<td>Tiendo a pasar mucho tiempo planificando.</td>
</tr>
<tr>
<td>ep4</td>
<td>I tend to list the steps necessary for getting an order</td>
<td>J’ai tendance à énumérer les étapes nécessaires pour obtenir une commande.</td>
<td>Tiendo a listar los pasos necesarios para obtener un pedido.</td>
</tr>
</tbody>
</table>

### New task-related strategies

<table>
<thead>
<tr>
<th>Code</th>
<th>Statement</th>
<th>French</th>
<th>Spanish</th>
</tr>
</thead>
<tbody>
<tr>
<td>ns1</td>
<td>I find new ways to solve the problems with my customers</td>
<td>Je trouve de nouvelles façons de résoudre les problèmes avec mes clients.</td>
<td>Encuentro nuevas formas de resolver los problemas con los clientes.</td>
</tr>
<tr>
<td>ns2</td>
<td>I can develop new task-related strategies</td>
<td>Je peux développer de nouvelles stratégies liées à mon travail.</td>
<td>Puedo desarrollar nuevas estrategias relacionadas con mi trabajo.</td>
</tr>
<tr>
<td>ns3</td>
<td>I can tackle my client’s problems differently</td>
<td>Je peux résoudre les problèmes de mon client de différentes façons.</td>
<td>Puedo resolver los problemas del cliente de variadas formas.</td>
</tr>
<tr>
<td>ns4</td>
<td>I can learn new ways of dealing with my sales tasks</td>
<td>Je peux apprendre de nouvelles façons de gérer mes tâches de vente.</td>
<td>Puedo aprender nuevas formas de llevar mis tareas de ventas.</td>
</tr>
<tr>
<td>ns5</td>
<td>I can identify alternative task strategies to reach my sales goals</td>
<td>Je peux identifier des stratégies de travail alternatives permettant d'atteindre mes objectifs de vente.</td>
<td>Puedo identificar en mis tareas estrategias alternativas para alcanzar mis metas de venta.</td>
</tr>
</tbody>
</table>

### Control variables

<table>
<thead>
<tr>
<th>Code</th>
<th>Statement</th>
<th>French</th>
<th>Spanish</th>
</tr>
</thead>
<tbody>
<tr>
<td>cv1</td>
<td>Gender (Male-Female)</td>
<td>Sexe (Homme-Femme)</td>
<td>Género (varón – mujer)</td>
</tr>
<tr>
<td>cv2</td>
<td>Age</td>
<td>Âge</td>
<td>Edad</td>
</tr>
<tr>
<td>cv3</td>
<td>How many years have you been working for this company?</td>
<td>Combien d’années avez-vous travaillé pour cette entreprise?</td>
<td>¿Cuántos años hace que trabaja en esta empresa?</td>
</tr>
<tr>
<td>cv4</td>
<td>How many years have you been working in this sales position?</td>
<td>Combien d’années avez-vous travaillé dans cette position de vente?</td>
<td>¿Hace cuántos años que trabaja en este puesto de ventas?</td>
</tr>
<tr>
<td>cv5</td>
<td>How many years of selling experience do you have?</td>
<td>Combien d’années d’expérience en vente avez-vous?</td>
<td>¿Cuántos años de experiencia en ventas tiene?</td>
</tr>
<tr>
<td></td>
<td>I am very effective in</td>
<td>Je contribue de façon efficace à la part de marché de mon entreprise.</td>
<td>Soy muy eficaz contribuyendo a la participación de mercado de mi empresa.</td>
</tr>
<tr>
<td>---</td>
<td>------------------------</td>
<td>---------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>pr1</td>
<td>contributing to my firm's market share</td>
<td>Je contribue de façon efficace à la part de marché de mon entreprise.</td>
<td>Soy muy eficaz contribuyendo a la participación de mercado de mi empresa.</td>
</tr>
<tr>
<td>pr2</td>
<td>selling products with the highest profit margins</td>
<td>Je vends avec beaucoup d'efficacité les produits à forte marge.</td>
<td>Soy muy eficaz vendiendo los productos que tienen los márgenes más altos.</td>
</tr>
<tr>
<td>pr3</td>
<td>generating a high level of dollar sales</td>
<td>Je suis très efficace pour générer un niveau de ventes élevé.</td>
<td>Soy muy eficaz generando un alto nivel de ventas.</td>
</tr>
<tr>
<td>pr4</td>
<td>quickly generating sales of newly introduced products</td>
<td>Je suis très efficace à générer rapidement des ventes de produits introduits récemment.</td>
<td>Soy muy eficaz en generar rápidamente ventas de productos recientemente introducidos.</td>
</tr>
<tr>
<td>pr5</td>
<td>identifying major accounts in my territory</td>
<td>Je suis très efficace dans l'identification des comptes majeurs de mon territoire de ventes.</td>
<td>Soy muy eficaz identificando grandes cuentas en mi territorio.</td>
</tr>
<tr>
<td>pr6</td>
<td>selling to major accounts</td>
<td>Je suis très efficace dans la vente auprès de comptes majeurs.</td>
<td>Soy muy eficaz vendiendo a grandes cuentas.</td>
</tr>
<tr>
<td>pr7</td>
<td>exceeding annual sales targets and objectives</td>
<td>Je suis très efficace dans le dépassement des cibles et des objectifs fixés</td>
<td>Soy muy eficaz en exceder metas y objetivos de venta anuales.</td>
</tr>
<tr>
<td>Anchors</td>
<td>1=strongly disagree, 7=strongly agree</td>
<td>1= fortement en désaccord; 7= fortement d'accord</td>
<td>1= fuertemente en desacuerdo; 7= fuertemente de acuerdo</td>
</tr>
</tbody>
</table>
APPENDIX 2
INTRODUCTORY MAIL TO PARTICIPANTS

Dear Madam/Sir,

I am contacting you, concerning the mail that your manager has sent you a few days ago, about a doctoral research project that your company agreed to participate in. My name is Claudio Pousa and I am the researcher who will be in charge of collecting data in the following weeks.

I would like to invite you to participate in this scientific research; I am in the process of collecting data to finish my doctoral dissertation, and your valuable participation is important in this research. The data that you would provide will help us better understand coaching in sales contexts, and advance the scientific knowledge in this field.

I would appreciate if you could devote no more than 15 minutes to complete a web-based questionnaire about the coaching that you have received from you supervisor/manager; your answers will be absolutely confidential; answers of all respondents will be aggregated to identify general relations between the variables, and in no way individual results will ever be disclosed.

The questionnaire will be available on the web-site for six weeks, so you will be able to answer it at any moment within that six-week period. Your participation is voluntary and there are no consequences if you decide not to participate; furthermore, if you decide to participate and later change your mind, you are free to quit the study at any moment.

If you have any questions, please do not hesitate to contact me or my thesis supervisor at any moment.

Thank you very much for your support and collaboration.

Claudio Pousa
## APPENDIX 3
### CONSTRUCTS AND MEASURES

| Item | Coaching Effort Self Performance New Strategies Adaptive Selling Sales Planning |
|------|----------------|----------------|-----------------|----------------|----------------|----------------|----------------|
| ce1  | .82            |               |                 |                |                |                |
| ce2  | .83            |               |                 |                |                |                |
| ce3  | .88            |               |                 |                |                |                |
| ce4  | .86            |               |                 |                |                |                |
| ce5  | .88            |               |                 |                |                |                |
| ce6  | .81            |               |                 |                |                |                |
| ce7  | .75            |               |                 |                |                |                |
| ce8  | .69            |               |                 |                |                |                |
| gc1  |               | .57           |                 |                |                |                |
| gc2  |               | .57           |                 |                |                |                |
| gc3  |               | .77           |                 |                |                |                |
| gc4  |               | .53           |                 |                |                |                |
| gc5  |               | .67           |                 |                |                |                |
| ei1  |               |               | .67             |                |                |                |
| ep1  |               |               | .82             |                |                |                |
| ep2  |               |               | .74             |                |                |                |
| ei2  |               |               | .90             |                |                |                |
| ei3  |               |               | .98             |                |                |                |
| ep3  |               |               | .97             |                |                |                |
| se1  |               |               |                 | .84            |                |                |
| se6  |               |               |                 | .62            |                |                |
| se7  |               |               |                 | .50            |                |                |
| pr1  |               |               |                 |                | .69            |                |
| pr2  |               |               |                 |                | .61            |                |
| pr3  |               |               |                 |                | .84            |                |
| pr4  |               |               |                 |                | .73            |                |
| pr5  |               |               |                 |                | .72            |                |
| pr6  |               |               |                 |                | .75            |                |
| pr7  |               |               |                 |                | .78            |                |
| ns1  |               |               |                 |                |                | .88            |
| ns2  |               |               |                 |                |                | .83            |
| ns3  |               |               |                 |                |                | .88            |
| ns4  |               |               |                 |                |                | .77            |
| ns5  |               |               |                 |                |                | .70            |
| ea1  |               |               |                 |                |                |                | .85            |
| ea2  |               |               |                 |                |                |                | .96            |
| ea3  |               |               |                 |                |                |                | .87            |
| ea5  |               |               |                 |                |                |                | .74            |
| ed2  |               |               |                 |                |                |                | .65            |
| ed3  |               |               |                 |                |                |                | .64            |
| ed4  |               |               |                 |                |                |                | .71            |