



HAL
open science

Influence of sales support technologies on salesperson performance: A study of interpersonal and intrapersonal mediators

Romain Franck, Maud Dampérat

► To cite this version:

Romain Franck, Maud Dampérat. Influence of sales support technologies on salesperson performance: A study of interpersonal and intrapersonal mediators. *Recherche et Applications en Marketing (French Edition)*, 2023, 37 (4), pp.63-92. 10.1177/07673701221117602 . halshs-04159504

HAL Id: halshs-04159504

<https://shs.hal.science/halshs-04159504>

Submitted on 17 Jul 2023

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



Distributed under a Creative Commons Attribution 4.0 International License

FRANCK R. et **DAMPERAT M.** (2022). Influence of sales support technologies on salesperson performance: A study of interpersonal and intrapersonal mediators. *Recherche et Applications en Marketing (English Edition)*, 37(4), 63-92. **Rang 2 FNEGE, A HCERES**
<https://doi.org/10.1177/07673701221117602>

**INFLUENCE OF SALES SUPPORT TECHNOLOGIES ON SALESPERSON PERFORMANCE: A STUDY
OF INTERPERSONAL AND INTRAPERSONAL MEDIATORS**

Romain Franck

PhD Student, Université Jean Monnet, COACTIS

romain.franck@univ-st-etienne.fr

Maud Dampérat

Professor, Université Jean Monnet, COACTIS

maud.damperat@univ-st-etienne.fr

**INFLUENCE OF SALES SUPPORT TECHNOLOGIES ON SALESPERSON PERFORMANCE: A STUDY
OF INTERPERSONAL AND INTRAPERSONAL MEDIATORS**

Abstract: This paper investigates the influence of the use of sales enablement technologies on the performance of the B2B salesperson, due to their growing importance and discussed effects. We examine the underlying mediating mechanisms between the use of sales enablement technologies and salesperson outcomes (i.e., job satisfaction and salesperson performance). Based on a sample of 196 B2B salespeople, our results validate the existence of a direct effect between the use of sales enablement technologies and the salesperson's performance, as well as the existence of indirect effects (1) via interpersonal mediators, i.e. successively adaptive selling behavior and relationship quality, and also (2) via intrapersonal mediators, i.e. successively role overload and the risk of salesperson *burnout*. The results also show the positive influence of job satisfaction on the salesperson's performance, and vice versa.

Keywords: *Burnout*, adaptive selling behavior, relationship quality, sales performance, job satisfaction, use of sales support technologies.

Introduction

Over the past decade, technology has been the focus of much interest among marketing theorists and practitioners, as evidenced by the broad development of sales enablement technologies, which, reinforced by the COVID-19 pandemic, is leading to immediate, broad, and serious challenges for many business-to-business (B2B) sales forces, including technology challenges (Hartmann and Lussier, 2020). These challenges involve salespeople integrating new sales enablement technologies and are particularly important and complex to address. Indeed, sales support technologies aim to improve the efficiency and effectiveness¹ of B2B salespeople (Hunter and Perreault Jr, 2007) and, *ultimately*, the company's performance (Kim and Kim, 2009). These technological tools are all the hardware, software, applications, and telecommunications devices used by salespeople during the sales process; such as customer *relationship* management software - also known *as CRM* - social media, collaborative tools, or automated prospecting. As technology advances, the implementation of sales enablement technologies is also increasing and is expected to continue in the future (Boujena et al., 2009). By improving the speed and quality of information flow between the salesperson, the customer, and the organization, sales enablement technology tools influence the entire sales process (Speier and Venkatesh, 2002). However, as far as we know, academic work on sales enablement technologies focuses on the acceptance of the technology, but does not study the influence of its use on the sales process (Ahearne et al., 2004) or on the performance of salespeople (Park et al., 2010). However, these results are of particular interest to marketing and sales departments who are wondering whether it is worth investing in these technologies and training their salespeople (Julienne et al., 2019). Beyond the commercial stake that these tools represent, the underlying mechanisms - particularly interpersonal and intrapersonal - linked to their use by salespeople deserve to be studied and tested empirically.

Regarding the benefits of using sales enablement technologies, studies report mixed results and there is a debate within the scientific community (Holloway et al., 2013). (1) Some researchers favor a technological approach and see these new tools as a way to develop strong relationships with customers. (2) Other researchers are more traditional in their approach and are reluctant to use new technologies because they believe that a relationship can only be

¹ According to Zallocco et al (2009), sales performance can be broken down into two types of measures, effectiveness and efficiency. *Effectiveness measures* are objectively measured sales results (e.g., units sold, revenue, profitability) while *efficiency measures* consist of subjectively measured sales behaviors (e.g., phone calls, customer demonstrations). Efficiency differs from effectiveness in that the focus is on salesperson behaviors (Ingram et al., 2002).

established face-to-face. These tools would then be an additional burden and stress for the salesperson (Westbrook and Peterson, 2020). We therefore seek to simultaneously study these two types of mechanisms that seem to act in a contradictory manner. We therefore follow the work done by Park et al. (2010) by analyzing, as they suggest, other variables associated with the use of sales support technologies such as interpersonal variables (i.e., quality of the customer relationship) or intrapersonal variables (i.e., job satisfaction).

Interpersonal variables are widely studied within the relational approach to marketing. The relational approach places the customer-supplier relationship at the heart of the B2B sales process (Guenzi et al., 2007) and is considered to be the key to a company's success (Palmatier et al., 2006). If the relational approach is not called into question by the development of new sales support technologies, on the other hand, the way in which relationships are built, contacts are made and long-term relationships are constructed is modified. A great deal of research has examined how to successfully implement sales enablement technologies (Foss et al. , 2008; Holger et al. , 2011; Palmatier et al. , 2008; Pardo, Ivens, and Wilson; 2014, Payne and Frow, 2005). However, the majority of these articles are prescriptive, typically identifying a list of key success factors and/or essential steps in the implementation process (Williams et al, 2017). Yet the study of interpersonal mechanisms, such as relationship quality or adaptive selling behavior, is necessary to better understand the role played by the use of sales enablement technologies on the sales process, and *ultimately*, the salesperson's performance.

In companies, the implementation and use of new technological tools (e.g., CRM, social media, collaborative or prospecting tools) are often decided by management and, in fact, undergone by salespeople. These changes related to sales enablement technologies can put some salespeople at risk (Rangarajan et al., 2005). In a recent study, Westbrook and Peterson (2020) show that sales aids - especially technological ones - improve salespeople's performance, but at the same time increase their stress, their risk of *burnout* and their intention to leave their job. Based on works in human resources management (Cordes and Dougherty, 1993) or in psychology (Maslach and Leiter, 2017), burnout seems to be induced by a feeling of role overload and leads to negative consequences for individuals (e.g. decrease in job satisfaction and performance) as well as for organizations. Also, the study of intrapersonal mechanisms, including the salesperson's feeling of overload and *burnout*, seems necessary to consider in order to better understand the relationships between the use of sales support technologies and salesperson performance.

Based theoretically on relationship marketing (Palmatier et al., 2005) and human resources management (Cordes and Dougherty, 1993), we propose a model of the influence of the use of sales support technologies on the performance of the salesperson in a B2B sales context. We study, on the one hand, the direct influence of the use of sales support technologies on the salesperson's performance; and, on the other hand, its indirect influence *via* interpersonal mediators (i.e., adaptive selling behavior and relationship quality), and intrapersonal mediators (i.e., role overload and *burnout* risks). In addition, we examine the consequences for the salesperson *via* the reciprocal influence between job satisfaction and salesperson performance. It is expected that these two mechanisms exert an opposite influence. On the one hand, the use of sales enablement technologies should allow salespeople to better adapt their selling behaviors to the needs of the customers and, consequently, increase the quality of their relationship with the customer. On the other hand, the use of these technologies should, conversely, lead to an overload of the sales role, thus inducing an increased risk of *burnout*.

The originality of this work, with regard to the technological challenges linked to the integration of sales support technologies (Hartmann and Lussier, 2020), lies mainly in the simultaneous study of two underlying mechanisms for which we assume opposite effects: one linked to interpersonal mechanisms which reinforces the positive influence of the use of sales support technologies by salespeople on their performance; and the other linked to intrapersonal mechanisms which are assumed to degrade this influence. The aim is to test two mechanisms exerting an opposite influence and studied in the form of a *complementary mediation* for the interpersonal mechanisms and in the form of a *competitive mediation* for the intrapersonal mechanisms, in the sense of Zhao et al (2010). This research is thus in line with the work (1) of Park et al. (2010) who study the quality of the relationship as a complementary mediator of the relationship between the use of sales support technologies and the performance of salespeople, and (2) in line with the work of Ambrose et al. (2021) who suggest studying the influence of technological tools on *burnout*. While the first contribution consists of the simultaneous study of opposing mechanisms, the second contribution is linked to it - because it is made possible by this simultaneity in the analysis - and consists of the study of the reciprocal relationship between the salesperson's job satisfaction and his or her performance, which means that job satisfaction contributes to the salesperson's performance and vice versa.

Theoretical foundations

B2B sales enablement technologies and their use

Sales enablement technologies-also known as *SFA or Sales Force Automation*-are the set of technological tools that facilitate the salesperson's work to better manage the customer relationship (Jelinek, 2013: page 636; Speier and Venkatesh, 2002: page 99). The construct of *sales enablement technology use*, on the other hand, corresponds to infusion, or the extent of technology use (Jones et al, 2002: page 147). This construct includes two distinct levels of analysis: one organizational, which focuses on the integration of technologies into an organization's operational or management work systems (Zmud and Apple 1992); and the other individual, which focuses on the extent to which salespeople use these technologies (Jones et al, 2002; Sundaram et al, 2007). We focus for this study on the individual level. Thus, we define the use of sales enablement technologies as the extent to which the salesperson maximizes the use of sales enablement technologies to improve productivity (Jones et al, 2002).

In the literature, two approaches are used to study sales enablement technologies: either (1) the study of a *specific sales enablement technology tool* to understand its effects, such as CRM (e.g., Nelson et al., 2020; Avlonitis and Panagopoulos, 2005; Agnihotri et al., 2017), social media (e.g., Agnihotri et al., 2016) or management software (Hernandez et al., 2008); or (2) studying a *combination of technological sales support tools* that allows for the diversity of tools used by the salesperson in their practice (e.g., Agnihotri et al., 2009; Rapp et al., 2012; Ahearne et al., 2004). We chose this second approach for two main reasons: (1) the diversity and heterogeneity of the tools corresponds to the reality of salespeople's daily practice; and (2) intrapersonal mechanisms (i.e., role overload and burnout risks) will play a key role when salespeople are confronted with a large number of technological tools whose purpose, use, and operating modalities are varied and heterogeneous. Thus, the approach based on the frequency of use of a combination of technological tools seems to us to be better able to explain a feeling of overload or *burnout*, which the study of a very specific tool allows less, since overload seems to us to come from the use of a multitude of different tools.

With the possibilities offered by sales enablement technology tools, the B2B sales process-i.e., understanding the customer, approach, needs discovery, presentation, closing, and follow-up-is largely changed (Andzulis et al., 2012). Work shows that sales enablement technologies are used to, among other things, gather information about customers and their needs to better understand them (Jones et al., 2005; Lacoste, 2016), develop long-term personal relationships (Itani et al., 2017), build a network and interact among stakeholders in a contract (Agnihotri et al., 2012; Bocconcelli et al., 2017; Lacoste, 2016), or meet with prospects, propose new

offers, and ensure that customers follow company news (Moore et al., 2013). By improving the speed and quality of the information flow between the salesperson, the customer, and the organization, sales enablement technology tools support the sales process (Speier and Venkatesh, 2002), and in turn the salesperson's bottom line.

Consequences for the salesperson

Sales force managers are particularly interested in two types of outcomes (Bagozzi, 1978): the first concerns sales performance and the factors that affect that performance; and the second, the job satisfaction and well-being of the people in the sales force. Concerning sales performance, if sales support technologies free up time for salespeople by reducing repetitive tasks, they provide, at the same time, additional resources to perform abstract and creative tasks (Cirillo et al., 2020). Indeed, salespeople are often confronted with complex sales processes involving multiple actors, and they need to find new and original solutions to meet customer needs and make a successful sale. Therefore, it is now necessary to evaluate the salesperson's performance by taking into account both their sales performance and their creative performance. In this work, the salesperson's performance is thus conceptualized as the combination of the sales performance and the creative performance of the salesperson. Sales performance is defined as the salesperson's ability to produce key sales results (Sundaram et al., 2007: page 104), while creative performance is defined as the salesperson's ability to develop original solutions to meet specific customer needs (Wang and Netemeyer, 2004: page 806).

With regard to job satisfaction and the well-being of the sales force, this approach to results reflects a more humanistic orientation to human resource management. From social psychology research, the work focuses on the study of *job* attitudes. Job attitudes are fundamental assessments of work experiences that *potentially* influence employee behaviors and organizational outcomes (Sessa and Bowling, 2020). The field of study of job attitudes is broad and includes psychological constructs related to the work setting such as job satisfaction (Harter et al., 2002), organizational justice (Martinez-Tur et al., 2020), perceived organizational support (Kurtosis et al., 2017), or job involvement (Diefendorff et al., 2020). Among job attitudes, job satisfaction is the most studied construct (Judge et al., 2017), as it corresponds to the manifestation of a set of job attitudes and constitutes an overall assessment of them. Managers are increasingly realizing the importance of measuring job satisfaction (Judge et al., 2020). According to Weiss (2002: page 175), job satisfaction is "a pleasant or positive emotional state resulting from the evaluation of one's work or work experiences. It

corresponds to an overall evaluative judgment of one's work ranging from positive to negative (Judge and Kammeyer-Mueller, 2012; Judge et al., 2017; Weiss, 2002). Job satisfaction contains cognitive aspects related to beliefs or judgments about work, affective aspects related to feelings about work, and behavioral aspects highlighting the tendency to behave toward work (Rosenberg and Hovland, 1960; Schleicher, Hansen, and Fox, 2011). It is thus related to a variety of individually and organizationally relevant behaviors, including task performance, absenteeism, and *turnover* (Judge and Kammeyer-Mueller, 2012; Judge et al., 2020). In sales, job satisfaction is important to the salesperson, but also to the company, as it is associated with sales force *turnover* (Behrman et al., 1981) and corresponds to a measure of performance (Brown and Peterson, 1993; Walker Jr. et al., 1977).

Interpersonal mechanisms

Sales support technologies aim to improve customer relationship management, and thus the performance of the salesperson. However, the underlying mediating mechanisms that explain this relationship are still little studied. Initial studies show the influence of sales enablement technologies on adaptive selling behavior (Itani et al., 2017; Park et al., 2010) and relationship quality (Agnihotri et al., 2012, Park et al., 2010). According to Mullins et al. (2014: page 39), the salesperson's perceived relationship quality is defined as a combination of the salesperson's perception of the customer's trust, satisfaction, and commitment to the salesperson. It is conceptualized as a second-order construct comprising three dimensions: trust, commitment and interpersonal satisfaction (Palmatier et al., 2006). Adaptive selling behavior, on the other hand, is defined as "the modification of selling behaviors during or between customer interactions based on perceived information about the nature of the sale" (Weitz et al., 1986: page 175). Interpersonal mechanisms (i.e., relationship quality and adaptive selling behavior) thus appear to play a key role in the relationship between the use of sales enablement technologies and the consequences for the salesperson.

Intrapersonal mechanisms

While sales enablement technologies aim to improve customer relationship management, they also require salespeople to learn how to use them. Furthermore, sales enablement technology tools are constantly evolving, making the salesperson's role more complex (Jones et al., 2005; Jones et al., 2000). Some salespeople may feel this pressure as excessive or even overwhelmed. This internal conflict can manifest itself in salespeople feeling overloaded by their role (Brown et al., 2005; House, 1980; Singh, 2000), as well as an increased risk of *burnout* (Westbrook and Peterson, 2020).

Regarding the notion of role overload, we use the conceptualization of Beehr et al. (1976: page 42) who define role overload as having too much work to do in the time available. When an employee is given more work than he or she can effectively manage, then role overload stress is experienced (Miles and Perreault (1976). According to Rutkowski and Saunders (2018), role overload consists of emotional overload (i.e. frustration, stress) and cognitive overload (i.e. inability to process information, increased errors made, difficulty performing all the calculations required). Following the example of many works (e.g., Bolino and Turnley, 2005), we focus our study on the cognitive dimension of role overload. Role overload is a serious and growing problem in many work environments (Brown et al., 2005). Indeed, when role demands create the perception that available resources are insufficient to cope, leading to distraction and stress, individuals experience role overload (Kahn et al., 1964). In the case of the sales role, this problem is particularly important. Indeed, salespeople have more flexibility in organizing their work than most employees (Jones et al., 2007), especially in scheduling phone calls, business travel, or administrative tasks. But, in return, organizations have higher expectations of them (Jones et al., 2007). For example, a sales organization that has just purchased new sales force automation software may expect salespeople to attend software training seminars in their "spare time." The demands associated with the role are thus deemed overwhelming relative to available capabilities and resources (Jones et al., 2007). This role overload can lead to *burnout*.

Burnout is defined as a state of physical, emotional and mental exhaustion (Pines and Aronson, 1988: page 263). The concept of *burnout* is of interest to researchers and practitioners alike (Malach-Pines, 2005), and is the end result of a process of attrition in which highly motivated individuals lose their minds (Freudenberger and Richelson, 1980; Maslach, 1982; Pines and Aronson, 1988). The use of sales support technologies can cause chronic stress overload (Berg-Beckhoff and Ladekjær, 2017). Extensive use of sales enablement technologies increases work time and speed (Green, 2004). It also increases multitasking, causes disruptions in work routines, and leads to overexposure to information (Mano and Mesh, 2010), which can cause anxiety and frustration that can lead to *burnout* (O'Discroll et al., 2010). This overload related to the intensive use of sales support technologies is likely to influence the health (i.e., *burnout*) and performance of the salesperson. We therefore consider sales role overload and *burnout* risk as intrapersonal mechanisms that explain the influence of sales enablement technology use on salesperson performance.

Conceptual model and assumptions

Our model is theoretically rooted in both relationship marketing work (Palmatier et al., 2005) and human resource management work (Cordes and Dougherty, 1993). More specifically, we propose an extension of this work in the context of the combined use of sales support technology and we follow the work of Park et al. (2010) on interpersonal mediators and that of Westbrook and Peterson (2020) on intrapersonal mediators. Also, in this section we present the evidence that allows us to establish a set of hypotheses grouped into four categories: (1) the hypothesis of a direct link between the use of sales enablement technologies and the salesperson's performance; (2) hypotheses related to indirect links *via* interpersonal mediators between the use of sales enablement technologies and the salesperson's performance; (3) hypotheses related to indirect links *via* intrapersonal mediators between the use of sales enablement technologies and the salesperson's job satisfaction; and (4), the hypothesis of a reciprocal link between job satisfaction and the salesperson's performance.

The use of sales enablement technologies and sales performance

Like Agnihotri et al. (2009), Rapp et al. (2012) and Ahearne et al. (2004), we consider the use of sales enablement technologies as the combined use of various technological tools accompanying the salesperson in his or her sales activities. These technological sales support tools are varied and include customer relationship management software, automated prospecting and social networks. By enabling greater efficiency in the performance of tasks, the use of sales support technologies by the salesperson should allow for the improvement of his or her performance in terms of sales (Franke and Park, 2006; Park et al., 2010). Furthermore, the information that salespeople can access, *via* CRM software or social networks in particular, can enable them to identify new customer needs, find new solutions and close sales (Park et al., 2010). Thus, the greater the degree of use of technological sales support tools, the higher the performance of the salesperson should be. Thus, we postulate that the salesperson's performance - both sales and creative - is enhanced by the use of sales enablement technologies.

H1: The use of sales enablement technologies positively influences the salesperson's performance.

The mediating role of interpersonal mechanisms

Adaptive selling behavior is defined as "the modification of selling behaviors during a customer interaction or between customer interactions based on perceived information about the nature of the sale" (Weitz et al., 1986). Adaptive selling behavior results in long-term effectiveness when the benefits of the approach outweigh the costs—that is, when the sales generated by practicing adaptive selling outweigh the cost of selecting and training salespeople to collect relevant information from their customers and use that information appropriately (Spiro and Weitz, 1990). Salespeople who have practiced adaptive selling in the past will be predisposed to continue this practice in the future. In today's environment, the salesperson's use of sales support technologies can provide them with information needed to understand customers and their needs, and thus enable them to adapt their selling behavior accordingly. A quality source of information improves the salesperson's ability to adapt, based on increasingly complex and readily available market data (Hunter and Perreault Jr, 2006). Thus, the greater the degree of use of technological sales support tools, the greater the adaptation of salespeople's selling behavior should be. We therefore postulate that adaptive selling behavior is promoted by the use of sales enablement technologies by providing useful and relevant information for selling.

H2a: The use of sales support technologies by the salesperson positively influences his or her adaptive selling behavior.

The quality of the relationship perceived by the salesperson is based on three dimensions (Palmatier et al., 2006): commitment (Jap and Ganesan, 2000), trust (Palmatier et al., 2006) and satisfaction (Crosby et al., 1990). We chose to study the influence of the salesperson's perception on the quality of the relationship, because the salesperson is familiar with the characteristics of his or her relationship with the customer (Vosgerau and Anderson, 2004). According to Ellis and Beatty (1995), customers perceive relational benefits when salespeople connect with them on a personal level. However, the use of sales enablement technologies, including social networks, provides the salesperson with personal information about customers. Salespeople themselves see sales enablement technologies as an effective tool for increasing connectivity, building personal and long-term relationships with customers, and maintaining relationships (Marshall et al., 2012). Thus, we hypothesize that having more information through the salesperson's use of sales enablement technologies should help to enhance the quality of the relationship with the customer. Thus, the greater the degree of use of sales enablement technology tools, the higher the quality of the customer relationship should be.

H2b: The use of sales support technologies by the salesperson positively influences the quality of the relationship with the customer.

According to Park et al. (2010), little research has focused on the relationship between adaptive selling behavior and relationship quality. This gap in the literature is surprising given that one of the goals of adaptive selling behavior is to strengthen the bond between salesperson and customer (e.g., Spiro and Weitz, 1990; Weitz, 1978). Adaptive selling allows salespeople to tailor messages to their buyers, and thus improve their ability to build quality relationships with customers to *ultimately* increase their sales performance (Jaramillo et al., 2007). We therefore postulate that the salesperson's adaptive selling behavior is likely to improve the quality of their relationship with the customer.

H2c: The salesperson's adaptive selling behavior positively influences the quality of the relationship with his or her customer.

Spiro and Weitz (1990) argue that the benefits of adaptive selling behavior outweigh the costs of collecting and responding to information, especially when the salesperson has the resources, the tasks are complex and may result in orders, and customer relationships have little conflict and are expected to continue in the future. Salespeople can use the information they collect about prospects or customers before or during an interaction to personalize the content and format of their messages for more effective communications (Franke and Park, 2006). The purpose of adaptive selling behavior is to improve the salesperson's performance, both in terms of sales made and in terms of the ability to respond in new and original ways to a customer's specific expectations. Moreover, Weitz (1978) shows the existence of a positive relationship between adaptive selling behavior and sales performance. Later, Anglin et al (1990) show that successful salespeople - identified as such by their managers - are also those who are most likely to implement adaptive selling behaviors. We therefore postulate a positive influence of adaptive selling behavior on salesperson performance.

H2d: Adaptive selling behavior positively influences salesperson performance.

Trade varies along a continuum from transactional to relational (Anderson and Narus, 1991). According to Palmatier et al (2006), relationship marketing assumes that building strong and lasting customer-supplier relationships positively influences the outcome of business exchanges. In the case of B2B sales - where the quality of customer relationships is particularly important (Rauyrueen and Miller, 2007) - we expect that the higher the quality of the relationship, the stronger the performance of the salesperson. In the sales literature, studies

show that a positive customer-salesperson relationship contributes to higher levels of customer loyalty and intention to continue the relationship with the salesperson (Crosby et al., 1990; Macintosh and Lockshin, 1997). Based on these results, we propose the following hypothesis:

H2e: The quality of the relationship perceived by the salesperson positively influences the salesperson's performance.

According to Jaramillo et al. (2007), the salesperson's adaptive selling behavior can improve his or her ability to establish quality relationships with buyers and, consequently, increase his or her job performance. Román and Iacobucci (2010) also find the existence of positive effects of adaptive selling on both customer satisfaction with the salesperson and the salesperson's performance. However, mixed results exist in the literature regarding the effect of adaptive selling behavior on salesperson performance (Itani et al., 2017). In the context of a sales relationship, the effective use of sales enablement technologies improves the salesperson's ability to anticipate and respond to buyers' concerns and objections. Previous work has studied the impact of adaptive selling behavior on salesperson performance (Chakrabarty et al., 2013; Román and Iacobucci, 2010; Park et al., 2010). Also, we postulate the existence of complementary mediation, i.e., an indirect negative effect between the use of sales support technologies and the salesperson's performance *via* interpersonal mediators (i.e., the salesperson's adaptive selling behavior and the quality of the relationship with customers).

H2f: Interpersonal mechanisms (i.e., the adaptive selling behavior of the salesperson and the quality of the relationship with the customer) have a complementary mediating role between the use of sales enablement technologies and the performance of the salesperson.

The mediating role of intrapersonal mechanisms

Sales-enabling technology tools can lead to distractions and decreased productivity in the workplace (Delpechitre et al., 2019). The information technology literature suggests that overuse of technology in the workplace can lead to cognitive overload through increased storage, information processing and retrieval capabilities, and Internet use (Farhoomand and Drury, 2002; Ho and Tang, 2001). This sense of role overload is particularly prevalent among salespeople, as part of their compensation depends on achieving their goals. According to Karimikia and Singh (2019), the use of sales enablement technologies reinforces the perception among salespeople that they must work harder and faster, contributing to a

perception that they are overworked. Also, the demands of using new technologies can be experienced as constraining by distracting the salesperson from their sales goals. We therefore postulate that the use of sales enablement technologies should increase the sense of role overload perceived by the salesperson in the course of their activities.

H3a: The use of sales enablement technologies positively influences salesperson overload.

The use of technology can unintentionally contribute to increased work interruptions and an accumulation of unplanned and unpredictable tasks (Fonner and Roloff, 2012). This can negatively affect employee well-being (Chesley, 2014; Diaz et al., 2012). For example, email use can lead to stress due to the fear of overload and loss of control (Barley et al., 2011). Video conferencing and instant messaging are also associated with stress due to interruptions (Fonner and Roloff, 2012). Heavy and complex tasks can lead to employee mental and physical resource depletion and *burnout* symptoms (Ter Hoeven et al., 2016). Thus, we postulate that the use of sales support technologies carries the risk of increasing salesperson *burnout*.

H3b: The use of sales support technologies by the salesperson positively influences his or her burnout.

The original concept of *burnout* states that the experience was related to work demands and a lack of resources (Maslach and Jackson, 1984) and considers role overload to be one of the major factors in job stress (Harris and Bladen, 1994). Extensive use of sales support technologies changes work routines (Mano and Mesh, 2010) and may require an increase in the number of hours worked (Green, 2004). This can cause negative feelings (e.g., anxiety, frustration) that can lead individuals to burnout (O'Discroll et al., 2010). *Burnout* has thus become one of the main consequences of role overload (Jamal, 2005; Sweeney and Summers, 2002). The demands associated with the salesperson's role may be deemed excessive in relation to their abilities and resources (Jones et al., 2007). This overload can lead to *burnout*. We therefore postulate that role overload should lead to a state of physical, emotional and mental exhaustion.

H3c: Salesperson role overload positively influences salesperson burnout.

Role overload is a form of conflict between the individual and the role (Jones et al., 2007), which can negatively affect their job satisfaction (Jones et al., 2007). The role of the salesperson is becoming increasingly demanding and complex. Salespeople are faced with

rising customer expectations, increased competition resulting from globalization, constantly evolving technology, continuous market change, the increasing prevalence of customer Internet use, and decreased product and service differentiation (Jones et al., 2005; Jones et al., 2000). These combined factors can overwhelm salespeople. Consequently, the effect of such internal conflicts may manifest as a sense of role overload, which is a growing concern (Brown et al., 2005; House, 1980; Singh, 2000). Thus, we posit that salesperson role overload should be detrimental to their job satisfaction.

H3d: The salesperson's role overload negatively influences their job satisfaction.

Burnout is consistently linked to negative attitudes toward work, which induce low levels of motivation, job satisfaction, and organizational commitment, but also high levels of job uncertainty (Maslach et al., 2001; Schaufeli and Enzmann, 1998). The higher the burnout, the lower the job satisfaction of the salesperson (Low et al., 2001). We therefore postulate that the degree of burnout of the salesperson should reduce his or her job satisfaction.

H3e: Salesperson burnout negatively influences their job satisfaction.

The technology stress literature shows that the demands of implementing sales enablement technologies lead to negative psychological outcomes (Moore, 2000), including an increased risk of sales role overload that can lead to *burnout*. In turn, these negative psychological outcomes (i.e. *burnout*) can damage the salesperson's job satisfaction (Matthews and Rutherford, 2020). We therefore postulate the existence of a competitive mediation, i.e. an indirect negative effect between the use of sales support technologies and the salesperson's job satisfaction *via* intrapersonal mechanisms (i.e., sales role overload and *burnout*).

H3f: Intrapersonal mechanisms (salesperson role overload and burnout) competitively mediate the relationship between the use of sales enablement technologies and salesperson job satisfaction.

The reciprocal relationship between job satisfaction and sales performance

While the existence of a relationship between job satisfaction and job performance has been confirmed in numerous studies (see Judge et al., 2001, for a review), the underlying mechanisms of this relationship remain little studied (Loan, 2020). In particular, the nature of the influence between performance and job satisfaction is a recurring question in sales force research (Franke and Park, 2006). The debate centers on the directionality of the relationship (Yang and Hwang, 2014), namely: does performance influence job satisfaction? Or conversely, does satisfaction influence performance? Much work in sales management shows

that performance leads to desired outcomes, such as salary, recognition, and promotion, which in turn lead to satisfaction (Yilmaz, 2002). Thus, salesperson's performance exerts a positive influence on their job satisfaction (Aftab, 2012; Brown and Peterson, 1993; Fu and Deshpande, 2014; Iqbal et al., 2012; Li et al., 2018; Walker Jr et al., 1977). Edwards et al. (2008) also found a statistically significant and positive relationship between overall satisfaction and salesperson performance. Conversely, other work shows that job attitudes (including satisfaction) are more likely to influence performance than vice versa (Ricketta, 2008). According to Springer (2011) managers can improve salespeople's performance by applying managerial strategies to increase job satisfaction. When a salesperson is successful in maintaining existing customers, finding new customers, and increasing sales performance, job satisfaction increases. A high level of job satisfaction should both facilitate sales and the production of new and original solutions to meet specific customer needs. Robbins and Judge (2009), on the other hand, indicate that both approaches are correct. Job satisfaction leads to improved job performance, and conversely, a high level of job performance increases feelings of job satisfaction. Yang and Hwang (2014) show that there is a significant mutual influence between job performance and job satisfaction. We therefore postulate that salesperson performance and job satisfaction have a mutual and positive influence. This is equivalent to postulating the existence of a reciprocal relationship -- i.e., relationship between two constructs, one being the cause, the other the consequence and vice versa -- between the salesperson's job satisfaction and his or her performance.

H4: (a) The salesperson's performance positively influences his or her job satisfaction, and vice versa (b), job satisfaction positively influences the salesperson's performance.

Figure 1 represents the use of sales enablement technologies as a determinant, the consequences for the salesperson (i.e., job satisfaction and salesperson performance), as well as the interpersonal (i.e., adaptive selling behavior and relationship quality) and intrapersonal (i.e., salesperson role overload and *burnout*) mediating mechanisms. It also details the set of hypotheses.

INSERT FIGURE 1

Methodology

Procedure

(3) issues related to salesperson performance (i.e., creative performance and sales performance); (4) issues related to the use of technological tools (i.e., frequency of use of a

wide range of tools and use of sales support technologies); and (5) issues related to intrapersonal mechanisms (i.e., job satisfaction, role overload and *burnout*).

In order to reduce *a priori* the risks related to method bias and to assess the respondent's attention, manipulation controls must be implemented (Paas and Morren, 2018). To this end, we included an item in the questionnaire "*If you read this question, please check 'Very weakly agree'.*" We followed the recommendations of Delacroix et al. (2020, p.74) by organizing our questionnaire into thematic blocks. Indeed, grouping by theme channels the respondent's attention and makes the questionnaire coherent (Vilatte, 2007). In addition, we physically separated each construct with a new introductory and/or contextualizing sentence (Hulland et al., 2018).

Sample

The sample includes 199 responses from French B2B salespeople collected *via* the platform and a Qualtrics panel (online panel company). Data from 328 respondents were not retained because they did not answer the control variable correctly or did not complete the questionnaire, leaving a final sample of 199 salespeople for data analysis. In addition, after cross-referencing the age reported by the salespeople with their number of years of service, inconsistencies were found in the statements of three salespeople; as a result, the responses of these respondents were removed from the database. The age of the respondents ranged from 18 to over 65 years old, with the largest age category being 25 to 44 years old. The sample was 45.5% male and 54% female (0.5% did not respond). The average tenure of the sales people surveyed was 11.5 years (SD: 9.2), with tenures ranging from 3 months to 42 years. The average annual salary ranged from €30-40k, with a minimum of €20k and a maximum exceeding €90k. The average use of sales enablement technologies is "once a week" ranging from "never" to "several times a day". The main business sectors represented are: Trade and Commerce (33.2%); Industry (22.5%); Services (21%); Banking and Insurance (14.1%). The sales professionals who responded to the questionnaire were informed that the research was conducted for scientific and non-commercial purposes only.

Scales of measurement

For sales enablement technology use, we relied on Agnihotri et al.'s (2016) adaptation of Jones et al.'s (2002) new system infusion scale. Because the purpose of the study was to measure the degree of use of a combination of tools, the approach chosen for measuring the

use of sales enablement technologies was that of a continuum from (1) "Strongly Disagree" to (7) "Strongly Agree."

Interpersonal mechanisms. To measure adaptive selling behavior, we used a 3-item, 7-step scale adapted from the ADAPTS scale developed by Spiro and Weitz (1990). Like Park and Holloway (2003), we retained only the items measuring adaptive selling behavior. These items were purged on the basis of correlations, and those with correlations less than or close to 0.3—as recommended by Schmitt et al. (2021)—were deleted. In the end, three of the original seven adaptive selling behavior items were retained in the analysis. To measure relationship quality, the work differs depending on whether quality is assessed by the customer or the salesperson. While the majority of works measure relationship quality as perceived by the customer (e.g., Mullins et al., 2014), others focus on the salesperson's perception (e.g., Holloway et al., 2013). **We follow this second approach and measure the quality of the relationship as perceived by the salesperson by proposing a conceptualization.** To measure the quality of the relationship, the work differs depending on whether the quality is assessed by the customer or the salesperson. While the majority of work measures the quality of the relationship as perceived by the customer (e.g., Mullins et al., 2014), other work focuses on the perception of the salesperson (e.g., Holloway et al., 2013). Holloway et al. (2013) in particular adapted scales originally related to relationships with "a specific customer" for use in the context of relationships with "customers in general." In their meta-analysis based on a review of 116 articles, Churchill et al. (1985) highlight that salespeople's evaluation of their own performance is neither worse nor better than that of their managers. A wide variety of subjective appraisals show substantial bias, whether made by managers, themselves, peers or subordinates. However, Sharma et al. (2004) show that salespeople's self-assessment measures of performance are no more biased than those of their managers. Therefore, we consider that salespeople, who know their customers well, are also in a position to offer a fair evaluation of the quality of their relationship with them. Thus, following the example of Holloway et al. (2013), we propose a measure of the quality of the relationship perceived by the salesperson with his or her customers. The items are adapted from the work of Mullins et al. (2014) and consider the three dimensions of relationship quality (i.e., trust, satisfaction and commitment). Each dimension is composed of two 7-step Likert-type items.

Intrapersonal mechanisms. Sales role overload is measured *using* the Beehr et al. scale (1976), which includes 3 items of 7 steps. Burnout is measured with the help of a reduced

scale developed by Malach-Pines (2005) which includes 10 items of 7 steps. This scale is presented in the form of an index allowing the calculation of a burnout probability score.

Implications for the salesperson. Job satisfaction was measured using a 3-item, 7-step scale adapted from the work of Dubinsky and Hartley (1986). For the salesperson's performance, we used a two-dimensional scale with a sales performance dimension consisting of 3 7-step items adapted from Roman and Rodriguez (2015) and Behrman and Perreault Jr (1982) and a creative performance dimension consisting of 3 7-step items adapted from Wang and Netemeyer (2004). For the latter dimension, we selected and adapted items from Wang and Netemeyer's (2004) scale for application to the salesperson's creative performance, while adhering to the principle of parsimony in measurement scales advocated by Hair et al. (2019: page 665).

Choice of the method

Coupled with this good performance, the ease of use of the macro Process (Hayes 2018: page 527) allows it to be widely developed within the scientific community. However, in the case of complex modeling with multiple mediations, modeling with structural equations is considered preferable to regressions associated with testing for indirect effects using the macro Process (Preacher and Hayes 2004: page 722). Furthermore, the Process macro can be used only in the case where the model being tested has a single dependent variable (Hayes 2018: page 613). Also, it is not possible to test a reciprocal relationship via the Process macro, whereas modeling via structural equations allows it. Methodologically, a reciprocal relationship exists when one construct serves as both a predictor and an outcome for another unique construct (Hair et al., 2019: page 707). A reciprocal relationship can be tested via structural equations using so-called non-recursive structural models (*feedback loops*); the structural relationships established between the two constructs are then bidirectional (Dampérat et al., 2020). Non-recursive models involve causal loops, which corresponds to a feedback effect (Kline, 2015).

Regarding the required sample size, Hair et al. (2019: page 132-133) propose three guidelines based on: (1) *the absolute size of the data set*. The authors indicate that the sample size should preferably be 100 or more. As the number of variables increases, they suggest much larger sample sizes (200 or more). However, in the case of hard-to-reach populations, they indicate that there is a tolerance on sample size. Our sample of 196 professional salespeople is therefore considered acceptable in absolute terms; (2) *the ratio of respondents to observed variables*. Regarding the ratio of observations to variables, the general rule is to have at least

five times as many observations as the number of variables to be analyzed (i.e., 5:1), and a more acceptable sample size would be a ratio of 10:1. For this study, the ratio is almost 8:1 (196:25, or 7.84), which is acceptable. If the 5:1 ratio is achieved, this indicates that the results should be generalizable as long as the sample is representative (Hair et al., 2019: page 279); and (3) *the "strength" of the analysis results*. Following McQuitty's (2004) decision rules, to obtain statistical power greater than 0.80 with a model with more than 250 degrees of freedom, a sample size greater than 90 observations must be gathered. Our model has 267 degrees of freedom, highlighting the high statistical power of the model. To reduce the risks associated with the lack of multi-normality and parameter overestimation, we implemented a Bollen-Stine bootstrap procedure (Bollen and Stine, 1992). This procedure allows us to establish a confidence interval for each of the parameters to be estimated and to test the robustness of the model. The results of the Bollen-Stine *bootstrap* test based on the creation of 200 *bootstrap* samples show a significance level of 0.299, which is above the 0.05 significance level. Thus, there is no statistically significant difference between the *pre-bootstrap* and *post-bootstrap* estimates. The model is therefore robust and has a good fit to the data. To conclude, modeling *via* the structural equation method is acceptable given our sample size.

Results

Evaluation of the measurement model

The item means and standard deviations, as well as the correlation matrix, are presented in Appendix A. To assess the quality of the scales used in this research, we followed the recommendations of Steenkamp and Van Trijp (1991). A confirmatory factor analysis (CFA) was conducted to test the measurement model and assess the convergent and discriminant validity of the constructs. The CFA was performed on the basis of the indices recommended by Hu and Bentler (1998) and the results, presented in Appendix B, confirm the appropriateness of the measurement model to the data: $\chi^2/234 = 1.966$ ($p = 0.000$); RMSEA = 0.070; TLI = 0.886; CFI = 0.903; SRMR = 0.063. Note that the *burnout* scale was not included in the measurement model, as it is an index. In terms of reliability, the *burnout* scale had a satisfactory Cronbach's alpha (0.897). For the multi-item scales included in the measurement model, the tests of reliability, convergent and discriminant validity show good results (see Table 1). Convergent validity is verified with mean extracted variance values above 0.50 for each construct (Fornell and Larcker, 1981). Based on the procedure advocated

by Fornell and Larcker (1981), discriminant validity was also verified for all constructs, since the average extracted variance of each construct is greater than the square of the correlations of the constructs taken two by two. These results allow us to continue the analyses and to test the hypotheses.

INSERT TABLE 1

In order to evaluate the method effect, we performed two successive tests: first, the single Harman factor test performed by means of an exploratory factor analysis (1), then the single latent unmeasured common method factor test performed by means of a confirmatory factor analysis as recommended by Podsakoff et al. All measurement variables from the multi-item scales are included in the analyses performed (i.e., use of sales support technologies, salesperson role overload, adaptive selling behavior, trust, commitment, satisfaction, job satisfaction, creative performance, and sales performance). The results of the exploratory factor analysis show a total explained variance of 78.6% for nine factors, compared to 27.7% for one factor. This absence of a method effect is confirmed by the results of the confirmatory factor analysis, which show an extracted variance for the common method factor of 13.1%, which corresponds to the average variance due to the method effect in marketing, estimated at 15.8% (Cote and Buckley, 1987).

Evaluation of the structure model

The structure model (H1 to H4) was tested in one run *via* the structural equations following the maximum likelihood method (SPSS-AMOS 27). For the analysis of the results, we used the quality indices and standards recommended by Hu and Bentler (1998). The proposed model presents satisfactory results (see Table 2 and Appendix C): $\chi^2/258 = 1.444$; RMSEA = 0.048; TLI = 0.945; CFI = 0.953; SRMR = 0.058.

INSERT TABLE 2

Regarding the use of sales support technologies, the results show that the combined use of sales support technologies has a significant and positive influence on the salesperson's performance (H1: $\gamma = 0.16$; $p = 0.027$). Thus, H1 is validated.

Regarding interpersonal mechanisms, the use of sales support technologies significantly and positively influences adaptive selling behavior (H2a: $\beta = 0.36$; $p = 0.000$) but has no direct influence on relationship quality (H2b: $\beta = 0.16$; $p = 0.072$). H2a is validated but H2b is not. Adaptive selling behavior, on the other hand, has a significant and positive influence on relationship quality (H2c: $\beta = 0.28$; $p = 0.003$), so H2c is validated. Adaptive selling behavior

significantly and positively influences salesperson performance (H2d: $\beta = 0.44$; $p = 0.000$). Relationship quality, too, significantly and positively influences salesperson performance (H2e: $\beta = 0.31$; $p = 0.000$). H2d and H2e are therefore validated.

Regarding intrapersonal mechanisms, the use of sales support technologies has a significant but negative influence on salesperson role overload (H3a: $\beta = -.19$; $p = .015$), and it has no influence on *burnout* (H3b: $\beta = .05$; $p = .458$). Thus, H3a is validated and H3b is not. Role overload significantly and positively influences *burnout* (H3c: $\beta = 0.58$; $p = 0.000$) but has no direct influence on job satisfaction (H3d: $\beta = 0.09$; $p = 0.222$). H3c is validated but not H3d. *Burnout*, on the other hand, has a significant and negative influence on job satisfaction (H3e: $\beta = -0.42$; $p = 0.000$). Thus, H3e is validated.

Regarding the consequences for the salesperson, the salesperson's performance significantly and positively influences his or her job satisfaction (H4a: $\beta = 0.53$; $p = 0.000$), and vice versa (H4b: $\beta = 0.31$; $p = 0.014$). H4a and H4b are validated.

Testing indirect effects via structural equations

Following the recommendations of Preacher and Hayes (2004), we used structural equations with the *bootstrap* technique, available on AMOS 27, for testing indirect effects. Due to the complexity of the proposed modeling and the presence of multiple mediators, structural equations should be preferred to the macro Process (Preacher and Hayes, 2004: page 722). The results, presented in Table 3, highlight the existence of indirect and positive effects between the use of sales support technologies and salesperson performance (H2f: Coef. Stand. = $0.32 \in [0.21; 0.47]$; $p = 0.004$), as well as between the use of sales support technologies and job satisfaction (H3f: Coef. Stand. = $0.26 \in [0.11; 0.39]$; $p = 0.015$). While we expected positive indirect effects ($a*b*c = 0.36*0.28*0.31$) and therefore the existence of complementary mediation for H2f, we postulated the existence of negative and therefore suppressive indirect effects for H3f. However, the latter turn out to be positive ($a*b*c*d = -0.19*0.58*-0.42*0.53$), thus also showing a complementary mediation, and not a competitive mediation as we had hypothesized. Thus, H2f is validated, but H3f is not.

INSERT TABLE 3

Discussion

Theoretically based on the work in relationship marketing (Palmatier et al., 2005) and the work in human resources management (Cordes and Dougherty, 1993), our conceptualization is confirmed since most of the hypotheses of the proposed model are validated. This study

allows us to better understand the influence of the use of sales support technologies on the salesperson's performance, and in particular the explanatory mechanisms that underlie it. Our results confirm the direct influence of the use of sales support technologies on the salesperson's performance, but also its indirect influence *via* interpersonal and intrapersonal mediating mechanisms. While the existence of these two mechanisms is confirmed, we expected them to exert an opposite influence in the form of *complementary mediation* for the interpersonal mechanisms and *competitive mediation* for the intrapersonal mechanisms, in the sense of Zhao et al. Our results show the existence of two complementary mediations, which means that the use of sales support technologies improves the salesperson's performance directly and indirectly *via* interpersonal and intrapersonal mechanisms. The comparison of these mechanisms shows us that they are favorable, complementary and of equivalent size. Overall, the simultaneous study of direct, indirect (i.e., interpersonal and intrapersonal) and reciprocal effects makes it possible to compare and discuss these effects, which is original from an academic point of view, but also instructive from a managerial point of view.

Regarding the direct influence of the use of sales enablement technologies on the salesperson's performance, our results show that the salesperson's performance is positively influenced by the extent of his/her use of sales enablement technologies. This means that as the salesperson increases his or her use of sales enablement technologies, his or her results are directly improved. The use of sales enablement technologies increases the amount of time spent selling and reduces the amount of time spent on administrative tasks, which leads to more sales opportunities due to increased customer contact time. This allows salespeople to reach more customers with the time saved and increase their sales performance. Technological tools - described as sales aids - do indeed seem to support the practice of the sales profession.

Regarding the role of interpersonal mechanisms, the majority of the hypotheses are validated, which shows the role of the use of sales support technologies in explaining the salesperson's performance. While the use of sales enablement technologies has a direct and positive influence on the salesperson's performance, its influence is also largely indirect *via* the complementary mediation of interpersonal mechanisms. This means that during the sales process, salespeople usefully integrate the information captured *via* sales support technologies to better adapt their sales behavior and, in return, improve the quality of their relationship, which *ultimately* has an effect on the salesperson's performance. Furthermore, we observe a lack of direct effect between the use of sales enablement technologies and the quality of the

customer relationship, this relationship is only indirect *via* the adaptive selling behavior. This shows that the quality of the relationship is improved, not by the use of technologies, but rather by the appropriate use of the information they make available to the salesperson, who is then able to adapt his or her behavior as closely as possible to the customer's needs. This therefore questions the nature of the social links that sales support technologies are able to offer (e.g., Marshall et al., 2012). Sales enablement technology tools do not directly enhance the quality of the customer relationship, but they do allow salespeople to adapt their sales behaviors, and consequently improve the quality of the customer relationship, which makes them more effective.

Regarding the role of intrapersonal mechanisms, most of the hypotheses concerning intrapersonal mechanisms are confirmed, since there is a mediating mechanism that successively links the use of sales support technologies - salesperson overload - *burnout* - job satisfaction - salesperson performance. The existence of intrapersonal mediating mechanisms is not questioned. On the other hand, we find a *negative relationship* between the use of sales support technologies and sales role overload. We expected that sales role overload would increase as the use of sales enablement technologies increased. However, the results show a negative effect on sales role overload. This means that the more salespeople use sales enablement technologies, the less they perceive their workload as heavy and excessive. The existence of this negative relationship between the use of sales enablement technologies and the overload of the sales role leads us to highlight a mediation, not competitive, but complementary between the use of sales enablement technologies and the performance of the sales person. The results show that far from overloading salespeople, as suggested by previous studies (e.g., Rangarajan et al., 2005), sales enablement technologies seem to be perceived as a support for improving the job satisfaction of salespeople by reducing their workload. These results - contrary to previous studies (e.g., Rangarajan et al., 2005) - can be explained by the fact that (1) new generations of salespeople are more experienced in using these technologies, but also that (2) these technologies are now easier to use. The use of these sales support technologies offers salespeople greater flexibility and control over their work tasks (Duxbury et al., 2014). Moreover, Fujimoto et al. (2016) recently showed that the use of sales enablement technologies is positively related to employees' perceptions of job autonomy. This reversal in the direction of the relationship compared to prior work by Rangarajan et al. (2005) may be due to salespeople's better mastery of technological tools, as well as by the refinement of available tools that better match the needs related to the tasks to be performed.

Concerning the reciprocal relationship, the results show a simultaneous and concomitant influence between the salesperson's job satisfaction and his or her performance (feedback loop). Indeed, the existence of a reciprocal relationship between the salesperson's job satisfaction and his or her performance highlights the mutual influence that they have on each other: the salesperson's job satisfaction improves his or her sales and creative performance, and vice versa.

Managerial implications

From a managerial point of view, our findings are favorable to the use of sales enablement technologies by salespeople. Indeed, the use of sales enablement technologies improves the salesperson's job satisfaction and performance, both directly and indirectly through interpersonal and intrapersonal mechanisms. Anchored in the massive development of digitalization and technological tools available to salespeople, this study focuses on the challenges imposed by technology, amplified by the pandemic, but generalizable beyond this single context. Also, the impact of the results concerns not only the salespeople themselves, but also their managers.

For salespeople, the results suggest that they should (1) take the time to train in the use of sales enablement technologies; (2) be willing to change their practices and routines; and (3) use the information gathered to better manage the customer relationship. While it is not always easy to find the time to train and change routines, it is useful when it comes to integrating new sales enablement tools. The ergonomics of the new tools make them allies for a better sales performance, but also allows to free up time to find innovative and creative solutions to the often-complex problems of B2B business customers. In concrete terms, sales enablement technologies allow salespeople to better adapt their selling behavior to the specific needs of each customer, and in turn increase the quality of their relationship with the customer. The use of sales enablement technologies is a source of efficiency gains in the accomplishment of the salesperson's tasks. These new tools allow sales behaviors to be adapted to the customer's needs, thus promoting the development of a better-quality customer relationship. Administrative tasks can also be automated and free up time that can be reallocated towards developing and maintaining quality customer relationships, which is the main added value of salespeople (Julienne et al., 2019). However, Agnihotri (2021) indicates that a large number of B2B salespeople consider themselves to be at a disadvantage with digital tools and uncomfortable with a digital interface, so there is still a long way to go to

make this use more accessible. Part of this work is the responsibility of the salesperson, but also of their sales management.

For managers, our results lead us to suggest that they (1) monitor new sales support tools; (2) develop the use of sales support technologies by their salespeople; and (3) train their sales teams and support them in their use of technological tools. Based on previous work, we envisioned unfavorable intrapersonal mechanisms due to the overload that the learning and use of new technologies are likely to induce. However, our results show that these technologies can also increase the salesperson's performance (i.e., sales performance and creative performance) by reducing the salesperson's perceived role load. Therefore, it seems particularly important to accompany salespeople during periods of change to avoid role overload when installing a new tool, as our results show the existence of complex intrapersonal mechanisms, such as less overload, leading to less burnout, which leads to more job satisfaction, and thus better performance. We therefore invite sales managers to offer their teams coaching to learn how to use the new technological tools, and thus avoid the vicious circle of overload/burnout/dissatisfaction/reduced performance.

Limitations and research perspectives

There are several limitations to our study, and the main one concerns the measurement scales. First, the measures used are self-reported by the salesperson, when a dyadic sample would have been preferable. However, Agnihotri et al. (2016) state that in general, "contact employees are good sources of information about customer attitudes (Bitner et al., 1994) and a perceptual measure can be used when an accurate objective measure is not available (Dess and Robinson Jr, 1984)." In addition to salespeople's perceptions, future work should examine the issue from the perspective of sales managers and customers. Such research would provide new insights into the use of sales enablement technologies. Second, the salesperson performance scale we use in this work is structured around two dimensions, i.e., sales performance and creative performance, each of which has good reliability and validity results. However, this two-dimensional scale has been largely redesigned compared to the original scales. This choice was guided, on the one hand, by the need to adapt the items to our specific study context, and on the other hand, by a concern for parsimony leading us to reduce the number of items for each scale in order to limit the cumbersome nature of the questionnaire as recommended by Hair et al. (2019). This choice has the advantage of allowing the inclusion of the two important, yet understudied, dimensions of salesperson performance in the same

study; but it also constitutes a limitation to this work that deserves further investigation to ensure the replicability of the results. Third, for measuring the use of sales enablement technologies, we chose to measure the degree of use of a combination of technology tools based on work from the infusion of a new system (Agnihotri et al., 2016; Jones et al., 2002). Nevertheless, our approach could be complemented by an assessment of the mental (over)load (or *overloading*) related to the use of sales enablement technologies, as a psychological variable, in order to study the perception of overload related to the use of sales enablement technologies by salespeople.

In this work, our study focused on the technological sales tools considered as the degree of use of a combination of tools and not the use of a particular tool. The advantage of this approach is that it considers the frequency of use of the various and heterogeneous technological tools that salespeople are confronted with in their daily work. Nevertheless, it would be interesting to pursue investigations in two directions: one on the study of the sales force of a specific company (thus controlling for the effects of the variety of tools available) in order to understand the individual determinants of the use of sales enablement technologies; and the other on the study of specific sales enablement technologies (e.g., automatic prospecting or social media) to understand their impact on the practice of salespeople. Like Agnihotri et al. (2016) who look at the role of social media on relationship quality or Nelson et al. (2020) who study the role of CRM software on information use, it would be useful to complement our study with an analysis of specific tools taken separately. The purpose of each tool and how it is deployed and used by salespeople is likely to vary and explain differences in sales performance. It would also be interesting to investigate the reasons why the relationship between the use of sales enablement technologies and relationship quality is not significant, *by* studying moderators such as emotional intelligence or social proximity. Following the example of the work of Westbrook and Peterson (2020) and as proposed by Rapp and Beeler (2021), it would be interesting to study sales *force enablement* tools that add a notion of resource provision and support to the use of sales enablement tools. This would allow us to study the best practices for deploying and maintaining technological sales support solutions. We have chosen to accumulate a variety of technological tools that lead to overload. It would be a question of continuing the work on the basis of a fleet of sales representatives for a specific company whose range of tools we know, in order to control the quantity and diversity of tools.

Moreover, our study focused on the cognitive dimension of role overload. However, there is also an affective dimension to role overload that needs to be examined in more depth, including the role of variables such as frustration or stress. Although there are many challenges associated with identifying the two distinct dimensions of role overload (Saunders et al. 2017), it would be useful to understand the influence of the affective dimension of role overload, and more specifically, the role of frustration related to difficulties encountered in the tasks to be performed, as well as the role of chronic stress on job satisfaction and salesperson performance.

BIBLIOGRAPHY

- Aftab H (2012) A Study of Job Satisfaction and IT's Impact on the Performance in the Banking Industry of Pakistan. *International Journal of Business and Social Science* 3.
- Agarwal R and Karahanna E (2000) Time flies when you're having fun: Cognitive absorption and beliefs about information technology usage. *MIS quarterly*: 665-694.
- Agnihotri R, Dingus R, Hu MY and Krush MT (2016) Social media: Influencing customer satisfaction in B2B sales. *Industrial Marketing Management* 53: 172-180.
- Agnihotri R, Kothandaraman P, Kashyap R and Singh R (2012) Bringing "social" into sales: The impact of salespeople's social media use on service behaviors and value creation. *Journal of Personal Selling & Sales Management* 32: 333-348.
- Agnihotri R, Rapp A and Trainor K (2009) Understanding the role of information communication in the buyer-seller exchange process: antecedents and outcomes. *Journal of Business & Industrial Marketing*.
- Agnihotri R, Trainor KJ, Itani OS and Rodriguez M (2017). Examining the role of sales-based CRM technology and social media use on post-sale service behaviors in India. *Journal of Business Research* 81: 144-154.
- Ahearne M, Jelinek R and Rapp A (2005) Moving beyond the direct effect of SFA adoption on salesperson performance: Training and support as key moderating factors. *Industrial Marketing Management* 34(4): 379-388.
- Ahearne M, Srinivasan N and Weinstein L. (2004) Effect of technology on sales performance: Progressing from technology acceptance to technology usage and consequence. *Journal of Personal Selling & Sales Management* 24: 297-310.
- Ambrose SC, Rutherford BN, Shepherd CD and Tashchian A (2021) Salesperson burnout: the state of research, scaling, and framework advancement. *A Research Agenda for Sales*. Edward Elgar Publishing.
- Anderson JC and Narus JA (1991) Partnering as a focused market strategy. *California Management Review* 33: 95-113.
- Andzulis JM, Panagopoulos NG and Rapp A (2012) A review of social media and implications for the sales process. *Journal of Personal Selling & Sales Management* 32: 305-316.
- Avlonitis GJ and Panagopoulos NG (2005) Antecedents and consequences of CRM technology acceptance in the sales force. *Industrial marketing management* 34(4): 355-368.

- Barley SR, Meyerson DE and Grodal S (2011) E-mail as a source and symbol of stress. *Organization science* 22: 887-906.
- Beehr TA, Walsh JT and Taber TD (1976) Relationships of stress to individually and organizationally valued states: Higher order needs as a moderator. *Journal of applied psychology* 61: 41.
- Behrman DN, Bigoness WJ and Perreault Jr WD (1981) Sources of job related ambiguity and their consequences upon salespersons' job satisfaction and performance. *Management Science* 27: 1246-1260.
- Behrman DN and Perreault Jr WD (1982) Measuring the performance of industrial salespersons. *Journal of Business Research* 10: 355-370.
- Berg-Beckhoff G, Nielsen G and Ladekjær Larsen E (2017) Use of information communication technology and stress, burnout, and mental health in older, middle-aged, and younger workers-results from a systematic review. *International journal of occupational and environmental health*, 23(2), 160-171.
- Bitner MJ, Booms BH and Mohr LA (1994) Critical service encounters: The employee's viewpoint. *Journal of Marketing* 58: 95-106.
- Bocconcelli R, Cioppi M and Pagano A (2017) Social media as a resource in SMEs' sales process. *Journal of Business & Industrial Marketing*.
- Bolino MC and Turnley WH (2005) The personal costs of citizenship behavior: the relationship between individual initiative and role overload, job stress, and work-family conflict. *Journal of applied psychology* 90(4): 740.
- Bollen KA and Stine RA. (1992) Bootstrapping goodness-of-fit measures in structural equation models. *Sociological Methods & Research* 21: 205-229.
- Boorum ML, Goolsby JR and Ramsey RP (1998) Relational communication traits and their effect on adaptiveness and sales performance. *Journal of the Academy of Marketing Science* 26: 16-30.
- Boujena O, Johnston WJ and Merunka DR (2009) The benefits of sales force automation: a customer's perspective. *Journal of Personal Selling & Sales Management* 29: 137-150.
- Brown SP, Jones E and Leigh TW (2005) The attenuating effect of role overload on relationships linking self-efficacy and goal level to work performance. *Journal of applied psychology* 90: 972.
- Brown SP and Peterson RA (1993) Antecedents and consequences of salesperson job satisfaction: Meta-analysis and assessment of causal effects. *Journal of Marketing Research* 30: 63-77.

- Chakrabarty S, Brown G and Widing II RE (2013) Distinguishing between the roles of customer-oriented selling and adaptive selling in managing dysfunctional conflict in buyer-seller relationships. *Journal of Personal Selling & Sales Management* 33(3): 245-260.
- Chesley N (2014) Information and communication technology use, work intensification and employee strain and distress. *Work, employment and society* 28: 589-610.
- Churchill Jr GA, Ford NM, Hartley SW and Walker Jr OC (1985) The determinants of salesperson performance: A meta-analysis. *Journal of marketing research* 22(2): 103-118.
- Cirillo V, Evangelista R, Guarascio D and Sostero M (2021) Digitalization, routineness and employment: an exploration on Italian task-based data. *Research Policy* 50(7): 104079.
- Cote JA and Buckley MR (1987) Estimating trait, method, and error variance: Generalizing across 70 construct validation studies. *Journal of Marketing Research* 24: 315-318.
- Crosby LA, Evans KR and Cowles D (1990) Relationship quality in services selling: an interpersonal influence perspective. *The Journal of Marketing*: 68-81.
- Dampérat M, Jongmans E and Jolibert A (2020) La modélisation par les équations structurelles. In: Dunod (ed) *Marketing Research: Méthodes de recherche et d'études en marketing* Ed. 2: 429-476.
- Delacroix E, Rasolofoarison D and Jourdan P (2020) La collecte des données quantitatives. In: Dunod (ed) *Marketing Research: Methods of research and studies in marketing* Ed. 2: 57-88.
- Delpechitre D, Black HG and Farrish J (2019) The dark side of technology: examining the impact of technology overload on salespeople. *Journal of Business & Industrial Marketing*.
- Dess GG and Robinson Jr RB (1984) Measuring organizational performance in the absence of objective measures: the case of the privately-held firm and conglomerate business unit. *Strategic management journal* 5: 265-273.
- Diaz I, Chiaburu DS, Zimmerman RD and Boswell WR (2012) Communication technology: Pros and cons of constant connection to work. *Journal of Vocational Behavior*, 80(2), 500-508.
- Diefendorff JM, Nolan MT, Tseng ST, Kenworthy ME and Fiorentino NL (2020) Job Involvement. In *Essentials of Job Attitudes and Other Workplace Psychological Constructs* (pp. 129-155). Routledge.
- Dubinsky AJ and Hartley SW (1986) A path-analytic study of a model of salesperson performance. *Journal of the Academy of Marketing Science* 14: 36-46.

- Duxbury L, Higgins C, Smart R and Stevenson M (2014) Mobile technology and boundary permeability. *British Journal of Management* 25(3): 570-588.
- Dwyer FR, Schurr PH and Oh S (1987) Developing buyer-seller relationships. *The Journal of Marketing*: 11-27.
- Edwards BD, Bell ST, Arthur Jr W and Decuir AD (2008) Relationships between facets of job satisfaction and task and contextual performance. *Applied psychology* 57(3): 441-465.
- Ellis KL and Beatty SE (1995) Customer relationships with retail salespeople: a conceptual model and propositions. *ACR North American Advances*.
- Farhoomand AF and Drury DH (2002) Managerial information overload. *Communications of the ACM*.
- Feldman MS (2000) Organizational routines as a source of continuous change. *Organization science* 11: 611-629.
- Fisher DM (2014) A multilevel cross-cultural examination of role overload and organizational commitment: Investigating the interactive effects of context. *Journal of Applied Psychology* 99(4): 723.
- Fonner KL and Roloff ME (2012) Testing the connectivity paradox: Linking teleworkers' communication media use to social presence, stress from interruptions, and organizational identification. *Communication Monographs* 79: 205-231.
- Fornell C and Larcker DF (1981) Structural equation models with unobservable variables and measurement error: Algebra and statistics. Sage Publications Sage CA: Los Angeles, CA.
- Franke GR and Park J-E (2006) Salesperson adaptive selling behavior and customer orientation: A meta-analysis. *Journal of Marketing Research* 43: 693-702.
- Freudenberger HJ and Richelson G (1980) The high cost of high achievement. *Paperback-Bantam Books*.
- Fu W and Deshpande SP (2014) The impact of caring climate, job satisfaction, and organizational commitment on job performance of employees in a China's insurance company. *Journal of business ethics* 124: 339-349.
- Fujimoto Y, Ferdous AS, Sekiguchi T and Sugianto LF (2016) The effect of mobile technology usage on work engagement and emotional exhaustion in Japan. *Journal of Business Research* 69: 3315-3323.
- Green F (2004). Work intensification, discretion, and the decline in well-being at work. *Eastern Economic Journal* 30(4): 615-625.

- Guenzi P, Pardo C and Georges L (2007) Relational selling strategy and key account managers' relational behaviors: An exploratory study. *Industrial Marketing Management* 36: 121-133.
- Hair JF, Black WC, Babin BJ and Anderson RE (2019) In: Cengage (ed) *Multivariate data analysis*.
- Harris MM and Bladen A (1994) Wording effects in the measurement of role conflict and role ambiguity: A multitrait-multimethod analysis. *Journal of Management* 20: 887-901.
- Harter JK, Schmidt FL and Hayes TL (2002) Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: a meta-analysis. *Journal of applied psychology* 87(2): 268.
- Hartmann N and Lussier B (2020) Managing the sales force through the unexpected exogenous COVID-19 crisis. *Industrial Marketing Management*.
- Hayes AF (2018) *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*: Guilford publications.
- Hernandez B, Jimenez J and Martín MJ (2008) Extending the technology acceptance model to include the IT decision-maker: A study of business management software. *Technovation* 28(3): 112-121.
- Ho J and Tang R (2001) Towards an optimal resolution to information overload: an infomediary approach. *Proceedings of the 2001 international ACM SIGGROUP conference on supporting group work*: 91-96.
- Holloway BB, Deitz GD and Hansen JD (2013) The benefits of sales force automation (SFA): an empirical examination of SFA usage on relationship quality and performance. *Journal of Relationship Marketing* 12(4): 223-242.
- House JS (1980) *Occupational Stress and the Mental and Physical Health of Factory Workers. Research Report Series*: ERIC.
- Hu L-T and Bentler PM (1998) Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification. *Psychological methods* 3: 424.
- Hulland J, Baumgartner H and Smith KM (2018) Marketing survey research best practices: evidence and recommendations from a review of JAMS articles. *Journal of the Academy of Marketing Science* 46: 92-108.
- Hunter GK and Perreault Jr WD (2006) Sales technology orientation, information effectiveness, and sales performance. *Journal of Personal Selling & Sales Management* 26: 95-113.

- Hunter GK and Perreault Jr WD (2007) Making sales technology effective. *Journal of Marketing* 71: 16-34.
- Ingram TN, LaForge RW and Leigh TW (2002) Selling in the new millennium: A joint agenda. *Industrial Marketing Management* 31(7): 559-567.
- Iqbal MT, Latif W and Naseer W (2012) The impact of person job fit on job satisfaction and its subsequent impact on employees performance. *Mediterranean Journal of Social Sciences* 3: 523-530.
- Itani OS, Agnihotri R and Dingus R (2017) Social media use in B2b sales and its impact on competitive intelligence collection and adaptive selling: Examining the role of learning orientation as an enabler. *Industrial Marketing Management* 66: 64-79.
- Jamal M (2005) Personal and organizational outcomes related to job stress and Type-A behavior: a study of Canadian and Chinese employees. *Stress and Health: Journal of the International society for the investigation of stress* 21: 129-137.
- Jap SD and Ganesan S (2000) Control mechanisms and the relationship life cycle: Implications for safeguarding specific investments and developing commitment. *Journal of Marketing Research* 37: 227-245.
- Jaramillo F, Locander WB, Spector PE and Harris EG (2007) Getting the job done: The moderating role of initiative on the relationship between intrinsic motivation and adaptive selling. *Journal of Personal Selling & Sales Management* 27: 59-74.
- Jelinek R (2013) All pain, no gain? Why adopting sales force automation tools is insufficient for performance improvement. *Business horizons* 56: 635-642.
- Jones E, Brown SP, Zoltners AA and Weitz BA (2005) The changing environment of selling and sales management. *Journal of Personal Selling & Sales Management* 25: 105-111.
- Jones E, Chonko L, Rangarajan D and Roberts J (2007) The role of overload on job attitudes, turnover intentions, and salesperson performance. *Journal of Business Research* 60: 663-671.
- Jones E, Roberts J and Chonko L. (2000) Motivating sales entrepreneurs to change: a conceptual framework of factors leading to successful change management initiatives in sales organizations. *Journal of Marketing Theory and Practice* 8: 37-49.
- Jones E, Sundaram S and Chin W (2002). Factors leading to sales force automation use: A longitudinal analysis. *Journal of personal selling & sales management* 22(3): 145-156.
- Judge TA, Thoresen CJ, Bono JE and Patton GK (2001) The job satisfaction-job performance relationship: A qualitative and quantitative review. *Psychological bulletin* 127(3): 376.

- Judge TA, Zhang SC and Glerum DR (2020) Job satisfaction. *Essentials of job attitudes and other workplace psychological constructs*: 207-241.
- Julienne E, Damperat M and Franck R (2019) Customer Relationships and Digital Technologies: What Place and Role for Sales Representatives? *Augmented Customer Strategy: CRM in the Digital Age*: 149-166.
- Karimikia H and Singh H (2019) A meta-analysis of the negative outcomes of ict use at work, incorporating the role of job autonomy.
- Kim H-S and Kim Y-G (2009) A CRM performance measurement framework: Its development process and application. *Industrial Marketing Management* 38: 477-489.
- Kline RB (2015) *Principles and practice of structural equation modeling*: Guilford publications.
- Kurtessis JN, Eisenberger R, Ford MT, Buffardi LC, Stewart KA and Adis CS (2017) Perceived organizational support: A meta-analytic evaluation of organizational support theory. *Journal of management* 43(6): 1854-1884.
- Lacoste S (2016) Perspectives on social media ant its use by key account managers. *Industrial Marketing Management* 54: 33-43.
- Loan L (2020) The influence of organizational commitment on employees' job performance: The mediating role of job satisfaction. *Management Science Letters* 10(14): 3307-3312.
- Li L, Zhu Y and Park C (2018) Leader-member exchange, sales performance, job satisfaction, and organizational commitment affect turnover intention. *Social Behavior and Personality: an international journal* 46: 1909-1922.
- Limbu YB, Jayachandran C and Babin BJ (2014) Does information and communication technology improve job satisfaction? The moderating role of sales technology orientation. *Industrial Marketing Management* 43: 1236-1245.
- Locke EA (1976) The nature and causes of job satisfaction. *Handbook of industrial and organizational psychology*.
- Low GS, Cravens DW, Grant K and Moncrief WC (2001) Antecedents and consequences of salesperson burnout. *European Journal of Marketing*.
- Malach-Pines A (2005) The burnout measure, short version. *International Journal of Stress Management* 12: 78.
- Mano RS and Mesch GS (2010). E-mail characteristics, work performance and distress. *Computers in Human Behavior* 26(1): 61-69.

- Marshall GW, Moncrief WC, Rudd JM and Lee N (2012) Revolution in sales: The impact of social media and related technology on the selling environment. *Journal of Personal Selling & Sales Management* 32: 349-363.
- Martínez-Tur V, Moliner C and Maniezki A (2020) Organizational Justice. *Essentials of Job Attitudes and Other Workplace Psychological Constructs*: 45-70.
- Martocchio JJ and Webster J (1992) Effects of feedback and cognitive playfulness on performance in microcomputer software training. *Personnel Psychology* 45: 553-578.
- Maslach C (1982) Understanding burnout: Definitional issues in analyzing a complex phenomenon. *Job stress and burnout*: 29-40.
- Maslach C and Jackson SE (1984) Burnout in organizational settings. *Applied social psychology annual*.
- Maslach C, Schaufeli WB and Leiter MP (2001) Job burnout. *Annual review of psychology* 52: 397-422.
- Matthews LM and Rutherford BN (2020) The impact of skill discretion and work demands on salesperson job satisfaction: the mediating influence of the burnout facets. *Journal of Personal Selling & Sales Management*: 1-11.
- Matthews RA, Winkel DE and Wayne JH (2014) A longitudinal examination of role overload and work-family conflict: The mediating role of interdomain transitions. *Journal of Organizational Behavior* 35(1): 72-91.
- McQuitty S (2004) Statistical power and structural equation models in business research. *Journal of Business Research* 57(2): 175-183.
- Moore JE (2000) One road to turnover: An examination of work exhaustion in technology professionals. *MIS quarterly*: 141-168.
- Moore JN, Hopkins CD and Raymond MA (2013) Utilization of relationship-oriented social media in the selling process: A comparison of consumer (B2C) and industrial (B2B) salespeople. *Journal of Internet Commerce* 12(1): 48-75.
- Mullins RR, Ahearne M, Lam SK, Hall ZR and Boichuk JP (2014) Know your customer: How salesperson perceptions of customer relationship quality form and influence account profitability. *Journal of Marketing* 78: 38-58.
- Nelson CA, Walsh MF and Cui AP (2020) The role of analytical CRM on salesperson use of competitive intelligence. *Journal of Business & Industrial Marketing*.
- O'Driscoll MP, Brough P, Timms C and Sawang S (2010) Engagement with information and communication technology and psychological well-being. In *New developments in theoretical and conceptual approaches to job stress*. Emerald Group Publishing Limited.

- Palmatier RW, Dant RP, Grewal D and Evans KR (2006) Factors influencing the effectiveness of relationship marketing: a meta-analysis. *Journal of Marketing* 70: 136-153.
- Palmatier RW, Dant RP, Grewal D and Evans KR (2007) Factors that influence the effectiveness of relationship marketing: a meta-analysis. *Marketing research and applications* 22: 79-103.
- Park JE, Kim J, Dubinsky AJ and Lee H (2010) How does sales force automation influence relationship quality and performance? The mediating roles of learning and selling behaviors. *Industrial Marketing Management* 39: 1128-1138.
- Park JE and Holloway BB (2003) Adaptive selling behavior revisited: An empirical examination of learning orientation, sales performance, and job satisfaction. *Journal of personal selling & sales management* 23(3): 239-251.
- Pines A and Aronson E (1983) Combatting burnout. *Children and Youth Services Review* 5(3): 263-275.
- Pines A and Aronson E (1988). *Career burnout: Causes and cures*. Free press..
- Podsakoff PM, MacKenzie SB, Lee JY and Podsakoff NP (2003) Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of applied psychology* 88(5): 879.
- Preacher KJ and Hayes AF (2004) SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior research methods, instruments, & computers* 36: 717-731.
- Rangarajan D, Jones E and Chin W (2005) Impact of sales force automation on technology-related stress, effort, and technology usage among salespeople. *Industrial Marketing Management* 34: 345-354.
- Rapp A and Beeler L (2021) The state of selling & sales management research: a review and future research agenda. *Journal of Marketing Theory and Practice* 29: 37-50.
- Rapp A, Beitelspacher LS, Schillewaert N and Baker TL (2012) The differing effects of technology on inside vs. outside sales forces to facilitate enhanced customer orientation and interfunctional coordination. *Journal of Business Research* 65(7): 929-936.
- Rauyruen P and Miller KE (2007) Relationship quality as a predictor of B2B customer loyalty. *Journal of Business Research* 60: 21-31.
- Rayburn SW, Badrinarayanan V, Anderson ST and Gupta A (2021). Continuous technotraining and business-to-business salesperson success: How boosting techno-efficacy enhances sales effort and performance. *Journal of Business Research* 133: 66-78.

- Robbins SP and Judge T (2009) Chapter 8 *Organizational Behavior*: Pearson/Prentice Hall.
- Román S and Rodríguez R (2015) The influence of sales force technology use on outcome performance. *Journal of Business & Industrial Marketing*.
- Román S and Iacobucci D (2010) Antecedents and consequences of adaptive selling confidence and behavior: a dyadic analysis of salespeople and their customers. *Journal of the Academy of Marketing Science* 38(3): 363-382.
- Rutkowski AF and Saunders CS (2018) *Emotional and cognitive overload: the dark side of information technology*. Routledge.
- Saunders C, Wiener M, Klett S and Sprenger S (2017) The impact of mental representations on ICT-related overload in the use of cell phones. *Journal of management information systems* 34: 803-825.
- Schaufeli W and Enzmann D (1998) *The burnout companion to study and practice: A critical analysis*: CRC press.
- Schmitt J, Jolibert A and Jourdan P (2021) Les analyses factorielles et l'analyse multidimensionnelle non-métrique. *Marketing Research : Methods of research and studies in marketing*, 2nd edition Dunod : 219-268.
- Sessa VI and Bowling NA (2020). *Essentials of job attitudes and other workplace psychological constructs*. Routledge.
- Sharma S, Mukherjee S, Kumar A and Dillon WR (2005) A simulation study to investigate the use of cutoff values for assessing model fit in covariance structure models. *Journal of Business Research* 58(7): 935-943.
- Sharma A, Rich GA and Levy M. (2004) Comment: Starting to solve the method puzzle in salesperson self-report evaluations. *Journal of Personal Selling & Sales Management* 24(2): 135-139.
- Singh J (2000) Performance productivity and quality of frontline employees in service organizations. *Journal of Marketing* 64: 15-34.
- Speier C and Venkatesh V (2002) The hidden minefields in the adoption of sales force automation technologies. *Journal of Marketing* 66: 98-111.
- Spiro RL and Weitz BA (1990) Adaptive selling: Conceptualization, measurement, and nomological validity. *Journal of Marketing Research*: 61-69.
- Springer GJ (2011) A study of job motivation, satisfaction, and performance among bank employees. *Journal of Global Business Issues* 5: 29.
- Steenkamp J-BE and Van Trijp HC (1991) The use of LISREL in validating marketing constructs. *International Journal of Research in marketing* 8: 283-299.

- Sundaram S, Schwarz A, Jones E and Chin WW (2007) Technology use on the front line: how information technology enhances individual performance. *Journal of the Academy of Marketing Science* 35: 101-112.
- Sweeney JT and Summers SL (2002) The effect of the busy season workload on public accountants' job burnout. *Behavioral Research in Accounting* 14: 223-245.
- Ter Hoeven CL, van Zoonen W and Fonner KL (2016) The practical paradox of technology: The influence of communication technology use on employee burnout and engagement. *Communication Monographs* 83: 239-263.
- Vilatte J-C (2007) Methodology of the survey by questionnaire. *Laboratory Culture & Communication University of Avignon*.
- Vosgerau J and Anderson E (2004) A social perception view of business relationships in the service sector. *ACR North American Advances*.
- Walker Jr OC, Churchill Jr GA and Ford NM (1977) Motivation and performance in industrial selling: Present knowledge and needed research. *Journal of Marketing Research* 14: 156-168.
- Wang G and Netemeyer RG (2004) Salesperson creative performance: conceptualization, measurement, and nomological validity. *Journal of Business Research* 57: 805-812.
- Weitz BA (1978) Relationship between salesperson performance and understanding of customer decision making. *Journal of Marketing Research* 15: 501-516.
- Weitz BA, Sujan H and Sujan M (1986) Knowledge, motivation, and adaptive behavior: A framework for improving selling effectiveness. *Journal of Marketing* 50: 174-191.
- Williams P, Ashill N and Naumann E (2017) Toward a contingency theory of CRM adoption. *Journal of Strategic Marketing* 25(5-6): 454-474.
- Yang C-L and Hwang M (2014) Personality traits and simultaneous reciprocal influences between job performance and job satisfaction. *Chinese Management Studies*.
- Yilmaz C (2002) Salesperson performance and job attitudes revisited: An extended model and effects of potential moderators. *European Journal of Marketing*.
- Zallocco R, Pullins EB and Mallin ML (2009) A re-examination of B2B sales performance. *Journal of Business & Industrial Marketing*.
- Zhao X, Lynch Jr JG and Chen Q (2011) Reconsidering Baron and Kenny: myths and truths about mediation analysis. *Marketing Research and Applications (English Edition)* 26: 81-95.

FIGURE 1 - The proposed model

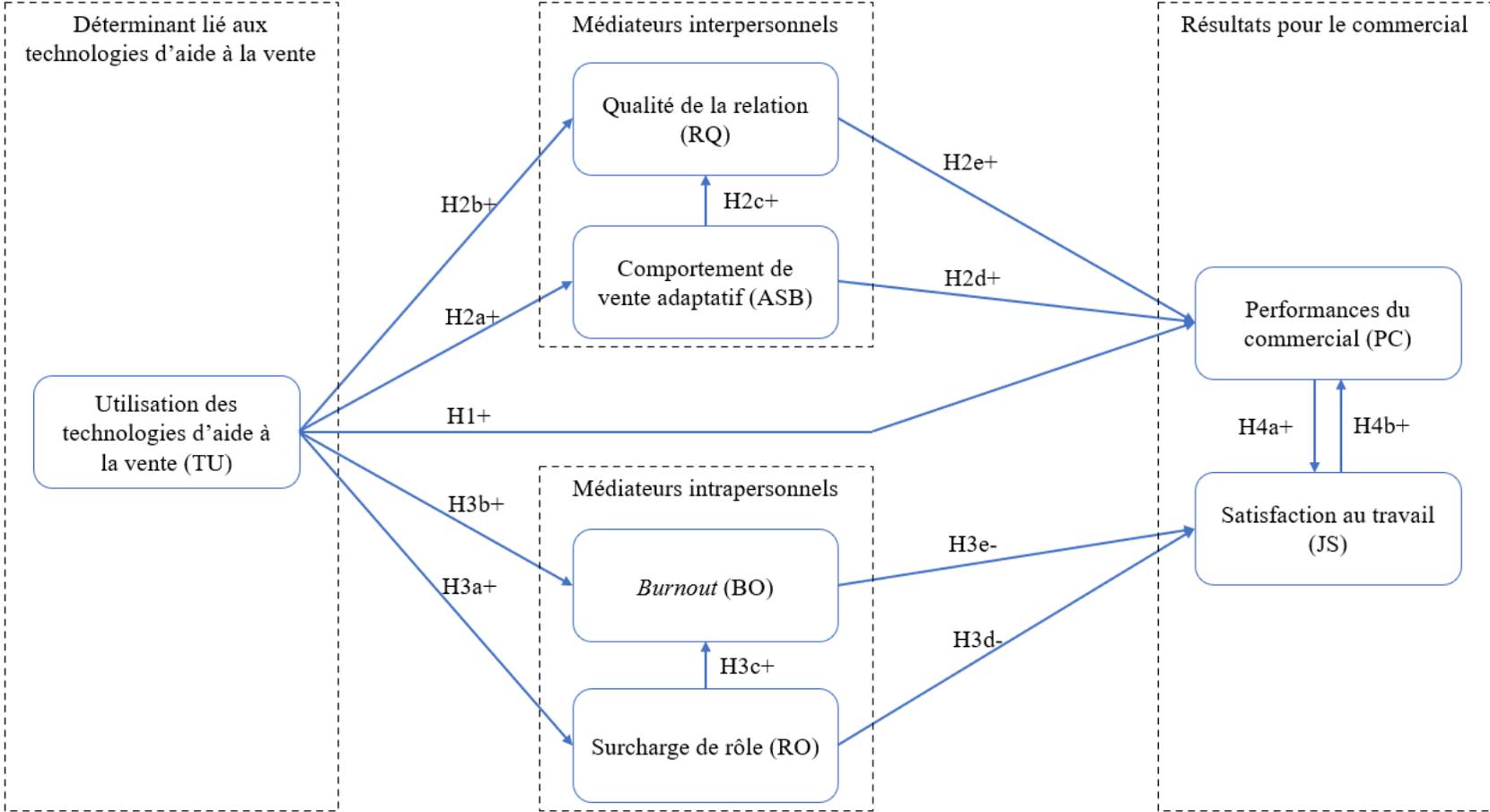


TABLE 1 - Reliability, convergent validity, discriminant validity

Built	V.E.	Squared Correlation					
		TU	ASB	RQ	RO	JS	PC
TU	0,82 (a)	<i>0,91</i> (b)					
ASB	0,53	0,12 (c)	<i>0,72</i>				
RQ	0,71	0,07	0,12	<i>0,84</i>			
RO	0,65	0,04	0,04	0,00	<i>0,80</i>		
JS	0,50	0,12	0,15	0,14	0,06	<i>0,71</i>	
PC	0,58	0,15	0,38	0,24	0,00	0,41	<i>0,81</i>

(a) The average variance extracted (AVE Average Variance Extracted) by construct is presented in the second column and is in bold.

(b) Alpha coefficients are presented in the diagonal and are italicized.

(c) The squares of the correlations between constructs are presented in the lower triangle.

TABLE 2 - Test results of the proposed model

				Coef. stand.	Stand. dev.	t-test	p
<i>The use of sales support technologies as a determinant</i>							
H1	Use of sales support technologies	→	Performance of the salesperson	0,16	0,020	2,216	0,027
<i>The role of interpersonal mechanisms</i>							
H2a	Use of sales support technologies	→	Adaptive selling behavior	0,36	0,043	4,425	0,000
H2b	Use of sales support technologies	→	Quality of the relationship	0,16	0,047	1,799	0,072
H2c	Adaptive selling behavior	→	Quality of the relationship	0,28	0,101	2,951	0,003
H2d	Adaptive selling behavior	→	Performance of the salesperson	0,44	0,055	4,283	0,000
H2e	Quality of the relationship	→	Performance of the salesperson	0,31	0,045	3,568	0,000
<i>The role of intrapersonal mechanisms</i>							
H3a	Use of sales support technologies	→	Overloading of the sales role	-0,19	0,061	-2,443	0,015
H3b	Use of sales support technologies	→	<i>Burnout of the salesman</i>	0,05	0,039	0,741	0,458
H3c	Overloading of the sales role	→	<i>Burnout of the salesman</i>	0,58	0,055	8,139	0,000
H3d	Overloading of the sales role	→	Job satisfaction	0,09	0,045	1,220	0,222
H3e	<i>Burnout of the salesman</i>	→	Job satisfaction	-0,42	0,064	-5,077	0,000
<i>Consequences for the salesperson</i>							
H4a	Job satisfaction	→	Performance of the salesperson	0,53	0,188	4,716	0,000
H4b	Performance of the salesperson	→	Job satisfaction	0,31	0,075	2,456	0,014
Overall suitability measures							
	χ^2 / ddl		372,501 / 258 (1,444)				
	RMSEA		0,048				
	TLI		0,945				
	CFI		0,953				
	SRMR		0,058				

TABLE 3 - Mediator Effects Test

	Coef stand.	Terminal low	Terminal high	<i>p. value</i>
<i>Indirect effects via adaptive selling behavior and relationship quality (H2f)</i>				
. Use of sales enablement technologies (TU) → Salesperson performance (PC)	0,32	0,21	0,47	0,004
<i>Indirect effects via role overload and burnout (H3f)</i>				
. Use of sales enablement technologies (TU) → Job satisfaction (JS)	0,26	0,11	0,39	0,015

APPENDIX A - Means, Standard Deviations and Correlation Matrix

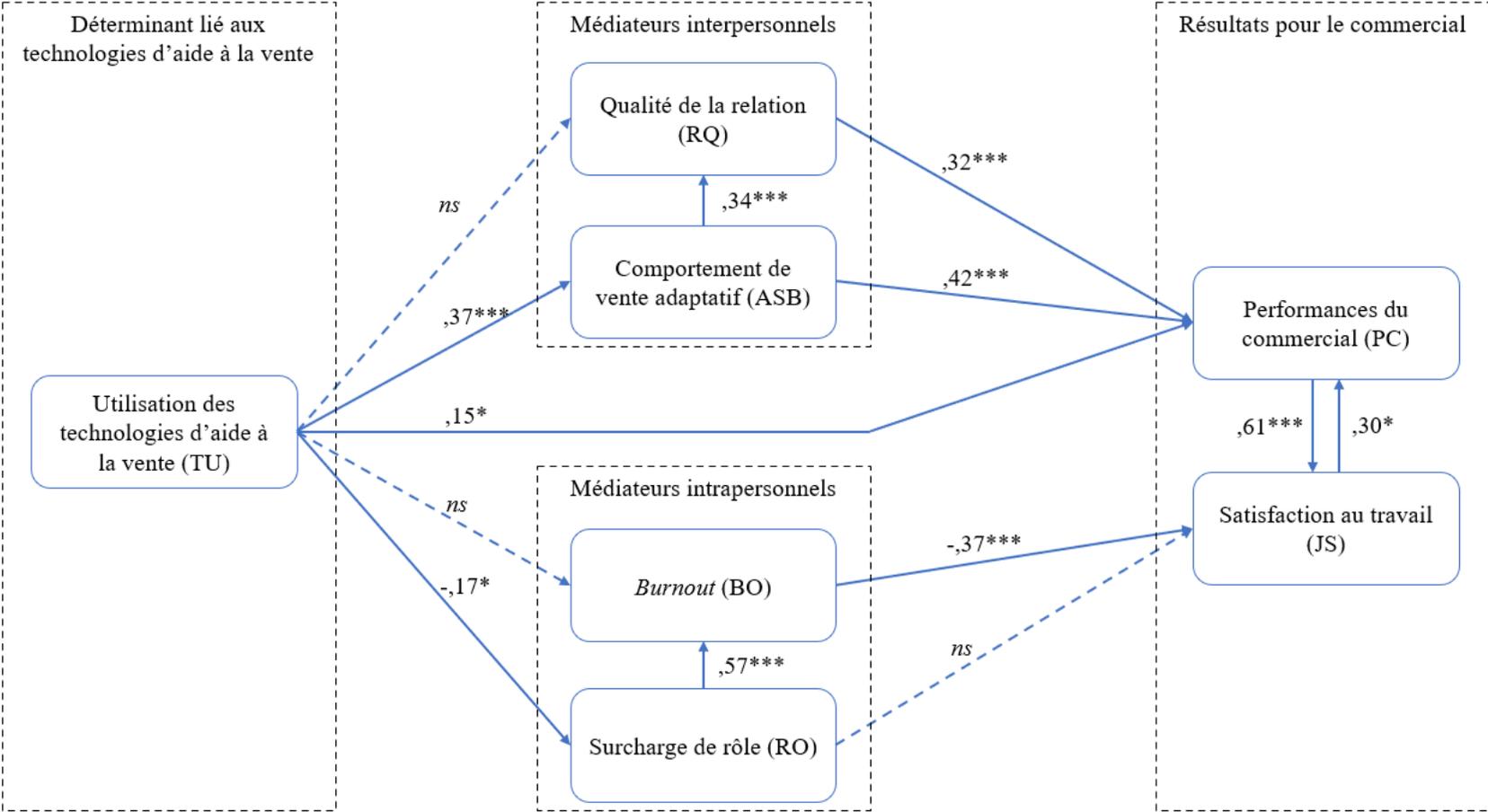
	M	σ	TU1	TU2	TU3	ASB1	ASB2	ASB3	CO1	CO2	SAT1	SAT2	COMM1	COMM2	RO1	RO2	RO3	JS1	JS2	JS3	CP1	CP2	CP3	SP1	SP2	SP3	
TU1	4,22	1,864	1																								
TU2	4,49	1,796	0,82	1																							
TU3	4,56	1,728	0,815	0,833	1																						
ASB1	5,57	1,232	0,224	0,229	0,228	1																					
ASB2	5,44	1,147	0,28	0,286	0,285	0,611	1																				
ASB3	5,30	1,402	0,188	0,192	0,191	0,41	0,511	1																			
CO1	5,77	1,065	0,164	0,167	0,166	0,168	0,21	0,141	1																		
CO2	5,90	1,123	0,149	0,153	0,152	0,154	0,192	0,128	0,726	1																	
SAT1	5,66	1,109	0,173	0,177	0,176	0,178	0,222	0,149	0,533	0,486	1																
SAT2	5,60	1,088	0,177	0,181	0,18	0,182	0,227	0,152	0,545	0,497	0,747	1															
COMM1	5,35	1,278	0,164	0,168	0,167	0,169	0,211	0,141	0,505	0,46	0,534	0,546	1														
COMM2	4,51	1,345	0,117	0,119	0,119	0,12	0,15	0,1	0,359	0,328	0,38	0,389	0,612	1													
RO1	3,46	1,674	-0,134	-0,137	-0,136	-0,037	-0,047	-0,031	-0,027	-0,025	-0,029	-0,03	-0,027	-0,019	1												
RO2	3,90	1,748	-0,161	-0,164	-0,163	-0,045	-0,056	-0,038	-0,033	-0,03	-0,035	-0,035	-0,033	-0,023	0,753	1											
RO3	3,89	1,610	-0,11	-0,112	-0,112	-0,031	-0,038	-0,026	-0,022	-0,02	-0,024	-0,024	-0,022	-0,016	0,515	0,619	1										
JS1	5,48	1,134	0,162	0,166	0,165	0,186	0,233	0,156	0,158	0,144	0,167	0,171	0,158	0,113	-0,124	-0,149	-0,102	1									
JS2	5,43	1,008	0,186	0,19	0,189	0,214	0,267	0,179	0,181	0,165	0,192	0,196	0,181	0,129	-0,142	-0,171	-0,117	0,562	1								
JS3	4,84	1,281	0,142	0,145	0,144	0,163	0,204	0,136	0,138	0,126	0,146	0,149	0,138	0,098	-0,108	-0,13	-0,089	0,428	0,491	1							
CP1	5,36	1,040	0,253	0,259	0,257	0,299	0,373	0,25	0,253	0,231	0,268	0,274	0,254	0,181	-0,068	-0,081	-0,056	0,301	0,346	0,264	1						
CP2	5,21	1,074	0,251	0,256	0,255	0,296	0,369	0,248	0,251	0,229	0,265	0,271	0,251	0,179	-0,067	-0,08	-0,055	0,299	0,343	0,261	0,496	1					
CP3	5,39	1,054	0,283	0,29	0,288	0,335	0,418	0,28	0,284	0,259	0,3	0,307	0,284	0,202	-0,076	-0,091	-0,062	0,338	0,387	0,295	0,561	0,555	1				
SP1	5,28	1,005	0,198	0,202	0,201	0,234	0,292	0,195	0,198	0,181	0,21	0,214	0,199	0,141	-0,053	-0,063	-0,043	0,236	0,27	0,206	0,279	0,276	0,312	1			
SP2	5,24	1,057	0,202	0,206	0,205	0,238	0,298	0,199	0,202	0,184	0,214	0,219	0,202	0,144	-0,054	-0,065	-0,044	0,24	0,276	0,21	0,284	0,282	0,318	0,605	1		
SP3	5,14	1,052	0,208	0,212	0,211	0,245	0,306	0,205	0,208	0,189	0,22	0,225	0,208	0,148	-0,055	-0,067	-0,046	0,247	0,284	0,216	0,292	0,29	0,328	0,623	0,635	1	

APPENDIX B - Item labels and measurement model test

CODES	Item labels	λ			
		stand.	σ	t-test	p
<i>Use of sales support technologies (ST)</i>					
TU1	I make maximum use of sales support technologies to help me in my work.	0,90	-	-	-
TU2	I use all the capabilities of sales enablement technologies to improve my results at work.	0,92	0,05	19,26	0,000
TU3	I integrate sales support technologies into my work routine.	0,91	0,05	19,04	0,000
<i>Adaptive Selling Behavior (ASB)</i>					
ASB1	I vary my selling style from situation to situation.	0,70	-	-	-
ASB2	I like to use different sales approaches.	0,87	0,13	8,80	0,000
ASB3	I change my approach from one client to another.	0,59	0,13	7,23	0,000
<i>Quality of the relationship as perceived by the salesperson (RQ)</i>					
<i>Dimension - Confidence (CO)</i>					
CO1	My clients perceive me as a person of integrity.	0,89	-	-	-
CO2	My clients consider me honest in all our transactions.	0,81	0,09	11,12	0,000
<i>Dimension - Satisfaction (SAT)</i>					
SAT1	Overall, I think my clients are very satisfied working with me.	0,86	-	-	-
SAT2	Overall, my clients really enjoy working with me.	0,87	0,08	12,63	0,000
<i>Dimension - Commitment (COMM)</i>					
COMM1	My clients are generally loyal to me over the long term.	0,93	-	-	-
COMM2	My clients are generally willing to make sacrifices to preserve our relationship for the long term.	0,66	0,10	7,81	0,000
<i>Commercial role overload (RO)</i>					
RO1	I don't have time to finish my work.	0,79	-	-	-
RO2	I have too much work to do for one person.	0,96	0,10	12,74	0,000
RO3	The performance standards for my job are too high.	0,65	0,08	9,53	0,000
<i>Job satisfaction (JS)</i>					
JS1	Overall, I am very satisfied with my work.	0,70	-	-	-
JS2	I am generally satisfied with the activities I do at work.	0,80	0,12	8,69	0,000

JS3	Most people in the same type of position as me are very satisfied with their work.	0,61	0,14	7,29	0,000
Performance of the commercial (PC)					
<i>Dimension - Creative Performance (CP)</i>					
CP1	I frequently find original solutions to problems.	0,71	-	-	-
CP2	I often propose new solutions to meet the needs of clients.	0,70	0,12	8,45	0,000
CP3	I am able to help my clients with new solutions that they had not thought of.	0,79	0,12	9,21	0,000
<i>Dimension - Sales Performance (SP)</i>					
SP1	I get better than expected sales results.	0,77	-	-	-
SP2	I am exceeding my sales goals for the year.	0,79	0,11	10,21	0,000
SP3	I have an excellent business performance.	0,81	0,11	10,38	0,000

Appendix C - Figurative presentation of the results of the proposed model



—> Relations statistiquement significatives : * pour $p < 0,05$, ** pour $p < 0,01$ et *** pour $p < 0,001$
 - -> Relations non statistiquement significatives (ns)