

Salesperson improvisation: Antecedents, performance outcomes, and boundary conditions



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ABSTRACT

Premised on the idea that not all salesperson behaviors can be pre-scripted and that, increasingly, salespersons must find ways to respond to unexpected but urgent market conditions, this study theorizes the drivers, outcomes and boundary conditions of salesperson improvisation. Using primary data from industrial salespersons, the study examines how perceptions of resource availability and customer demandingness drive salesperson improvisation and condition its sales performance effects. Findings show that higher levels of salesperson improvisation are associated with increased sales performance. Additionally, a heightened perception of resource availability and greater customer demandingness are associated with increases in salesperson improvisation. Furthermore, findings indicate that the salesperson improvisation–sales performance relationship is strengthened when resource availability is greater and when customer demandingness is lower.

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1. Introduction

Research on industrial sales suggests that firms should develop market responses to satisfy evolving customer demands, address competitive moves, and minimize the impact of other exogenous market forces on their bottom-line (Helm & Gritsch, 2014; Kumar, Subramanian, & Strandholm, 2011). To this end, the industrial sales management literature suggests that firms must rely on their salespersons to maximize their chances of quickly detecting and responding to marketplace uncertainties (Lambert, Marmorstein, & Sharma, 1990). The logic is that salespersons have first-hand knowledge of customers' evolving needs and preferences and are therefore best positioned to respond (Wang & Netemeyer, 2004). Additionally, given salespeople's direct access to key competitor intelligence, they represent the 'database' of firms' intelligence and should therefore be involved in the design and execution of competitive strategies (Hughes, Le Bon, & Rapp, 2013).

Scholarly research examining salesperson behavior suggests a planning-based approach to decision-making, whereby selling decisions are argued to be predicated on rationality and sequential market

information processing/optimization (Moncrief & Marshall, 2005). While this planning-based approach has advanced knowledge on the industrial selling process, it is important to bring to fore the apparent lack of knowledge on a descriptive approach to selling. Particularly in the contemporary fast-paced and unpredictable business world where customers define satisfaction by timely responsiveness (Tom & Lucey, 1997), the need to understand variations in salesperson behaviors as a function of contextual requirements has heightened. As Singh and Koshy (2010) argue, the situation-specific nature of contemporary selling demands that models of effective selling account for specific types of sales situations, choosing only those variables (specific set of skills) that explain performance in those situations.

As such, we specifically argue that not all industrial selling behaviors are pre-scripted and that in the increasingly uncertainty-laden competitive landscape, the role of more emergent selling behaviors may be more relevant. Given that salespersons are normally pressured to respond in the moment to market conditions (Chonko, Jones, Roberts, & Dubinsky, 2002), this study argues that the litmus test for sales success may not only lie in how much sales planning is done, but also by the extent to which salespersons can generate and implement context-relevant solutions when it matters most.

Different options exist for achieving such contextual relevance and subsequent sales success. First, salespersons may employ adaptive selling approaches by varying their sales presentations based on customer characteristics (Sujan, Weitz, & Kumar, 1994). A second option is the

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application of real-time creativity during customer interactions (Strutton, Pentina, & Pullins, 2009; Wang & Netemeyer, 2004). While both approaches have been proven useful (Franke & Park, 2006; Martinaityte & Sacramento, 2013; Spiro & Weitz, 1990; Wang & Miao, 2015), theory and empirical evidence are lagging with regard to how salespersons act under conditions of surprise and exigency. To this end, this study investigates the question: what happens when salespersons must think and act on their feet when faced with unexpected and urgent situations for which they have no clear strategy? To shed light on this question, we propose the notion of salesperson improvisation, and identify its antecedents, outcomes and boundary conditions.

We define salesperson improvisation as a behavior (exhibited in sales situations) that is not 'pre-scripted' but rather conceived and implemented extemporaneously. Through the lens of descriptive decision-making theory we link salesperson improvisational behavior to sales performance. Given that the sales literature points to emergent behavior as a direct outcome of customer-related, (Wang & Netemeyer, 2004) and firm-related (Bonney & Williams, 2009) environmental drivers, we examine how salespeople's perception of customer demandingness and resource availability give rise to salesperson improvisation and condition improvisation's effect on sales performance. In doing so, our study makes several contributions to the industrial sales management literature.

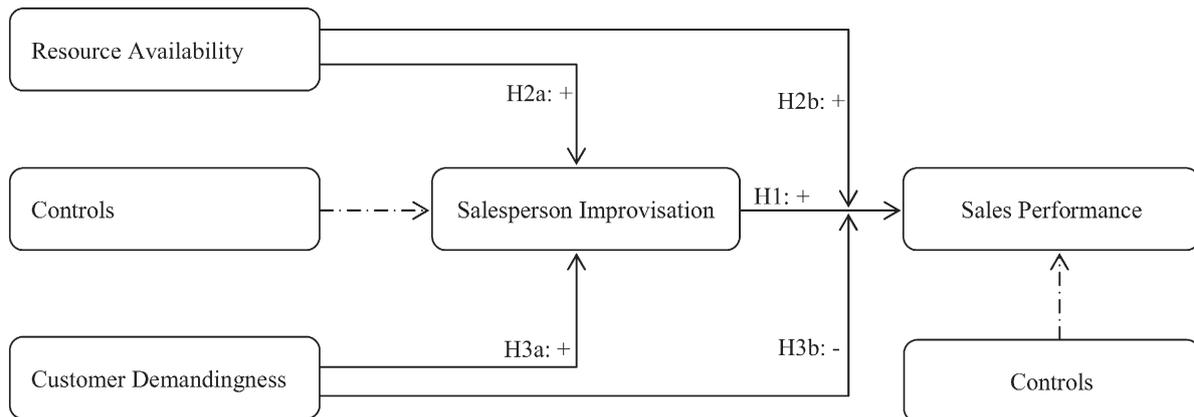
First, our conceptualization of the salesperson improvisation construct within the individual selling context helps broaden knowledge of the improvisation phenomenon that until now has largely been studied at the broader organizational level (e.g. Moorman & Miner, 1998; Nemkova, Souchon, & Hughes, 2012; Nemkova, Souchon, Hughes, & Micevski, 2015; Vera & Crossan, 2005). Second, by viewing the salesperson improvisation–sales performance linkage from a descriptive decision-making lens we expound an alternative mechanism connecting salesperson behavior to performance. Third, by examining resource- and customer-related drivers and boundary conditions of salesperson improvisation, this study provides fine-grained recommendations on how sales organizations can engender improvisation in their sales force, and the conditions under which improvisation helps or hinders sales. Finally, given that improvisational behavior in the selling process may be driven by a lack of primary and enabling infrastructure such as communication channels and regulatory discipline (Sheth, 2011), and in view of scarce emerging markets sales scholarship (Panagopoulos et al., 2011), we broaden existing perspectives on industrial selling research by testing our theoretical framework (Fig. 1) in an emerging market setting.

2. Theoretical background and hypotheses

2.1. Salesperson improvisation: its definition and distinctiveness

Improvisation draws its roots from 'proviso', which means a provision made in advance of the occurrence of an event (Weick, 1998). The prefix 'im' negates the structured orientation of 'proviso' to create the opposite which is 'improvise'. As such, improvisation refers to behaviors that occur in the absence of predetermined stipulation. Whereas a typical behavior composition is thought to precede its execution, in improvisation, the time gap between the two is narrow and hardly separable; hence their convergence (Moorman & Miner, 1998). Accordingly, improvisation has been defined as a convergence of behavior composition and execution reflecting the conception of action as it unfolds (Cunha, Cunha, & Kamoche, 1999). This definition of improvisation is rooted in jazz music and theatrical performance. In jazz music, improvisation is often viewed as "the creation of music in the course of performance" (Nettl & Russell, 1998, p. 2) or as composing and performing in real time by reworking pre-composed material in a new creative way (Kamoche, Cunha, & Cunha, 2003). Specifically, jazz music performance research suggests that the creative process of composing music and the resulting jazz music product co-occur. Studies focusing on the creative processes during jazz performance indicate that the jazz musicians' cognitive processing capacity during real time jazz performance is constrained, to the extent that the amount of time available for decision making during a composition and performance is minimal (e.g., Gabrielsson, 2003). Accordingly, scholars have developed psychological models of jazz improvisation to argue that jazz performance is characterized by a note-by-note process of musical decision making that occurs spontaneously (e.g., Johnson-Laird, 2002; Pressing, 1988). In theatrical improvisation viewers' immediate reactions replace a predetermined plot (Barrett & Peplowski, 1998). Instead actors continuously work with the audience, process real-time information flow and react accordingly; actors see the audience's feedback and amend their performance in response. When the theatrical improvisation metaphor is mapped onto an organizational context, similar logic applies: "In business, customers are like the audience. Improvisational processes can affect customer satisfaction when work teams deal with customers' requirements and handle unexpected problems or unreasonable requests" in real time (Vera & Crossan, 2004 p. 739).

Therefore, in moving beyond the jazz music and theatrical performance contexts, organizational scholars (e.g., Meyer, 1998; Nemkova et al., 2015) have relied on the core tenet of the improvisation construct



Controls: Adaptive selling behavior; pressure to perform; competitive intensity; compensation type; client relationship length; selling context; industry type; product type; selling experience; and salesperson autonomy

Fig. 1. Conceptual model. Controls: adaptive selling behavior; pressure to perform; competitive intensity; compensation type; client relationship length; selling context; industry type; product type; selling experience; and salesperson autonomy.

(i.e., the notion of being spontaneous) to explain the process of formulating and implementing solutions to intractable problems in the 'nick of time'. Additionally, the educational psychology literature refers to the improvisation construct as the act of thinking in the middle of an action (Irby, 1992). It appears, therefore, that the key definitional characteristic of the improvisation construct lies in the temporal distance between behavior composition and behavior execution, to the extent that improvisational behavior is exhibited when the two events are proximate in time (Moorman & Miner, 1998). This is akin to the concept of "thin-slicing", advanced by Gladwell (2007), whereby decisions are often made in an automated, accelerated way, replacing a painstaking pattern of analysis.

Against this backdrop, salesperson improvisation refers to salesperson behavior (exhibited in sales situations) that is not 'pre-scripted' but rather conceived and implemented extemporaneously. To ensure that this definition is practically relevant we conducted 10 personal interviews with sales managers and executives in multiple industries to seek their viewpoints on the notion of improvisation in the selling process. The interviews revealed that improvisation is pervasive in the selling process and does encapsulate salespersons having to generate and action solutions in exigent situations. Interviewees described their improvisation as typically involving 'having to figure out responses as one goes along', 'thinking and acting on one's feet' and 'thinking and acting in the moment'.

Examples of improvisation recounted include one in which the salesperson needed to redeem a sale that nearly fell through. The client had asked for a discount on a product for which there was no discount offer and was threatening to pull out: *"I encountered a situation like that where I called my boss and he told me that we don't give discounts on this product and we will not do it. The alternative was that the whole thing will be returned. We had made a sale of over 25,000 and it was just one product that we didn't give the discount on. This party was going to return the whole range because of that particular product that we didn't give the discount on. And then I told him (the boss) that (normally we have products near expiry that if we don't sell, we burn them), these products will be destroyed. So instead of giving these people the ten percent in money, why don't we give them extra stock which is near expiry which they will choose to sell first and still make their profits? We wouldn't have given them extra cash, but we would have made them happy. Then my boss was like this is good thinking, let's do this, which we did and then the sale went through"*.

Based on this combined scholarly and practitioner understanding of the construct, we argue that improvisation involves having to think while acting in sales situations where prior behavioral blueprints (e.g., plans) are lacking. Such sales situations include those requiring immediate action and occur when planning has not provided sufficient details for the salesperson to act upon (Moorman & Miner, 1998). Scholarly marketing research examining the improvisation construct has applied it to the sub-disciplines of new product development (Vera & Crossan, 2005), export marketing (Nemkova et al., 2012), and services marketing (Cunha et al., 1999). Across these research streams it is understood that improvisation is activated when it is impossible to negotiate more time for responding to a problem or an opportunity, forcing individuals to think and act in the moment. Given the exigency and surprise context in which the improvisation construct is often enacted, improvisation exudes bounded rationality and an increased reliance on heuristic and satisficing behavior to the extent that improvisers must act their way into clearer territories (Vera & Crossan, 2004).

Given this conceptualization of salesperson improvisation, there is a risk of equating it to adaptive selling. However, the two are conceptually distinct (Moorman & Miner, 1998). Whereas salesperson improvisation is an emergent behavior characterized by a temporal fusion of composition and action (Cunha et al., 1999; Moorman & Miner, 1998), in adaptive selling, a time lag between the two can exist. In fact, adaptive selling may be planned ahead of time. Defined as variations in sales behaviors during and across customer interactions based on market intelligence,

adaptive selling allows for planning as it requires intelligence generation as a precursor to its application (Spiro & Weitz, 1990). Indeed, Sujan, Weitz, and Kumar (1994, p. 40) consider "engaging in planning" to be a manifestation of 'working smart' which is closely related to adaptive behavior. Critically, the two concepts differ not just in terms of their application but also their domains. Vera and Crossan (2005) also suggest that improvisation, being spontaneous and real-time bound, can be employed as an adaptation strategy suggesting that while related, the scope of the two constructs are conceptually different. While this suggests that adaptive selling is sufficient for contextual relevance, it does not tap into the temporal nuance that surrounds a context and how this pressurizes salespersons to think while acting. Thus, unexpected and urgent sales problems may require improvisatory responses over and above adapting to a situation. Therefore, we argue that while adaptive selling has proved critical for sales success, in today's time pressured markets a salesperson's improvisatory responses may be even more relevant as they enhance the opportunity to be responsive when it matters most to customers.

2.2. Decision-making theory

Decision-making scholarship provides two key approaches: normative and descriptive (Grant, 2003). The normative approach views decision-makers as capable of making optimal and rational choices. The optimizing benefit of this route accrues from generation and analysis of relevant information surrounding a choice situation leading to effective decisions. Simon (1960) uses the concept of programmability to capture the essence of the normative approach by arguing that because programmed decisions are largely routinized with a structured and defined starting point, such decisions provide pre-emptive roadmaps to predict decision goals. Normative sales literature suggests that the selling process follows rational planning progression (Sujan et al., 1994), which manifests in the time and effort dedicated to gathering intelligence as a precursor to effective sales strategy formulation, implementation, and control (Spiro & Weitz, 1990).

Notwithstanding the contribution of normative sales research, it is increasingly clear in today's dynamic business environment that the descriptive approach to decision-making provides a fruitful alternative approach to managerial and employee decision-making (Nemkova et al., 2012). The descriptive decision-making approach proposes that decision choices are inherently bounded in rationality since "actual decisions flow from cognitive limitations, political processes, routines and environmental constraints" (Haley & Stumpf, 1989, p. 477), placing greater emphasis on what is happening now rather than predicting what to do next (Wiltbank, Dew, Read, & Sarasvathy, 2006). It argues that deviations from planned strategies are too commonly observed in reality to be ignored (Tversky & Kahneman, 1986), with evidence suggesting that decision choices tend to be focused on generalized problem solving skills, experience, and in-the-moment assessments of situations (Perkins & Rao, 1990). Decision scholars therefore argue that the resulting actions following the descriptive approach tend to be heuristic-based (Slovic, Fischhoff, & Lichtenstein, 1977) and spontaneous (Quinn, 1980).

Linking descriptive decision theory logic to salesperson improvisational behavior, we argue that improvisation being a heuristic-based and satisficing form of behavior set in bounded rationality exemplifies descriptive choice. Further, we argue that because salespersons often function in boundary roles that bring them in direct contact with challenging and "vaguely structured" situations (Wang & Netemeyer, 2004, p. 806), the litmus test for sales success becomes not just how much planning salespersons start off with, but rather upon salespersons' ability to make context-relevant choices, and act on them when it matters most (Cunha et al., 1999; Moorman & Miner, 1998). In other words, salespersons' abilities to improvise their way into clearer territories might be a critical predictor of their success.

Consequently, we drew insights from the descriptive approach to decision-making to argue our hypotheses.

2.3. Salesperson improvisation and sales performance

Improvisational behavior, being descriptive in nature and context-relevant (Nemkova et al., 2012), is expected to increase salespersons' ability for devising relevant solutions to customers' emergent needs (Wang & Netemeyer, 2004). As improvisation propels action when it matters most (Weick, 1998), it should confer timely responsiveness which works to the salesperson's advantage. In today's complex business-to-business sales situations, real responsiveness lies not only in generating solutions to market conditions, but also in doing so timeously (Homburg, Grozdanovic, & Klarmann, 2007). Additionally, given that spontaneous actions may yield differentiated solutions, salespersons who improvise responses may be difficult to match, thus, depressing competitors' ability to make similar offers (Moreno & Moreno, 1944).

H1. Salesperson improvisation is positively related to sales performance.

2.4. Antecedents and boundary conditions

2.4.1. Salesperson perception of resource availability

We propose that increases in salespeople' perceptions of resource availability are associated with increases in salesperson improvisational behavior. In organizational settings, resource constraints are associated with a predilection towards adherence to plans and limited deviations from them (Covin, Slevin, & Schultz, 1997). According to Bonney and Williams (2009), having abundant resources (such as support personnel and discretionary financial capital) enable salespersons to follow their ideas through to completion. Thus, across sales situations, salespeople who feel adequately equipped with necessary resources are more likely to exert improvisational effort to meet market conditions. Resource sufficiency affords salespersons the opportunity to positively appraise their ability to effectively improvise to situations, thus driving them towards action (Lazarus & Folkman, 1984). Thus, salespersons with adequate resources will likely feel they have the latitude to maximize customer satisfaction and generate greater sales and are, therefore, more likely to improvise.

H2a. Salesperson perception of resource availability is positively related to salesperson improvisation.

As a moderator, it appears resource availability enhances the benefits of salesperson improvisation. Resource scarcity can be restrictive on the attempted improvisation as salespersons are conscious of their limitations (Bonney & Williams, 2009) reducing the opportunity to leverage the performance benefits of salesperson improvisation. More importantly, improvising with limited resources might lead to imperfect solutions that fail to satisfy customers (Baker & Nelson, 2005), or worse, make customers feel taken for granted. Conversely, when there is an abundance of resources available to the salespersons, they have additional latitude (and incentive) to maximize customer satisfaction. For example, where support staff is readily available, the salesperson has the luxury to provide additional service to customers when requested. Slack financial resources will further provide the salesperson flexibility to offer additional incentives and discounts to customers, thus enhancing satisfaction and sales growth.

H2b. The positive effect of salesperson improvisation on sales performance is strengthened when resource availability is high.

2.4.2. Salesperson perception of customer demandingness

Customers want market offerings that not only meet their changing needs and but also amplify their preferences (Bonney & Williams, 2009;

Jaworski & Kohli, 1993). As such, customer demandingness (the extent to which customers are thought to demand a perfect fit between their needs and market offerings) may signal a gap between a firm's market offerings and customers' needs (Wang & Netemeyer, 2004), requiring that salespersons improvise to timeously match the two. According to Wang and Netemeyer (2004, p. 219), perceptions of customer demandingness form an aspect of task difficulty and serve to drive salespersons to go the extra mile" in their effort to devise tailored solutions to customer problems. Thus, we expect that rather than giving up on demanding customers, salespersons would exert additional improvisational effort to match customer needs with the right market offerings (Bonney & Williams, 2009; Jaramillo & Mulki, 2008):

H3a. Salesperson perception of customer demandingness is positively related to salesperson improvisation.

Although customer demandingness may drive salesperson improvisation, we expect that the efficacy of salesperson improvisational behavior to generate sales success weakens with highly demanding customers. Demanding customers can be unrelenting in their expectations, putting salespeople under excessive pressure during the improvisational process (Bonney & Williams, 2009; Cano, Sams, & Schwartz, 2009). A potential consequence, therefore, is that an improvising industrial salesperson ends up taking haphazard decisions, which fail to meet customers' expectations and needs, and subsequently engender lost sales (Taute & McQuitty, 2004). Secondly, efforts to satisfy high demanding customers may require application of greater firm resources than usual (e.g., greater sales promotions and discounts), causing a reduction in the overall financial benefits from the sales gains (Jaramillo & Mulki, 2008). It appears that relative to customer demandingness, improvisation exemplifies the trade-off effect which Moorman and Miner (1998) allude to. They found that organizational memory has contrasting effects (as driver and moderator) on improvisation suggesting that the same "feature that makes improvisation effective is likely to reduce the chances of its occurrence" (Moorman & Miner, 1998, p. 15). In our case, it is argued that while too little customer demandingness may inhibit salesperson improvisation, extreme levels may render such improvisation ineffective.

H3b. The positive effect of salesperson improvisation on sales performance is weakened when customer demandingness is high.

3. Methods

3.1. Research context and data collection

The data for this study was collected from a sample of sales professionals working in Ghana-based industrial firms. Ghana is an appropriate context to test our conceptual model for several reasons. First, Ghana has successfully operated an open market economy for more than three decades, providing an important contextual environment to investigate how theories based on the behavior of Western industrialized salespeople perform in an emerging economy setting. Second, like many other emerging market economies, Ghana's GDP growth rates have outstripped many developed economies, indicating an appropriate setting to examine improvisational behavior of industrial salespeople in a growing and yet institutionally-challenged economies. Third, while Ghana remains the easiest place to do business in West Africa (World Bank, 2011), resources (e.g., financial capital) are hard to come by due to underdeveloped capital markets and subsistent-based consumption. Thus, studying industrial salespeople in Ghana provides a typical emerging market perspective on debates about industrial selling processes.

Salespersons in industrial organizations with defined sales roles were sampled for the study. Specifically, we identified 4125 industrial

organizations listed in the 2012 Ghana business directory and Ghana association of industries database (Acquaah, 2012) that had at least 5 employees, and operated industrial (i.e., business to business) activities. To balance cost of survey administration and sample size required to achieve statistical power, and in view of the heavy concentration of Ghana's commercial activities in a few cities (Grant, 2001), we limited our sampling to four commercial cities (Accra, Tema, Takoradi and Kumasi). Consequently, a cover letter was sent to the divisional heads of a random sample of 1472 firms. The divisional heads then introduced the study to 400 salespersons in their respective firms. One co-author and trained researcher subsequently administered structured questionnaires in person to the 400 salespersons. Upon informants' requests 16 questionnaires were administered online (via email). After several rounds of reminders and informant visits, 224 questionnaires were returned fully completed, yielding an overall response rate of 56%. An initial screening indicated that five questionnaires had been completed by persons whose roles did not entail direct selling contacts with industrial buyers. Consequently, the effective final sample is 219 industrial salespersons out of which 173 are male and 46 female, with an average of six years' industrial selling experience.

3.2. Measures

We used multi-item measures anchored on seven point Likert-type scales for all constructs. Our dependent variable, *sales performance* ($\alpha = .82$), defined as the level of sales achievement of a given salesperson in meeting the sales targets, increasing market share, and selling products with higher profit margins, is based on the salesperson's own assessment of their success or failure in meeting set targets (Sujan et al., 1994). *Salesperson improvisation* ($\alpha = .74$) is conceptualized as the conception of action as it unfolds (Cunha et al., 1999) and was measured by asking respondents to indicate the extent of their agreement/disagreement with the following across typical sales situations: "I figure out my responses as I go along"; "I think and act on my feet" and "I respond in the moment". The items were based on scholarly conceptualizations of the improvisation construct (Vera & Crossan, 2005) and reflected interviewees' articulation of its essence during the preliminary interviews. *Resource availability* ($\alpha = .95$) refers to salespersons' perception of the availability of relevant resources (tangible and intangible) for carrying out sales-related decisions (Bonney & Williams, 2009), while *Customer demandingness* ($\alpha = .80$) is conceptualized as the salesperson's perception of how demanding his/her customers are relative to their expectations of quality and technical sophistication of products/services (Wang & Netemeyer, 2004), with high levels suggesting greater customer demandingness.

We also included several firm-, industry-, and salesperson-level variables to control for possible confounds as previous research suggest that these variables might influence a salesperson's improvisation and sales performance levels. The control variables included competitive intensity (Jaworski & Kohli, 1993), pressure to perform (Robertson & Rymon, 2001), adaptive selling behavior (Spiro & Weitz, 1990), and compensation type (percent of remuneration in salary versus commissions on an 11-point scale). A high score on the upper axis indicates a higher margin of compensation in salary and a corresponding low margin in commissions (Slater & Olson, 2000). Additionally, we controlled for length of relationship with client with whom the salesperson tends to improvise most (Dagger, Danaher, & Gibbs, 2009), the selling context (Theodosiou & Katsikea, 2007), industry type (Armstrong & Sweeney, 1994), product type (Lian & Lin, 2008), salesperson selling experience – measured by number of years a salesperson had been working in a sales job, a company, and industry (Rapp, Ahearne, Mathieu, & Schillewaert, 2006), and the extent to which a salesperson is allowed to make autonomous sales decisions (Wang & Netemeyer, 2002). Appendix A contains a complete list of the measures used, their sources and results of construct validity tests.

3.3. Analyses

3.3.1. Measure validation

We undertook confirmatory factor analysis (CFA) using the maximum likelihood estimation procedure in LISREL 8.71 to evaluate reliability and validity of the multi-item measures. Model fit was assessed using traditional chi-square (χ^2) test together with a number of approximate fit heuristics. Given that findings from the study are extracted from a single informant in each firm, we followed the approaches used by Carson (2007) and Lindell and Whitney (2001) to control for common method variance (CMV). First, we followed Carson (2007) to estimate a combined congeneric measurement model by estimating a CFA model for all multi-item scales together with a common method factor that was modeled to load on all items.¹ In that way we controlled for any variance and covariance that was introduced as a result of obtaining responses from a single informant. We set the covariance between the method factor and the latent constructs, and the variance of the method factor to unity. The process involved estimation of two competing models: Model 1 was a trait-only model in which each indicator was loaded on its respective latent factor. The results show good model fit: $\chi^2/D.F. = 578.16/288$; $p < .01$; RMSEA = .06; NNFI = .92; CFI = .93; SRMR = .06. In Model 2 we estimated a trait-method model involving inclusion of a common factor linking all the indicators. Model 2 results show an acceptable model fit: $\chi^2/D.F. = 548.09/260$, $p < .01$; CFI = .96; NNFI = .95; SRMR = .04; RMSEA = .05. Although the chi-square statistic for both models is significant at 1% level, the p-value of the test of close fit (RMSEA $\leq .05$) yields .06 and .08 respectively, suggesting a reasonable probability of accepting the fit of the measurement model. A comparison of the two models indicates that Model 2 is not substantially superior to Model 1.

Second, Lindell and Whitney's (2001) method marker test was followed to analyze the correlation between a marker variable and the study's constructs. We used "There are too many demands on my time" as our marker variable, which is a measure of *role overload*, and therefore not theoretically related to any construct in the conceptual model. Results show non-significant relationships, with correlations ranging from $-.01$ to $.03$. Furthermore, in view of the fact that our conceptual model includes multiple moderating effect relationships, it is unlikely that informants would find it easy to form mental models of the studied relationships (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Accordingly, we argue that common method variance does not pose a serious threat to the results. Factor loadings for each multi-item construct from the trait-only model are significant at 1% level, with loadings ranging from .66 to .98 (details are available in Appendix A).

3.3.2. Convergent and discriminant validity tests

The reliability and validity of each construct are reported in Appendix A. Specifically, the attenuated composite reliability (CR) and attenuated average variance extracted (AVE) values (i.e. CR and AVE values calculated in the presence of a common method factor) are all above .60 and .50 respectively. In addition, the percentages of variance explained by the traits measured are significantly higher than the variance explained by common method factor and error. Importantly, as Appendix A reveals, the Method and Error columns provide evidence to show that the amount of variance in each of the model factors explained by a common method factor and an error term are not substantial to be of any major concern. A further inspection of the highest shared variances (HSV) between each pair of multi-item construct and the comparison of the HSVs to the AVEs show that the AVEs are larger than the HSVs in all cases, indicating that reliability, and convergent and discriminant validities are established in the data (Fornell & Larcker, 1981). As can be seen in Table 1, the relationship between salesperson improvisation and other related constructs (including adaptive

¹ We thank an anonymous reviewer for suggesting this test to us.

Table 1
Descriptive statistics and inter-construct correlations.

Constructs	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Salesperson improvisation	5.15	.86	.74													
2. Resource availability	5.32	1.14	.42**	.95												
3. Customer demandingness	6.14	.83	.24**	.22**	.80											
4. Sales performance	5.12	.78	.17*	.22**	.19**	.82										
5. Adaptive selling behavior	5.53	.76	.19**	.30**	.39**	.15*	.81									
6. Pressure to perform	5.59	1.08	.26**	.29**	.32**	.01	.26**	.87								
7. Competitive intensity	5.81	.81	-.03	-.07	.35**	-.06	.18**	.27**	.88							
8. Compensation type	3.39	2.12	.07	-.06	-.01	.07	-.03	.02	-.07	-						
9. Relationship length	2.58	1.24	.05	-.05	-.07	-.03	.08	-.22**	-.08	.05	-					
10. Selling context	1.66	.93	-.08	.02	-.12	.13*	-.03	-.08	-.24**	.07	.17*	-				
11. Industry	.74	.44	-.07	-.15*	-.07	-.16*	-.04	-.08	.12	-.11	-.03	-.31**	-			
12. Product type	.40	.49	-.10	-.13	-.10	-.15*	-.08	-.19**	-.05	-.00	.11	.05	.35**	-		
13. Selling experience	4.52	2.71	-.05	-.03	.14*	.07	-.01	.05	.09	.17*	.39**	.03	.02	.06	.84	
14. Salesperson autonomy	5.13	1.25	.29**	.32**	.39**	.05	.34**	.17**	.20**	.04	.01	-.12	.02	-.04	.05	.85

*Correlation significant at the 0.05 level (2-tailed); **Correlations significant at the 0.01 level (2-tailed); SD = standard deviation; alpha values for multi-item constructs are reported on the diagonal.

selling) in the model are below .50, indicating that the constructs differed markedly from each other.

3.3.3. Structural model estimation approach

Following established precedence (e.g., Patel, Kohtamäki, Parida, & Wincent, 2015) we used structural equation modeling and maximum likelihood estimation method to test a system of nested structural models in path analyses. The literature suggests that when measurement errors are likely to be high in constructs, it is important that structural paths and measurement models are estimated simultaneously in a full information equation model (Jaccard & Wan, 1996). However, in our case, all the measures used to measure our constructs have been well-validated in prior research. Additionally, together there are 27 paths in our model with 219 effective samples, violating the recommended 15 cases per construct for structural equation modeling (Tabachnick & Fidell, 2010). Hence, we followed the procedures used by Patel et al. (2015) to use latent moderated structural (LMS) modeling to test our path analysis model and the mean values of our multi-item constructs in LISREL 8.71. As Patel and colleagues argue, the LMS approach produces estimates that are less biased but more efficient in modeling interactions with relatively small sample sizes. Since the use of single indicants within interaction-based structural models also helps reduce model complexity (Jaccard & Wan, 1996), we used averages across the multi-item constructs to generate single item scores.

We then followed the approach recommended by Ping (1995) to calculate the error variances of the single item measures in our conceptual model and single item interaction terms. Having orthogonalized (i.e., mean-centered) all the variables that were involved in multiplicative terms in our structural model, we followed Ping (1995) to multiply the respective variables involved in the interactions (i.e., salesperson improvisation multiplied by resource availability, and salesperson improvisation multiplied by customer demandingness). We then estimated a structural model and set the error variance of the latent variables at $[(1 - p) \times \sigma^2]$, where p is the construct reliability, and σ is the sample standard deviation of each construct, enabling us generate estimates for the factor loadings and error variances of the linear terms in the structural model. For the single indicant measures (such as relationship length and compensation type) we assumed a composite reliability value of .70 when calculating the error variances. We then used Ping's (1995) equations to calculate the item loadings and error variances of the interaction terms.

Consequently, Eqs. (1) and (2) were produced and estimated using moderated structural modeling, enabling us to observe and compare

changes in model fit statistics of multiple nested models.

$$\begin{aligned} \text{Salesperson improvisation} = & \gamma_0 + [\gamma_1 \text{CSA} + \gamma_2 \text{LEN} + \gamma_3 \text{SEL} + \gamma_4 \text{IND} \\ & + \gamma_5 \text{PRO} + \gamma_6 \text{ADA} + \gamma_7 \text{PRE} + \gamma_8 \text{COM} \\ & + \gamma_9 \text{EXP} + \gamma_{10} \text{AUT}] + [\gamma_{11} \text{RES} + \gamma_{12} \text{CUD}] \\ & + \varepsilon_1 \end{aligned} \tag{1}$$

$$\begin{aligned} \text{Sales performance} = & \gamma_0 + [\gamma_1 \text{CSA} + \gamma_2 \text{LEN} + \gamma_3 \text{SEL} + \gamma_4 \text{IND} + \gamma_5 \text{PRO} \\ & + \gamma_6 \text{ADA} + \gamma_7 \text{PRE} + \gamma_8 \text{COM} + \gamma_9 \text{EXP} + \gamma_{10} \text{AUT}] \\ & + [\gamma_{11} \text{IMP} + \gamma_{12} \text{RES} + \gamma_{13} \text{CUD}] \\ & + [\gamma_{14} \text{IMP} \times \text{RES} + \gamma_{15} \text{IMP} \times \text{CUD}] + \varepsilon_1 \end{aligned} \tag{2}$$

where: salesperson improvisation (IMP); resource availability (RES); customer demandingness (CUD); competitive intensity (COM); pressure to perform (PRE); adaptive selling (ADA); compensation type (CSA); length of relationship with clients (LEN); selling context (SEL); industry type (IND); product type (PRO); selling experience (EXP); salesperson autonomy (AUT); and ε_1 (error terms).

4. Results

Table 2 presents the results of the standardized coefficients, fit statistics, percentage of variance explained in the criterion variables, and the variance inflation factor (VIF) of the structural paths estimated. We find that the fits of our proposed conceptual model against alternate models are significantly different (see Table 2). Findings indicate that the largest VIF across all equations is 1.80, suggesting that multicollinearity does not undermine stability of the estimated coefficients. Results also show that our explanatory variables explain 14% of the total variance in sales performance (Models 5 and 6). The total variance explained in improvisation is 21% (Model 3). In line with the established sales literature (Futrell & Parasuraman, 1984), we interpret the findings using two-tailed tests (critical t-value = 1.96; p-value < .05).

Regarding the hypothesized paths, H1 specifies that the relationship between salesperson improvisation and sales performance is positive and linear. Table 2 indicates that the parameter estimate for H1 is positive but not significant ($\gamma = .13, p < .10$); hence H1 is not supported at 5% level. However, H1 is nested in H2b, and H2b is accepted ($\gamma = .23; p < .01$). Our study provides support for H2b if the parameter estimate for H2b (a higher-order structural path within which H1 is nested) is positive and significant at 5% level. Findings show that at higher levels of resource availability, the relationship between salesperson improvisation and sales performance becomes positive and significant. This also therefore provides support for H1, since we uncover a positive

Table 2
Results of hypothesis tests.

Independent variables	Salesperson improvisation		Sales performance			Results
	Model 1	Model 2	Model 3	Model 4	Model 5	
<i>Control paths</i>						
Adaptive selling behavior	.19**	.21**	.26*	.31*	.40*	
Pressure to perform	.21**	.21**	-.03	-.10	-.13 [†]	
Competitive intensity	-.16*	-.10 [†]	-.08	-.07	-.07	
Compensation type	.06	.11	.03	.02	.07	
Client relationship length	.13 [†]	.16 [†]	-.17*	-.17*	-.17*	
Selling context	-.12	-.11	.09	.11	.11	
Industry type	-.06	-.01	-.12 [†]	-.11	-.04	
Product type	-.05	-.03	-.14 [†]	-.13 [†]	-.12	
Selling experience	-.02	-.05	.16	.15 [†]	.14 [†]	
Salesperson autonomy	.16*	.13 [†]	.05	-.03	-.11	
<i>Hypothesized direct effect paths</i>						
H1: Salesperson improvisation (IMP)		NA		.16 [†]	.13 [†]	Supported [‡]
H2a: Resource availability (RES)		.40***		.06	.02	Supported
H3a: Customer demandingness (CUD)		.20**		.10	.13*	Supported
<i>Hypothesized moderating effect paths</i>						
H2b: IMP × RES					.23**	Supported
H3b: IMP × CUD					-.22*	Supported
<i>Goodness of fit indicators</i>						
χ ² /D.F.	72.01/26	42.74/24	68.43/35	60.19/32	48.75/30	
Δχ ² /ΔD.F.	—	29.27/2***	—	8.24/3**	11.44/2**	
RMSEA [#]	.09	.06	.07	.06	.05	
SRMR	.05	.03	.04	.03	.02	
NNFI	.91	.96	.89	.90	.95	
CFI	.92	.97	.95	.97	.99	
R ²	.12	.20	.10	.14	.19	
ΔR ²	—	.08***	—	.04*	.05*	
Largest VIF value	1.24	1.34	1.37	1.77	1.80	

***p < .001; **p < .01; *p < .05; [†]p < .10; Critical t-values for hypothesized paths = 1.96 (5%, two-tailed tests); [#] = 90% confidence interval for RMSEA = .03; .05 and the p-value for the test of close fit (RMSEA ≤ .05) = .35; [‡] = H1 is supported because parameter estimate for H2b is positive and significant at 5% level.

and significant relationship between improvisation and sales performance when resource availability is high. Thus, there is strong support for our argument that salesperson improvisation is positively related to sales performance when resource availability increases in magnitude. Hypothesis 2a argues that increases in salesperson perception of resource availability is related to increases in salesperson improvisation, and is supported ($\gamma = .40$; $p < .001$). The test for H3a supports our expectation of a positive relationship between perception of customer demandingness and salesperson improvisation ($\gamma = .20$; $p < .01$). Finally, the data supports H3b, which argues that salesperson improvisation weakens sales performance when customer demandingness is high ($\gamma = -.22$; $p < .05$).

We followed (Aiken, West, & Reno, 1991) to further decompose and compare the significant interaction terms. First, the effect of improvisation on sales performance was computed below and above the mean values (-/+1 SD of mean) of resource availability and customer demandingness. Findings, as reported in Fig. 2, show that the positive effect of improvisation on sales performance is positive at high levels of resource availability, but negative at low levels of resources availability.

Similarly, Fig. 3 shows that the positive effect of improvisation on sales performance is weakened at high levels of customer demandingness, but more positive at low levels of customer demandingness.

To further establish the robustness of our findings, we analyzed an alternative model to rule out a potential argument that salesperson improvisation has a curvilinear relationship with performance. Specifically, one may argue that because Vera and Crossan (2005) suggest that improvisation *per se* may not explain variance in performance, given that Hmieleski and Corbett (2008) find no direct link between improvisation and new venture performance, and because our data reveals a non-significant direct relationship between salesperson improvisation and sales performance, perhaps there is a curvilinear relationship between improvisation and sales performance. Accordingly, we included a squared term of the orthogonalized improvisation variable and re-estimated our structural model. The findings show an inferior model fit and non-significant coefficient between improvisation-squared and sales performance ($\Delta\chi^2/\Delta D.F. = 2.66/2$; $\gamma = -.02$; $p > .10$). Interestingly the direction and strength of the main and interaction effect paths remained qualitatively unchanged.

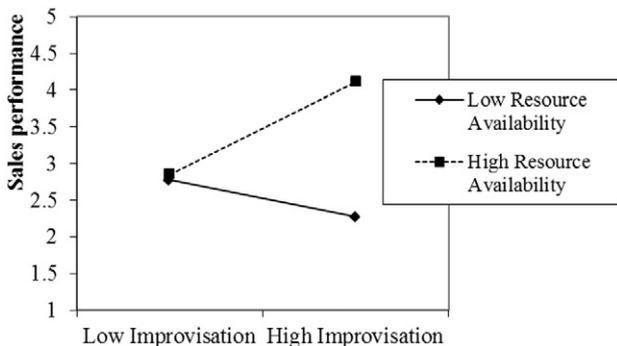


Fig. 2. Interaction plot of the moderating effect of resource availability.

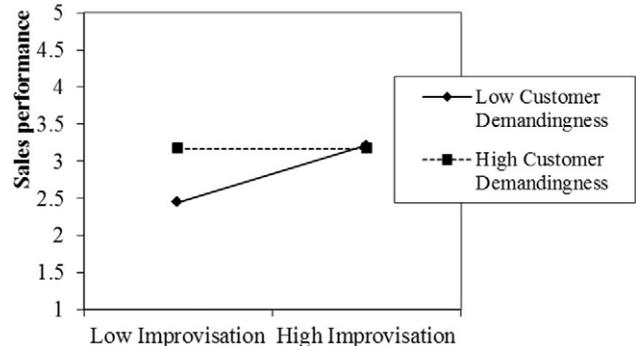


Fig. 3. Interaction plot of the moderating effect of customer demandingness.

5. Discussion

While salesperson behavior under uncertainty and urgent conditions continues to attract managerial attention and academic inquiry, extant scholarly discussions on the topic is dominated by the traditional notions of effective selling as a systematic process characterized by rationality, sequential progression, market information processing, and optimization (Moncrief & Marshall, 2005). Additionally, in explaining salesperson behavior under varying selling situations, past research tends to rely on the notions of adaptive selling behavior (Spiro & Weitz, 1990) and salesperson creativity (Wang & Netemeyer, 2004). While studies on adaptive selling behavior have helped explain how perceived information (about market situations) enables salespersons to subsequently adapt selling approaches in customer interactions (Sujan et al., 1994; Weitz, Sujan, & Sujan, 1986), this literature stream does not address the issue of salespersons' ability to be spontaneous when dealing with unexpected or urgent situations. Similarly, although research on salesperson creativity addresses the question of salespersons' ability to respond in unexpected situations, it does not address the question of how salespersons strive for timely responses to urgent selling situations.

To extend the existing sales literature, therefore, this study introduces the notion of salesperson improvisation to explain the salespeople's behavior in unexpected and urgent selling situations devoid of previously held market information but in need of a timely response (Chonko et al., 2002). The study argues that sales success is not always a function of sales planning (e.g., as portrayed in adaptive selling behavior) but a function of a salesperson's ability to think and act extemporaneously. In other words, faced with unexpected and urgent selling situations, salespersons need improvisational responses to attain sales success. Thus, this study aimed to investigate the question: to what extent do salespersons employ improvisation when faced with unexpected and urgent selling situations for which they have no clear existing strategy? To this end, the study's validated salesperson improvisation scale, provides a useful tool for industrial sales organizations to assess the extent to which their salespersons are improvisational in unexpected and urgent selling situations.

Additionally, this study broadens scholarly understanding of the outcomes of salesperson behavior by drawing insights from decision theory (Bell, Raiffa, & Tversky, 1988) to explain how salesperson improvisatory behavior influences sales success in industrial markets. The extant sales literature tend to rely on normative decision theory to suggest that accumulation and analysis of market information make selling decisions routinized and less error-prone, thus emphasizing a planning approach to behavioral adaptation to boost sales success (e.g., Weitz et al., 1986). By departing from the normative view, this study follows a descriptive decision making perspective to argue that salespersons are bounded in rationality by their lack of clarity to the nuances surrounding sales situations. That is, while pre-determined plans as advocated in the normative decision theory have their utilities for the selling process, this study argues that because "deviations of actual behavior from the normative model are too widespread to be ignored" (Tversky & Kahneman, 1986, p. 8252), it is important to account for salespeople's reliance on intuitive judgments in selling situations. Clearly, where decision tasks are surrounded by uncertainty and ambiguity, descriptive logic appears to be a suitable theoretical lens for analysis. This study suggests that variations in sales success are determined by salespersons' ability to make in-the-moment assessments of situations and to draw on heuristics and instinct to generate context-relevant solutions.

In line with the descriptive decision theory, the study finds that salesperson improvisation is positively associated with sales performance, particularly when levels of resource availability are high. From a theoretical standpoint, this finding helps focus scholarly attention on improvisation as an important individual-level selling behavior that helps explain variations in sales success. Importantly, while the construct's application in new product development (Moorman & Miner, 1998), entrepreneurship (Hmielski & Corbett, 2006), and team work (Vera & Crossan, 2005)

contexts is ongoing, its implications for selling organizations needs scholarly attention, especially given the increasing need for salespeople to be able to achieve contextual responsiveness to market conditions (Lambert et al., 1990; Wang & Netemeyer, 2004).

Second, the finding that a stronger perception of resource availability strengthens the sales success outcomes of improvisational behavior is intriguing. This finding implies that with adequate resources, salespersons have the latitude to go an extra mile to maximize customer satisfaction to generate greater sales. Thus, there is a strong support for our argument that sales performance needs more than just higher levels of salesperson improvisation. Greater sales benefits are derived from improvisational behavior when this behavior is accompanied with greater resources (Gassenheimer & Manolis, 2001).

Third, while resource availability helps explain when the usefulness of improvisational behavior can be strengthened, the finding regarding moderating role of customer demandingness helps explain when the benefits of salesperson improvisation are weakened. Findings show that the effect of improvisation on sales performance is attenuated when customer demandingness is high, which is consistent with Taut and McQuitty's (2004) suggestion that spontaneous choices can lead to haphazard actions, which might fail to meet customers' expectations and needs, and subsequently reduce sales revenue. In sum, findings from this study do not only show the usefulness of salesperson improvisation in driving sales levels, findings also show when the benefits of improvisation in selling situations are strengthened and when they are reduced.

Finally, the study finds that increases in both resource availability and customer demandingness help drive a salesperson's propensity to improvise. Thus, in line with our prediction, we find evidence to show when salesperson improvisation can be developed in selling organizations. On one hand, we find that increases in resource availability leads to greater levels of improvisational behavior. We link this finding to the notion of positive appraisal in coping theory (Lazarus & Folkman, 1984), arguing that greater resource availability triggers salespeople to positively appraise their ability to improvise when confronted by selling problems characterized by urgency and surprise in need of timely solutions (Bonney & Williams, 2009). On the other hand, we show that increases in customer demandingness signal a gap between a firm's market offerings and customers' needs (Wang & Netemeyer, 2004), implying that salespersons should improvise to fill the gap extemporaneously. As Wang and Netemeyer (2004) argue, greater customer demandingness drives salespersons to "go the extra mile" in devising timely solutions to customer problems. Thus, this study provides an empirical evidence to shed new light on how salespersons exhibit improvisational behavior as a consequence of an increasing customer demands.

5.1. Managerial implications

Our findings offer significant implications to sales managers seeking ways to enable their sales teams to be more responsive to the market. The three-item reflective salesperson improvisation instrument offers an effective and practical tool for both industrial salesperson assessment and training purposes. Secondly, the study's results suggest a critical link between resources and salesperson behaviors that increase performance in industrial organizations. Not only do managers need to ensure that their sales teams are ably resourced as a means of encouraging improvisatory responses, but more critically this study shows that doing so actually enhances their sales teams ability to increase sales. Our findings regarding customer demandingness suggest that industrial salespersons need to improvise when dealing with highly demanding customers. Additionally, while established recommendation to sales organizations propose that they should improve in order to drive sales performance, our findings suggest that improvisation is only helpful in driving sales success when levels of customer demandingness are relatively low. In conclusion, drawing on the extant jazz music and organizational improvisation literature, and with primary data from industrial salespersons, we find that perceptions of resources availability and

customer demandingness increase improvisation behavior in salespersons, and the extent to which salesperson improvisation impacts sales performance is dependent upon greater perception of resource availability and less perception of customer demandingness.

5.2. Limitations and future research directions

We identify several limitations of the study that might prompt further research. First, this is a cross sectional study; therefore, future longitudinal research should be conducted to track the evolving roles of resource availability and customer demandingness on salesperson improvisation. Second, given that our data is set in an emerging economy context, it would be interesting to find how our findings compare to studies in developed economy settings. Thus, a cross-country study of the relationships tested in our study would be an interesting extension. Third, we suggest that future research should further explore potential boundary conditions of the relationship between resource availability and customer demandingness and salesperson improvisation. Fourth,

Self-efficacy (i.e., the idea of the extent to which an individual's belief in his or her capacity to execute behaviors necessary to produce specific performance attainments (Bandura, 1986)), is logically expected to condition the outcomes of any individual level behavioral construct. Specifically, one may argue that self-efficacy reflects one's confidence in the ability to exert control over own motivation, behavior, and social environment. We believe that future research, based on relevant social-cognitive theory (Bandura, 1986), may model salesperson self-efficacy as a moderator of salesperson improvisation outcomes. Fifth, although we test for common method variance and find that it did not pose any serious threat to our results we still suggest that future research rely on supplementary performance data from superiors and customers to cross validate the responses from the salespersons. Finally, we did not control for individual level variables (e.g., salesperson age, gender, education) in our study as we have no reason to believe that these will affect a salesperson's sales performance level. However, future research might want to further validate our thinking on these variables by controlling for these variables or examine whether they play moderating roles.

Appendix A. Multi-item measures (and their sources) and results of validity test.

Constructs and their measures	Loadings	CR ^a	AVE ^b	Traits ^c	Method ^d	Error ^e
<i>Salesperson improvisation</i> (developed from Vera & Crossan, 2005 and in-depth interviews)		.75	.51	.71	.01	.28
<i>When dealing with unexpected and urgent situations...</i>						
I figure out my responses as I go along	.73*					
I think and act on my feet	.62 (7.51)					
I respond in the moment	.74 (8.21)					
<i>Sales performance</i> (Sujan et al., 1994)		.83	.62	.78	.01	.21
Meeting the sales targets assigned to me	.66*					
Increasing market share for my company	.86 (13.96)					
Selling products with higher profit margins	.81 (14.90)					
<i>Resource availability</i> (Bonney & Williams, 2009)		.95	.87	.74	.02	.24
I have enough resources	.96*					
I have enough resources to be able to see my ideas through to completion	.94 (29.16)					
I have access to a wide variety of resources for meeting customers' needs	.90 (24.10)					
<i>Customer demandingness</i> (Wang & Netemeyer, 2004)		.81	.58	.76	.01	.23
The customers I serve demand very high standards of quality	.79*					
My customers require a perfect fit between their needs and our offerings	.77 (10.90)					
My customers expect the highest levels of product and service quality	.67 (9.85)					
<i>Adaptive selling behavior</i> (Spiro & Weitz, 1990)		.82	.61	.78	.11	.11
<i>In my work...</i>						
I like to experiment with different sales approaches	0.63*					
I can easily use a wide variety of selling approaches	0.91 (9.49)					
I am very flexible in the selling approach I use	0.72 (8.83)					
<i>Competitive intensity</i> (Jaworski & Kohli, 1993)		.89	.74	.85	.00	.15
<i>In my industry...</i>						
Competition is very intensive	0.83*					
Our competitors are aggressively promoting special offers.	0.84 (10.01)					
Our competitors are aggressively trying to increase market share.	0.98 (11.59)					
<i>Pressure to perform</i> (Robertson & Rymon, 2001)		.88	.71	.80	.02	.18
<i>In my work...</i>						
I am under a lot of pressure	0.86*					
If my sales targets were not met, I would be called to explain why	0.79 (9.44)					
I may lose my job if I consistently fail to meet targets	0.76 (7.13)					
<i>Salesperson autonomy</i> (Wang & Netemeyer, 2002)		.87	.69	.85	.09	.06
<i>In my work...</i>						
I have freedom in choosing actions to satisfy customers	.84*					
I am allowed freedom to select my own sales strategies	.78 (12.18)					
I have freedom to develop my own sales tactics	.76 (11.77)					
<i>Selling experience</i> (Rapp et al., 2006)		.89	.72	.85	.00	.15
How many years of experience do you have in a sales job?	.84*					
How many years of experience do you have in your current company?	.78 (13.46)					
How many years of experience do you have in the current industry?	.93 (15.64)					

Fit statistics for CFA with bias modeled: $\chi^2/D.F. = 548.09/260$; $p < .01$; NNFI = .92; CFI = .93; SRMR = .05; RMSEA = .06; and the 90% confidence intervals for RMSEA = 0.04; 0.07.

* = Fixed to the value of 1.00.

^a Attenuated composite reliability (CR).

^b Attenuated average variance extracted (AVE).

^c Percentage of variance explained by constructs.

^d Percentage variance explained by common method factor.

^e Percentage of variance explained by error.

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