

INFLUENCE OF SUPERVISORY CONTROL ON SALESPERSON PERFORMANCE: EXAMINING THE ROLE OF ADAPTIVE SELLING BEHAVIOUR AS A MEDIATOR

Kok-Leong Wong* and Cheng-Ling Tan

*Graduate School of Business, Universiti Sains Malaysia,
11800 USM Pulau Pinang, Malaysia*

*Corresponding author: klwong_pg@yahoo.com

Published online: 30 December 2016

To cite this article: Wong, K. L., and Tan, C. L. (2016). Influence of supervisory control on salesperson performance: Examining the role of adaptive selling behaviour as a mediator. *Asian Academy of Management Journal*, 21(2), 183–203. <http://dx.doi.org/10.21315/aamj2016.21.2.8>

To link to this article: <http://dx.doi.org/10.21315/aamj2016.21.2.8>

ABSTRACT

Salespersons are the key marketing agent and they play a significant role in determining business successes of firms. In today's highly competitive business environment, firms are attempting to outperform each other. Product quality and performance are no longer the key differentiating factor. The competitive edge of competing firms has shifted to the performance of the salespersons and the effectiveness of managing them. Nevertheless, achieving salesperson performance remains as one of the most challenging tasks of sales management today. This study aims to examine the effect of supervisory control on salesperson performance and the mediating role of salesperson's adaptive selling behaviour in the relationship between supervisory control and salesperson performance. Based on a sample of pharmaceutical salespersons in Malaysia, the results revealed that supervisory control of activity control has a significant positive relationship on salesperson performance, and adaptive selling behaviour significantly mediates the relationship between activity control and salesperson performance. Implications, limitations of the research and improvements for future studies were discussed.

Keywords: salesperson, salesperson performance, supervisory control, adaptive selling behaviour

INTRODUCTION

Businesses are getting more dynamic and competitive, as there are a wide variety of choices of products and services being offered by firms. Due to the intense competition in the market, there is a threat that products and services may decline into a commodity business in which products and services are getting harder to be differentiated. Consequently, in order to gain a competitive edge, firms have to shift their competitive differentiation to the uniqueness of their human capital and the effectiveness of managing their human capital.

It has been a long history that firms have been using salespersons as the marketing agent of businesses. Salespersons are key in the promotion of products and services, as well as building relationships with customers. It has been reckoned that the single most effective way to promote products and services to the prospective customers is the use of salespersons (Zoltners, Sinha, & Lorimer, 2008, 2009). Being at the forefront of any firms, salespersons play several important roles. First and foremost, salespersons are the financial contributors of the firms as they are entrusted to bring in revenue and profit for firms' long-term sustainability. They are also responsible to foster and grow the business relationships with the customers (Zoltners et al., 2009). Second, salespersons are seen as the change agent of businesses as they use their salesmanship skills to trigger the buying decision in the selling process. While other marketing efforts aim to create the 'pull' effects, salespersons are responsible to 'push' the products to the target customers (Zoltners et al., 2008). Third, salespersons are the boundary spanner of the selling and buying firms by matching the supply and demand of both parties (Stan, Evans, Arnold, & McAmis, 2012). Last but not the least important, salespersons are an effective communication agent who convey up-to-date information between their firms and the customers (Ingram, LaForge, Avila, Schwepker, & Williams, 2012).

Knowing the important roles played by the salespersons, businesses are spending to invest in hiring and maintaining salespersons. Unless the salespersons can truly perform, otherwise maintaining and managing salespersons becomes a cost burden to businesses. The budgets to maintain a sales force can be as high as 20% of the firm's sales revenue (Zoltners et al., 2008). In revealing the truth, performance of salesperson has been generally far from satisfactory. According to the global surveys conducted by Accenture (Accenture, 2010a, 2010b, 2012), Chief Sales Officers of countries including Malaysia, who participated in the global surveys, revealed that typically only the top 20% of the salespersons bring in more than 60% of the firm's revenue. The surveys implied that the remaining 80% of the salespersons are considered ineffective and can be a cost burden to the firms (Accenture, 2010a, 2010b, 2012).

Past research examining salesperson performance has been largely focused on factors related to individual salesperson's personal characteristics and attributes (Verbeke, Dietz, & Verwaal, 2011). Even though supervisory control has been extensively researched, the findings are still inconclusive (Fang, Evans, & Zou, 2005; Flaherty, Arnold, & Hunt, 2007). Besides, past studies examining the salesperson's adaptive selling behavior (ASB) and salesperson performance have also reported inconsistent or mixed results, while a majority of the studies reported results supporting the positive relationship between the salesperson's ASB and salesperson performance (Kidwell, McFarland, & Avila, 2007; Spiro & Weitz, 1990). Due to the observed inconsistencies and mixed results reported in the relationship between the supervisory control and salesperson performance, as well as the relationship between salesperson's adaptive selling behaviour and salesperson performance, this study propose to introduce salesperson's adaptive selling behaviour as a mediator with the aim of filling the gaps on the above mentioned.

In view of this performance issue, the study of salesperson performance has become more important today than it has been in the past, as what influence the performance of salesperson needs to be clearly understood. However, the number of past studies examining factors that influence the performance of salesperson in Malaysia has been very limited. Therefore, the purpose of this study is to contribute to the extant literature by examining the following two questions:

1. To what extent does supervisory control influence salesperson performance?
2. To what extent does salesperson's ASB mediate the relationship between supervisory control and salesperson performance?

LITERATURE REVIEW

Salesperson Performance

Salesperson performance refers to the financial and non-financial accomplishments achieved by the individual salesperson with respect to the roles and responsibilities set forth by the firm. It indicates how well the individual salesperson performs his or her sales related tasks when carrying out the assigned job responsibilities (Babakus, Cravens, Grant, Ingram, & LaForge, 1996).

As salespersons largely contribute to firm's revenue, performance of the salespersons greatly affects the overall performance of the firm. Due to the important contribution of salespersons to firm's business and profitability, research

into what drive salesperson performance has attracted attention from scholars and sales researchers (Zoltners et al., 2008, 2009).

Past research in examining salesperson performance has been primarily on factors related to individual or personal characteristics as salespersons are often the ones blamed for firm's lackluster sales performance (Verbeke et al., 2011). However, examining direct influence of factors related to individual or personal characteristics on salesperson performance has not been able to explain a large variance in salesperson performance. Subsequently, scholars proposed that studies related to salesperson performance should be examined by exploring management practices (Avlonitis & Panagopoulos, 2007) as the determinant of managerial practices is one of the controllable organizational factors which can influence salesperson's motivation, attitude, behavior, commitment, satisfaction and performance (Churchill, Ford, Walker, Johnston, & Tanner, 2000).

Hence, scholars proposed that the focus should be shifted to managerial factors because sales management is known to play an influencing role in a salesperson's behaviors and attitudes (Cravens, Le Meunier-FitzHugh, & Piercy, 2011). Based on a literature search using the available online databases on managerial practices, a large proportion of past research examining salesperson performance was related to supervisory control (Guenzi, Baldauf, & Panagopoulos, 2014). However, the mechanism of how supervisory control influences salesperson performance remains a black box. Scholars believed that managerial practices of supervisory control influence salesperson's own behaviors, which in turn, lead to salesperson performance (Evans, McFarland, Dietz, & Jaramillo, 2012).

Supervisory Control

Supervisory control is the mechanism used by the sales management of the firm to manage and control their sales resources efficiently (Anderson & Oliver, 1987; Piercy, Cravens, & Lane, 2012). Supervisory control can be seen as a process by which the firm regulates or adjusts the behavior of its salespersons in the direction of meeting the firm's business objectives (Challagalla & Shervani, 1997).

Based on the original conceptualization of Jaworski (1988) which was refined by Challagalla and Shervani (1996), supervisory control consists of 3 dimensions: (a) output control, (b) activity control and (c) capability control. Output control aims to drive salespersons to achieve end-results. Activity control focuses on how salespersons execute and accomplish their selling-related tasks. Capability control intends to enhance the quality of selling by improving salesperson's skills and abilities. Both activity control and capability are often being referred

to as behavior control as they aim to influence the behavioral performance of salespersons (Challagalla & Shervani, 1996). Behavior control involves relatively close supervision from the sales management in specifying the tasks, activities, abilities and skills, that are expected to be achieved or completed (Miao, 2007). In contrast to behavior control, in output control, salespersons are given the freedom to achieve the sales outcomes and salesperson performance is directly measured based on their sales revenue achievements (Challagalla & Shervani, 1996).

Salesperson's Adaptive Selling Behavior

Salesperson's selling behaviors have been described as the behavioral aspect of the salesperson in expending effort in the course of working and they are found to have an influence on firm's sales effectiveness (Cravens, Ingram, LaForge, & Young, 1993; Wren & Simpson, 1996) and salespersons' performance (Boles, Brashear, Bellenger, & Barksdale, 2000). Among all these selling behaviors examined, the salesperson's adaptiveness in selling encounters has been identified as the most significant contributor to sales effectiveness (Wren & Simpson, 1996). The concept of applying adaptiveness in selling behaviors is known as Adaptive Selling Behavior (ASB) (Weitz, Sujan, & Sujan, 1986).

Salesperson's adaptive selling behaviour refers to the salesperson's behaviour in adapting, experimenting with different selling approaches from one customer to another, varying selling styles from one situation to another, and being flexible in selling approaches used. It also refers to the salesperson's altering of sales behaviors during a customer interaction or across customer interactions based on the perceived information about the nature of the selling situation (Weitz et al., 1986). Subsequently, salesperson's ASB has been widely studied by many scholars (Park & Holloway, 2003; Roman & Iacobucci, 2010; Spiro & Weitz 1990).

RESEARCH FRAMEWORK

Based on the literature review and the discussion in the preceding section, the following research framework is developed to incorporate the influence of supervisory control and salesperson's ASB on salesperson performance.

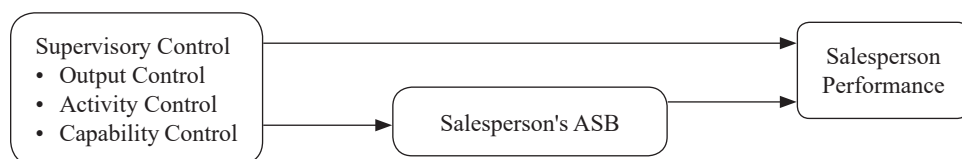


Figure 1. The research framework

The research framework is developed based on Social Exchange Theory (SET). In SET (Blau, 1964), there is a feeling of personal obligation within the employee to reciprocate to the organisation (or management) and that develops a workplace commitment and the behaviour to perform. When the employee feels that the managerial practices are beneficial and useful, the employee is more likely to reciprocate by showing high levels of organizational commitment which leads to positive work performance even to the extent of engaging in certain positive behaviors that can benefit the organizations (Blau, 1964). Based on this underlying theory, the research framework intends to investigate if supervisory control influences salesperson performance directly or through the mediating variable of salesperson's ASB.

RESEARCH HYPOTHESES

In general, supervisory control, in the form of involvement and supervision by the sales management should provide guidance and motivation to the salespersons to perform better (Baldauf, Cravens, & Piercy, 2001). Based on the underlying SET, salespersons should react in a positive manner and reciprocate the influence of supervisory control. In examining each individual dimensions of supervisory control, there are sufficient empirical supports for a positive relationship between output control with salesperson performance (Guenzi et al., 2014; Jaworski & Kohli, 1991; Miao, 2007), activity control with salesperson performance and capability control with salesperson performance (Oliver & Anderson, 1994; Babakus et al., 1996). Hence, it is logical to suggest that:

H1a: Output control is positively related to salesperson performance.

H1b: Activity control is positively related to salesperson performance.

H1c: Capability control is positively related to salesperson performance.

Based on the same logic as mentioned, salespersons who reciprocate the influence of supervisory control should engage in smart-selling approach in order to achieve the improvement in their performance. Past studies revealed that there has been substantial empirical support for a positive relationship between supervisory control (output control, activity control and capability control) and the salesperson's ASB, which is a form of behavioral performance (Babakus et al., 1996; Baldauf et al., 2001; Grant & Cravens, 1996; Guenzi et al., 2014; Oliver & Anderson, 1994, 1995; Piercy, Cravens, & Morgan, 1998, 1999; Piercy, Low, & Cravens, 2004; Rouzies & Macquin, 2003). Hence, it can be hypothesized that:

H2a: Output control is positively related to salesperson's ASB.

H2b: Activity control is positively related to salesperson's ASB.

H2c: Capability control is positively related to salesperson's ASB.

ASB influences adaptive skills, which are consistently associated with increased salesperson performance (Franke & Park, 2006; Keillor, Parker, & Pettijohn, 2000; Sujan, Weitz, & Kumar, 1994; Verbeke et al., 2011). Past studies examining adaptive selling behavior on salesperson performance have largely supported the notion that ASB improves salesperson performance (Miao & Evans, 2013; Park & Deitz, 2006; Park & Holloway, 2003; Roman & Iacobucci, 2010; Singh & Das, 2013; Spiro & Weitz 1990; Weitz et al., 1986). Hence, based on the strong empirical support, it is proposed that:

H3: ASB is positively related to salesperson performance.

While there has been a lot of studies examining the direct relationship between supervisory control (output control, activity control and capability control) and the salesperson's adaptive selling behavior (Babakus et al., 1996; Baldauf et al., 2001; Grant & Cravens, 1996; Piercy et al., 1998, 1999; Piercy et al., 2004; Rouzies & Macquin, 2003) and between adaptive selling behavior on salesperson performance (Park & Holloway, 2003; Roman & Iacobucci, 2010; Spiro & Weitz 1990; Weitz et al., 1986), the mediating effect of adaptive selling behavior received relatively lesser attention. Adaptive selling behavior has been examined by Pelham (2009) as a mediator in the relationship between firm-level orientation and salesperson consulting behaviors. Jaramillo, Grisaffe, Chonko, and Roberts (2009) also found that adaptive selling behavior fully mediated the relationship between customer orientation and outcome performance. Their findings correlate with the outcome from the study of Franke and Park (2006) which revealed that adaptive selling behavior fully mediates the relationship between customer orientation and performance. Although ASB has not been studied as a mediator between supervisory control and salesperson performance, based on similar past research examining ASB as a mediator and the past studies of antecedent and outcome variables involving ASB, it can be proposed that:

H4a: ASB mediates the relationship between activity control and salesperson performance.

H4b: ASB mediates the relationship between capability control and salesperson performance.

H4c: ASB mediates the relationship between output control and salesperson performance.

RESEARCH METHODOLOGY

Measures

Based on the extant literature, a total of 39 measurement items were adopted. Out of these 39 items, 12 items were on demographic information, 15 items measured supervisory control practices, 5 items measured salesperson's ASB, and 7 items measured salesperson performance. Measure of supervisory control practices was adapted from Challagalla and Shervani (1996), which has a Cronbach's alpha of 0.94 (for output control), 0.86 (for activity control) and 0.92 (for capability control). Measure of salesperson's adaptive selling behavior was adapted from Robinson, Marshall, Moncrief and Lask (2002), which introduced the shortened version measure of the full adaptive selling behavior scale with a comparatively high Cronbach's alpha of 0.84. Measure of salesperson performance was adapted from Behrman and Perreault (1982), which had been used by several past studies (Cravens et al., 1993; Piercy et al., 1999; Piercy et al., 2012), which has a Cronbach's alpha of 0.87. To reduce potential common method variance issue, supervisory control and salesperson performance were measured using a 7-point Likert scale whereas salesperson's ASB was measured using a 6-point Likert scale.

Sample and Data Collection

The research method employed was of quantitative and cross-sectional in nature, in which individual salesperson is the unit of analysis. The quantitative research was administered in the pharmaceutical industry where the use of salespersons to promote pharmaceutical products and services to the healthcare professionals is a common marketing practice. Salespersons engage in personal selling which is a form of business-to-consumer (B2C) marketing approach. In this B2C marketing approach, the pharmaceutical salespersons interact directly with the healthcare professionals who are the decision-makers in recommending the types of pharmaceutical products to their patients. The research involved distribution of survey questionnaires to individual salespersons working as full-time employees in the pharmaceutical firms in Malaysia. The Human Resource Managers of the 42 pharmaceutical firms listed in the PhAMA (Pharmaceutical Association of Malaysia) website were contacted and sought for their cooperation to get their salespersons to participate in the survey. Out of the 42 firms, 3 firms did not have any sales activities and had to be excluded. Six firms had no response despite voice messages and letters sent. Out of the remaining 33 firms, 24 firms refused to allow their salespersons to participate due to internal policy reasons. Thus, only 9 firms' agreed to participate in the survey. Based on the number of salespersons provided by the participating firms, a total of 320 hardcopies of questionnaires were mailed

to the 9 participating firms. In a period of three months, a total of 154 responses were received. This yielded a response rate of 48.12%.

Control Variables

In order to understand if any demographic differences of the respondents has any influence on the study variables, control variables of respondents' demographics of gender, marital status, age, race, educational level, work experience and organisational tenure were examined. SmartPLS software version 3 was used to examine the relationships between these control variables with the endogenous variables (ASB and salesperson performance).

Mediation Analysis

The mediation analysis of this research was based on the structural equation modeling's (SEM) two-steps mediation approach of Preacher and Hayes (2008). Even though Baron and Kenny's (1986) basic approach for testing empirical evidence of mediation effect has been widely used for the past several years, the Preacher and Hayes' (2008) two-steps approach is better as it estimates everything simultaneously instead of assuming all the three steps of Baron and Kenny's approach independently (Hayes, 2009; Zhao, Lynch, & Chen, 2010).

In Preacher and Hayes' (2008) two-steps approach, to establish if the mediator mediates the relationship between predicting and outcome variables, both the relationships of the predicting variable to the mediator (β_a) and of the mediator to the outcome variable (β_b) must be significant. The mediation pathway is inferred as significant if the indirect path coefficients ($\beta_a * \beta_b$) are significant at least at the 0.05 level (MacKinnon, Fairchild & Fritz, 2007).

The strength of the mediation can be determined from the value of Variance Accounted For (VAF). VAF value represents the ratio of the Beta Coefficient of the indirect effect ($\beta_a * \beta_b$) to the total effect ($\beta_a * \beta_b + \beta_c$). A VAF value bigger than 80% represents full mediation, a VAF value of between 20% and 80% means a partial mediation, while a value below 20% means no mediation (Hair, Ringle & Sarstedt, 2011). In addition, according to Preacher and Hayes (2008), a mediation is confirmed to be present when the lower and upper limits of the confidence interval (CI) do not straddle a zero in the range.

ANALYSIS AND RESULTS

Descriptive Statistics and Control Variables

Data screening was conducted to check for incomplete response, missing data and outliers. Sixteen responses were found to be incomplete with a lot of missing data, thus had to be discarded. Five responses were found to consist of outliers above the ± 3 standardised values and had to be dropped. The final number of usable responses was 133. All the 133 responses were checked for common method variance issue using Harman's Single Factor test in SPSS and confirmed no serious issue of common method variance based on the guidelines (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Out of the 133 respondents, 61.7% were female and 38.3% were male respondents. About 60.9% of the respondents were still single while 32.3% were married. Majority of the respondents were below the age of 35, where 34.6% were 26 to 30 years, 24.8% were 31 to 35 years and 13.5% were 21 to 25 years. Data showed that 39.1% of the respondents possessed between 5 to 10 years of sales experience and 28.6% of the respondents were having less than 5 years sales experience. A large majority of the respondents (63.2%) worked for their company for less than 5 years and only 26.3% worked between 5 to 10 years in their respective companies. In terms of academic qualification, 57.9% possessed a Bachelor's degree while 7.5% were Master's degree holders.

In examining the influence of the control variables of respondents' demographics on the endogenous variables, it was found that the changes in the R^2 values were generally negligible (not more than 0.005) on the endogenous variables. All the t -values of the control variables were not significant at $p < 0.05$ level (based on the two-tailed test). This concludes that the control variables do not have any statistical significance on any of endogenous variables (adaptive selling behavior and salesperson performance).

Results of the Measurement Model

SmartPLS version 3 software was also used to perform the tests on the measurement model to check for the reliability and validity of the items. Factor loadings of each items, Average Variance Extracted (AVE), Composite Reliability (CR) were checked for each constructs. Items with loadings less than 0.5 were removed to make sure the AVE values achieved at least 0.5 and CR values were at least 0.7 (Hair, Black, Babin, & Anderson, 2010). Based on this rule, one item each from the construct of output control, activity control and adaptive selling behavior was deleted. As a result, all latent constructs modelled in this research demonstrated significant convergent validity that ranges from 0.504 to 0.591 (Table 1). Salesperson

performance has the lowest correlation among indicators (AVE=0.504), output control has the highest correlation among indicators (AVE=0.591). The latent construct in this model has shown the substantial homogeneity reflects by above 0.7 threshold value (Hair et al., 2010) that ranges from 0.809 to 0.876 (Table 1). This assumed that all indicators within the latent construct measures the same latent construct.

Table 1
Summary of SmartPLS – Convergent Validity and Item Reliability

Construct	Items	Main Loadings	AVE	CR
Output Control (OC)	OC1	0.847	0.591	0.850
	OC2	0.748		
	OC3	0.845		
	OC4	0.610		
	OC5	Deleted		
Activity Control (AC)	AC1	0.667	0.584	0.848
	AC2	0.786		
	AC3	0.777		
	AC4	Deleted		
	AC5	0.817		
Capability Control (CC)	CC1	0.728	0.542	0.855
	CC2	0.692		
	CC3	0.751		
	CC4	0.729		
	CC5	0.779		
Adaptive Selling Behavior (ASB)	ASB1	Deleted	0.518	0.809
	ASB2	0.792		
	ASB3	0.639		
	ASB4	0.619		
	ASB5	0.807		
Salesperson Performance (SP)	SP1	0.731	0.504	0.876
	SP2	0.803		
	SP3	0.773		
	SP4	0.660		
	SP5	0.723		
	SP6	0.708		
	SP7	0.543		

Note : Main loadings > 0.5; AVE > 0.5; Composite Reliability > 0.7 ; $R^2_{(Performance)} = 0.523$

The discriminant validity is assessed by observing the correlation between indicators associated in a latent construct and the inter-correlation between latent constructs as known by Fornell-Larcker Criterion (Fornell & Larcker, 1981). Accordingly, the square root of AVE must be larger than the correlation between latent construct (Fornell & Larcker, 1981). Table 2 depicted that all measured latent construct demonstrated convincing discriminant validity manifests by higher correlation among indicators in a latent construct represents by squared AVE values (in bold) as compared to the inter-correlation among latent constructs.

Table 2
Summary of SmartPLS - Discriminant Validity of Constructs based on Fornell-Larcker Criterion

Fornell-Larcker Criterion Discriminant Validity	Mean	Std Dev	1	2	3	4	5
1. Adaptive Selling Behavior (ASB)	5.055	0.391	0.719				
2. Activity Control (AC)	5.367	0.468	0.422	0.764			
3. Capability Control (CC)	5.179	0.588	0.225	0.502	0.736		
4. Output Control (OC)	5.604	0.569	0.076	0.385	0.513	0.769	
5. Performance (SP)	5.075	0.601	0.546	0.465	0.403	0.229	0.710

Note : Diagonals (in bold) represent the square root of the AVE, while off-diagonals represent the correlations.

In summary, the results as shown in Table 1 and Table 2 confirmed that the convergent validity and discriminant validity of the measurement model were established.

Results of the Structural Model

Subsequently, a bootstrapping analysis of 1000 subsamples was performed using the SmartPLS version 3 software to test the structural model in order to find out the path coefficients, the significance of the paths and the VAF value of the indirect effect. The results of bootstrapping are shown in Table 3 and Table 4.

The structural assessment revealed that the direct relationship between activity control and salesperson performance ($\beta = 0.156$) was positively significant. On a similar note, activity control was also found to be positively associated with ASB ($\beta = 0.248$). Besides, ASB was positively and significantly related to salesperson performance ($\beta = 0.251$). On the contrary, capability control ($\beta = -0.031$), and output control ($\beta = -0.071$) were insignificant to salesperson performance. And also, both capability control ($\beta = -0.157$), and output control ($\beta = -0.174$) were found insignificant associated with ASB.

Table 3
Summary of SmartPLS : Path Coefficients and Hypothesis Testing of direct relationships

Hypothesis	Hypothesized Path	Std. Beta Coef (β)	Standard Error (SE)	t-value = β / SE	p values	Stat. Sig. (1-tailed test)	Hypothesis Test Results
H1a	AC \rightarrow PERF	0.156	0.073	2.127*	0.017	Significant	Yes
H1b	CC \rightarrow PERF	-0.031	0.130	0.241	0.405	Not Significant	No
H1c	OC \rightarrow PERF	-0.071	0.085	0.838	0.201	Not Significant	No
H2a	AC \rightarrow ASB	0.248	0.088	2.814**	0.002	Significant	Yes
H2b	CC \rightarrow ASB	-0.157	0.105	1.539	0.062	Not Significant	No
H2c	OC \rightarrow ASB	-0.174	0.123	1.355	0.088	Not Significant	No
H3	ASB \rightarrow PERF	0.251	0.076	3.415**	0.000	Significant	Yes

Note : ** = $p < 0.01$ (t-value > 2.33), * = $p < 0.05$ (1.65 < t-value < 2.33) for 1-tailed test

Table 4
Summary of SmartPLS : Path Coefficients and Hypothesis Testing of indirect relationships

Hypothesis	Hypothesized Path	Std Beta Coef of indirect path (a*b) (β)	Std Error of indirect path (a*b) (SE)	t-value of indirect path = β / SE	p values	Stat. Sig. (2-tailed test) & VAF = (a*b) / (a*b + c')	Hypothesis Test Results
H4a	AC \rightarrow ASB \rightarrow PERF	0.062	0.147	2.070*	0.039	Significant VAF = 0.422 (Partial)	Yes
H4b	CC \rightarrow ASB \rightarrow PERF	-0.040	-0.044	1.209	0.227	Not Significant	No
H4c	OC \rightarrow ASB \rightarrow PERF	-0.044	-0.063	1.191	0.234	Not Significant	No

Note : ** = $p < 0.01$ (t-value > 2.58), * = $p < 0.05$ (1.96 < t-value < 2.58) for 2-tailed test VAF < 0.20 (No mediation), 0.20 < VAF < 0.80 (Partial mediation), VAF > 0.80 (Full mediation)

To address the mediation effect of ASB, three hypotheses have been tested with regards to the mediation effect of ASB to the relationship of activity control (H4a), capacity control (H4b), and output control (H4c), towards salesperson performance. Notably, it was found that ASB demonstrates significant mediation effect to the relationship of activity control and salesperson performance ($\beta = 0.062$).

The lower limit and upper limit of the indirect effect were calculated and shown in Table 5. As indicated by Preacher and Hayes (2008), the indirect effect 95% boot confidence interval [LL=0.03, UL = 0.121] did not straddle a zero in between indicating there is valid mediation. Thus, it can be concluded that the partial mediation effect is statistically significant.

Table 5
Summary of SmartPLS: 95% Bootstrapped Confidence Interval Calculation for the mediation path

Hypothesized Path	Std Beta Coef of indirect path (a*b) (β)	Standard Error (SE)	Lower Limit LL = (β) - Z(SE)	Upper Limit UL = (β) + Z(SE)
AC→ASB→PERF	0.062	0.030	0.003	0.121

Note: Z = 1.96 for $\alpha = 0.05$ (2-tailed test)
 $Z(SE) = 1.96 * SE = 0.059$

Next, blindfolding technique was performed to check the predictive relevance of the proposed model. The results of blindfolding as shown in Table 6 indicated that the proposed model had good predictive relevance. Specifically, the Q² value for ASB and salesperson performance were 0.176 and 0.240 respectively. In essence, the model in this study has predictive relevance as the endogenous latent constructs' Q² value is larger than zero (Chin, 2010; Hair, Hult, Ringle & Sarstedt, 2013).

Table 6
Summary of SmartPLS : Predictive Relevance of the Model

Exogenous Variable	Endogenous Variable	R ²	Q ²	Predictive Relevance
Output Control (OC) Activity Control (AC) Capability Control (CC)	Adaptive Selling Behavior (ASB)	0.386	0.176	Yes
Adaptive Selling Behavior (ASB)	Salesperson Performance (SP)	0.523	0.240	Yes

Note : Blindfolding Omission Distance = 6

DISCUSSION, IMPLICATIONS AND LIMITATIONS

Based on the empirical results of the research, it was found that activity control has a direct significant positive relationship on salesperson performance as well as on salesperson's ASB. This lends support to hypotheses H1a and H2a. As expected, similar to past studies, salesperson's ASB was found to be positively related to salesperson performance. This finding supports the hypothesis H3. In examining the mediating effect, salesperson's ASB was found to partially mediate the relationship between activity control and salesperson performance. The result provides support to hypothesis H4a.

A review of the results conclusively showed that activity control is an important managerial practice that can effectively drive higher level of salesperson performance in the present context of pharmaceutical sales. Activity control also influences salespersons to engage in ASB. In the context of the present study where the majority of the respondents were young and less experienced salespersons, it was expected that activity control would serve as a guidance to the young sales force to achieve better performance and encourage the young sales force to work smarter and become more adaptive and creative in their interactions with customers in different situations. More often than not, ASB is seen as the crucial cognitive factor where salespersons would reciprocate the guidance and coaching sessions by engaging in positive selling behaviours that are beneficial in accomplishing the required selling activities and tasks, which then leads to attainment of their performance goals.

In the present study, output control and capability control were found to be not significant and their relationships with salesperson performance and salesperson's ASB were negatively related. This is because young salespersons viewed output control as a form of management pressure, which does not benefit them. Capability control, which aims to improve salespersons' selling skills and abilities may be perceived as less important and does not bring any significant results to the near term. Hence, both output control and capability control practices by the sales management did not seem to motivate the young salespersons to engage in adaptive and innovative approaches in their current sales interactions with customers.

Based on the findings of this research, a few inferences can be drawn for the benefit of the academics and researchers. From the theoretical perspective, this research framework was developed based on SET to address how salespersons engage in adaptive selling behavior to reciprocate the supervisory control of activity control, which in turn improve the salespersons' performance. Secondly, this research manages to reveal that ASB is a mediating variable between supervisory control of

activity control and salesperson performance. From the practical perspective, this study serves as a finding to sales management that more activity control such as coaching and mentoring should be practiced to guide less experienced salespersons and encourage the practice of ASB among salespersons.

In terms of managerial implications that can be drawn, this research revealed that the salesperson's perception of the firm's managerial practices of activity control increases the engagement of ASB which then leads to improvement in performance. Activity control practices are task-oriented selling activities set by sales management on salespersons (Challagalla & Shervani, 1996). In making sure these task-oriented selling activities are being followed and executed correctly by the young salespersons, experienced sales managers should provide guidance and gauge the salesperson's progressive achievement through regular meetings. Sales management should provide coaching, mentoring as well as individualised guidance to the young salespersons, more so for fresh graduates without any sales experience. Informal communication and facilitation by the sales management are crucial to keep the salespersons motivated and execute the correct strategies. High degree of managerial attention will not only makes the salespersons feel respected, but also gives them valuable strategic insights.

Similar to other research, this study has its limitations. Firstly, this research is being limited by the cross-sectional nature of the study in which only the correlation among variables were studied and not their causal effects. Secondly, this study was a self-reported study, which was subject to a certain amount of common method variance issue. Future research can explore if data can be obtained from the salespersons as well as from the sales managers. In additional, data should also be collected over a longer period of time to examine the causal effects of the other managerial control practices of capability control and output control.

CONCLUSION

While there are several challenges in managing salespersons in the Business-to-Consumer marketing approach, with the appropriate managerial practices, effectiveness and performance of the salespersons should produce positive outcomes. This empirical research managed to shed light to confirm that activity control is an important supervisory control practice that should be given emphasis, specifically on young sales force as activity control was found to influence a salesperson to engage in ASB, which ultimately produces positive sales performance. Based on this empirical research, ASB is confirmed to play a mediating role between supervisory control and salesperson performance.

REFERENCES

- Accenture (2010a). The high performance workforce study 2010. Retrieved October 19, 2013 from <http://www.accenture.com/us-en/Pages/insight-workforce-study-2010-usa-findings-summary.aspx>.
- Accenture (2010b). Optimizing sales effectiveness to achieve high performance 2010. Retrieved October 20, 2013 from <http://www.accenture.com/us-en/Pages/insight-optimizing-sales-effectiveness-to-achieve-high-performance.aspx>.
- Accenture (2012). Connecting the dots on sales performance. Retrieved October 13, 2013 from <http://www.accenture.com/us-en/Pages/insight-connecting-dots-sales-performance.aspx>.
- Anderson, E., & Oliver, R. L. (1987). Perspectives on behavior-based versus outcome-based sales force control systems. *Journal of Marketing*, 51(10), 76–88. <https://doi.org/10.2307/1251249>
- Avlonitis, G. J., & Panagopoulos, N. G. (2007). Exploring the influence of sales management practices on the industrial salesperson: A multi-source hierarchical linear modeling approach. *Journal of Business Research*, 60(7), 765–775. <https://doi.org/10.1016/j.jbusres.2007.02.011>
- Babakus, E., Cravens, D. W., Grant, K., Ingram, T. N., & LaForge, R. W. (1996). Investigating the relationships among sales, management control, sales territory design, salesperson performance, and sales organization effectiveness. *International Journal of Research in Marketing*, 13(4), 345–363. [https://doi.org/10.1016/S0167-8116\(96\)00016-X](https://doi.org/10.1016/S0167-8116(96)00016-X)
- Baldauf, A., Cravens, D. W., & Piercy, N. F. (2001). Examining business strategy, sales management, and salesperson antecedents of sales organization effectiveness. *Journal of Personal Selling and Sales Management*, 21(2), 109–122.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182. <https://doi.org/10.1037/0022-3514.51.6.1173>
- Behrman, D. N., & Perreault, W. D., Jr. (1982). Measuring the performance of industrial salespersons. *Journal of Business Research*, 10(3), 355–370. [https://doi.org/10.1016/0148-2963\(82\)90039-X](https://doi.org/10.1016/0148-2963(82)90039-X)
- Blau, P. M. (1964). *Exchange and power in social life*. New York: John Wiley.
- Boles, J., Brashear, T., Bellenger, D., & Barksdale, H., Jr. (2000). Relationship selling behaviors: Antecedents and relationship with performance. *Journal of Business & Industrial Marketing*, 15(2/3), 141–153. <https://doi.org/10.1108/08858620010316840>
- Challagalla, G. N., & Shervani, T. A. (1996). Dimensions and types of supervisory control: effects on salesperson performance and satisfaction. *The Journal of Marketing*, 60(1), 89–105. <https://doi.org/10.2307/1251890>
- Challagalla, G. N., & Shervani, T. A. (1997). A measurement model of the dimensions and types of output and behavior control: An empirical test in a salesforce context. *Journal of Business Research*, 39(3), 159–172. [https://doi.org/10.1016/S0148-2963\(96\)00195-6](https://doi.org/10.1016/S0148-2963(96)00195-6)

- Chin, W. W. (2010). How to write up and report PLS analyses. In V. Esposito Vinzi, W. W. Chin, J. Henseler, & H. Wang (Eds.), *Handbook of partial least squares: concepts, methods and applications (Springer Handbooks of Computational Statistics Series, vol. II)* (pp. 655–690). Heidelberg, Dordrecht, London, New York: Springer. https://doi.org/10.1007/978-3-540-32827-8_29
- Cravens, D. W., Ingram, T. N., LaForge, R. W., & Young, C. E. (1993). Behavior-based and outcome-based salesforce control systems. *The Journal of Marketing*, 57(4), 47–59. <https://doi.org/10.2307/1252218>
- Cravens, D. W., Le Meunier-FitzHugh, K., & Piercy, N. F. (2011). *The Oxford handbook of strategic sales and sales management*. Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199569458.001.0001>
- Churchill, G. A., Ford, N. M., Walker, O. C., Johnston, M. W., & Tanner, J. F. (2000). *Sales force management* (6th ed.). New York: McGraw-Hill/Irwin.
- Churchill, G. A., Ford, N. M., Hartley, S. W., & Walker, O. C. (1985). The determinants of salesperson performance: A meta-analysis. *Journal of Marketing Research*, 22(2), 103–118. <https://doi.org/10.2307/3151357>
- Evans, K. R., McFarland, R. G., Dietz, B., & Jaramillo, F. (2012). Advancing sales performance research: A focus on five underresearched topic areas. *Journal of Personal Selling and Sales Management*, 32(1), 89–106. <https://doi.org/10.2753/PSS0885-3134320108>
- Fang, E., Evans, K. R., & Landry, T. D. (2005). Control systems' effect on attributional processes and sales outcomes: A cybernetic information processing perspective. *Journal of the Academy of Marketing Science*, 33(Fall), 553–574. <https://doi.org/10.1177/0092070305275249>
- Flaherty, K. E., Arnold, T. J. & Hunt, C. S. (2007). The influence of the selling situation on the effectiveness of control: Toward a holistic perspective. *Journal of Personal Selling & Sales Management*, XXVII(3), 221–233. <https://doi.org/10.2753/PSS0885-3134270302>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.2307/3151312>
- Franke, G. R., & Park, J. E. (2006). Salesperson adaptive selling behavior and customer orientation: A meta-analysis. *Journal of Marketing Research*, 43(4), 693–702. <https://doi.org/10.1509/jmkr.43.4.693>
- Grant, K., & Cravens, D. W. (1996). Examining sales force performance in organizations that use behavior-based sales management processes. *Industrial Marketing Management*, 25(5), 361–371. [https://doi.org/10.1016/0019-8501\(96\)00038-7](https://doi.org/10.1016/0019-8501(96)00038-7)
- Guenzi, P., Baldauf, A., & Panagopoulos, N. G. (2014). The influence of formal and informal sales controls on customer-directed selling behaviors and sales unit effectiveness. *Industrial Marketing Management*, 43, 786–800. <https://doi.org/10.1016/j.indmarman.2014.04.014>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis*. (7th ed.). Upper Saddle River, New Jersey : Prentice Hall.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M. (2013). *A primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Thousand Oaks: Sage.

- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *The Journal of Marketing Theory and Practice*, 19(2), 139–152. <https://doi.org/10.2753/MTP1069-6679190202>
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, 76(4), 408–420. <https://doi.org/10.1080/03637750903310360>
- Ingram, T. N., LaForge, R., Avila, R., Schwepker, C. H. Jr., & Williams, M. (2012). *Sales management: Analysis and decision making* (8th ed.). Armonk, NY: M.E. Sharpe Inc.
- Jaramillo, F., Grisaffe, D. B., Chonko, L. B., & Roberts, J. A. (2009). Examining the impact of servant leadership on sales force performance. *Journal of Personal Selling and Sales Management*, 29(3), 257–276. <https://doi.org/10.2753/PSS0885-3134290304>
- Jaworski, B. J. (1988). Toward a theory of marketing control: Environmental context, control types, and consequences. *The Journal of Marketing*, 52(3), 23–39. <https://doi.org/10.2307/1251447>
- Jaworski, B. J., & Kohli, A. K. (1991). Supervisory feedback: Alternative types and their impact on salespeople's performance and satisfaction. *Journal of Marketing Research*, 28(2), 190–201. <https://doi.org/10.2307/3172807>
- Keillor, B. D., Parker, R. S., & Pettijohn, C. E. (2000). Relationship-oriented characteristics and individual salesperson performance. *Journal of Business & Industrial Marketing*, 15(1), 7–22. <https://doi.org/10.1108/08858620010311520>
- Kidwell, B., McFarland, R. & Avila, R. (2007). Perceiving emotion in the buyer-seller interchange: The moderated impact on performance, *Journal of Personal Selling and Sales Management*, 27(Spring), 119–150. <https://doi.org/10.2753/PSS0885-3134270201>
- MacKinnon, D. P., Fairchild, A. J., & Fritz, M. S. (2007). Mediation analysis. *Annual Review of Psychology*, 58, 593–614. <https://doi.org/10.1146/annurev.psych.58.110405.085542>
- Miao, C. F. (2007). *Salesforce control systems: An integrated approach*. (Unpublished doctoral dissertation). University of Missouri-Columbia, USA.
- Miao, C. F., & Evans, K. R. (2013). The interactive effects of sales control systems on salesperson performance: A job demands-resources perspective. *Journal of Academy of Marketing Science*, 41, 73–90. <https://doi.org/10.1007/s11747-012-0315-4>
- Oliver, R. L., & Anderson, E. (1994). An empirical test of the consequences of behavioral and outcome-based sales control systems. *Journal of Marketing*, 58(4), 53–67. <https://doi.org/10.2307/1251916>
- Oliver, R. L., & Anderson, E. (1995). Behavior and outcome-based sales control systems - Evidence and consequences of pure-form and hybrid governance. *Journal of Personal Selling & Sales Management*, 15(4), 1–15.
- Park, J. E., & Deitz, G. D. (2006). The effect of working relationship quality on salesperson performance and job satisfaction: Adaptive selling behavior in Korean automobile sales representatives. *Journal of Business Research*, 59(2), 204–213. <https://doi.org/10.1016/j.jbusres.2005.04.002>

- Park, J. E., & Holloway, B. B. (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.
- Pelham, A. M. (2009). An exploratory study of the influence of firm market orientation on salesperson adaptive selling, customer orientation, interpersonal listening in personal selling and salesperson consulting behaviors. *Journal of Strategic Marketing*, 17(1), 21–39. <https://doi.org/10.1080/09652540802619202>
- Piercy, N. F., Cravens, D. W., & Morgan, N. A. (1998). Salesforce performance and behaviour-based management processes in business-to-business sales organizations. *European Journal of Marketing*, 32(1/2), 79–100. <https://doi.org/10.1108/03090569810197480>
- Piercy, N. F., Cravens, D. W., & Morgan, N. A. (1999). Relationships between sales management control, territory design, salesforce performance and sales organization effectiveness. *British Journal of Management*, 10(2), 95–111. <https://doi.org/10.1111/1467-8551.00113>
- Piercy, N. F., Low, G. S., & Cravens, D. W. (2004). Consequences of sales management's behavior-and compensation-based control strategies in developing countries. *Journal of International Marketing*, 12(3), 30–57. <https://doi.org/10.1509/jimk.12.3.30.38102>
- Piercy, N. F., Cravens, D. W., & Lane, N. (2012). Sales manager behavior-based control and salesperson performance: the effects of manager control competencies and organizational citizenship behavior. *Journal of Marketing Theory and Practice*, 20(1), 7–22. <https://doi.org/10.2753/MTP1069-6679200101>
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–885. <https://doi.org/10.1037/0021-9010.88.5.879>
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879–891. <https://doi.org/10.3758/BRM.40.3.879>
- Robinson, L. Jr., Marshall, G. W., Moncrief, W. C., & Lassk, F. G. (2002). Toward a shortened measure of adaptive selling. *Journal of Personal Selling & Sales Management*, 22(2), 111–118.
- Roman, S., & 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. <https://doi.org/10.1007/s11747-009-0166-9>
- Rouzies, D., & Macquin, A. (2003). An exploratory investigation of the impact of culture on sales force management control systems in Europe. *Journal of Personal Selling and Sales Management*, 23(1), 61–72.
- Singh, R., & Das, G. (2013). The impact of job satisfaction, adaptive selling behaviors and customer orientation on salesperson's performance: Exploring the moderating role of selling experience. *Journal of Business & Industrial Marketing*, 28(7), 554–564. <https://doi.org/10.1108/JBIM-04-2011-0121>

- Spiro, R. L., & Weitz, B. A. (1990). Adaptive selling: Conceptualization, measurement, and nomological validity. *Journal of Marketing Research*, 27, 61–69. <https://doi.org/10.2307/3172551>
- Stan, S., Evans, K. R., Arnold, T. J., & McAmis, G. T. (2012). The Moderating influence of organizational support on the development of salesperson job performance: Can an organization provide too much support? *Journal of Personal Selling & Sales Management*, 32(4), 405–419. <https://doi.org/10.2753/PSS0885-3134320401>
- Sujan, H., Weitz, B. A., & Kumar, N. (1994). Learning orientation, working smart, and effective selling. *The Journal of Marketing*, 58(3), 39–52. <https://doi.org/10.2307/1252309>
- Verbeke, W. J., Dietz, B., & Verwaal, E. (2011). Drivers of sales performance: A contemporary meta-analysis. Have salespeople become knowledge brokers? *Journal of the Academy of Marketing Science*, 39(3), 407–428. <https://doi.org/10.1007/s11747-010-0211-8>
- Weitz, B. A., Sujan, H., & Sujan, M. (1986). Knowledge, motivation, and adaptive behavior: A framework for improving selling effectiveness. *The Journal of Marketing*, 50(4), 174–191. <https://doi.org/10.2307/1251294>
- Wren, B. M., & Simpson, J. T. (1996). A dyadic model of relationships in organizational buying: A synthesis of research results. *Journal of Business & Industrial Marketing*, 11(3/4), 63–79. <https://doi.org/10.1108/08858629610125478>
- Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of consumer research*, 37(2), 197–206. <https://doi.org/10.1086/651257>
- Zoltners, A. A., Sinha, P., & Lorimer, S. E. (2008). Sales force effectiveness: A framework for researchers and practitioners. *Journal of Personal Selling & Sales Management*, 28(2), 115–131.
- Zoltners, A. A., Sinha, P., & Lorimer, S. E. (2009). *Building a winning sales force: Powerful strategies for driving high performance* (1st ed.). New York, NY: AMACOM Division, American Management Association. <https://doi.org/10.2753/PSS0885-3134280201>

