

The moderating effect of goal-setting characteristics on the sales control systems–job performance relationship

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Received 4 July 2002; accepted 21 March 2004

Abstract

There have been no consistent findings with regard to the relationships between sales control systems and job performance. The authors propose a contingency model in which the effects of sales control systems on job performance are moderated by goal-setting characteristics (goal difficulty, goal specificity, and goal participation). They empirically test the model using two studies conducted in the United States and China, respectively. The findings suggest the need for considering goal-setting characteristics when one attempts to link sales control systems to salesperson's job performance. Managerial and research implications are offered at the conclusion of the paper.
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Keywords: Sales control systems; Job performance; Goal-setting characteristics; Contingency model

1. Introduction

Sales control systems are one of the key management tools impacting salespeople's motivation and performance (Anderson and Oliver, 1987). Marketing organizations typically use three types of formal supervisory control systems to direct employees' job-related outcomes: outcome control, activity control, and capability control (Challagalla and Shervani, 1996; Chonko et al., 2000). Although the need for sales controls is rarely disputed, the effect of various types of sales control systems on salespeople's job performance remains unsettled. For example, outcome control has been found to enhance job performance (Jaworski et al., 1993), hurt job performance (Oliver and Anderson, 1994), and have no direct effect on job performance (Challagalla and Shervani, 1996; Lusch and Jaworski, 1991).

To address these inconsistent findings, contingency models have been advanced (e.g., Jaworski and MacInnis, 1989; Ramaswami, 1996) that moderate the effects of sales control systems on job performance. Unfortunately, past empirical studies generally have failed to find support for these moderating effects. It appears that sales control research is needed to unravel the sales control systems–job performance relationship.

Jaworski (1988) suggests that it is the “fit” between control systems and the environment that influences task performance. Among the internal factors, goal-setting characteristics are considered to be the predominant dimensions that determine the effectiveness of control systems (Gupta et al., 1994; Ouchi, 1979). Similarly, the organizational design literature suggests that control systems (evaluation design and implementation) and goal-setting characteristics (goal design) are two important components of organizational assessment processes; therefore, they should be incorporated when assessing influences on performance (effectiveness; Van de Van and Diane, 1980). The primary purpose of this research is to advance and test a new contingency model in which goal-setting characteristics (e.g., goal difficulty, goal specificity, and

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Table 1
Descriptive statistics

	Mean		Standard deviation		Correlation matrix							
	United States	China	United States	China	1	2	3	4	5	6	7	8
(1) Outcome control	4.48	5.02	1.18	1.04	1.00	.51	.51	.28	.09	−.10	.21	.18
(2) Activity control	4.21	4.68	1.18	1.07	.53	1.00	.56	.10	−.12	.05	.25	.23
(3) Capability control	4.01	4.35	1.24	1.04	.49	.71	1.00	.12	−.13	.12	.16	.19
(4) Goal difficulty	4.43	4.42	1.11	1.28	.35	−.09	.08	1.00	.00	−.14	−.06	−.10
(5) Goal specificity	4.63	4.49	1.47	1.19	.26	−.08	−.12	.18	1.00	−.17	−.09	−.20
(6) Goal participation	4.30	3.87	1.39	1.33	.05	.09	.11	−.11	.13	1.00	.20	.21
(7) Outcome performance	4.90	5.08	1.26	1.04	.12	.20	.19	.15	.25	.00	1.00	.68
(8) Behavior performance	5.39	5.42	1.16	0.93	.10	.24	.20	.25	.20	−.03	.47	1.00

Lower triangle of correlation matrix: U.S. sample.

Upper triangle of correlation matrix: China sample.

goal participation) are posited to moderate the effects of sales control systems on job performance.

We report the results of two studies. In Study 1, we use a national survey of 290 salespeople in the United States to test the proposed contingency model. We find support for the role of goal-setting characteristics as moderating factors in the sales control system–performance relationship (see Table 1). In Study 2, we extend Study 1 into a different national context. With primary data collected from 247 salespeople in 30 companies in China, a distinct culture from that of the United States, this contingency model is also generally supported.

2. Background literature

2.1. Sales control systems

Anderson and Oliver (1987) defined control systems as an aggregate of policies, procedures, and rules marketing organizations use to monitor, direct, evaluate, and reward employees. They classified control systems into those that emphasize end results (i.e., outcome control) and those that stress inputs and processes (i.e., behavior control). More recently, Challagalla and Shervani (1996) and Kohli et al. (1998) suggested three types of supervisory controls: outcome control, activity control, and capability control. To these researchers, outcome control focuses on the achievement of end results, such as sales volume, while activity control focuses on routine activities employees are supposed to perform, and capability control focuses on the development of employees' skills that enhance the quality of their behavior.

In the current literature, research findings concerning the effects of sales control systems on job-related outcomes have been inconsistent. For example, outcome control has been found to enhance job performance (Jaworski et al., 1993), hurt job performance (Oliver and Anderson, 1994), and have no direct effect on job performance (Challagalla and Shervani, 1996; Lusch and Jaworski, 1991). Additionally, Challagalla and Shervani (1996) concluded that both outcome control and behavior control (activity and capa-

bility control) have little direct effect on sales performance. Given its importance to practicing sales managers, the lack of consistent findings regarding the effects of sales control systems represents a major gap in the literature.

To address this gap, some studies attempted to advance contingency models in which the sales control systems–job-related outcomes are moderated by internal and external environmental factors (Jaworski, 1988). For example, Jaworski and MacInnis (1989), Agarwal and Ramaswami (1993), and Ramaswami (1996) tested and were unable to statistically verify the moderating effects of two task characteristics: procedural knowledge and performance documentation. Jaworski et al. (1993) also failed to find support for the moderating effects of strategic business unit (SBU)'s characteristics (profitability and size of an SBU) and task characteristics (job interdependence and job routineness).

2.2. Goal-setting characteristics

Goal difficulty, goal specificity, and goal participation are basic characteristics identified in goal-setting theory (Locke and Latham, 1990). Goal difficulty refers to the degree to which the goals assigned by a supervisor are attainable, whereas goal specificity is defined as the extent to which the goals are clearly defined by a supervisor, and goal participation is the degree of involvement of salespeople in setting the goals (Locke and Latham, 1990). This study is focused on *assigned* output goals, such as assigned sales volume and/or profit quotas, because *assigned* output goals can be readily detected and acted upon, which is arguably more relevant to a sales manager setting salespeople's goals. Besides assigned output goals, salespeople could self-set performance goals. However, the impact of self-set goals is not within the scope of this study.

2.3. Effects of control systems on job performance

Essentially, sales control systems affect salespeople's performance through the mediation effects of salespeople's behavioral responses. There are two general types of behaviors that salespeople would exhibit in response to

sales control systems: working smart and working hard (Sujan et al., 1994). Working smart refers to behaviors directed toward developing knowledge and utilizing it in sales situations, whereas working hard is defined as the overall amount of effort salespeople devote to their work (Sujan et al., 1994). While working hard is normally manifested through the length of time devoted to work, working smart has both an activity component (e.g., planning behaviors and adaptive selling behaviors) and a capability component (e.g., ability to engage in a wide range of selling behaviors; Sujan et al., 1994).

In the sales literature, salespeople's job performance is often assessed with regard to outcome performance (i.e., making dollar sales and generating new accounts) and behavior performance (i.e., salespeople's activities, knowledge, and skills). High levels of activity control and capability control would prompt salespeople to engage in working-smart behavior which, in turn, would lead to enhanced behavior performance. In contrast, high levels of outcome control would press salespeople to engage in working-hard behaviors. This is consistent with Cravens et al.'s (1993) argument that more behavior-oriented sales control increases behavior performance, while more outcome-oriented sales control increases outcome performance.

3. Research hypotheses

3.1. The moderating effects of goal difficulty

The marketing and management literatures suggest that outcome control influences outcome performance through employees' working-hard behavior (Sujan et al., 1994). However, working-hard behavior in response to outcome control may be conditioned by goal difficulty due to a tendency to adjust effort to the difficulty of the task (Latham and Locke, 1991; Locke, 1968). When the performance goal is easily obtained, little effort needs to be expended. When goal difficulty increases, employees work harder, thereby increasing effort. On the other hand, when the performance goal becomes extremely difficult, employees may feel they cannot succeed regardless of their effort. As a result, employees may be discouraged in expending effort on certain types of performance goals (Latham and Locke, 1991).

This inverted-U relationship between goal difficulty and working-hard behavior is due to the compliance effect which refers to "the phenomenon in which individuals redirect or modify their intentions and efforts to match the demands confronting them and adjust their target performance to correspond to the assigned goals" (Chowdhury, 1993, p. 30). Therefore, when the assigned goals are moderately difficult, salespeople tend to work harder in response to a supervisor's outcome control than when the assigned goals are either very easy or too difficult.

H1. The effect of outcome control on salespeople's outcome performance is greater when goal difficulty is moderately high than:

- (a) when goal difficulty is low.
- (b) when goal difficulty is extremely high.

The literature also suggests that activity control and capability control influence employee performance behavior by working smarter (i.e., adaptive selling, planning behaviors, and capability to engage in a wide range of selling approaches). Because goal difficulty could affect employees' working-smart behavior, the effect of activity control and capability control on employees' behavior performance may be moderated by goal difficulty.

Kanfer and Ackerman (1989) proposed the resource allocation model (RAM), in which the setting of goals automatically initiates allocation of resources to self-regulatory activities whereby people monitor and evaluate their performance. According to the RAM, the allocation of resources to self-regulation "steals" critical resources from strategy development for planning behaviors and adaptive selling practice. That is, under difficult goal situations, more attention is devoted to effort and self-regulation cognition, and less attention is devoted to strategy development, such as adaptive selling and planning behaviors in response to activity control and capability control. Consequently, goal difficulty may inhibit employees' working-smart behavior, reducing the effects of activity control and capability control on behavior performance.

H2a. The effect of activity control on behavior performance is weaker when goal difficulty is high than when goal difficulty is low.

H2b. The effect of capability control on behavior performance is weaker when goal difficulty is high than when goal difficulty is low.

3.2. The moderating effects of goal specificity

The relationship between outcome control and outcome performance is also contingent upon the specificity of performance goals as set by supervisors. Social loafing theory argues that loafing can be viewed as an evaluation effect (Harkins and Jackson, 1985). When individuals perceive that they lack clear evaluations for their performance, loafing may occur. Similarly, Baron (1986) suggested that evaluation apprehension leads to increased effort in response to supervisor control. Carver and Scheier (1982) suggested that specific evaluation prompts individuals' self-awareness which leads to greater attention regarding how actual performance matches performance standards, thus motivating them to work hard in response to outcome controls.

Thus, when performance evaluation is not perceived as specific, salespeople would exert less effort stimulated by outcome control on tasks than when performance evaluation is perceived as specific, thus reducing the effects of outcome control on outcome performance.

H3. The effect of outcome control on outcome performance is stronger when goal specificity is high than when goal specificity is low.

The moderating effect of goal specificity on the relationships between activity control and capability control systems and behavior performance can be understood by strategic ambiguity theory which suggests that nonspecific goals foster the existence of multiple viewpoints about goals in organizations (Eisenberg, 1984). The multiple interpretations of goals can enhance individuals' creativity because of more perceived autonomy (Eisenberg, 1984). Empirical results have shown that in the educational context, specific goals inhibit acquisition of knowledge (Rossano and Reardon, 1999). Similarly, Vollmeyer et al. (1996) argued that nonspecific goals provide an effective way of learning the overall structure of a problem in complex task environments. Therefore, nonspecific goals could facilitate employees' development of effective selling activities and skills, enhancing the effects of activity control and capability control on behavior performance.

H4a. The effect of activity control on behavior performance is weaker when goal specificity is high than when goal specificity is low.

H4b. The effect of capability control on behavior performance is weaker when goal specificity is high than when goal specificity is low.

3.3. The moderating effect of goal participation

Campbell et al. (1970) suggested that participation in the goal-setting process may help clarify the task to be performed, to the extent that goal participation gives employees explicit knowledge of where to direct their efforts. For example, when salespeople participate in the goal-setting process, the information obtained from sales managers would prompt the development of task strategies (Latham and Steele, 1983). Furthermore, Latham et al. (1991) suggested that the key benefit of goal participation is the cognition effect (e.g., task strategy development), not the motivational effect. Therefore, it is expected that goal participation enhances employees' working-smart behavior in response to supervisors' activity controls and capability controls, enhancing the effects of activity control and capability control on behavior performance.

H5a. The effect of activity control on behavior performance is stronger when goal participation is high than when goal participation is low.

H5b. The effect of capability control on behavior performance is stronger when goal participation is high than when goal participation is low.

4. Study 1

4.1. Sample and data collection

A cross-section survey was conducted to collect data to test the research hypotheses. To develop a sampling frame, 600 U.S. sales managers were identified from an online broker, and cover letters, along with sample questionnaires were mailed to them to solicit their cooperation in recruiting salespeople in their organizations. One hundred fifty-two sales managers agreed to participate and identified 1257 salespeople in their sales organizations. A package containing copies of the cover letter, survey questionnaire, and business reply envelope was sent to the sales manager for distribution to the identified salespeople in their organization. Individual salespeople then mailed the completed questionnaires back to the researchers directly. Two hundred ninety usable responses were obtained for a response rate of about 23%. To assess potential nonresponse bias, early responses were compared to late responses with regard to the constructs in the study. No significant difference was found. The sample consisted primarily of men (approximately 77%) and covered a variety of products, including health insurance, computer components, home electronics, mechanical products, and financial services. Approximately 39% of the respondents were between 40 and 55 years of age, and the average years of sales experience was 16.4.

4.2. Measurements

Key constructs in this study were measured by existing scales. Items measurement consisted of a seven-point Likert-type scale ranging from *strongly agree* to *strongly disagree* (please see Appendix A for the items and their sources).

To estimate the measurement model, confirmatory factor analysis (CFA) was used. Specifically, the measurement model was estimated in which each item was restricted to load on its a priori specified factor, and the factors themselves were permitted to correlate (Gerbing and Anderson, 1988). Maximum likelihood estimates of model coefficients were obtained using EQS. The results are shown in Appendix A. As can be seen, the measurement model demonstrates an acceptable fit as the indices are high, all factor loadings are positive and significant at the .01 level, and the coefficient α and composite reliability suggest that the measured factors are reliable.

A series of model comparisons were conducted to assess the discriminant validity of the measures (Bagozzi and Yi, 1991). For any two constructs, the chi-square difference test

was used to assess whether the two-factor model fits significantly better than the one-factor model (in which the correlation between the two constructs was constrained to 1.0). The results indicate that all chi-square difference tests are significant. In addition, as indicated in Appendix A, the average variance extracted (AVE) of any two constructs is larger than the squared correlation between these two constructs (Fornell and Larcker, 1981). Thus, all measured constructs possess discriminant validity.

4.3. Results of hypothesis testing

This study posits that goal-setting characteristics moderate the relationship between sales control systems and job performance. To test the research hypotheses, the sample was split into two or three subgroups with about an equal number of cases depending on the levels of the moderating factors. To test H1 that moderately difficult goals would facilitate the effects of outcome control, the sample was split into three subgroups with high, medium, and low levels of goal difficulty, respectively. To test other hypotheses, the sample was median-split into two subgroups with high and low levels of the moderating factors, respectively. Separate regression analysis was conducted on each subgroup, and Chow's (1960) *F* test was performed to determine whether the difference between the subgroups was significant as per the hypotheses (Sharma et al., 1981). This procedure was recommended by Sarin and Mahajan (2001) for testing the presence of moderating effects. The results are summarized in Table 2.

Table 2 shows that when goal difficulty is at a moderate level, outcome control has a significant positive effect on outcome performance ($b=.24, P<.05$). However, when goal difficulty is low and high, it was found that outcome control has no significant effect on outcome performance ($b=.09, P>.05; b=.04, P>.05$). Chow's *F* test indicates that significant differences exist across the three subgroups. Thus, both H1a and b are supported.

As shown in Table 2, activity control and capability control has a significant effect on behavior performance when goal difficulty is low ($b=.29, P<.01; b=.25, P<.01$), while the effects of activity and capability control on behavior performance are smaller and when goal difficulty is high ($b=.17, P<.05, b=.16, P<.05$). Chow's *F* test indicated that there was a significantly different impact of activity control and capability control on behavior performance between high and low goal-difficulty subgroups. Thus, both H2a and H2b are both supported.

With regard to H3, Table 2 indicates that the relationship between outcome control and outcome performance is significant when goal specificity is high ($b=.21, P<.01$), whereas the relationship between outcome control and outcome performance is not significant when goal specificity is low ($b=.04, P>.05$). However, Chow's *F* test did not exhibit a significant difference between these two subgroups. Thus, H3 is not supported.

Table 2
Results of moderating effects of goal difficulty, goal specificity, and goal participation

Moderating variable	Goal difficulty					
	United States		China		Low	
	High	Low	High	Low	High	Low
Regression coefficients						
Outcome control → outcome performance	0.04 ($R^2=.00$)	0.24** ($R^2=.05$)	0.09 ($R^2=.01$)	0.07 ($R^2=.00$)	0.45** ($R^2=.20$)	0.14 ($R^2=.02$)
Moderating variable	Goal difficulty		Goal specificity		Goal participation	
Regression coefficients	United States		China		U.S.	
Outcome control → outcome performance	High	Low	High	Low	High	Low
Activity control → behavior performance	0.17* ($R^2=.03$)	0.29** ($R^2=.08$)	0.03 ($R^2=.01$)	0.37** ($R^2=.14$)	0.25** ($R^2=.06$)	0.41** ($R^2=.17$)
Capability control → behavior performance	0.16* ($R^2=.03$)	0.25** ($R^2=.06$)	0.03 ($R^2=.00$)	0.28** ($R^2=.08$)	0.14* ($R^2=.02$)	0.30** ($R^2=.09$)
Regression coefficients	High	Low	High	Low	High	Low
Outcome control → outcome performance	0.17* ($R^2=.03$)	0.29** ($R^2=.08$)	0.03 ($R^2=.01$)	0.37** ($R^2=.14$)	0.25** ($R^2=.06$)	0.41** ($R^2=.17$)
Activity control → behavior performance	0.16* ($R^2=.03$)	0.25** ($R^2=.06$)	0.03 ($R^2=.00$)	0.28** ($R^2=.08$)	0.14* ($R^2=.02$)	0.30** ($R^2=.09$)
Capability control → behavior performance	0.16* ($R^2=.03$)	0.25** ($R^2=.06$)	0.03 ($R^2=.00$)	0.28** ($R^2=.08$)	0.14* ($R^2=.02$)	0.30** ($R^2=.09$)

Values in bold mean Chow's *F* test is statistically significant at .01 or .05 level.

All the estimates are standardized ones.

* $P<.05$.

** $P<.01$.

Table 2 indicates that, under the high goal-specificity condition, activity control is not significantly related to behavior performance ($b=.11$, $P>.05$), while under the low goal-specificity condition, activity control has a significant, positive relationship with behavior performance ($b=.30$, $P<.01$). Chow's F test indicates a significant difference between these two subgroups. Thus, H4a is supported. Regarding H4b, while the effect of capability control on behavior performance is positive under both high and low goal-specificity conditions, Chow's F test does not indicate a significant difference between these two subgroups. Hence, H4b is not supported.

Regarding H5a and H5b, Table 2 indicates that activity control has a significant and positive effect on behavior performance under both the high goal-participation condition ($b=.25$, $P<.01$) and the low goal-participation condition ($b=.22$, $P<.01$). The Chow's F test does not exhibit a significant difference between these two subgroups. Thus, H5a is not supported. Moreover, when goal participation is high, capability control does not demonstrate a significant relationship with behavior performance ($b=.14$, $P<.05$), while when goal participation is low, capability control has a significant positive effect on behavior performance ($b=.23$, $P<.01$). Chow's F test does not indicate a significant difference between these two groups. Thus, H5b is also not supported.

5. Study 2

Study 2 explores whether the proposed contingency model holds in China, an emerging economic power with a distinctive culture (Hofstede, 1997). A multistage survey was conducted in China to collect the data. The sampling frame in China consisted of 30 companies representing a wide range of employee size, industries, and sales volume. First, sales managers or general managers in these companies were contacted by telephone to explain the purpose of the study and to inform them that aggregate results would be shared with them. Once their participation was secured, survey questionnaires were hand delivered to the sales/general managers for distribution to salespeople in their organizations. Completed surveys were retrieved by one of the researchers directly from the salespeople. This procedure resulted in 247 completed questionnaires. The Chinese sample consisted primarily of men (approximately 71%), and covered a range of products, including insurance, medical equipment, home electronics, and IT products. All respondents had set performance goals, and 35% of them were between 40 and 55 years of age.

5.1. Analysis and results

The same questionnaire used in Study 1 was adopted in Study 2. The questionnaire was developed in English, and then translated into Chinese and back translated into

English to ensure equivalency. Similar to Study 1, the measurement model of the constructs in Study 2 was also assessed by CFA. As indicated in Appendix A, CFA results for Chinese sample exhibited acceptable model fit indices. The coefficient α and composite reliability provided satisfactory evidence of reliability of the constructs. Through the comparison of chi-square difference (Bagozzi and Yi, 1991) and AVE (Fornell and Larcker, 1981) test, all the constructs possessed discriminant validity in Study 2.

Similar regression analysis was performed in Study 2, and the results are also shown in Table 2. As can be seen from Table 2, H1a and b are also supported in the China sample. However, H2a is not supported in the China sample because Chow's F test failed to provide significant chi-square difference. Furthermore, H2b is supported in the China sample. Contrary to H3, in the China sample, when goal specificity is high, the relationship between outcome control and outcome performance is not significant ($b=.03$, $P>.05$), while when goal specificity is low, the relationship between outcome control and outcome performance is significant ($b=.37$, $P<.01$). Chow's F test indicates a significant difference between these two groups. Furthermore, H4a and H4b are both supported in the China sample. Finally, regarding the moderating effect of goal participation, the findings in Table 2 support both H5a and H5b in the China sample.

6. Discussion

6.1. Research implications

Over the last 15 years, researchers have demonstrated an interest in gaining a better understanding of sales control systems. Consistent with this research tradition, the primary contribution of this study is that it advances a contingency model depicting goal-setting characteristics (goal difficulty, goal specificity, and goal participation) as moderating variables between sales control systems and job performance. With the importance of sales control, this study contributes to the literature in that it provides partial explanation of inconsistent findings in the sales control literature to date. Given the increasing attention toward global sales management, the contingency model was evaluated in two countries (United States and China) to examine whether the relationships investigated were stable. The following discussion provides more extensive elaboration of the study's findings.

Generally, the results of this study provide support of the organizational design literature and structural contingency theory viewpoints in that sales control systems and goal-setting characteristics should be addressed from an integrated perspective to assess their influence on sales performance (Jaworski, 1988; Van de Ven and Diane, 1980). Without considering goal characteristics, such as goal difficulty, goal

specificity, and goal participation, the effectiveness of sales control systems (outcome control, activity control, and capability control) are difficult to determine.

It appears that the positive effect of outcome control on outcome performance is only significant under moderately difficult performance goals. The results also indicate that goal difficulty negatively moderates the effects of sales control on behavior performance with some difference in the U.S. and China sample.

Interestingly, contrary to the hypothesis, outcome control only has a significant effect on outcome performance when goal specificity is low among salespeople in the China sample. This negative moderating effect of goal specificity on outcome control–outcome performance may be explained by the low- and high-context communication style distinction between the U.S. and Chinese cultures (Hall, 1976). Low-context communication involves the use of explicit and direct messages in which meanings are contained mainly in the transmitted messages, while high-context communication involves the use of implicit and indirect messages in which meanings are embedded in the sociocultural context (Hall, 1976). The communication literature suggests that Chinese culture is characterized by high-context communication, while U.S. culture is characterized by low-context communication (Gudykunst and Ting-Toomey, 1988; Usunier, 1996). Usunier (1996) suggested that in the case of low-context communication, the evaluation phase needs to be precise and specific for individuals to work hard in response to supervisory control, while in the case of high-context communication, specific and clear evaluation criteria tend to decrease salespeople's motivation to work hard in response to supervisory control, reducing the effects of outcome control on outcome performance.

The results of the impact of goal participation on the effects of activity control and capability control on behavior performance are mixed. In general, it would appear that participation in the goal-setting process helps clarify the task to be performed by salespeople and provides salespeople explicit knowledge of where to direct their efforts which enhances the effectiveness of activity control and capability control. Intriguingly, this relationship holds in the China sample, but not in the U.S. sample. A possible explanation could be due to the *interdependent-* vs. *independent-*self suggested by Markus and Kitayama (1991). The U.S. culture is characterized by *independent-*self emphasizing autonomy and freedom from social influence; and places high value on the uniqueness of internal qualities like preferences and abilities, whereas the culture of China is characterized by *interdependent-*self, which emphasizes the interconnectedness of people and assigns greater value to social exchange. Because participation in the goal setting process helps build connections among individuals and between individuals and environments, its moderating effects tend to be more salient in interdependent-self cultures, such as China, than independent-self cultures, such as the United States.

6.2. Managerial implications

This study provides important implications for managers. Generally, this study reveals that when managers use control systems, they should consider the implication of appropriate goal-setting strategies and their performance objectives. However, specific execution of these findings should be sensitive to the differences across national cultures. For sales managers in the United States, when end results, such as salespeople's sales volume and profits, are the primary concerns of managers, a high level of outcome control along with moderately difficult, specific goals should be adopted. When behavior performance, such as maintaining good relationships with customers and providing timely feedback, is the primary concern of managers, high levels of activity control and capability control along with more easily obtainable, nonspecific goals (e.g., "do your best") are more desirable.

However, for sales managers, who may be supervising Chinese salespeople in multinational companies, such as Shanghai, evidence from China sample suggest that when end results are the primary concerns of managers, a high level of outcome control along with moderately difficult, nonspecific goals would be appropriate. Whereas when behavior performance is the primary concern of managers, high levels of activity control and capability control along with more easily obtainable, nonspecific goals, and a high level of goal participation should be adopted.

6.3. Limitations and future research directions

Like that of other research, this study is subject to limitations. First, for performance goals, this study only investigates quantitative performance goals. Besides quantitative goals, managers can also assign behavior goals, like improving customer satisfaction. How behavior goal difficulty, specificity, and participation influence the relationship between control systems and job performance may be valuable topics for future research. Second, although we suggest that the moderating influence of goal-characteristics are due to their effects on salespeople's behavioral responses (working hard and working smart) toward sales control systems, this study failed to measure and test these intervening behavioral responses. Future research could explore how salespeople's goal-setting characteristics directly influence working-smart and working-hard behaviors. Future research may also seek to explore whether the moderating effects discovered in this study hold across different selling tasks (e.g., order-taker, order-getter, and consultative selling) and/or are influenced by environmental uncertainty. Third, although the measurements of outcome performance and behavior performance are adapted from existing literature, they may be too narrowly defined and, thereby, unable to capture the essence of the sales job, particularly when the usage of technology (e.g., CRM) is becoming more prevalent in the

selling environment. Therefore, new conceptualizations and measures of sales performance are strongly needed in future research.

The other limitation is the utilization of self-report measures, particularly outcome and behavior performance. This limitation was determined to be acceptable as the contributions of this study are focused on moderating effects of goal-setting factors on sales control systems–performance relationship, and most of the moderating effects are supported. To increase the confidence in the self-reported performance data, performance evaluations were collected for 45 of the Chinese salespeople from their sales managers. These sales manager reports were compared with their respective salespeople’s self-reports and yielded correlation coefficients of .58 (output performance) and .48 (behavior performance), which indicate an acceptable degree of reliability.

Appendix A

Items	Loadings	
	United States	China
Outcome control (adapted from Challagalla and Shervani, 1996) China sample: $\alpha=.84$, AVE=0.59, CR=0.91; U.S. sample: $\alpha=.87$, AVE=0.61, CR=0.92		
(1) The extent to which I attain my quantitative goals is critically evaluated.	.84	.75
(2) If my quantitative performance goals are not met, I would be required to explain why.	.83	.78
(3) Feedback on the extent to which I achieve my assigned goals is provided regularly.	.83	.80
(4) My pay increases are based upon how my performance compared with my goals.	.77	.75
(5) I would get a bonus if I exceed my sales volume target or market share target.	.69	.77
(6) I would receive a warning if my sales objectives are not met.	.78	.79
(7) My pay increase would suffer if my sales objectives are not met.	.71	.74
Activity control (adapted from Challagalla and Shervani, 1996) China sample: $\alpha=.82$, AVE=0.66, CR=0.93; U.S. sample: $\alpha=.88$, AVE=0.55, CR=0.90		
(1) The extent to which I follow established sales procedure is critically monitored.	.72	.77
(2) The procedures used to accomplish a given task are carefully regulated.	.73	.78
(3) Feedback on how to achieve my performance goals is frequently communicated to me.	.75	.81
(4) My immediate boss modifies my work procedures when desired results are not obtained.	.72	.84
(5) If I perform sales activities well, my supervisor would commend me.	.79	.82
(6) I would be recognized by my supervisor if s/he is pleased with how well I perform my sales activities.	.82	.86
(7) I would receive a warning if my manager is not pleased with how well I perform my sales activities.	.70	.80

Appendix A (continued)

Items	Loadings	
	United States	China
Capability control (adapted from Challagalla and Shervani, 1996) China sample: $\alpha=.80$, AVE=0.66, CR=0.94; U.S. sample: $\alpha=.85$, AVE=0.61, CR=0.92		
(1) My supervisor has standards by which my selling skills are evaluated.	.83	.80
(2) My supervisor provides guidance on ways to improve my selling skills and abilities.	.84	.82
(3) My supervisor periodically evaluates the selling skills I use to accomplish a task.	.90	.85
(4) My supervisor evaluates how I make sales presentations and communicate to customers.	.82	.85
(5) I would be commended if I improve my selling skills.	.78	.76
(6) Assignment to better territories or accounts depends on how good my selling skills are.	.62	.80
(7) I would receive a warning if my manager is not pleased with my selling abilities.	.66	.79
Goal difficulty (newly developed for this study) China sample: $\alpha=.78$, AVE=0.56, CR=0.79; U.S. sample: $\alpha=.70$, AVE=0.41, CR=0.67		
(1) My assigned goals are very difficult to achieve.	.61	.72
(2) I have very little difficulty in reaching my assigned goals (reverse coded).	.65	.60
(3) Generally, my assigned goals are challenging.	.65	.89
Goal specificity (newly developed for this study) China sample: $\alpha=.93$, AVE=0.76, CR=0.93; U.S. sample: $\alpha=.86$, AVE=0.63, CR=0.87		
(1) My supervisor specifically explained my assigned goals.	.73	.82
(2) I have very specific assigned goals in my job.	.90	.88
(3) I understand the exact level of my assigned performance goals.	.82	.88
(4) My assigned goals are general as opposed to specific (reverse coded).	.70	.90
Goal participation (adapted from Inkson et al., 1970) China sample: $\alpha=.76$, AVE=0.51, CR=0.80; U.S. sample: $\alpha=.84$, AVE=0.59, CR=0.85		
(1) I have influence on my supervisor regarding the level of my goals.	.73	.74
(2) My goals are typically set by my supervisor without my participation (reverse coded)	.78	.70
(3) It is easy to get my ideas across to my supervisor regarding the level of my goals.	.70	.64
(4) I have considerable influence over the level of goals set by supervisor.	.85	.76
Outcome performance (adapted from Behrman and Perreault, 1982) China sample: $\alpha=.91$ (China), AVE=0.60, CR=0.91; U.S. sample: $\alpha=.95$, AVE=0.72, CR=0.95		
(1) I am very effective in contributing to my firm’s market share.	.86	.81
(2) I am very effective in selling products with the highest profit margins.	.82	.80
(3) I am very effective in generating a high level of dollar sales.	.92	.74
(4) I am very effective in quickly generating sales of newly introduced products.	.80	.72
(5) I am very effective in identifying major accounts in my territory.	.82	.80
(6) I am very effective in selling to major accounts.	.87	.79
(7) I am very effective in exceeding annual sales targets and objectives.	.85	.78

(continued on next page)

Appendix A (continued)

Items	Loadings	
	United States	China
Behavior performance (adapted from Behrman and Perreault, 1982)		
China sample: $\alpha=.87$, AVE=0.57, CR=0.89; U.S. sample: $\alpha=.92$, AVE=0.68, CR=0.93		
(1) I am very effective in assisting my supervisor in meeting his or her goals.	.75	.74
(2) I am very effective in maintaining good customer relations.	.92	.77
(3) I am very effective in providing accurate information to customers and other people in my company.	.94	.77
(4) I am very effective in providing accurate and complete paperwork.	.80	.75
(5) I am very effective in managing sales expenses and time.	.77	.75
(6) I am very effective in acquiring the necessary knowledge about my products, competitors' products, and my customer's needs.	.74	.75

Fit indices in the U.S. sample: chi-square ($df=910$): 3025.82; GFI: 0.86; CFI: 0.89; RMSEA: 0.10.

Fit indices in the China sample: chi-square ($df=910$): 2729.27; GFI: 0.88; CFI: 0.90; RMSEA: 0.09.

CR=composite reliability, AVE=average variance extracted.

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