

# When Does Trust Matter? Antecedents and Contingent Effects of Supervisee Trust on Performance in Selling New Products in China and the United States

There is a strong normative bias toward the inherent value of trust among both marketing researchers and practitioners. Yet there is little empirical evidence of a positive impact of trust on performance. Indeed, scholars suggest that the sources of trust may provide opportunities for its abuse. Following this line of thinking, the authors investigate the dual roles of sales controls and supervisor behaviors as antecedents of salespeople's belief in the benevolence of the supervisor (i.e., supervisee trust). The authors then examine these antecedents as moderators of the relationship between supervisee trust and sales performance in the context of selling new products. Data on field salespeople from high-technology firms in China and the United States suggest that factors such as supervisor accessibility engender supervisee trust but do not necessarily enhance its impact on sales performance. In the Chinese sample, supervisee trust enhances sales performance when output control is adopted, when the supervisor has a higher level of achievement orientation style, and when the salesperson has higher role ambiguity. Furthermore, the results suggest that the supervisee trust-sales performance relationship is negative when supervisor accessibility is high. With the exception of achievement orientation and supervisor accessibility, these effects are negative or nonexistent in the U.S. sample. The authors discuss theoretical and practical implications of the study's findings.

**T**rust is given the pride of place among the factors that foster productive relationships in marketing and other contexts. In extant research, there is a strong normative bias toward the inherent value of trust—that is, trust is good for performance (e.g., Anderson and Weitz 1989; McAllister 1995; Morgan and Hunt 1994; Wicks, Berman, and Jones 1999). Consistent with the scholarly literature, the popular press also lauds trust as the hallmark of effective organizational relationships and performance and perceives the effectiveness of managers as dependent on their ability to gain the trust of their subordinates (Culbert and McDonough 1985). For example, in the sales context, the supervisor trusts the salesperson to exert maximum effort and commitment to achieve organizational goals. Reciprocally, the salesperson trusts the supervisor to be benevolent—to pro-

vide support, show fairness and objectivity in work assignments and performance appraisals, and show consideration for the salesperson's welfare. The salesperson's trust in the supervisor's benevolence is therefore believed to enhance sales performance (see Rich 1997).

Where is the evidence for this strong normative bias toward the inherent value of trust in the various contexts? Our review of the diverse literature suggests that there is little empirical evidence to support the validity of this viewpoint. Rich (1997) reports a positive relationship between supervisee trust and overall job performance rather than sales performance. Indeed, Dirks's (1999) recent review of the management literature concludes that there is little support for a positive relationship between trust and performance. Studies of trust in several marketing contexts tell a similar story. Smith and Barclay (1997) observe that trust among sales teams is only a modest predictor of task performance. Dahlstrom and Nygaard (1995) show that the effect of interpersonal trust on performance in marketing franchises could be positive or negative depending on the country sample. Crosby, Evans, and Cowles (1990) report that customers' trust in the salesperson is unrelated to sales performance. Similarly, Doney and Cannon (1997) report that trust in the buyer and trust in the salesperson are unrelated to purchase choice. Their results suggest that trust is only an order qualifier rather than an order winner. Finally, Aulakh, Kotabe, and Sahay (1996) observe that trust is unrelated to performance in interfirm marketing relationships.

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Given this state of empirical findings on the trust–performance relationship in the various contexts, we argue that trust may be in danger of being “oversold” and inappropriately used in practice if its moderating conditions are not critically assessed (see Dirks 1999). Trust connotes risk and vulnerability, a willingness to open oneself to harm, and the likelihood of being taken advantage of (Mayer, Davis, and Schoorman 1995; Soule 1998). Thus, trust carries a risk of betrayal (Elangovan and Shapiro 1998; Noteboom 1996, p. 989), may lead to illegal and immoral pursuits (Brenkert 1998), and may stifle creativity (Wicks, Berman, and Jones 1999). The risks inherent in trust arise because people’s integrity and their propensity to cheat vary across relationships and because there is incomplete information about other people’s intentions (Mayer, Davis, and Schoorman 1995).

Consequently, researchers argue that the conditions that are conducive for the emergence of trust may also allow for its abuse (Elangovan and Shapiro 1998; Granovetter 1985). For example, Shapiro (1987, p. 625) asserts that the sources of trust “may provide the opportunity and means for its abuse.” Similarly, Kramer, Brewer, and Hanna (1996, p. 380) observe that “the very properties of identity-based trust that contribute to its resilience might sometimes render individuals more vulnerable to misplaced trust.” The language of these authors implies that examining the antecedents of trust tells only half the story. It must also be determined whether the antecedents of trust affect its impact on performance. Such a dual role for antecedent factors has been observed in the marketing literature on improvisation and innovation (Moorman and Miner 1998). To our knowledge, no study in the marketing literature has examined the moderating impact of antecedents of trust on performance.

Trust occurs in different contexts, such as between individuals (e.g., employees and management; McAllister 1995; Rich 1997; Soule 1998), between firm employees (e.g., salespeople) and customers (Doney and Cannon 1997), within groups (such as sales teams; Smith and Barclay 1997), between organizations (Aulakh, Kotabe, and Sahay 1996; Ganesan 1994), and at the societal level (Fukuyama 1995). In this study, we focus on the salesperson–supervisor dyad in an attempt to contribute to the literature in three ways: First, with the exception of Rich’s (1997) examination of supervisor coaching, there is almost total silence on antecedents of the salesperson’s trust in the supervisor’s benevolence (hereafter *supervisee trust*) in the marketing literature. We believe that our understanding of supervisee trust will not be complete without a systematic examination of other supervisory behaviors (Kohli 1985, 1989) and supervisor-initiated control systems (Jaworski 1988). Second, we explore the extent to which the effect of supervisee trust on sales performance is moderated by these antecedents.<sup>1</sup> The moderating approach not only is consistent with the literature (e.g., Grayson and Ambler 1999; Moorman, Zaltman, and Deshpandé 1992) but also responds

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<sup>1</sup>This line of inquiry and the resulting insights and implications became possible because of an anonymous reviewer’s suggestion that we explore the moderating variables as antecedents of supervisee trust.

to recent calls for research of this kind. For example, Geyskens, Steenkamp, and Kumar (1998, p. 245) encourage researchers to “explore more complex interactive patterns relating to trust.” Similarly, Moorman, Deshpandé, and Zaltman (1993, p. 94) urge that “how trust operates in conjunction with other relationship factors such as ... controls warrants greater research attention.” Third, we test these relationships in both China and the United States. Compared with the West, China is a low-trust society, and therefore trust is of the highest importance in organizations (Fukuyama 1995; Redding 1993). Yet comparative research on trust in these two countries has rarely been conducted in marketing scholarship. The rest of the article is organized as follows: We first present the theoretical background and hypotheses. Next, we present the study methods and tests of the hypotheses. We conclude with a discussion of the results and their implications.

## Theoretical Background and Model

### *Supervisee Trust*

The vast literature on trust provides different definitions for the term. Some scholars refer to trust as a person’s belief and expectation about the likelihood of having a desirable action performed by another, as a person’s assessment of another’s goodwill and reliability (e.g., Mayer, Davis, and Schoorman 1995; Soule 1998; Wicks, Berman, and Jones 1999), or behavior reflecting a person’s vulnerability to another in an exchange relationship involving risk (e.g., Das and Teng 1998; Moorman, Zaltman, and Deshpandé 1992; Morgan and Hunt 1994). Marketing scholars working in the domain of interfirm and group relationships distinguish between two main forms of trust: honesty (the belief that the party is reliable, stands by his or her word, and fulfills promised role obligations) and benevolence (the belief that one party is genuinely interested in the welfare of the other party and is motivated to seek mutually beneficial gains) (see Doney and Cannon 1997; Ganesan 1994; Geyskens, Steenkamp, and Kumar 1998). Scholars who work in the interpersonal domain (e.g., manager–subordinate relationship) define trust as the employee’s attachment or bond with the manager and his or her belief in the manager’s benevolence (Lewis and Weigert 1985, p. 970; McAllister 1995; Soule 1998; Tyler and DeGoey 1996; Wicks, Berman, and Jones 1999, pp. 100–101). Theorists propose that this form of trust represents a higher stage or “deeper” level of trust and is highly stable (McAllister 1995, p. 30). Rempel, Holmes, and Zanna (1985, p. 97) assert that this deeper level of trust, which they refer to as “faith,” requires emotional investments of caring responses and a foundation of affective attachments.

We adopt this view of trust and note that it reflects the benevolence dimension of trust identified by marketing scholars in the interfirm and group contexts. In both these contexts, benevolence trust involves showing consideration and sensitivity for the needs and interests of the other party in the relationship, acting in a way that protects these interests, and refraining from exploiting the other party for the benefit of one’s own interests (see Mayer, Davis, and Schoorman 1995; Rich 1997; Whitener et al. 1998, p. 518).

Formally, in the current study, we define supervisee trust as the degree to which the salesperson perceives the supervisor as benevolent and believes that the supervisor is genuinely interested in the salesperson's welfare and provides due care for his or her needs. Supervisee trust implies an emotional bond or attachment of the supervisor to the salesperson (see Rempel, Holmes, and Zanna 1985; Rich 1997).<sup>2</sup>

In extant research, considerable attention has been focused on identifying the factors that engender trust in marketing exchange relationships. In the interorganizational context, research has shown that factors such as transaction-specific investments (Ganesan 1994); controls (John 1984); mutual values (Morgan and Hunt 1994); support, cultural similarity, goal congruence, and communication (Anderson and Weitz 1989); reputation (Anderson and Weitz 1989; Ganesan 1994); and the organizational structure and culture, along with the characteristics of the exchange object (Moorman, Deshpandé, and Zaltman 1993), influence the formation of trust. In the customer-organization context, a salesperson's expertise, frequency of interactions with customers, similarity, and communication have been identified as antecedents of trust (Crosby, Evans, and Cowles 1990; Doney and Cannon 1997; Smith and Barclay 1997). We extend the literature on trust by investigating some of the factors uncovered at the interorganizational level in the salesperson-supervisor context. We consult transaction cost analysis (TCA) and social exchange theory to isolate the potential antecedents of supervisee trust.

### **TCA and Trust**

According to TCA, opportunistic behaviors occur in exchange relationships largely because of bounded rationality and information uncertainty. Opportunistic behavior involves withholding or distorting information, shirking responsibilities, cheating, and other subtle forms of dishonest behaviors (Williamson 1985, p. 47). Although TCA is ambivalent about trust, it acknowledges that exchange relationships that feature personal trust will survive greater stress and will display greater adaptability (Williamson 1985, pp. 62-63). Two tenets of TCA inform our study: First, it argues that to forestall opportunism and ensure trustworthy behavior, the parties in an exchange must resort to control mechanisms. The notion of controls forestalling opportunism has led to the suggestion that controls influence trust formation because trust reflects abstinence from opportunistic behavior. For example, Smith and Barclay (1997, p. 6) contend that forbearance from opportunistic behavior is a trusting behavior. This notion of controls affecting trust is also reflected in Ouchi's (1979, p. 846) view that "people must either be able to trust each other or to closely monitor each other if they are to engage in cooperative enterprises." Similarly, informed by TCA, Doney and colleagues (Doney and Cannon 1997; Doney, Cannon, and Mullen 1998) suggest that trust building is a calculative process involving one party calculating the costs and rewards of another party cheating or cooperating in the rela-

tionship. Viewed from another angle, trust is "about believing that others will perform whatever serves the trustor's interests, even in the absence of control" (Das and Teng 1998, p. 498). The implication of this literature is that if the sales supervisor trusts that the salesperson will do the best job possible, there is no need for controls. It follows that from the salesperson's perspective, sales controls have implications about the supervisor's intentions in the working relationship. We deduce that because controls imply the sharing of performance risk between the organization and the employee (Oliver and Anderson 1994, p. 54; Whitener et al. 1998), a salesperson infers the positive or negative support and caring intentions of the supervisor from the types of sales controls instituted, thereby affecting his or her trust in the supervisor.

The second tenet of TCA is that opportunism is more likely when the environment of the exchange permits. This notion suggests that parties to the exchange weigh the costs and benefits of opportunistic behavior (see Hill 1990). For example, Noteboom (1996, p. 989) argues that the temptation of a party to abuse trust in an interorganizational relationship depends on the likelihood of detection and the ensuing risk of loss of reputation. Consistently, Elangovan and Shapiro (1998, pp. 555-56) postulate that managers weigh the costs and benefits of violations of trust. Hill (1990, p. 510) also claims that opportunism is a viable strategy when the benefits outweigh the costs. Consequently, we argue that sales controls may influence the salesperson's evaluations of the costs and risks of untrustworthy behavior, thereby affecting the efficacy of supervisee trust on sales performance. In support of our position, researchers (e.g., Ghoshal and Moran 1996, p. 27; Hill 1990; John 1984) contend that bureaucratic controls may increase opportunistic behavior or dissipate the positive returns from an exchange. This could occur for two reasons: First, controls may be perceived by the controlled party as depriving him or her of self-control and autonomy, thereby implying a lack of trust. For this reason, John (1984, p. 284) reports a positive relationship between bureaucratic controls and opportunistic behavior in the interorganizational marketing context. Second, controls may be perceived to increase or lower the performance risk of the employee, thereby affecting his or her evaluation of the costs and benefits of violations of trust. Therefore, we believe that though sales controls may affect supervisee trust, they also moderate the effect of supervisee trust on sales performance.

This idea of the potential direct and moderating effects of sales controls provides an extension of TCA, which tends to focus on only the behaviors of the person being monitored rather than on his or her attitudes toward controls. It provides a fresh perspective of sales controls, which seems to have begun with Anderson and Oliver (1987) but has not yet been systematically investigated. In this study, we examine the differential impact of output and process controls because of their salience in prior research as the supervisor's initiated control mechanisms (Jaworski 1988) that are likely to affect trust (see Anderson and Oliver 1987; Das and Teng 1998). Furthermore, these controls have been singled out as potential moderators of the effect of trust on performance (see Moorman, Deshpandé, and Zaltman 1993, p. 94).

<sup>2</sup>Our focus on benevolence trust is not meant to downplay the importance of the honesty dimension of trust in the salesperson-supervisor context. We address this point subsequently.

## **Social Exchange Theory and Trust**

Critics argue that TCA undersocializes exchange relationships by underestimating the role of social interactions between the parties in a relationship (Ghoshal and Moran 1996; Granovetter 1985, p. 490; Hill 1990). Social exchange theory (Blau 1964; Thibaut and Kelley 1959) suggests that the behaviors of parties in an exchange relationship cannot be explained only through economic exchange. They can also be explained through social interactions entailing repeated exchanges, future obligations, and the belief that each party will discharge his or her obligations in the long run. From this theoretical perspective, the main sources of trust are shared values and length of attachment, which ensure effective communication and understanding between the parties. For example, Doney, Cannon, and Mullen (1998) suggest that people build trust in others through an intentionality process based on repeated interactions and common values and goals. Therefore, as we argue previously, in the supervisor-subordinate relationship, trust implies affective attachments, the feelings of being connected and joined, that emerge through relational exchanges (McAllister 1995, p. 30; Whitener et al. 1998, p. 518).

The social exchange perspective has informed several previous studies of trust in various relationship contexts in the marketing literature (e.g., Anderson and Weitz 1989; Doney and Cannon 1997). Partner behaviors such as communication and interaction frequency (Doney and Cannon 1997; Smith and Barclay 1997), goal congruency, and shared values (Anderson and Weitz 1989) have received particular attention as antecedents of trust. In this study, we extend the literature by investigating three of these behaviors at the supervisor-salesperson level: supervisor accessibility, achievement orientation, and role ambiguity. *Supervisor accessibility* is a similar concept to interaction frequency (Doney and Cannon 1997; McAllister 1995). *Achievement orientation* captures the convergence of the salesperson's and supervisor's goals (Kohli 1989), thereby reflecting shared values and agreement on goals (Tyler and Degoey 1996). Achievement orientation is particularly important in China's emerging market economy because it overcomes the "iron rice bowl" mentality of workers (i.e., expectation of rewards for merely being an employee rather than for achieving organizational goals) developed during the planned economy. *Role ambiguity* is a salient construct in this study because it captures the lack of communication or mutual understanding about supervisee roles (see Das and Teng 1998, pp. 504-505).

Social exchange theory also argues that trust prevails even when opportunism might be rationally expected. For example, Granovetter (1985) proposes that the interactions in an exchange relationship encourage trustworthy behavior even if controls against opportunistic behavior are not in place. This view has led to the contention that in interpersonal relationships, trust is characterized by a "leap of faith" beyond the expectations that reason and experience alone would warrant (Lewis and Weigert 1985, p. 970; Wicks, Berman, and Jones 1999, pp. 100-101). The logic for this viewpoint is that the relational context itself acts as a "moral control" on the behavior of exchange partners (Ghoshal and Moran 1996; Granovetter 1985; Hill 1990). Consequently, we argue that to the extent that the supervisor's behaviors

forestall the abuse of trust, they would enhance the impact of supervisee trust on sales performance. In consonance with this argument, Shapiro (1987, p. 631) suggests that managers forge "agency relationships based on familiarity, interdependence, and continuity that provide strong incentives for trustworthy performance and a potent array of informal social control options to punish abuse." In other words, managers can deal with the potential abuse of trust by "personalizing the agency relationship by embedding it in structures of social relations" (Shapiro 1987, p. 631). Similarly, Tyler and Degoey (1996) observe that supervisee trust has a greater influence on the employee's acceptance of the supervisor's decisions when the supervisor is considered a friend and when they share similar goals.

In summary, trust is a common element in both TCA and social exchange theories. This is because, as Ouchi (1979) and others (e.g., Ghoshal and Moran 1996) argue, even the purest form of economic exchange involves social and emotional requirements. Whereas TCA assumes that untrustworthy behavior in the form of opportunism can be prevented by controls, social exchange theory intimates that opportunism can be prevented by the social relations between the parties to an exchange. Both therefore highlight the essential feature of exchange relationships between supervisors and subordinates. That is, the relationship is based on an expectation that each party offers something the other party perceives as valuable, that each party must perceive the exchange as reasonably equitable and fair, and that trustworthy behavior (i.e., lack of opportunism) is required to ensure desirable outcomes. We believe that the integration of these two theoretical perspectives yields a model with better predictive validity.

### **Does National Culture Matter?**

National culture influences individual and organizational behavior such that it has implications for trust development and efficacy (Doney, Cannon, and Mullen 1998). Two cultural dimensions are relevant to our study: (1) individualism/collectivism (or the degree to which people look after their own interests as opposed to the interest of in-groups) and (2) uncertainty avoidance (or the degree to which people in a society tolerate ambiguity and uncertainty and feel threatened by uncertain situations). Compared with the United States, China is a collectivist and high-uncertainty avoidance society (Hofstede 1980, 1997). Relationships between managers and subordinates have more far-reaching implications for the nature of trust in collectivist/high-uncertainty avoidance societies than in individualist/low-uncertainty avoidance societies. For example, in the West, managers have the power to control some behaviors, but employees retain control over other behaviors. As Shenkar and von Glinow (1994, p. 62) argue, the situation in China is markedly different:

Unlike his/her Western counterpart, the Chinese manager impacts not only the work domain, but also all other spheres of life of his/her subordinates, including even such matters as birth control. There are no time, place or role restrictions on his power, and the total nature of enterprise allows for constant supervision.

Furthermore, the level and the importance of trust are distinct but related constructs. Compared with Western soci-

eties such as the United States, Chinese societies are low-trust societies (Fukuyama 1995). Chinese societies are strongly familistic such that there is a lack of trust outside the family (Redding 1993, p. 67). As an indication of low trust, Chinese societies tend to be high-power distance societies, where inequality of power is accepted and managers tend to centralize decision making, share little information, and expect and receive compliance from subordinates (Hofstede 1980; Shane 1994). In addition, the recent political and social history of China, involving a great deal of suspicion and betrayal (e.g., in the Cultural Revolution), means that people view others as a threat and are less inclined to trust them.<sup>3</sup> Finally, Dahlstrom and Nygaard (1995) suggest that in transitional economies such as China, institutional underdevelopment creates an uncertain and risky environment that generates low trust among people. Given that trust is low in the society, we argue that a higher level of importance is given to interpersonal trust in China than in the United States (see Fukuyama 1995; Reeder 1987). The preceding discussion suggests that culture matters and that China and the United States provide ideal sites to test the potential conditional impact of supervisee trust on sales performance. Indeed, Reeder (1987) observes that many U.S. businesses failed in China because their managers tended to ignore the development of interpersonal trust.

Figure 1 presents the theoretical model. Because trust is context specific and is more operative in situations of risk and uncertainty (see Das and Teng 1998, p. 494; Doney and Cannon 1997, p. 36), we contend that in the sales context, supervisee trust could be more operative when the situation involves selling a new product. Akin to the difference between a new buy and a straight rebuy in industrial marketing (see Doney and Cannon 1997), a new product involves greater selling risk and uncertainty than an old product (see Atuahene-Gima 1997; Hultink and Atuahene-Gima 2000). Therefore, we test our model in the context of the most recent new product introduced by the firm. In the next section, we develop our hypotheses by first presenting the logic for a general effect of each antecedent variable on

supervisee trust. We then suggest how culture influences the strength of the relationship posited.

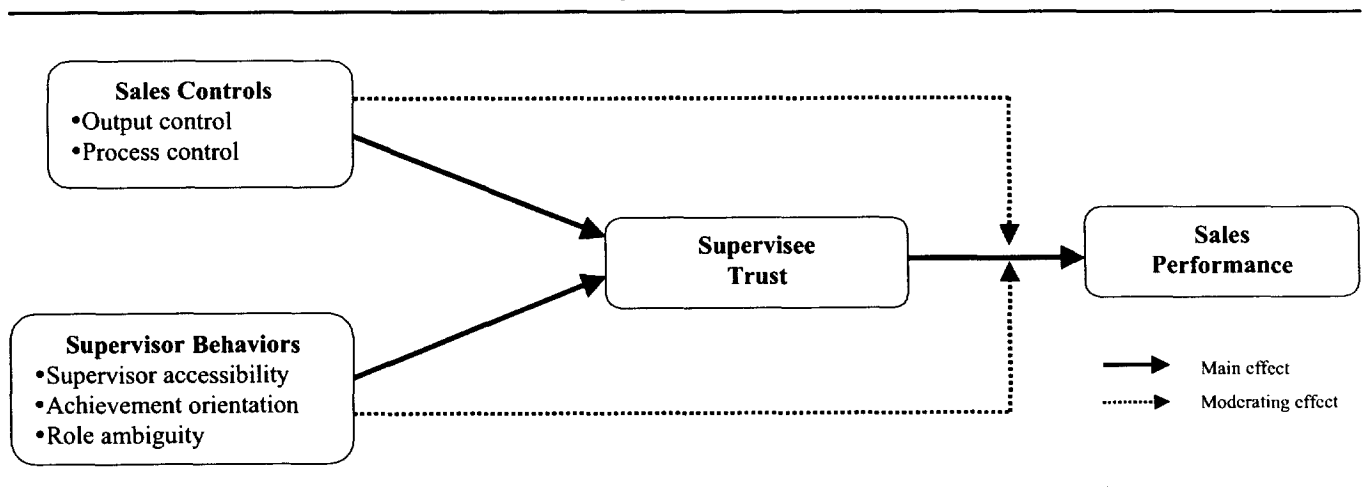
## Hypotheses

### Antecedents of Supervisee Trust

*The effects of output and process controls.* Output control refers to the extent to which a supervisor places emphasis on results when monitoring, evaluating, and rewarding salespeople. In contrast, process control reflects the extent to which a supervisor emphasizes procedures and behavioral activities in monitoring, evaluating, and rewarding salespeople (Anderson and Oliver 1987). As mentioned previously, TCA suggests that trust is influenced by control mechanisms. However, the nature of the influence appears to depend on the inferences the salesperson makes about the motives of the supervisor from the sales controls used (see Anderson and Oliver 1987). Output control represents a “hands-off” approach to managing salespeople, in that they are given a great deal of autonomy and independence to perform their duties and are compensated for the output they achieve. Thus, output control shifts substantial performance risk to the salesperson because output may be affected by environmental and company factors beyond his or her control (Oliver and Anderson 1994, p. 54). As Whitener and colleagues (1998, p. 515) argue, to the extent that the employee is compensated on the basis of outcomes beyond his or her control, performance risk to him or her is greater. We believe that by increasing the salesperson’s performance risk, output control sends a negative signal of the supervisor’s lack of concern or support for the salesperson. As Hopewood (1972) suggests, when managers rely heavily on financial and quantitative measures, employees tend to show increased tension and perceive poorer relations with them. In contrast to output control, process control ensures that the salesperson receives rewards as long as process requirements are met, irrespective of the output achieved. It therefore reduces the pressure to produce output, because the organization rather than the salesperson assumes much of the performance risk (Anderson and Oliver 1987; Cravens et

<sup>3</sup>We owe this explanation to an anonymous reviewer.

FIGURE 1  
Conceptual Framework



al. 1993). Consequently, although process control may limit autonomy and self-control, unlike output control, it sends a positive signal of the supervisor's concern, care, and support for the salesperson. As Oliver and Anderson (1994, p. 54) argue, employees feel committed and grateful to supervisors who use process control, because it provides them a nurturing climate and reduced performance risk.

Prior research suggests that the effects of sales controls may depend on the risk preferences of the salesperson (Anderson and Oliver 1987; Basu et al. 1985). Risk preferences differ across cultures. For example, in individualistic and low-uncertainty avoidance cultures, people relish risk and challenging work (Hofstede 1980). This suggests that these cultural dimensions will moderate the impact of output and process controls on supervisee trust. The negative implications of output control mentioned previously are more likely to be felt by the Chinese because of their collectivist and high-uncertainty avoidance cultural orientation. Being individualists and being relatively comfortable with uncertainty, U.S. salespeople are more likely to cherish the autonomy and opportunities afforded by output control to achieve high individual performance. Therefore, they may be less concerned with the performance risk implications of output control. Compared with their U.S. counterparts, Chinese salespeople are likely to value the supervisor's care and support, which are implied by process control, and be less concerned with the lack of autonomy and self-control. Consistent with this argument, Dahlstrom and Nygaard (1995) report a positive relationship between process formalization and interpersonal trust in the former East Germany, a collectivist and high-uncertainty avoidance society. In contrast to their Chinese counterparts, U.S. salespeople may be more concerned with the lack of autonomy and loss of personal discretion from process control and interpret these as non-benevolent behaviors of the supervisor. Therefore, we posit that

- H<sub>1a</sub>: Output control is related negatively to supervisee trust.
- H<sub>1b</sub>: The negative effect of output control on supervisee trust is stronger in China than in the United States.
- H<sub>2a</sub>: Process control is related positively to supervisee trust.
- H<sub>2b</sub>: The positive effect of process control on supervisee trust is stronger in China than in the United States.

*The effects of supervisor behaviors.* In addition to sales controls, we consider three supervisor behaviors as antecedents of supervisee trust: supervisor accessibility, achievement orientation, and role ambiguity. Supervisor accessibility refers to the extent to which the supervisor is available to meet and interact with the salesperson (e.g., making joint sales calls with the salesperson). It reflects the degree of personal communication and interaction frequency between them. Frequent communication between partners in an exchange relationship fosters trust because it provides opportunities to resolve disputes, thereby aligning the partners' perceptions and expectations (Anderson and Weitz 1989; Doney and Cannon 1997). Such common perspectives, according to social exchange theory, facilitate a sense of understanding and even similarity, which increases the partners' confidence in the relationship (Anderson and Weitz 1989, p. 314). Thus, by enhancing communication,

supervisor accessibility reduces the salesperson's performance risk because it allows for due consideration of the salesperson's problems and views in selling (see Oliver and Anderson 1994). In other words, the performance problems of the salesperson are likely to be considered in appraisals of the salesperson's performance. Given that the Chinese are relatively more collectivist and uncomfortable with uncertainty, we argue that they would attach greater importance to the support and caring benefits inherent in supervisor accessibility than their individualist U.S. counterparts would. Indeed, the latter may view supervisor accessibility as interference in their work. Therefore,

- H<sub>3a</sub>: Supervisor accessibility is related positively to supervisee trust.
- H<sub>3b</sub>: The positive effect of supervisor accessibility on supervisee trust is stronger in China than in the United States.

Achievement orientation refers to the degree to which the supervisor sets challenging goals, expects high levels of performance, and expresses confidence in the salesperson's ability to meet the goals and expectations (Kohli 1985). From a TCA perspective, an emphasis on achievement of goals fosters trustworthy behavior. The logic is that achievement orientation reflects a mutual hostage situation because of the close linkage between the successful performance of the salesperson and the performance of the supervisor. From a social exchange viewpoint, achievement orientation is a supervisor's demonstration of the importance of joint gain. Reflecting the logic of goal congruence (see Anderson and Weitz 1989), achievement orientation leads to supervisee trust because the salesperson's and supervisor's goals are linked, which implies mutual vulnerability. Given the individualist U.S. culture, salespeople will cherish achievement orientation, because it is designed to motivate high individual performance (see Kohli 1989). In contrast, the collectivist Chinese place greater weight on the in-group's interests than on personal interests. Thus, achievement orientation style may be perceived as undue pressure to achieve individual goals rather than the group's goals (see Earley 1989). Therefore,

- H<sub>4a</sub>: Achievement orientation is related positively to supervisee trust.
- H<sub>4b</sub>: The positive effect of achievement orientation on supervisee trust is weaker in China than in the United States.

Role ambiguity refers to the degree of discrepancy between the information available to the salesperson and the information he or she requires to perform the job adequately (Singh and Rhoads 1991). In other words, role ambiguity reflects the degree of uncertainty and lack of clarity the salesperson perceives in his or her job. There are several dimensions of role ambiguity (Singh and Rhoads 1991). However, we focus on customer role ambiguity because it has been contended that the customer interface is perhaps the most important dimension affecting sales performance (Weitz, Sujana, and Sujana 1986). Customer role ambiguity (e.g., lack of clarity about what services to provide to customers, what company strengths to emphasize to customers, and how to handle customer objections) hinders supervisee

trust because it reflects a lack of communication and understanding between the salesperson and the supervisor about the role requirements of the salesperson. It undermines the supervisor–salesperson relationship by creating conflicts over goals and the tactics to achieve them, because the perceptions and expectations of the salesperson and the supervisor are not aligned. The strength of the negative effect of role ambiguity on supervisee trust may depend on the level of uncertainty avoidance in the culture. In high–uncertainty avoidance cultures, people place great emphasis on clarity of roles because of the fear of the unknown (Hofstede 1997). In this sense, the level of uncertainty avoidance magnifies the negative impact of role ambiguity on supervisee trust. Because China has a higher uncertainty avoidance orientation than the United States, we propose that

H<sub>5a</sub>: Role ambiguity is related negatively to supervisee trust.

H<sub>5b</sub>: The negative effect of role ambiguity on supervisee trust is stronger in China than in the United States.

### **Direct and Contingency Effects of Supervisee Trust on Sales Performance**

In the preceding subsection, we examine the antecedents of supervisee trust. The effectiveness of such trust, when it occurs, is another matter because the factors that breed trust may also stifle its effectiveness on desired outcomes (Granovetter 1985; Kramer, Brewer, and Hanna 1996; Shapiro 1987). Therefore, in the next subsection, we first examine the main effect of supervisee trust on sales performance and then investigate how the antecedents may moderate the relationship between supervisee trust and sales performance.

*The effect of supervisee trust on sales performance.* The performance outcomes of trust have been conceptualized differently across contexts. For example, in an interorganizational context, performance is conceptualized and measured as commitment, satisfaction, or long-term orientation in the relationship (see Ganesan 1994; Geyskens, Steenkamp, and Kumar 1998). In the business-to-customer context, performance is measured as a customer's decision to purchase a product (e.g., Doney and Cannon 1997) or as customer satisfaction (e.g., Moorman, Zaltman, and Deshpandé 1992). In theory, goal achievement reflects the salespeople's efficiency in processing and using task-related information because of their different work and decision-making styles. Thus, from a methodological standpoint, salespeople produce measurable output as a result of task performance and can be reliably compared on the basis of such production. Therefore, in this study, we define *sales performance* as the extent of achievement of sales objectives for a specific new product that recently has been introduced by the firm (see Sujan, Weitz, and Kumar 1994).

Supervisee trust is related positively to sales performance for several reasons. First, a salesperson who trusts the supervisor believes that he or she will receive fair treatment and equitable rewards. Thus, supervisee trust enhances the salesperson's commitment in performing the job. Second, to increase sales performance, the supervisor must provide advice to the salesperson and must set performance goals for him or her to achieve. Supervisee trust is likely to increase the salesperson's acceptance of the advice and goals of the supervisor, thereby energizing him or her to work harder.

Supervisee trust may play a more significant role in influencing sales performance in China than in the United States. This is because, being collectivists, the Chinese are not only more likely to value the supervisor's benevolence but also less likely to abuse trust. Unlike people from high–uncertainty avoidance cultures, those from low–uncertainty avoidance cultures (the United States) do not fear the future and can tolerate risk easily. It follows that they may abuse trust even if it damages the exchange relationship (Doney, Cannon, and Mullen 1998, pp. 610, 614). This proposition is buttressed by the argument that in low-trust societies such as China, trust is rare outside the family (Fukuyama 1995) and therefore is of utmost importance and is highly valued in organizations (see Redding 1993). We hypothesize that

H<sub>6a</sub>: Supervisee trust is related positively to sales performance.

H<sub>6b</sub>: The positive effect of supervisee trust on sales performance is stronger in China than in the United States.

*The moderating role of output and process controls.* Although H<sub>1a</sub> predicts that output control will hinder supervisee trust, we contend that it will enhance the effectiveness of supervisee trust on sales performance. Recall that output control shifts substantial performance risk to the salesperson because he or she is compensated on the basis of outcomes that may be beyond his or her control (see Oliver and Anderson 1994; Whitener et al. 1998). Thus, from a TCA perspective, output control suggests to salespeople that opportunistic behavior (e.g., shirking of responsibility) is unrewarding. Consistent with this view, several scholars contend that trust is psychologically more important for performance in situations in which its abuse would lead to unfavorable consequences for the abuser (see Brockner et al. 1997; Shapiro 1987). For example, Noteboom, Berger, and Noorderhaven (1997) argue that abuse of trust is self-defeating for a partner whose benefits depend on actual contribution to the outcomes of the partnership. This discussion suggests that output controls enhance the effectiveness of supervisee trust on sales performance.

H<sub>2a</sub> predicts that process control engenders supervisee trust. However, we argue that it could simultaneously reduce the value of supervisee trust because it creates conditions for opportunistic behavior (see Whitener et al. 1998). There are three reasons for this: First, as we argue previously, a potential disadvantage of process control is that it could be perceived by the salesperson as limiting his or her self-control and autonomy. It thereby raises questions about the supervisor's benevolence in the relationship. In other words, under process control, a salesperson must live up to whatever process requirements are demanded by the supervisor (e.g., making a specified number of sales calls, working a specified number of hours per week). This usually means more monitoring that could be construed as implying lack of trust and limiting self-control, thereby interfering with sales performance. Second, process control lowers the perceived performance risk of the salesperson (Anderson and Oliver 1987; Cravens et al. 1993), because under process control, rewards are dependent on the salesperson's activities over which he or she has maximum control. To the extent that the salesperson performs all the stipulated process requirements, he or she receives rewards irrespective of the actual

performance output achieved. However, a process control could be subjective, because the supervisor does not know for certain which behaviors to emphasize (Anderson and Oliver 1987) or may find it difficult to implement them (Oliver and Anderson 1994). This means that to ensure greater output, salespeople need to perform significant extra-role discretionary activities that are not stipulated by the control system, such as building long-term customer relationships, adopting creative selling methods, and engaging in other organizational citizenship behaviors (Netemeyer et al. 1997). Yet on the basis of TCA logic, in contrast to output control, under process control the salesperson can calculate that there is relatively less to lose from failing to perform such discretionary activities because they are not stipulated by the control system. Third, a process control must be detailed to guide salespeople regarding the "correct" way to carry out selling tasks (Cravens et al. 1993; Oliver and Anderson 1994, p. 54). We argue that such detailed guidance reduces performance risk by making it easier for the salesperson to perform the process requirements and meet the supervisor's expectations. Formally, we posit that

- H<sub>7a</sub>: The greater the level of output control, the greater is the likelihood that supervisee trust will lead to higher sales performance.
- H<sub>7b</sub>: The greater the level of process control, the greater is the likelihood that supervisee trust will lead to lower sales performance.

*The moderating role of supervisory behaviors.* According to social exchange theory, supervisor accessibility enhances mutual communication, thereby increasing the supervisor's knowledge of the conditions surrounding the salesperson's task performance. We argue that, with increased supervisor accessibility, problems encountered by the salesperson in selling and his or her views about them are likely to be factored into performance appraisal decisions. This is likely to reduce the salesperson's perceived performance risk, thereby increasing the likelihood of opportunistic behavior. Consistent with this argument, Moorman, Zaltman, and Deshpandé (1992, p. 323) argue that opportunistic behavior could follow from increased communication and deeper exchanges. Similarly, other scholars suggest that trust has greater relevance for performance when there is little consideration of the employee's views in decision making (see Kohli 1989; Tyler and Degoe 1996). Furthermore, Grayson and Ambler (1999, p. 139) report that trust is more effective in short-term than in long-term relationships. A plausible reason for this finding is that the increased communication and similarity that develop between parties in long-term relationships reduce performance risk, thereby dampening the impact of trust by increasing its potential abuse. In brief, we argue that to the extent that supervisor accessibility reduces the performance risk of the salesperson, supervisee trust becomes less important for sales performance.

We mentioned previously that salespeople infer mutual vulnerability from the supervisor's achievement orientation style, because such a style reflects the parties' mutual commitment to organizational goals and performance risk (see

Williamson 1985). It follows that achievement orientation strengthens the impact of supervisee trust on sales performance; it makes an abuse of trust unrewarding for the salesperson because his or her goals are closely linked with those of the organization. As support for this argument, Tyler and Degoe (1996) show that agreement on goals and mutual concern for achievement between the employee and the manager strengthen the impact of trust on the employee's acceptance of managerial decisions. Similarly, Shapiro (1987) argues that one means of curtailing the abuse of trust is to ensure agreement and commitment to mutual goals.

By its very nature, role ambiguity increases the salesperson's performance risk. It therefore enhances the impact of supervisee trust on sales performance for two reasons: First, role ambiguity suggests a high need for clarity on the part of the salesperson because of the inadequate information about his or her role. Social exchange theory suggests that supervisee trust becomes critical in creating an environment in which the salesperson is comfortable raising issues with the supervisor in an attempt to clarify his or her role. This line of reasoning is in keeping with the argument that the supervisor's considerateness (which is defined to include trust) has a stronger positive effect on sales performance when the salesperson's need for clarity is high (Kohli 1989). Second, role ambiguity threatens goal achievement because it increases the probability of the salesperson making incorrect decisions, thereby increasing the potential for performance failure and unfavorable assessment of performance. Consequently, there is little incentive for the salesperson to behave opportunistically when role ambiguity is higher. Therefore,

- H<sub>8a</sub>: The greater the level of supervisor accessibility, the greater is the likelihood that supervisee trust will lead to lower sales performance.
- H<sub>8b</sub>: The greater the level of achievement orientation, the greater is the likelihood that supervisee trust will lead to higher sales performance.
- H<sub>8c</sub>: The greater the level of role ambiguity, the greater is the likelihood that supervisee trust will lead to higher sales performance.

*Cross-national differences in moderating effects.* People in collectivist and high-uncertainty avoidance cultures are less likely than their counterparts in individualist and low-uncertainty avoidance cultures to abuse trust, because they perceive higher costs of such behavior (see Doney, Cannon and Mullen 1998, pp. 610–14). This notion of differential propensity to abuse trust suggests that the moderating effects presented previously differ between China and the United States. For example, output control has the potential to encourage opportunistic behavior depending on the risk preferences of the employee (see Anderson and Oliver 1987, p. 78). Given the differences in the level of uncertainty avoidance between China and the United States, this idea suggests that the Chinese are less likely to take advantage of trust under output control because they perceive higher performance risk than their U.S. counterparts do. In other words, the positive effect of the interaction of supervisee trust with output control on sales performance would be stronger in China than in the United States. However, we do



not offer specific hypotheses about the relative effects of the interactions between supervisee trust and the moderating variables on sales performance other than the implicit notion that each may differ between the two samples. This is because it is not clear from the current literature whether the different propensities to abuse trust by people from the two different cultures will be maintained in each of the contingencies examined here. Therefore, the issue of the differential moderating effects between China and the United States is an exploratory aspect of our study that we address in our empirical analysis.

## Research Method

### Sample and Data Collection

The Chinese sample for the study consisted of sales employees of firms in the electronics, information technology, software development, biotechnology, and other high-technology sectors. We randomly selected the sample from a sample frame of firms located in Beijing's High Technology Experimental Zone. We contacted chief executive officers of 250 firms to introduce the study and encourage participation. A total of 150 firms agreed to participate in the study. Using a list of sales employees, we randomly selected 3 from each firm for the study, which resulted in a sample of 450 salespersons. We collected the data through on-site interviews. We assured confidentiality to all respondents to encourage candid responses. Our data collection efforts yielded 215 completed questionnaires (i.e., those who agreed to participate and did participate in the interviews), for a participation rate of 48% (215 of 450). Missing data and listwise deletion reduced the current analytic sample to 157, for an effective participation rate of 34.9%.<sup>4</sup> To test whether our respondents were different from nonrespondents, we obtained by telephone demographic data from 30 nonrespondents (salespeople who agreed initially to participate but then refused participation at the time of the study) to compare with those of the study participants. We found no statistically significant differences in age, tenure, education, and sales experience. The U.S. sample frame, supplied by a commercial list provider, consisted of 3000 salespeople from the same types of industries. We selected at random 1000 salespeople but were left with 750 after deleting those who worked in nonmanufacturing firms. We collected the data through a mail survey and obtained 190 usable responses after two follow-ups. This response rate of 25% is similar to that of other studies that use a similar methodology (e.g., Siguaw, Brown, and Widing 1994). We found no significant differences between early and late respondents in

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<sup>4</sup>Several authors have raised concerns about social and Western desirability biases with respect to surveys in the Chinese context, because they create substantial pressure for respondents to appear knowledgeable (e.g., Adler, Campbell, and Laurent 1989). Scholars recommend that to reduce this pressure and allow for candid responses, respondents should be offered a "don't know" option. Consequently, during our interviews, we encouraged respondents to skip questions or specific items they did not want to answer or could not recall.

the U.S. sample, which indicated that nonresponse bias was not a major problem (Armstrong and Overton 1977).

Regarding salespeople's characteristics, 61% and 64% were less than 34 years of age in the Chinese and U.S. samples, respectively. Other characteristics were as follows: sex (male: China = 74%, U.S. = 79%); education below university level (China = 60%, U.S. = 58%), average company tenure (China = 3.1 years, U.S. = 6.2 years), sales experience (China = 4.2 years, U.S. = 12.9 years), and average number of hours worked per week (China = 44.6, U.S. = 48.8). The t-test results showed that the U.S. salespeople were more likely to have higher company tenure and higher sales experience and tended to work more hours per week than their Chinese counterparts.

### Measurement Development and Validation

The Appendix provides the measures for all the constructs in the study. All variables were measured on a five-point Likert-type scale that focused on the firm's most recent new product. All the scales, except the one for sales performance (anchored at 1 = "no extent" to 5 = "to a great extent"), were anchored at 1 ("strongly disagree") and 5 ("strongly agree"). The research instrument was developed on the basis of prior studies in the West. For the Chinese sample, the English questionnaire was translated into Chinese by a Chinese marketing professor educated in the West who had significant knowledge of marketing issues in China. Two doctoral students then independently back-translated it into English to verify its accuracy. We conducted 20 in-depth interviews with sales supervisors and salespeople to ensure the face validity of the measures. At these interviews, each respondent was probed regarding the relevance and completeness of the measures. As an example, supervisee trust needed precise translation. It could refer to integrity, credibility, or reputation and character of a person, as in credit rating in business circles or reliance on personal integrity in trading relationships (*xinyong*). Our measures of supervisee trust capture "personal trust" (*xinren*), reflecting the degree of the supervisor's personal attachment and emotional bond with the salesperson and genuine care and concern for the salesperson's welfare (McAllister 1995). These items are similar to Rich's (1997) measures, which reflect the salesperson's faith in the supervisor's benevolence and fairness.

In light of TCA's assumption that opportunistic behavior results from information and behavioral uncertainty, other variables that may influence supervisee trust are the complexity of the exchange object and the market environment (Williamson 1985). For example, environmental uncertainty influences trust in marketing exchange because it affects the level of conflict and understanding between the parties in the relationship (Ganesan 1994; Geyskens, Steenkamp, and Kumar 1998; Moorman, Deshpandé, and Zaltman 1993). Therefore, we controlled statistically for *product complexity* (the extent to which the new product being sold is technically complex and sophisticated; see Bello and Gilliland 1997), *competitive intensity* (the perceived intensity of market competition), and *market volatility* (the degree of market and demand changes).

We examined the validity of the measures in a two-step approach recommended by Anderson and Gerbing (1988).

First, we conducted exploratory factor analysis to assess the underlying factor structure of the items. This analysis also helped us assess the potential problem of common method variance with Harman's one-factor method (Podsakoff and Organ 1986). The results indicated that the first factor did not account for a majority of the variance and there was no general factor in the unrotated factor structure in both samples, which suggested that common method variance was not a problem. Second, we performed confirmatory factor analysis (CFA) to assess the validity of the measures. Because the inclusion of a large number of measures would result in too complex a measurement model for LISREL, Bentler and Chou (1987) recommend that submodels should be analyzed. This approach is well established in the marketing literature (e.g., Doney and Cannon 1997). We ran three separate measurement models, grouping related constructs. The first CFA grouped items measuring sales performance, output, and process controls. The second CFA analyzed measures of supervisee trust, supervisor accessibility, achievement orientation, and role ambiguity. The third CFA model included product complexity, competitive intensity, and market volatility. The fit indices presented in the Appendix indicate that the models fit the data well in both samples. All item standardized loadings for each construct were significant ( $p < .01$ ), which supports the dimensionality of the constructs.

As reported in the Appendix, the Cronbach's alpha and composite reliabilities exceed the recommended minimum level in both samples. The average variance extracted, which assesses the amount of variance captured by the construct's measures relative to measurement error and the correlations ( $\phi$  estimates) among the latent constructs in the model, is also reported. Estimates of .50 or higher indicate validity for a construct's measure. All but two of our constructs achieved this criterion in the Chinese sample (process control and market volatility) and in the U.S. sample (process control and achievement orientation). We assessed discriminant validity of the measures in two ways: First, we conducted a chi-square difference test for all the constructs in pairs to examine whether they were distinct from each other. The process involved collapsing each pair of constructs into a single model and comparing its fit with that of a two-construct model, as suggested by Anderson and Gerbing (1988). In each case, a two-factor model had a better fit than a single-factor model in both the Chinese and the U.S. sample. Second, the constructs evidenced discriminant validity by meeting Fornell and Larcker's (1981) criterion, which requires that the square of the parameter estimate between two constructs ( $\phi^2$ ) be less than the average variance extracted estimates of the two constructs. Table 1 presents the correlation matrices and descriptive statistics of the measures.

Equality of factor structure and loadings is needed to make comparisons of the inferences about relationships between variables across national cultures. We tested for measurement equivalence in two steps. First, using CFA procedures, we assessed separately whether the number of factors and items that load on each factor are similar across the two samples (Ryan et al. 1999). As shown in the Appendix, although the factor loading weights varied slightly

across the samples, each CFA yielded the same number of factors with similar item loading patterns, providing evidence of measurement equivalence. Second, we ran a multiple group analysis for each construct separately, in which each sample served as a separate group (Netemeyer, Durvasula, and Lichtenstein 1991). We estimated two stacked models, one in which the factor loadings across the Chinese and U.S. samples were constrained to be equal and one in which the factor pattern was specified as invariant across the two samples. We compared the constrained and unconstrained models for each construct in terms of the difference in  $\chi^2$  and other model fit indices such as goodness-of-fit index (GFI), comparative fit index (CFI), nonnormed fit index (NNFI), and root mean square error of approximation (RMSEA). The  $\chi^2$  difference between the two models in each case was not significant, suggesting that the pattern of factor loadings is invariant across the two samples.<sup>5</sup>

## Analysis and Results

### *Antecedents of Supervisee Trust*

We ran a regression analysis for each sample to test the hypotheses. Following previous studies (e.g., Yang et al. 2000), we then used a t-test to assess differences in the impact of each significant factor between the two samples. We controlled for the number of hours worked per week, market duration of the new product, sales experience, level of education, sex, type of market (consumer [0] versus industrial [1]), size of the firm, product complexity, competitive intensity, and market volatility. Table 2 presents the results.

The results indicate an  $R^2$  of .54 in the Chinese sample and .46 in the U.S. sample, suggesting that we explain a fair portion of the variance in supervisee trust.  $H_{1a}$ , positing a negative relationship between output control and supervisee trust, is not supported in both samples.  $H_{2a}$ , predicting a positive effect of process control on supervisee trust, is supported in the Chinese sample ( $\beta = .16, p < .05$ ) but not in the U.S. sample ( $\beta = .04, n.s.$ ) ( $t = 3.09, p < .01$ ). Two variables are positively related to supervisee trust in both samples: supervisor accessibility ( $H_{3a}$ ; Chinese sample:  $\beta = .33, p < .001$ ; U.S. sample:  $\beta = .26, p < .001$ ) ( $t = 2.87, p < .01$ ) and achievement orientation ( $H_{4a}$ ; Chinese sample:  $\beta = .34, p < .001$ ; U.S. sample:  $\beta = .38, p < .001$ ) ( $t = -.87, n.s.$ ). Role ambiguity is unrelated to supervisee trust in either sample. The t-test results suggest support for  $H_{2b}$  and  $H_{3b}$ , indicating that the positive effects of process control and supervisor accessibility on supervisee trust are stronger in the Chinese sample than in the U.S. sample. In our study, the control variable, product complexity, had a statistically significant, positive effect on supervisee trust in both samples: Chinese sample ( $\beta = .12, p < .05$ ) versus U.S. sample ( $\beta = .10, p < .10$ ) ( $t = .60, n.s.$ ), though the later effect is marginal. Market volatility had a significant, positive effect on supervisee trust only in the U.S. sample ( $\beta = .15, p < .01$ ). These find-

<sup>5</sup>Detailed results of the multiple group analysis are available on request.

**TABLE 1**  
**Correlation Matrices and Descriptive Statistics of the Chinese and U.S. Samples**

Variables	SP	TR	OC	PC	SA	AO	RA	PK	CI	MV	SE	ED	GD	PM	HR	FS	MS
Mean	3.20	3.84	3.65	3.01	3.30	4.03	1.98	3.98	3.38	3.07	12.99			13.77	48.82	3861	
Standard deviation	1.00	.88	.92	.84	1.09	.70	.91	.87	1.03	.88	9.60			13.38	9.95	1825	
Sales performance (SP)	1.00	.20**	.28**	.19*	.06	.18*	-.23**	.13	-.08	-.01	.34**	-.25**	-.00	.10	.12	.04	.11
Supervisee trust (TR)	.37**	1.00	.31**	.30**	.47**	.56**	-.05	.20**	.12	.17*	.15*	-.19**	-.11	.03	.14*	-.01	-.09
Output control (OC)	.22**	.29**	1.00	.39**	.14*	.45**	.02	.01	-.08	-.14*	.15*	-.30**	-.13	.06	.20**	.12	.02
Process control (PC)	.47**	.48**	.40**	1.00	.45**	.35**	-.06	.00	.11	-.07	.06	.00	.09	-.20**	-.04	-.03	.04
Supervisor accessibility (SA)	.38**	.64**	.40**	.45**	1.00	.44**	.02	.05	.18*	-.04	.12	-.01	-.05	.02	.09	-.07	.04
Achievement orientation (AO)	.44**	.61**	.29**	.46**	.61**	1.00	-.04	.08	.09	.07	-.01	-.18*	-.00	.02	.15*	.07	.07
Role ambiguity (RA)	-.02	-.01	-.11	.08	-.04	-.06	1.00	-.06	-.00	-.05	-.19**	.06	.03	.06	-.09	.02	.03
Product complexity (PK)	.09	.24*	.26**	.24**	.17*	.24*	-.09	1.00	.15*	.19*	.20*	-.28**	.06	-.06	.01	-.04	-.12
Competitive intensity (CI)	.11	.09	.09	.10	.16*	.12	.06	-.00	1.00	.24**	.11	-.08	.13	-.05	-.01	-.06	.01
Market volatility (MV)	-.04	.04	-.01	-.00	.04	-.00	.12	.18*	.32**	1.00	-.00	-.09	-.04	-.11	-.02	-.04	-.19**
Sales experience (SE)	.22	.16*	.13	.29**	.21**	.20*	.06	-.06	.03	-.03	1.00	-.11	.14**	-.00	.18**	.10	.04
Level of education (ED)	-.18*	-.14	-.01	.17*	-.20*	-.12	-.01	.12	-.09	.08	-.14	1.00	.18**	-.00	-.38**	-.07	.00
Sex (GD)	-.04	-.11	-.01	-.00	-.07	-.08	-.18*	-.09	.06	-.00	-.09	-.02	1.00	-.07	-.27**	-.04	.10
Product market duration (PM)	.12	.00	.14	.11	.15	.00	-.22**	.11	-.04	-.14	.20*	.17*	-.12	1.00	-.01	-.00	-.05
Hours worked per week (HR)	.14	.02	.06	.10	.11	.06	-.10	.18	-.02	-.02	.05	-.01	-.10	.03	1.00	.06	.06
Firm size (FS)	.04	-.08	-.05	-.11	-.13	.01	.07	.02	-.05	-.06	.00	.13	-.07	.14	.02	1.00	.18**
Type of market served (MS)	.12	.00	.05	-.04	.16	.05	-.05	-.10	.12	-.12	-.06	-.06	-.00	.03	.08	.14	1.00
Mean	3.49	3.69	4.17	4.07	3.40	3.99	2.36	3.67	3.87	3.07	4.29			17.81	45.22	5792	
Standard deviation	.80	.92	.67	.94	1.05	.81	1.16	.91	1.07	.88	3.29			14.65	11.97	2646	

\*p < .01.

\*\*p < .001.

Notes: The Chinese sample is below and the U.S. sample is above the diagonal.

**TABLE 2**  
**Regression Analysis of Antecedents of Supervisee Trust (Standardized Coefficients)**

	Chinese Sample		U.S. Sample	
	$\beta$	t-Value	$\beta$	t-Value
<b>Control Variables</b>				
Number of hours worked per week	-.02	-.38	.01	.23
Product market duration	.02	.40	-.07	-1.10
Sales experience	-.03	-.54	.08	1.20
Level of education	-.01	-.25	-.03	-.44
Sex	.06	.97	-.04	-.69
Type of market served	-.10	-1.61*	-.08	-1.38
Size of firm	-.04	-.68	-.01	-.31
Product complexity	.12	1.84*	.10	1.47†
Competitive intensity	.01	.08	-.01	-.25
Market volatility <sup>a</sup>	.02	.24	.15	2.25**
<b>Independent Variables</b>				
Output control	-.01	-.27	.07	.98
Process control <sup>a</sup>	.16	1.87*	.04	.58
Supervisor accessibility <sup>a</sup>	.33	3.88***	.26	3.48***
Achievement orientation	.34	3.84***	.38	4.96***
Role ambiguity	-.03	-.51	-.01	-.18
R <sup>2</sup>	.54		.46	
Adjusted R <sup>2</sup>	.48		.41	
F-value	9.70***		8.97***	
N	134		175	

† $p < .10$  (one-tailed).

\* $p < .05$  (one-tailed).

\*\* $p < .01$  (one-tailed).

\*\*\* $p < .001$  (one-tailed).

<sup>a</sup>Significant difference in effects between the two samples ( $p < .05$ ).

ings suggest that the complexity of the new product and market volatility influence supervisee trust.

### **Contingent Effects of Antecedents of Supervisee Trust on Sales Performance**

We tested the moderating hypotheses with hierarchical moderated regression analysis (Aiken and West 1991). We ran an initial regression with the control variables, supervisee trust, and the moderator variables to determine their main effects. We added the hypothesized interactions in the second model. We mean-centered the constituent variables before creating the interaction terms to eliminate multicollinearity (Aiken and West 1991). We found that the variance inflation factors were well below the cutoff of 10, which suggests that multicollinearity is not a problem.

The results presented in Table 3 indicate that the addition of the interaction terms to the main effects model increases R<sup>2</sup> by 11% ( $\Delta F = 4.86, p < .001$ ) in the Chinese sample and by 6% ( $\Delta F = 2.80, p < .01$ ) in the U.S. sample. We do not find support for H<sub>6a</sub> and H<sub>6b</sub>, which involve the main effect of supervisee trust on sales performance. H<sub>7a</sub>, which posited that supervisee trust is likely to enhance sales performance when output control is high, is supported in the Chinese sample ( $\beta = .22, p < .01$ ) but rejected in the U.S. sample ( $\beta = -.18, p < .05$ ) ( $t = 2.01, p < .05$ ). H<sub>7b</sub> is not supported, because the interaction between supervisee trust and process control is not significantly related to sales performance in either sample. H<sub>8a</sub>, positing that supervisee trust

will lead to lower sales performance when supervisor accessibility is high, is supported strongly in the Chinese sample ( $\beta = -.34, p < .001$ ) and marginally in the U.S. sample ( $\beta = -.15, p < .10$ ) ( $t = 4.55, p < .01$ ). H<sub>8b</sub> is supported in both samples (Chinese sample:  $\beta = .34, p < .001$ ; U.S. sample:  $\beta = .25, p < .01$ ) ( $t = 3.22, p < .05$ ), which indicates that supervisee trust enhances sales performance when achievement orientation is high. Finally, H<sub>8c</sub>, positing that the interaction of supervisee trust and role ambiguity is positively related to sales performance, is supported in the Chinese sample ( $\beta = .29, p < .001$ ) but marginally rejected in the U.S. sample ( $\beta = -.11, p < .10$ ) ( $t = 3.11, p < .01$ ). As the results indicate, t-tests for the standardized coefficients within each sample showed that the effects of the interaction of supervisee trust with output control, supervisor accessibility, achievement orientation, and role ambiguity are stronger in the Chinese sample than in the U.S. sample. An interesting pattern of results in Table 3 is that the control variables, particularly sales experience, level of education, sex, and competitive intensity had a statistically significant influence on sales performance in the U.S. sample but not in the Chinese sample.

## **Discussion**

Despite limited empirical evidence, the growing body of work on trust in marketing and other contexts provides a normatively positive view of trust. Drawing on previous

**TABLE 3**  
**Moderated Regression Analysis of the Effect of Supervisee Trust on Sales Performance (Standardized Coefficients)**

	Chinese Sample				U.S. Sample			
	Model 1		Model 2		Model 1		Model 2	
	$\beta$	t-Value	$\beta$	t-Value	$\beta$	t-Value	$\beta$	t-Value
<b>Control Variables</b>								
Hours worked per week	.05	.66	.08	1.19	-.02	-.26	-.04	-.74
Product market duration	-.08	-1.08	-.03	-.43	.12	1.76*	.16	2.40**
Sales experience	.11	1.47†	.06	.88	.31	4.09***	.31	4.22***
Level of education	.02	.34	-.02	-.29	-.20	-2.47***	-.21	-2.66**
Sex	.05	.69	.05	.76	.13	1.81*	.14	1.99*
Type of market served	-.01	-.16	-.06	-.78	.12	1.76*	.09	1.38
Size of firm	.08	1.11	.12	1.71*	-.03	-.52	-.04	-.67
Product complexity	.05	.64	.06	.89	.02	.29	.03	.52
Competitive intensity	.03	.41	.05	.64	-.17	-2.41***	-.19	-2.68**
Market volatility	-.11	-1.27	-.17	-2.05*	.05	.78	.03	.43
<b>Independent Variables</b>								
Supervisee trust	-.03	-.29	.03	.36	.05	.65	-.06	-.64
Output control	-.03	-.36	-.01	-.11	.10	1.13	.07	.83
Process control	.19	1.88*	.14	1.44†	.15	1.74*	.16	1.85*
Supervisor accessibility	.15	1.40†	.17	1.66*	-.07	-.81	-.05	-.60
Achievement orientation	.29	2.66***	.25	2.21**	.04	.48	.14	1.40†
Role ambiguity	-.03	-.45	-.13	-1.69*	-.16	-2.40**	-.19	-2.73***
<b>Relevant Interactions</b>								
Supervisee trust								
× Output control <sup>a</sup>			.22	2.62**			-.18	-1.77*
× Process control			.05	.52			-.02	-.20
× Supervisor accessibility <sup>a</sup>			-.34	-3.03***			-.15	-1.54†
× Achievement orientation			.34	3.07***			.25	2.46**
× Role ambiguity <sup>a</sup>			.29	3.40***			-.11	-1.47†
R <sup>2</sup>	.36		.47		.31		.37	
Adjusted R <sup>2</sup>	.28		.38		.24		.28	
F-value	4.46***		5.09***		4.42***		4.23***	
Incremental R <sup>2</sup>			.11				.06	
F-value for Incremental R <sup>2</sup>			4.86***				2.80**	
N	138		138		170		170	

† $p < .10$  (one-tailed).

\* $p < .05$  (one-tailed).

\*\* $p < .01$  (one-tailed).

\*\*\* $p < .001$  (one-tailed).

<sup>a</sup>Significant difference between the two samples ( $p < .05$ ).

research (e.g., Granovetter 1985; Shapiro 1987), we argue that trust carries a risk of betrayal and therefore the positive view of trust needs reassessment and extension. Consistent with this view, the results of the current study highlight the message that supervisee trust may not always enhance sales performance. We show that in some situations, supervisee trust may provide the conditions for opportunistic behavior that hinders sales performance. This occurs largely because of the salesperson's interpretation of the supervisor's motives from sales controls and relational behaviors, which in turn affects his or her perception of performance risk. Overall, our results suggest that, theoretically, the potential antecedents of supervisee trust may be categorized into four groups: (1) those that engender supervisee trust and enhance its effect on sales performance (e.g., achievement orientation in both the Chinese and the U.S. samples), (2) those that engender supervisee trust but have no effect on and/or hin-

der its impact on sales performance (e.g., process control in the Chinese sample, supervisor accessibility in both samples), (3) those that do not engender supervisee trust but enhance its effect on sales performance (e.g., output control and role ambiguity in the Chinese sample), and (4) those that do not engender supervisee trust but hinder its impact on sales performance (e.g., output control and role ambiguity in the U.S. sample). Theoretically, our study provides insight into why the antecedents of supervisee trust might provide the conditions under which supervisee trust enhances sales performance but also under which behaviors detrimental to sales performance are likely to occur.

This study suggests that there may be few differences between Chinese and U.S. salespeople regarding the antecedents of supervisee trust. For example, the evidence suggests that supervisor accessibility and achievement orientation influence supervisee trust in both samples. The only

exception is that process control is related positively to supervisee trust in the Chinese sample but not in the U.S. sample. This finding supports the assertion that given their relatively high-uncertainty avoidance culture, Chinese salespeople may perceive process control as more supportive and nurturing than their U.S. counterparts do. Note that some researchers have found that process control leads to opportunistic behavior in the interfirm context (John 1984) and that it may reduce trust (see Das and Teng 1998). Our findings in the Chinese sample contrast with this viewpoint, suggesting that the relationship may be culturally specific.

Regarding the moderating hypotheses, the results suggest that output control ensures a positive impact of supervisee trust on sales performance in the Chinese sample. This finding provides support for arguments made in marketing (e.g., Aulakh, Kotabe, and Sahay 1996), management, and social psychology (e.g., Brockner et al. 1997; Shapiro 1987) literature that trust is more important for performance in situations of high performance risk, because opportunistic behavior becomes unprofitable. However, contradicting this argument, the opposite effect was found in the U.S. sample. Several reasons may account for this differential finding. First, the high uncertainty avoidance in China suggests that the disadvantages of output control, particularly the shifting of performance risk to the employee, may be perceived more by the Chinese than their U.S. counterparts. Therefore, we argue that supervisee trust becomes more important for sales performance in the former sample than in the latter sample. Second, there is a higher expectation of equity and fairness in risk sharing between the organization and the employee in high-trust cultures (the United States). Consequently, by transferring a disproportionate amount of performance risk to salespeople, output control may damage the basis of supervisee trust in the United States. It may also be that because of the lower uncertainty avoidance among U.S. salespeople, they are more accepting of the risk of abusing trust when performance risk is shifted to them (see Doney, Cannon, and Mullen 1998). Finally, given their high level of individualism, U.S. salespeople under output control may pursue short-term goals through activities that could harm customer relationships and overall sales performance in the long run. These explanations reflect the finding that output control might lead to opportunistic behavior depending on the salesperson's acceptance of risk (see Anderson and Oliver 1987, p. 78) and that output control is not always optimal (Basu et al. 1985). Note that unlike output control, process control is related positively to sales performance in both samples. Comparatively, it seems that output control has a more limited role in sales performance than process control, as has been found in other research (see Cravens et al. 1993).

Consistent with our hypothesis, supervisor accessibility ensures a negative impact of supervisee trust on sales performance in both samples. However, this effect is stronger in the Chinese sample than in the U.S. sample. It is possible that in collectivist/low-trust China, supervisor accessibility enhances potential abuse of trust because it reduces performance risk. In addition to reducing performance risk, in the United States, supervisor accessibility may also be perceived as interference and "looking over my shoulder"

behavior. Such a behavior contradicts the expectations of salespeople in such a high-trust and individualist society. The evidence suggests that achievement orientation ensures a positive impact of supervisee trust on sales performance in both samples. This finding implies that achievement orientation engenders mutual performance risk and concern for the goals of the organization, both of which restrain opportunistic behavior (see Granovetter 1985; Tyler and DeGoey 1996). Our findings therefore support the view that achievement orientation is a vital construct in motivating salespeople to refrain from effort aversion in a trusting relationship (see Kohli 1989).

Role ambiguity implies that the salesperson faces high performance risk and uncertainty. Our finding that role ambiguity interacts with supervisee trust to enhance sales performance in the Chinese sample supports this view. Low-trust and high-uncertainty avoidance cultures exhibit limited information flow between the parties to an exchange. It therefore appears that role ambiguity enhances the impact of supervisee trust on sales performance because it increases the salesperson's perceived risk from opportunistic behavior. In contrast, our results suggest a negative interaction effect in the high-trust and low-uncertainty avoidance context of the United States, where exchange partners are not afraid to share information. Because role ambiguity reflects a lack of communication about responsibilities, it may be that when U.S. salespeople trust their supervisors, they perceive role ambiguity as a sign of the supervisor's bad faith in the relationship. Given their high tolerance of risk, our finding suggests that they may reciprocate with lower sales performance.

In summary, we believe that considering antecedents of supervisee trust as moderators of its impact on sales performance ensures a more insightful understanding of the relationship between supervisee trust and sales performance. The different findings in the two samples suggest that antecedents of supervisee trust may have positive or negative implications for sales performance when matched with supervisee trust, depending on the national context. Theoretically, our study broadens current conceptualizations of the impact of supervisee trust on sales performance into low- and high-trust societal contexts. It offers new avenues for critical study of trust, its antecedents, and its linkage with performance in the current context as well as in other marketing contexts by both managers and researchers.

## **Managerial Implications and Further Research**

### ***Managerial implications***

Reeder (1987) suggests that to ensure the success of their businesses in China, Western managers need to take the time to build trust with their workers. Our theoretical framework and results have implications for these and other managers. First, our framework is a challenge to the normative view that trust is good for performance: Supervisee trust in this study and various forms of trust in other studies did not exhibit a direct, positive relationship with performance. Our results caution managers that an unquestionable positive

view of trust may be too simplistic. As our findings show, supervisee trust may be good, but it is only conditionally good, because its antecedents may offer potential conditions for it to hurt sales performance (see Granovetter 1985; Shapiro 1987).

Second, our findings have some implications for supervising the sales force in low- and high-trust societies. In low-trust societies, trust is of utmost importance in exchange relationships not only because of its rarity but also because transaction costs are high and time and energy are required to monitor and check for opportunistic behavior. Because people in these societies tend to have high uncertainty avoidance, they are likely to protect themselves by communicating less information and taking conservative actions. The results from the Chinese sample inform managers that by using controls and behaviors that reduce the salesperson's perceived performance risk, supervisors may unwittingly reduce the potential for their benevolence (supervisee trust) to enhance sales performance. This is because salespeople may perceive greater gains than losses from opportunistic behavior under such conditions. In contrast, when managers use controls and behaviors that shift performance risk to the salesperson, they encourage more trustworthy behavior that enhances sales performance. This is a radical suggestion, but it is consistent with the theoretical logic that only under conditions in which opportunistic behavior is self-defeating will an exchange partner attach greater importance to trust and refrain from abusing trust (Noteboom, Berger, and Noorderhaven 1997). However, our findings from the United States suggest caution in shifting disproportionate performance risk to the salesperson. Given that U.S. salespeople are individualists in a high-trust environment, have better coping strategies, and can tolerate risk, they are less willing to shoulder disproportionate performance risk for reasons of fairness and equity. Thus, unlike in China, the results suggest that output control and role ambiguity may combine with supervisee trust to hinder sales performance in the United States. It appears that in the U.S. context, output control and role ambiguity may violate the basis of supervisee trust.

The preceding discussion implies that in both low- and high-trust societies, managers should view more critically the implications of sales controls and relational behaviors for the development and efficacy of supervisee trust. As we have shown, social exchange theory suggests that trust evolves over time on the basis of a series of observations, experience, and repeated interactions (see Mayer, Davis, and Schoorman 1995). Because it takes time to build supervisee trust and make it effective, the situations described in this study involve potential trade-offs and should be carefully crafted. For example, our findings imply that in both China and the United States, managers must enhance their accessibility to salespeople when they want to build trust (perhaps at the initial stage of the relationship). However, they must reduce such accessibility after trust has been built. They must also use an achievement orientation style to build and enhance the effect of supervisee trust. However, unlike in the high-trust context of the United States, in the low-trust context of China, output control may need to be emphasized when supervisee trust has already been built. This is because

it is likely to prevent opportunism and thus enhance the impact of supervisee trust on sales performance. To build supervisee trust in the low-trust and collectivist Chinese context, managers may need to emphasize process control. The logic is that the Chinese attach greater importance to the care, support, and nurturing benefits of process control than to the loss of autonomy and self-control implied by this control method (see Oliver and Anderson 1994).

In summary, accepting that China is a low-trust society and the United States is a high-trust society, our study sheds some light on what is likely to happen more generally in supervisor-subordinate relationships in low- and high-trust environments (e.g., low-/high-trust sectors and organizations in high-/low-trust cultures). In both low- and high-trust contexts, managers may need to give attention to factors that engender supervisee trust and enhance its effectiveness on sales performance (e.g., achievement orientation) when the objective is to build trust and at the same time enhance its impact on sales performance. In a low-trust context, if trust has already been built, managers may need to focus on factors that do not engender supervisee trust but enhance its effect on sales performance (e.g., output control and role ambiguity). In a high-trust context, however, these factors may be detrimental to performance because they suggest a lack of equity and fairness in the exchange relationship. If managers are interested only in building trust, our results suggest that they may need to focus on factors that engender supervisee trust irrespective of their impact on its effectiveness (e.g., process control in China, supervisor accessibility and achievement orientation in both samples). These implications suggest that supervisee trust (and other forms of trust) may involve a dilemma and that managers must perform a delicate balancing act in building and in enhancing its effectiveness in different cultures. As Shapiro (1987, p. 651) comments,

The paradox of trust is akin to the choice between Type I and Type II errors. Should procedural constraints of trust be set so narrowly that desirable agency behavior is deterred or so flexibly that inappropriate behavior is tolerated? Most often, principals equivocate: they really hope that trustees do not take their instructions too literally yet simultaneously fear that they will not.

We hope that the results of our study make this dilemma more manageable.

### **Limitations and Further Research**

Even though our research extends and enriches the marketing literature, it has several limitations that must be taken into account in the interpretations of the findings. First, previous research has shown that honesty is an important dimension of trust in marketing exchanges, but our study does not address this line of inquiry. Our focus on the benevolence dimension of trust and the omission of the honesty dimension of trust represent a missed opportunity. We believe that a comparison of the antecedent and interactive effects of the two dimensions of trust would have yielded useful insights. This is an important issue for further research. Despite this limitation and future research directions, our omission of the honesty dimension of trust does

not invalidate the empirical results, because previous research suggests a strong correlation between the two dimensions. Furthermore, it could be argued that a trust scale comprising both benevolence and honesty items has a higher content validity than do scales measuring only a single dimension (see Geyskens, Steenkamp, and Kumar 1998, p. 234). Therefore, we acknowledge that we may have obtained stronger relationships if our trust scale comprised both benevolence and honesty items. However, we believe that the strong association between the two dimensions found in previous studies provides a good foundation for arguing that our empirical results still appropriately illustrate actual associations.<sup>6</sup>

Second, the study focused on the supervisor-salesperson relationship in the context of selling the most recent new product introduced by the firm. Therefore, we make no claims about the generalizability of the findings beyond this context. Third, the study identified relationships, not causes, because it is cross-sectional. We therefore cannot rule out the possibility that the hypothesized relationships could be reversed. For example, it could reasonably be argued that low supervisee trust could lead to higher role ambiguity. Fourth, factors other than those examined here may influence the formation and efficacy of supervisee trust. Of particular importance is opportunistic behavior that underlies our theoretical arguments, which we did not measure. We found that supervisee trust is unrelated to sales performance in both the Chinese and U.S. samples. Perhaps the relationship is not direct but rather indirect through other variables. Another limitation of our study therefore is that we did not examine potential mediators, such as salespeople's effort, commitment, and perceptions of fairness and equity. Further research should expand our understanding by investigating these and other specific mechanisms through which supervisee trust affects sales performance. We also note that in each of the two samples, two constructs displayed average variance extracted estimates below the recommended level of .50. Although this is not uncommon with marketing constructs (see Netemeyer et al. 1997), it suggests that the domains of these constructs require further develop-

ment and refinement. Finally, we administered the questionnaire on-site in China. In contrast, we collected the U.S. data through a mail survey. Although we do not believe this influenced the results, we cannot completely discount the possibility.

Beyond these limitations, our results point to two other directions for further research. First, our study argues for more critical study of supervisee trust and its antecedents in further research. Our categorization of the antecedents of supervisee trust suggests that a more promising avenue of research is the investigation of factors that are positive antecedents of supervisee trust and at the same time are positive moderators of its impact on sales performance. Similarly, in the future, attention should be focused on factors that may not engender supervisee trust but nevertheless enhance its impact on sales performance. Research that uncovers more of these two groups of factors in the interpersonal and organizational contexts will provide value to practitioners. A second promising line of research is to extend the conceptual model investigated here to the marketing channel relationships and other interorganizational contexts. In comparison with the supervisor-salesperson dyad, research on trust in the interorganizational context is far more advanced in the marketing literature. Yet as we mentioned previously, this stream of research has been criticized for focusing too much on antecedents of trust and paying little attention to the interactions between trust and other relationship factors for their performance implications (Geyskens, Steenkamp, and Kumar 1998).

## Conclusion

This study appears to be one of the few investigating the effects of sales controls and supervisor behaviors on supervisee trust and their contingent effects on the linkage between supervisee trust and sales performance. Our results indicate that supervisee trust does not translate into sales performance in all conditions. Rather, they suggest that supervisee trust must be managed with a careful attention to the potential trade-off effects of its antecedents. We believe that this study opens up new lines of research and hope it inspires more scholars to undertake studies on the contingent value of trust.

<sup>6</sup>We owe these ideas to an anonymous reviewer.

### APPENDIX CFA Results of Measures

Constructs, Sources, and Measurement Items	Chinese Sample		U.S. Sample	
	Standardized Factor Loading	t-Value	Standardized Factor Loading	t-Value
<b>Model 1</b>				
<b>Sales Performance</b> (Sujan, Weitz, and Kumar 1994)				
(Chinese sample: $\alpha = .88$ , CR = .75, AVE = .50;				
U.S. sample: $\alpha = .92$ , CR = .89, AVE = .59)				
1. Contributing to your company's gaining significant market share.	.71	7.82	.84	11.64
2. Generating a high level of sales.	.63	6.03	.92	13.38
3. Quickly generating sales from the new product.	.88	9.71	.75	9.99



**APPENDIX  
Continued**

Constructs, Sources, and Measurement Items	Chinese Sample		U.S. Sample	
	Standardized Factor Loading	t-Value	Standardized Factor Loading	t-Value
4. Identifying major accounts and selling to them.	.81	8.72	.73	9.56
5. Exceeding sales targets.	.73	8.01	.85	11.86
6. Assisting your sales supervisor in achieving his/her objectives.	.51	5.90	.77	10.26
<b>Output Control</b> (Adapted from Jaworski and MacInnis 1989)				
(Chinese sample: $\alpha = .76$ , CR = .87, AVE = .56; U.S. sample: $\alpha = .87$ , CR = .84, AVE = .53)				
1. My pay increases and other tangible rewards depend on how my performance compares with goals.	.80	11.52	.66	8.32
2. If my performance goals are not met, I will be asked to explain why.	.71	9.66	.66	8.22
3. Performance evaluations of salespeople place primary weight on results.	.75	10.47	.71	9.09
4. My pay increases and other tangible rewards depend on the degree to which I achieve specific goals set.	.80	11.52	.88	12.22
5. My immediate supervisor monitors the extent to which I achieve my performance goals.	.68	9.12	.88	12.17
6. I receive feedback from my immediate supervisor on the extent to which I have achieved my goals. <sup>a</sup>				
7. Specific performance goals are established for my job. <sup>a</sup>				
<b>Process Control</b> (Adapted from Jaworski and MacInnis 1989)				
(Chinese sample: $\alpha = .79$ , CR = .79, AVE = .40; U.S. sample: $\alpha = .81$ , CR = .84, AVE = .46)				
1. My pay increases and other tangible rewards depend on how well I follow sales procedures.	.76	10.29	.71	8.59
2. My pay increases and other tangible rewards depend on my knowledge of selling procedures.	.70	9.23	.59	6.86
3. My immediate supervisor monitors the extent to which I follow established procedures.	.59	7.36	.77	9.21
4. My immediate supervisor evaluates procedures we use to accomplish the task of selling.	.67	8.75	.80	9.68
5. My immediate supervisor modifies the procedures if desired results are not obtained.	.52	6.38	.68	8.08
6. Primary weight in evaluating salespersons' performance is placed on sales behavior.	.49	5.98	.74	9.01
7. Salespeople are accountable for their actions in selling regardless of the results they achieve. <sup>a</sup>				
8. I receive feedback on how I accomplish my goals. <sup>a</sup>				
<b>Model Fit Indices</b>				
China: $\chi^2 = 189.07$ ( $p = .0$ ), $\chi^2/d.f. = 1.68$ , RMSEA = .05, GFI = .89, CFI = .92.				
U.S.: $\chi^2 = 268.34$ ( $p = .0$ ), $\chi^2/d.f. = 2.39$ , RMSEA = .07, GFI = .87, CFI = .89.				
<b>Model 2</b>				
<b>Supervisee Trust</b> (McAllister 1995)				
(Chinese sample: $\alpha = .88$ , CR = .89, AVE = .61; U.S. sample: $\alpha = .87$ , CR = .86, AVE = .57)				
1. My supervisor and I have a sharing relationship; we freely share our ideas, feelings, and hopes about the work we do.	.86	11.63	.82	10.68
2. I can freely talk to him/her about difficulties I am having at work and know that he/she wants to listen.	.87	11.97	.86	12.87
3. If I share my problems with my supervisor, I know he/she would respond constructively and caringly.	.77	10.90	.94	14.84

**APPENDIX  
Continued**

Constructs, Sources, and Measurement Items	Chinese Sample		U.S. Sample	
	Standardized Factor Loading	t-Value	Standardized Factor Loading	t-Value
4. We both would feel a sense of loss if we could no longer work together.	.76	10.71	.55	7.15
5. I would have to say, my supervisor and I have made considerable emotional investments in our working relationship.	.77	10.84	.52	6.82
<b>Supervisor Accessibility</b> (Adapted from Oliver and Anderson 1994) (Chinese sample: $\alpha = .84$ , CR = .88, AVE = .65; U.S. sample: $\alpha = .89$ , CR = .90, AVE = .70)				
1. My supervisor is available to meet with me.	.75	10.61	.54	7.11
2. My supervisor spends time with me.	.79	11.34	.93	15.26
3. My supervisor makes joint sales calls with me.	.83	12.27	.95	15.89
4. My supervisor observes my performance in the field.	.85	12.62	.86	13.30
<b>Achievement Orientation</b> (Adapted from Oliver and Anderson 1994) (Chinese sample: $\alpha = .84$ , CR = .91, AVE = .71; U.S. sample: $\alpha = .78$ , CR = .75, AVE = .43)				
1. My supervisor shows that he/she has confidence in my ability to meet most objectives.	.91	13.78	.74	9.48
2. My supervisor lets me know he/she expects me to perform at my highest level.	.81	11.74	.74	9.64
3. My supervisor consistently sets challenging goals for me to attain.	.78	11.19	.52	6.30
4. My supervisor encourages continual improvement in my performance.	.87	12.79	.61	7.27
<b>Role Ambiguity</b> (Singh and Rhoads 1991) (Chinese sample: $\alpha = .93$ , CR = .91, AVE = .61; U.S. sample: $\alpha = .87$ , CR = .86, AVE = .59)				
1. I am not sure how much service I should provide to customers.	.76	10.85	.84	12.30
2. I am not sure which specific company strengths I should present.	.78	11.27	.80	11.40
3. I am not sure which product benefits I should highlight to customers.	.84	12.68	.68	9.12
4. I am not sure how I am expected to handle customer objections.	.78	11.37	.69	9.29
5. I am not sure how I am expected to handle unusual customer problems and situations.	.80	11.59	.69	9.21
6. I am not sure how I am expected to interact with customers.	.74	10.39	.70	9.44
<b>Model Fit Indices</b> China: $\chi^2 = 248.32$ ( $p = .00$ ), $\chi^2/d.f. = 1.73$ , RMSEA = .05, GFI = .87, CFI = .94. U.S.: $\chi^2 = 270.31$ ( $p = .00$ ), $\chi^2/d.f. = 1.94$ , RMSEA = .07, GFI = .85, CFI = .93.				
<b>Model 3</b>				
<b>Product Complexity</b> (Bello and Gilliland 1997) (Chinese sample: $\alpha = .81$ , CR = .77, AVE = .54; U.S. sample: $\alpha = .82$ , CR = .69, AVE = .63)				
1. Simple/unsophisticated–sophisticated	.64	7.90	.69	10.04
2. Nontechnical–highly technical	.78	9.49	.91	13.92
3. Low engineering content–high engineering content	.77	9.41	.77	11.30

**APPENDIX  
Continued**

Constructs, Sources, and Measurement Items	Chinese Sample		U.S. Sample	
	Standardized Factor Loading	t-Value	Standardized Factor Loading	t-Value
<b>Competitive Intensity (New Scale)</b> (Chinese sample: $\alpha = .88$ , CR = .87, AVE = .71; U.S. sample: $\alpha = .78$ , CR = .77, AVE = .53)				
1. Few-many competitors	.90	13.49	.72	9.81
2. Weak-strong competition	.84	12.19	.78	10.67
3. Few-many competing products	.78	11.10	.70	9.59
<b>Market Volatility (Adapted from Bello and Gilliland 1997)</b> (Chinese sample: $\alpha = .73$ , CR = .72, AVE = .40; U.S. sample: $\alpha = .82$ , CR = .82, AVE = .53)				
1. Stable-unstable	.65	7.72	.70	9.89
2. Certain-uncertain	.70	8.38	.65	8.93
3. Changes slowly-changes rapidly	.61	7.16	.79	11.37
4. Predictable-unpredictable	.56	6.49	.78	11.21
<b>Model Fit Indices</b> China: $\chi^2 = 51.75$ ( $p = .01$ ), $\chi^2/d.f. = 1.61$ , RMSEA = .05, GFI = .94, CFI = .96. U.S.: $\chi^2 = 50.82$ ( $p = .01$ ), $\chi^2/d.f. = 1.58$ , RMSEA = .05, GFI = .95, CFI = .97.				

<sup>a</sup>Items deleted because of high cross-loadings.

Notes: CR = composite reliability, AVE = average variance extracted.

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