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# BUYER ATTENTION AND SALESPERSON INFLUENCE TACTICS IN B2B SALES e-NEGOTIATIONS

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## ABSTRACT

e-negotiations, or sales negotiations over electronic mail, are increasingly common in business-to-business (B2B) sales, but little is known about selling effectiveness in this medium. This research investigates salespeople's use of influence tactics as textual cues to manage buyers' attention during B2B e-negotiations for sales contract award. Drawing on studies of attention as a selection heuristic, we advance the literature on mechanisms of sales influence by conceptualizing buyer attention as a key mediating variable between the use of influence tactics and contract award. We utilize a unique, longitudinal panel spanning more than two years of email communications between principal buyers and salespeople during B2B sales negotiations to develop a validated corpus of textual cues that are diagnostic of salespeople's influence tactics in e-negotiations. These e-communications data are augmented by in-depth interviews with members of the sales organization, a survey of salespeople, and archival performance data. The obtained results indicate that the concurrent use of compliance *or* internalization-based tactics as textual cues bolsters buyer's attention, and is associated with greater likelihood of contract award. Our results also suggest that concurrent use of compliance *and* internalization-based tactics is prone to degrade buyer attention and likely to put the salesperson at a disadvantage in closing contract award.

*Keywords:* B2B sales, negotiation, buyer attention, email communications, sales contract, textual cues

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## BUYER ATTENTION AND SALESPERSON INFLUENCE TACTICS IN B2B SALES e-NEGOTIATIONS

Advances in digital interactive technologies motivate firms to adopt technology-mediated channels for various business interactions. In particular, business e-communications account for more than 125 billion daily messages, or a remarkable 86 million messages per second (Radicatti Group 2015-2018). According to industry reports, 77% of customers prefer e-communications over other formats, and data indicate robust returns of \$40.56 for every dollar companies invest in e-communications (Miller and Waldow 2013). For business-to-business (B2B) selling (Russo 2015), these trends also are manifest in a 75% increase in e-negotiations, while face-to-face negotiations decrease (Bulow, 2011). By one estimate, 80% of U.S. sales negotiations are conducted online.<sup>1</sup>

Yet research into the effectiveness of these B2B e-negotiations is lacking, despite the challenges they create for salespeople. Compared with face-to-face communications, e-communications are generally leaner, with fewer contextual cues and less interactivity and flexibility (Dennis, Fuller, and Valacich 2008), but they also offer some key benefits, as we list in Table 1, including (1) *accessibility*, such that emails are always available and offer the possibility of almost immediate feedback; (2) *transparency*, because emails are verifiable (stored digitally for review) and visible (others in the organization can access them); (3) *diversity*, such that emails can contain diverse materials, including hypertext, links to external text or video, and various content attachments; and (4) *flatness*, which leads to professional norms that favor short, to-the-point messages without undue emotion (Byron 2008; Naquin, Kurtzberg, and Belkin 2010).

\*\*\*\*\*Insert Table 1 about here\*\*\*\*\*

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<sup>1</sup>See a survey by the IACCM (International Association of Contract and Commercial Management), <https://commitmentmatters.com/2014/05/12/does-virtual-negotiation-work/>

For researchers, e-negotiations pose challenges of analyzing unstructured data. However, they also provide a unique, relatively unobtrusive, unfettered, and automatic access to the selling process, by creating a permanent record of the selling process as it unfolds, without requiring an intervention (e.g., surveys, video/audio recordings can suffer from a reporting and obtrusive bias). Emergent academic research that utilizes process data from digital technologies show promise of new insights. For instance, researchers analyzed more than 1 million email exchanges among members of a professional services organization over a 6-month period to show that response times are highly predictive of social and professional ties (Wuchty and Uzzi 2011). Using actual emails exchanged between buyers and salespeople, we can (1) extract, categorize, and code unique textual cues associated with a salesperson's influence tactics; (2) conceptualize and operationalize the buyer's attention, as indicated by e-communications (i.e., text data); and (3) examine the impact of influence tactics and buyer attention on the probability of closing the contract successfully. Furthermore, noting evidence from studies of buyer-seller interactions that the process underlying interdependent influence mechanisms is more complex and nuanced than can be revealed by self-reports or static studies (Mantrala and Albers 2012; Moncreif and Marshall 2005; Plouffe, Bolander, and Cote 2014), we examine salespeople's dynamic influence tactics, designed to gain buyer attention and win contracts during the negotiation phase of the B2B selling process, when email is the dominant mode of communication.

In so doing, this research makes three contributions to research and practice. First, we identify textual cues in e-communications that are diagnostic of individual influence tactics and establish their validity. To do so, we offer a five-step roadmap for developing and validating theoretical constructs from textual cues by outlining objectives, techniques, activities and outcomes for each step and showing empirical evidence of their validity (Table 3). In our five-step design, we

use grounded analysis to develop word dictionaries, contextualized to provide authentic representations of the target constructs, which then serve as "seed" dictionaries for a machine learning algorithm to broaden their scope and expand their content to a reasonably large corpus of linguistic cues that ensure generalizability.

Second, rather than testing the direct effects of salesperson influence tactics on sales outcomes, we include buyer attention as a key mediating variable (Frazier and Summers 1984; McFarland, Challagalla, and Shervani 2006; Plouffe et al. 2014). Buyer attention refers to the degree to which a buyer displays strong behavioral responses to a salesperson's e-communications (Ocasio 2011; Ocasio, Laamenen, and Vaara 2018). As a selection heuristic, attention defines the allocation of information-processing resources; as an action motivator, it channels behavioral responses toward the focal object (Ocasio 2011). By theorizing and testing how buyer attention can explain when and why salesperson influence tactics yield sales outcomes, this study advances research into sales influence tactics.

Third, we show that individual influence tactics are neither equivalent nor sufficient to hold buyer's attention or win the contract. Rather, specific combinations of influence tactics are effective or not, yet no prior research has investigated influence tactics in combination or the potential for their inconsistent use to result in ineffective outcomes. We find that effective combinations feature the concurrent use of complementary influence tactics that prompt internalization (internal analyzing) or compliance (risk shifting).

To attain these contributions, we employ a unique data set of longitudinal email communications, sourced from a B2B heavy equipment manufacturing firm. The communications involve a lead seller and the principal buyer, and our unfettered access to these naturalistic data, untainted by the seller's perceptions, provide real-life accounts of buyer-seller negotiations (Clopton 1984). To rule out alternative explanations, we supplement the email data with in-depth

interviews, survey data (e.g., demographics, attitudes) and a sales manager survey that provides performance and profitability data.

## **THEORY AND HYPOTHESES**

The proposed conceptual model of e-communications includes (1) textual cues in e-communications that salespeople use to exert influence during the B2B sales negotiations; (2) buyer attention, displayed **in** textual cues of the buyer's e-communications during the B2B sales negotiation; and (3) a successfully closed sales contract (yes/no) as an outcome (Figure **1**). Using textual cues enables us to examine the exchange between salespeople and buyers in a naturalistic form. We anticipate that buyer attention mediates the effect of influence tactics on outcomes by signaling the buyer's response to the salesperson's influence attempts, which is sensitive to variations in the sales negotiation and directs the buyer's action and preferences.

\*\*\*\*\*Insert Figure 1 about here\*\*\*\*\*

### ***Buyer Attention and B2B Sales Contract Award***

We propose that e-communications that garner greater buyer attention are more likely to result in a successfully closed contract. According to the attention-based view of the firm, attention facilitates both coping with and adaptation to contextual stimuli (Ocasio 2011). An entity with limited information processing capacity copes with overwhelming stimuli by prioritizing and focusing on selective stimuli (Styles 2006).<sup>2</sup> An entity also might adapt to incoming stimuli by directing attention to those stimuli that are more likely to facilitate goal achievement, while dismissing stimuli with less goal instrumentality (Ocasio 2011). If stimuli garner an entity's attention, it indicates their relative importance and relevance (Ocasio et al. 2018).

Based on the preceding, we conceptualize that the intensity *of* attention given to a specific

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<sup>2</sup> Instead of coping and adaptation, Ocasio (2011) uses selection (what is attended to), vigilance (sustaining attention), and regulation (deciding to switch among multiple stimuli).

stimulus is indicative of (a) its relative importance and relevance to the individual's needs and goals (MacKenzie 1986), and (b) its motivational potential to evoke behavioral response (Janiszewski, Kuo, and Tavassoli 2013). As Coleman and Williams (2015) suggest, attention functions like a gatekeeper, for sorting, managing, and evaluating stimuli according to their fit with self-meaning. Tenneessen and Cimprich (1995) also show that deliberately directed attention provides a means to triage incoming stimuli that distract from purposeful activity. In a B2B context, Bonner and Calantone (2005, p. 55) conceptualize buyer "attentiveness" as a diagnostic construct that indicates the buyer's "cognitive disposition . . . towards a product manufacturer and away from its competitors."

Regarding its motivational potential, Janiszewski, Kuo, and Tavassoli (2013) show that attention can be a source of "preference formation," such that after directing their attention, people exhibit a preference for the focus of that attention, which they call the "mere attention effect." Such selective attention entails an encoding process that stores the selected stimuli according to preferred network connections, relative to stimuli that are triaged. This encoding then motivates preferences in subsequent action. In other words, "highly attentive buyers . . . purchase more products, more often, [and] for longer period of time" (Bonner and Calantone 2005, p. 56).

The diagnosticity of attention might be amplified in e-communications. Compared with face-to-face communication, e-communications increase accessibility, such that a salesperson can compose messages, with the desired level of richness, at any time and thus reach out to a buyer with follow-up, targeted messages. These cue-rich communications, arriving at any time, increase the buyer's cognitive load (Table 1). The transparency feature of e-communications, though attractive to the buyer because it supports checks of the veracity of the salesperson's claims, is also cognitively intensive, because it prompts analyses of message content and comparisons with

previous strings or other sources. Greater cognitive load and intensity increase the time demands on the buyer, so the buyer's attention should offer a particularly reliable and sensitive indicator of changing priorities during B2B negotiations.

Furthermore, the textual features of e-communications reveal the buyer's attention in these naturalistic exchanges. Positively valenced words indicate heightened interest (Hsu, Yu, and Chang 2017). A response that includes more active than passive text also indicates the activation of instrumental behavior (Singh et al. 2018), which is diagnostic of interest. Similarly, buyer responses that indicate time urgency reveal interest, such as when a buyer asks the salesperson to respond "asap" (Chen and Lurie 2013). Such signals of increased buyer attention show that the salesperson's messages have been granted relatively higher priority, and thus we expect it to be associated with increased probability of contract award.

**H1:** Buyer attention mediates the impact of the salesperson's influence tactics on the probability of B2B sales contract award during e-negotiations.

### ***Influence Tactics as Textual Cues and Buyer Attention in B2B Sales e-Negotiations***

Prior B2B sales literature identifies various influence tactics used in face-to-face communications, such as information sharing, recommendations, assertiveness, promises, inspirational appeals, and ingratiation (McFarland et al. 2006; Plouffe et al. 2014; see Table 2). In a buyer-dominated sales process, threats, sanctions, and inspirational appeals are less relevant (McFarland et al. 2006; Plouffe et al. 2014). The uses of threats or legalistic pleas presume that a contract already exists. Inspirational appeals presume that emotions sway buyers' decisions, but for B2B sales negotiations, with open bid processes and managerial or regulatory oversight, emotional appeals are relatively rare. Ingratiation might build relational bonds in face-to-face communications, but their use in professional email exchanges is less common, because the explicit, transparent exchanges make ingratiation attempts generally inappropriate. Accordingly, we

do not include ingratiation appeals in our hypotheses, but to reflect prior research, we include them in the empirical analysis as a statistical control (Alavi et al. 2018).

\*\*\*\*\*Insert Table 2 about here\*\*\*\*\*

Our conceptual development of influence tactics for e-negotiations features several notable elements. First, we use a *slice-a* continuous tract of time (e.g., 10 days) that clusters e-communications-as the unit of conceptual and empirical analysis. It offers an alternative to a single salesperson-buyer tum, which tends to be overly sensitive and prone to noisy input due to truncated or out-of-tum communications (e.g., multiple salesperson emails with no buyer response; Bulow 2011), as well as to an entire string of communications that aggregates all turns and thus might hide influence dynamics. Second, we hypothesize that textual cues that indicate salesperson influence tactics *change* the buyer's attention over the duration of thee-communications. Thus, desired changes in the buyer's attention should provide a key mechanism by which influence tactics effectively achieve outcomes. Third, we advance past conceptualizations in marketing that have adapted and refined Kelman's compliance and internalization constructs, which initially served as foundations to understand social influence in international relations. Among the first efforts, Venkatesh, Kohli, and Zaltman (1995, p. 76) drew on Kelman's work to categorize existing influence tactics developed by Frazier and Summers (1984) using "processes of social influence and attitude and behavior change" that individual tactics evoke. Venkatesh et al. (1995) conceptualized that internalization is evoked by task-oriented influence tactics, including information sharing and recommendation, because they "seek to persuade a target of the inherent merit of the proposed decision." Further, they conceptualized that compliance is prompted by non-task-oriented influence tactics, such as requests or promises, which "seek to obtain conformance without attempting to persuade the target of the appropriateness of the decision." Leveraging this

linkage between Kelman's social influence theory and independently developed influence tactics in marketing, McFarland et al. (2006) examined the relevance of influence tactics for salespeople and predicted the correspondence between Kelman's social influence mechanisms and individual influence tactics. They similarly predict that information sharing and recommendation tactics evoke intrinsic processes, whereas promises and threats indicate an instrumental mechanism. Their empirical findings indicate that individual influence tactics affect the buyer's manifest influence consistent with this categorization, such that when an intrinsic process is activated, the effects are larger and significant. Hochstein et al. (2019), Plouffe et al. (2014), and McFarland and Dixon (2019) adopt this categorical correspondence between Kelman's social influence mechanisms and influence tactics. We similarly draw on the conceptual categories of internalization and compliance but adapt their conceptualizations to e-communications.

*Internalization Tactics (Information Sharing and Recommendation).* Both *information sharing*, defined as communicating and exchanging knowledge about solutions/services/products, and *recommendation*, defined as the explicit suggestion in favor of a particular solution/service/product, are likely to evoke internalization (Boyle et al. 1992; Kelman 1961; McFarland et al. 2006). In e-communications, internalization implies internal analyzing, such that a buyer is motivated to assess the stimuli contained in the salesperson's message to evaluate the benefits and costs of an action, activity, or choice. Information sharing prompts the buyer to evaluate the substantive content of the message and analyze the potential to increase or decrease the likely benefits and costs of an offer. In the case of recommendation, provision of a suggested course of action with decisional responsibility put on the buyer also prompts the buyer to evaluate the credibility of the message and its implications in the context of the buyer's use situation.

Information sharing and recommendation tactics trigger an internal-analyzing process in

complementary ways. Unlike face-to-face exchanges, e-communications enable the salesperson to craft messages carefully and thereby include attachments such as drawings, industry reports, or white papers that offer novel information about unique product or service specifications that can overcome objections and meet buyers' needs (Parlami and Geiger 2015). The richness of novel information, combined with buyer vigilance to assess its relevance for goal pursuit, prompts analysis by the buyer. When the incoming information is evaluated to be favorable in advancing buyer's goals, it is likely to be internalized and prompt more positive dispositions toward the object of the information (Boyle et al. 1992). McFarland et al. (2006) show that, relative to sales situations characterized by the buyer's self-orientation or interaction orientation (i.e., social welfare), those that feature task orientations, such that they are goal oriented, enable more significant, positive effects of the salesperson's information sharing on the buyer's manifest (perceived) influence.

In face-to-face exchanges, salespeople also issue recommendations that leverage social bonds or interpersonal trust with the buyer. However, the flatness and transparency of e-communications may hinder a salesperson's attempts to engage in explicit social bonding or trust building (Byron 2008). Buyers also might be more vigilant, to protect against self-serving claims by salespeople. These features activate the buyer's likely analysis of recommendations; if the analysis suggests positive implications for achieving the buyer's goal, the recommendations should shift the buyer's attention toward their object. Prior research shows that salespeople's recommendation tactic is associated with relational norms in a B2B context and is effective in reframing status quo solutions as suboptimal or problematic which can be improved by the salesperson's recommended course of action (Boyle et al. 1992; Hohenschwert and Geiger 2015).

Beyond the effects of each tactic, we posit that the concurrent use of information sharing and recommendations will be positively associated with buyer attention, due to the reinforcing effects of these compatible processing motivations, especially when the buyer's cognitive

resources are stretched. Both information sharing and recommendation evoke an intrinsic (internalization) mechanism that favors internal analyses of input stimuli, yet in different ways. With their concurrent use and complementary internal analysis prompts, they should enhance attention effects, because the message content is reinforced by consistency and coherence (Pieters and Wedel 2004). Similarly, the concurrent use of search and display advertising online yields better results, because search advertising evokes a deliberate process to reveal consumer preferences, and display advertising acts like a recommendation agent that directs customers to a preferred site. We posit that textual cues of information sharing and recommendation promote cognitive consistency and coherence, because the former enables the buyer to process new knowledge and find disadvantages of current solutions, whereas the latter provides suggestions for resolving the problem (Hohenschwert and Geiger 2015).

**H2:** Salesperson's concurrent use of information sharing and recommendation tactics as textual cues during each slice of B2B e-negotiation positively affects buyer attention.

*Compliance Tactics (Promise and Assertiveness).* *Promise*, the act of a salesperson committing to a future course of action, activity and/or benefit, and *assertiveness*, a call-to-action for the buyer that ensures continuity of the business exchange and/or relationship, are both conceptualized to evoke risk-shifting in accord with a *compliance* mechanism (Kelman 1961; McFarland et al. 2006). In B2B e-communications, risk-shifting is evoked by salesperson messages that provide affordances for buyers to mitigate decision risk, simplify information processing, and/or reduce uncertainty (Newell and Simon 1972). Salesperson's messages that effectively mitigate buyer's decision risk and information processing burden are likely to garner increased attention due to their relevance in situations where time is at a premium, informational uncertainty is high, and cognitive resources are stretched. Such risk shifting is not necessarily suboptimal; it reflects a reasoned choice, based on instrumentality. For example, the buyer's risk can be shifted,

and informational uncertainty reduced if the buyer complies with a course of action suggested by the textual cues in the salesperson's messages.

Promises and assertiveness both evoke risk shifting, but in complementary ways. When a salesperson makes a promise, it mitigates buyer risk and uncertainty by guaranteeing some specific outcome, benefit, or payoff. In e-communications, salespeople issue promises that increase clarity and help buyers visualize the expected payoffs. In this sense, an explicit promise of a desired outcome, conditional on a favorable decision, should strongly reduce the cognitive burden by enabling the buyer to forgo a systematic risk analysis (benefits/costs), in favor of a promised outcome for which the seller bears the risk. If the salesperson offers certain solutions, services, and products, related to her or his expertise, it also mitigates buyer risk (Belonax, Newell, and Plank 2007). e-communications help the salesperson demonstrate expertise and superior knowledge, using scientific evidence and cases tailored to attractive solution options. Because the explicit and permanent nature of e-communications permits independent verification and validation of a salesperson's knowledge claims, by multiple members of the buyer organization, knowledge claims that are credible enjoy the benefits of expertise. Grant (2013) affirms that the use of assertiveness during sales processes improves outcomes, and Payan and McFarland (2005) show that a directed request tactic enhances the salesperson's manifest influence.

Here again, we predict a positive, incremental effect of salespeople's concurrent use of promise and assertiveness in e-communications on buyer attention, beyond the distinct effect of each tactic. Both of them shift decision risk and reduce information uncertainty. The complementary impact of promises and assertiveness also should reinforce the consistency and coherence of salesperson messaging, without creating the downside of repetitive or belabored messages associated with a singular influence tactic. That is, by making promises, the salesperson

indicates a willingness to take on the risk; similarly, assertiveness also reduce the buyer's informational uncertainty by redirecting attention to tailored solutions designed according to the salesperson's expert knowledge. Research offers similar evidence that a salesperson, acting as an expert consultant, can reduce risk perceptions with a consultative selling approach (Liu and Leach 2001; Rackham 1988).

**H3:** Salespersons' concurrent use of promise and assertiveness tactics as textual cues during each slice of B2B e-negotiations positively affects buyer attention.

### ***Research Setting***

We collaborated with a global B2B industrial manufacturing firm that is one of the top competitor in the custom manufacturing of specialized equipment for heavy industrial plants with \$1.6 billion market and growing at a CAGR of~ 5%. It had started conducting sales negotiations via email due to market changes; a vice president of sales noted that industrial buyers were actively avoiding face-to-face or phone meetings and requiring sales contract negotiations to be conducted by email, as an industry-wide practice. We collected various data: (1) longitudinal captures of buyer and salespeople emails exchanged during B2B sales negotiations for a two-year period, focusing on the sales negotiation phase (see Figure 1); (2) post-negotiation outcomes, namely, a successfully closed sales contract or not; (3) survey-obtained information about salespeople's demographic profile, perceptions of email use, and description of their firm's vendor status; (4) archival data capturing salespeople's past performance, obtained from managers; and (5) in-depth knowledge about the sales process and setting, gained from field interviews with salespeople and sales managers.

*Interviews with Salespeople and Sales Managers.* Individual interviews with eight salespeople and two sales managers helped us understand the sales negotiation process, ascertain the media and frequency of buyer-salesperson interactions, and define the duration of e-

negotiations. These interviews enabled us to develop an appropriate research design, identify data sources for the study variables, and derive an empirical approach for the sampling.

*Sampling.* The sampling procedure involved several steps. First, each salesperson provided lists of all sales e-negotiations assigned to him or her in the previous two years, including key identifiers, such as the buyer's name, purchase order number, project number, start month, and end month. The lists were verified for completeness and accuracy by the sales managers, to ensure the sampling frame included all sales e-negotiations or bids, whether successful or not. Second, guided by these lists of sales e-negotiations and identifiers, an IT manager extracted the emails from the firm's servers. Third, we checked the extracted emails for completeness with regard to identifiers such as date and time stamps, receiver's/sender's name, and email subject. We also determined the incidence of email exchanges between the lead salesperson and lead buyer (> 90%) versus other buying team members (e.g., project manager, legal). Reflecting the insights we gained from our interviews, we retained only those sales e-negotiations that entailed at least 20 emails and thus excluded six sales e-negotiations. Further analysis revealed that these six sales e-negotiations were unusual, lower-valued negotiations that resulted from face-to-face interactions. Finally, we recorded sales e-negotiations specific information, such as the price and negotiation outcome. In total, we sampled communications for 47 distinct sales e-negotiations.

*Unit of analysis.* The balance of power in these negotiations favor the buyer, so e-negotiations often involve multiple emails, sent out of turn and without waiting for a response, by the salesperson. In addition, emails often address disparate topics (e.g., address topic A, then topic B) and appear in waves of heightened or low activity. Therefore, we computed a similarity measure

(cosine distance)<sup>3</sup> between time-ordered email subject entries<sup>4</sup> for buyer and salesperson emails, and then used different time windows<sup>5</sup> to cluster buyer and salesperson emails over the duration of the period. The resulting unit of analysis is a slice ( $k$ ), spanning 10 days (for a total of 273 slices). We checked the robustness of the subsequent analysis using 14 days for each slice (232 slices).

*Salesperson survey.* We surveyed all salespeople ( $n = 9$ ; 100% response rate) to obtain control variables that likely influence the outcomes of B2B sales negotiations. Specifically, we collected perceptual (e.g., email use, customer orientation, adaptive selling behavior), demographic (e.g., age, gender, education, years as a salesperson), and negotiation-specific archival (e.g., status of the vendor, length of the relationship) data.

*Archival data.* Sales managers provided archival data about the salespeople's performance on key performance indicators (KPIs) that the company routinely collects for evaluation purposes. The KPIs include sales, profitability, responsiveness to buyers' requests, and completeness of information provided. Each KPI was assessed on a five-point scale (1 = "poor" performer and 5 = "best" performer).

### ***Measure Development: Influence Tactics and Buyer Attention as Textual Cues***

As shown in Table 3, we used a five-step process to develop and validate measures of the salesperson's influence tactics and buyer attention. We briefly discuss each step next.

\*\*\*\*\*Insert Table 3 about here\*\*\*\*\*

*Operational definitions.* To gather purposive data, we asked four salespeople who work in

<sup>3</sup> Cosine distance =  $1 - \text{cosine similarity}$ , where cosine similarity between two document vectors  $A_i$  and  $B_i = \cos(\theta) = \frac{A_i \cdot B_i}{\|A_i\| \|B_i\|}$ . A score of 1 suggests that A and B are similar, and a score of 0 indicates dissimilarity.

<sup>4</sup> We use a threshold of .4 for cosine distance, which accommodates the natural variation in subject lines that occur due to the use of "reply" or "forward" indicators (e.g., "RE" or "FW" added to the email subject line). The email subject lines are relatively short ( $M = 4.1$  words,  $SD = 2.7$  in our data), and cosine distance is based on the number of words in a sentence. For these shorter sentences, a change of even one word can cause the cosine distance score to fluctuate dramatically. The sensitivity analysis suggested using a score of .4.

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<sup>5</sup> A 10-day slice is constructed in two steps: Check for any change in the email title over 10 continuous days. If a change exists, the slice is constructed for the similar email title, and otherwise, on the 10th day, the next slice begins. The mean slice length = 8.93 days,  $SD = 1.91$  days; if we use a 14-day slice, the mean slice length = 11.72 days,  $SD = 3.17$  days.

the focal industry to write sample emails that contain one specific influence tactic, as information-specific cases of emails used purposefully to convey a specific (target) influence tactic (Shaltoni and West 2010). This process yielded 113 sentences, each containing a target influence tactic. We merge a subsample of the naturalistic data obtained from the firm (pertaining to four sales e-negotiations, or about 10% of the data) with these purposive data to create a training sample of 473 sentences. Sales managers from the focal firm and academics reviewed the influence tactics in the training sample, fine-tuned the operational definitions of each influence tactic, and produced the definitions in Table 2.

We used a top-down approach to develop an operational definition of buyer attention. The conceptual definition cites the heightened interest and behavioral engagement indicated by a buyer's response to a salesperson's email message that includes instrumental (action-oriented) words and phrases that signal action, temporal contiguity words to convey time-related urgency, and positive or negative valence words that indicate activation. We asked expert academics to evaluate sentences extracted from the buyers' email data ( $n = 150$ ) for the presence or absence of each dimension. They achieved intercoder reliability greater than 95%.

*Measure generation.* On the basis of operational definitions, two sales managers and an executive from the focal firm and two academics, classified each sentence in the training sample as indicative of one of five influence tactics. They identified which words and phrases in each classified sentence indicated that tactic, which provides the *seeds* for an influence tactic-specific dictionary. Iterative recoding and discussions resulted in interrater reliability greater than 93%.

For buyer attention, two research assistants identified unique words and phrases corresponding to each dimension: instrumental (33), temporal contiguity (22), and valence (24). We supplemented this list with words from extant dictionaries such as the LIWC (Pennebaker et al. 2015; 198 words from the time dimension for temporal contiguity) and Harvard Enquirer (249

words for positive/negative valence, 623 words for instrumental/action oriented). Overall, we thus generated 1149 words/phrases to refer to buyer attention.

*Measure augmentation.* Using the training sample, we preprocessed the data to remove uninformative words/characters, such as stop words (e.g., "the," "and," "on"), HTML tags, and extraneous features. We inserted white spaces following punctuation to separate content and also stemmed the words to their roots to allow for variations (e.g., "seem" for "seeming" and "seemingly"). Thereafter, for feature (construct specific linguistic markers) identification, we assigned the email sentences to meaningful vectors using term frequency-inverse document frequency and co-occurrence matrices. Feature identification is followed by feature selection, with the objective of choosing the relevant features that can lower the error rate for the hold-out sample. To select relevant features, we fit five logistic regressions (one per influence tactic) relative to all other classes (influence tactics). Therefore,

$$(1) \quad P(L = 1|w) = \frac{1}{1 + \exp(w_0 + \sum_{i=1}^n w_i x_i)}, \text{ and}$$

$$(2) \quad P(L = 0|w) = \frac{\exp(w_0 + \sum_{i=1}^n w_i x_i)}{1 + \exp(w_0 + \sum_{i=1}^n w_i x_i)},$$

where  $L = 1$  for a specific influence tactic and 0 otherwise;  $x_i$  is the feature; and  $w_i$  is the weight.

Using the weight, we select the most relevant features for the classification step after testing iteratively among 25-100 features for each influence tactic; ultimately, we selected the top 35 features for each influence tactic, according to the accuracy achieved in the hold-out sample. The selected features and seeding dictionaries of linguistic cues developed in the previous step together classify the training sample in a supervised vector machine (SVM), which performs well in high-dimensional spaces (Vapnik 1998) and has been used in prior marketing literature (Ordenes et al. 2018). To assess classification accuracy, we used stratified five-fold cross-validation, where the "training sample" is divided randomly into five parts, after which training is performed on the first

four samples, with the prediction performed on the fifth (hold-out) sample. Then we compare the manual coding of influence tactic labels with the SVM classification to determine the error rate. The latter two steps repeat five times, to rotate the hold-out sample, and we calculate the classification accuracy over the five iterations (Witten, Frank, and Hall 2011). We achieved satisfactory accuracy values of 85.1% for influence tactics and 86.2% for buyer attention.

*Deployment of measures.* We use these linguistic markers in the SVM algorithm to code the email data (4094 sentences from 43 e-negotiations) for the presence or absence of specific influence tactics. To validate out-of-sample coding, two research assistants independently coded 100 randomly selected email sentences from the 43 e-negotiations into one of the five influence tactics using operational definitions (interrater agreement= 91%). We obtained a classification consistency value of 86% with the sentences coded by SVM. Similarly, for buyer attention, two research assistants independently read 75 sentences randomly sampled from the 43 e-negotiations and classified them into the three buyer attention dimensions (interrater agreement= 92%). The classification consistency was 90.7% relative to sentences coded by SVM. Table 2 includes a sample of the linguistic markers deployed.

*Measure validity.* Each influence tactic was operationalized as the number of identified sentences corresponding to the tactic, divided by the total number of sentences in the slice. Similarly, buyer attention was operationalized as the total number of instrumental, valence, and temporal contiguity sentences that occur in a slice, divided by the total number of sentences in that slice. To examine measure validity, a confirmatory factor analysis (CFA) included two measures for each influence tactic<sup>6</sup> and three dimensions of buyer attention. In Table 4, we present the satisfactory fit statistics thus obtained:  $\chi^2 = 47.51$  (df= 34), confirmatory fit index (CFI) = .99,

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<sup>6</sup>The linguistic markers for each influence tactic were randomly divided into two groups.

normed fit index (NFI) = .98, non-normed fit index (NNFI) = .98, root mean square error of approximation (RMSEA) = .04 (90% confidence interval [CI] < .06), and standardized root mean residual (SRMR) = .03. Each influence tactic construct and buyer attention construct also indicate evidence of significant factor loadings, convergent validity (average variance extracted [AVE] > .50), and discriminant validity (AVE > maximum shared variance [MSV]). A second-order CFA further confirms that the influence tactic measures display the expected pattern for higher internalization and compliance constructs ( $\chi^2 = 52.91$  [df= 37], CFI = .99, NFI = .98, NNFI = .98, RMSEA = .04 [90% CI < .06], and SRMR = .04). In addition, and without exception, the second-order constructs of the compliance and internalization constructs exhibit significant factor loadings, convergent validity (AVE > .50), and discriminant validity (AVE > MSV).

\*\*\*\*\*Insert Table 4 about here\*\*\*\*\*

*Control variables.* We included several control variables, as listed in table 5: salesperson alternative mode of communication (=1 if emails contain words specific to meeting outside the email context such as "hotel" or "golf"), linguistic style matching (Taylor and Thomas 2008) (M = .64, SD= .32), the salesperson's average response time to buyer emails (M = 2.27 days, SD= 12 days), salesperson education (Feng and Fay 2016) (1= "undergraduate," 2 = "Master," 3 = "PhD," and 4 = "any other college degree"), salesperson performance across four KPIs (Zoltners, Sinha, and Lorimer 2008) (sales, profitability, responsiveness, and completeness) (1= poor performer, 5 = best performer), customer orientation (Homburg, Muller, and Klarmann 2011) (1 = low, 5 = high), salesperson tenure (Larson et al. 2008) (M = 6.87 yrs., SD= 5.76 yrs.), contract price (M = \$2.1 million, SD= \$3.6 million), and selling firm status (Anderson and Narus 1990) (1 = preferred vendor, 0 = not a preferred vendor).

\*\*\*\*\*Insert Table 5 about here\*\*\*\*\*

## Empirical Analysis

We estimate the following equations (Greene 2018):

$$(3) \text{BATTN}_{sjk} = \alpha_{sj} + \beta_1 \text{BATTN}_{sj(k-1)} + \beta_2 \text{INSH}_{sjk} + \beta_3 \text{RECO}_{sjk} + \beta_4 \text{PROM}_{sjk} + \beta_5 \text{ASRT}_{sjk} + \beta_6 \text{INGR}_{sjk} + \beta_7 \text{INSH}_{sjk} \times \text{RECO}_{sjk} + \beta_8 \text{PROM}_{sjk} \times \text{ASRT}_{sjk} + \beta_9 \text{INSH}_{sjk} \times \text{PROM}_{sjk} + \beta_{10} \text{INSH}_{sjk} \times \text{ASRT}_{sjk} + \beta_{11} \text{RECO}_{sjk} \times \text{PROM}_{sjk} + \beta_{12} \text{RECO}_{sjk} \times \text{ASRT}_{sjk} + \beta_{13} \text{ACALL}_{sjk} + \beta_{14} \text{LSM}_{sjk} + \beta_{15} \text{STTR}_{sjk} + \beta_{16} \text{TS}_{sjk} + \epsilon_{sjk}, \text{ where } \epsilon_{sjk} \sim N(0, \sigma^2).$$

$$(4) \alpha_{sj} = \alpha_0 + \alpha_1 \text{EDU}_{sj} + \alpha_2 \text{SALPERF}_{sj} + \alpha_3 \text{CORIENT}_{sj} + \alpha_4 \text{SPEX}_{sj} + \alpha_5 \text{LPRICE}_{sj} + \alpha_6 \text{PVENDOR}_{sj} + \eta_{sj}, \text{ where } \eta_{sj} \sim N(0, \sigma^2).$$

$$(5) \text{rns}_{jk} = \gamma_0 + \gamma_m \alpha_{sj}, \text{ where } \alpha_{sj} \sim N(0, \sigma^2), \text{ where } m = 2 \text{ to } 15.$$

Probability of Contract Award =  $K_{sj}$

$$(6) K_{sj} = 1,$$

$$\text{if } K^*_{sj} = \gamma_0 + \gamma_1 \text{BATTN}_{sjk} + \gamma_2 \text{INSH}_{sjk} + \gamma_3 \text{RECO}_{sjk} + \gamma_4 \text{PROM}_{sjk} + \gamma_5 \text{ASRT}_{sjk} + \gamma_6 \text{INGR}_{sjk} + \gamma_7 \text{INSH}_{sjk} \times \text{RECO}_{sjk} + \gamma_8 \text{ASRT}_{sjk} \times \text{PROM}_{sjk} + \gamma_9 \text{INSH}_{sjk} \times \text{PROM}_{sjk} + \gamma_{10} \text{INSH}_{sjk} \times \text{ASRT}_{sjk} + \gamma_{11} \text{RECO}_{sjk} \times \text{PROM}_{sjk} + \gamma_{12} \text{RECO}_{sjk} \times \text{ASRT}_{sjk} + \gamma_{13} \text{ACALL}_{sjk} + \gamma_{14} \text{LSM}_{sjk} + \gamma_{15} \text{STTR}_{sjk} + \gamma_{16} \text{EDU}_{sj} + \gamma_{17} \text{SALPERF}_{sj} + \gamma_{18} \text{CORIENT}_{sj} + \gamma_{19} \text{SPEX}_{sj} + \gamma_{20} \text{LPRICE}_{sj} + \gamma_{21} \text{PVENDOR}_{sj} + \alpha_{sj} > 0.$$

$$\text{Otherwise } K_{sj} = 0, \text{ where } \alpha_{sj} \sim N(0, \sigma^2).$$

$$(7) \gamma_{tsj} = \gamma_0 + \gamma_m \text{EDU}_{sj} + \gamma_m \text{SALPERF}_{sj} + \gamma_m \text{CORIENT}_{sj} + \gamma_{10} \text{SPEX}_{sj} + \gamma_m \text{LPRICE}_{sj} + \gamma_{16} \text{PVENDOR}_{sj} + \eta_{sj}, \text{ where } \eta_{sj} \sim iid(0, \sigma^2).$$

In these equations,  $sj$  = the salesperson-buyer dyad;  $k$  = slice;  $TS$  = time-ordered slices with the first sequence coded as 0 to facilitate interpretation; and  $BATTN$  = buyer attention. The influence tactics are as follows: *INSH* = information, *RECO* = recommendation, *PROM* = promise, *ASRT* = assertiveness, and *INGR* = ingratiation. For the control variables, we use *ACALL* = alternative channel for sales negotiation (0 = not using, 1 = using alternative channel), *LSM* = linguistic style

matching between buyer and salesperson, *STTR* = time taken by salesperson to respond to buyer's email (days), *EDU* = salesperson education, *SALPERF* = managers' rating of salesperson's performance (1-5 Likert scale), *CORJENT* = customer orientation (1-5 Likert scale), *SPEX* = number of years the salesperson has been with the firm, *LPRICE* = log of contract price in U.S. dollars, and *PVENDOR* = salesperson's status (0 = not preferred, 1 = preferred).

*Endogeneity.* The salesperson-buyer negotiations yield contemporaneous measures. Specifically, the influence tactic measures are temporally ordered and contemporaneous, in that they co-occur with other influence tactics and reciprocally with the dependent variable (buyer attention), so we encounter endogeneity due to simultaneity (Rutz et al. 2019; Wooldridge 2010). Following Rutz et al. (2019) and Papies et al. (2017), we take an instrumental variable approach. To produce valid and strong instruments, we use predicted scores from regressions of the current value of a contemporaneous variable on its past values, lagged one period, as well as the dependent variable, lagged one period (Rutz et al. 2019). These instruments satisfy the exclusion criteria; they correlate with the current values of the predictor variables that they precede and are not influenced by contemporaneous unobservable variables. Next, we seek to establish instrument validity and strength (Germann, Ebbes, and Grewal 2015). The Sargan test for overidentifying restrictions tests whether the instruments are uncorrelated with the residuals and yields a non-significant statistic ( $X^2_{df} = 7.78, p < .1$ ), indicating the validity of the instruments. We also regress the endogenous variable on all exogenous variables, then add instruments in the second step to perform an incremental F-test; a value higher than 10 indicates strong instruments. The obtained F-statistics demonstrate that the instruments are strong, with incremental F-statistics of 64.85 (information sharing), 76.91 (recommendation), 60.75 (promise), 60.83 (assertiveness), and 67.14 (ingratiation) (all significant at  $p < .001$ ;  $df = 16, 18$ ).

*Multicollinearity.* Multicollinearity is not a concern, because all variance inflation factors

are less than 6.

### ***Impact of Influence Tactics and Buyer Attention on Sales Contracts***

*Model fit.* We compared the hypothesized model with a model that contains only control variables. According to the likelihood ratio test, the hypothesized model offers a superior fit for both buyer attention ( $\chi^2(23) = 254.78, p < .001$ ) and sales contract award ( $\chi^2(13) = 39.64, p < .001$ ) (Table 6). The Akaike information criterion values for the hypothesized and control only model are 728.7 versus 520.3 (for buyer attention) and 289.2 versus 277.5, (for contract award) respectively.

\*\*\*\*\*Insert Table 6 about here\*\*\*\*\*

*Hypothesis testing.* To test H1, we conducted a series of moderated mediation tests and examined the conditional indirect effects of the hypothesized influence tactics on sales contract award (Pieters 2017).<sup>7</sup> The conditional *direct* effects of information-sharing (.04,  $p > .1$ , 95% CI= [-.46, .58]) and recommendation (.21,  $p > .1$ , 95% CI= [-.14, .56]) on sales contract award are insignificant, but the conditional *indirect* effect of information sharing, mediated by buyer attention, is significant and negative when recommendation increases from -2 SD (-4.44,  $p < .001$ , 95% CI= [-5.80, -3.07]) to -.1 SD (-.79,  $p < .001$ , 95% CI= [-1.02, -.56]). Then as recommendation rises from .4 SD to +2SD, the conditional indirect effect of information sharing increases from .26 ( $p < .001$ , 95% CI= [.18, .34]) to 6.26 ( $p < .001$ , 95% CI= [4.24, 8.29]). The conditional direct effects of promises (.30,  $p > .1$ , 95% CI= [-.21, .81]) and assertiveness (.31,  $p > .1$ , 95% CI= [-.25, .87]) on sales contract award also are insignificant, with a negative and significant conditional indirect effect of promises on contract award mediated by buyer attention when assertiveness increases from -2 SD (-3.08,  $p < .001$ , 95% CI= [-4.81, -1.36]) to -.4 SD (-.14,

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<sup>7</sup> Pieters (2017) cites six conditions that should be met prior to running mediation tests. Accordingly, we checked for directionality (arguing for H1), reliability (conducting CFA for buyer attention measure), unconfoundedness (collecting the mediator [buyer attention] and dependent variable [sales contract award] using diverse methods and different time periods), distinctiveness (buyer attention is a time-varying, whereas sales contract award is time-invariant; empirically buyer attention and sales contract award correlate at only .12), and power ( $N = 273$ , 80% power). We used the online tool developed by Schoemann, Boulton, and Short (2017) for power analysis, which is available at [https://schoemanna.shinyapps.io/mc\\_power\\_med/](https://schoemanna.shinyapps.io/mc_power_med/).

$p < .001$ , 95% CI= [-.20, -.07]). As assertiveness increases above its mean value, the conditional indirect effect of promises becomes positive and significant, from .4 SD (.32,  $p < .001$ , 95% CI= [.16, .47]) to +2 SD (4.99,  $p < .001$ , 95% CI = [1.79, 8.19]).

The conditional *direct* effects of promise (.30,  $p > .1$ , 95% CI= [-.21, .81]) and recommendation (.21,  $p > .1$ , 95% CI= [-.14, .56]) on sales contract award are insignificant, but the conditional *indirect* effect of recommendation, mediated by buyer attention, is significant and positive when promise moves from -2 SD (3.51,  $p < .001$ , 95% CI= [1.47, 5.54]) to -.1 SD (.37,  $p < .001$ , 95% CI= [.03, .70]). Then as promise rises from .6 SD to +2SD, the conditional indirect effect of recommendation is negative and significant, from -.78 ( $p < .001$ , 95% CI = [-1.53, -.04]) to -3.09 ( $p < .001$ , 95% CI= [-5.43, -.75]). Similarly, conditional *direct* effects of assertiveness (.21,  $p > .1$ , 95% CI= [-.14, .56]) and recommendation (.21,  $p > .1$ , 95% CI= [-.14, .56]) on sales contract award are insignificant, but the conditional *indirect* effect of recommendation, mediated by buyer attention, is significant and positive when assertiveness moves from -2 SD (10.17,  $p < .001$ , 95% CI= [7.38, 12.96]) to -.1 SD (.79,  $p < .001$ , 95% CI= [.29, 1.30]). Then as promise rises from -.2 SD to +2SD, the conditional indirect effect of recommendation is negative and significant, from -.68 ( $p < .001$ , 95% CI= [-1.25, -.12]) to -9.57 ( $p < .001$ , 95% CI= [-12.48, -6.65]). Thus, buyer attention mediates the impact of the concurrent use of influence tactics on the probability of contract award, in support of H1.

In support of H2, we find a significant positive interaction of information sharing and recommendation (.15,  $p < .05$ ) on buyer attention (Table 6). Following Spiller et al. (2013), we assess the impact of information sharing on buyer attention when recommendation ranges from 2SD to +2SD. When recommendation is low (-2 SD), the impact of information sharing on buyer attention is negative and significant (-.31,  $p < .002$ ) (Figure 2). As recommendation increases to .1 SD, the effect of information becomes positive and significant (.02,  $p < .002$ ) and grows to .31 ( $p <$

.002) at +2SD. Conversely, the marginal effect of recommendation on buyer attention at low levels (-2SD) is -.42 ( $p < .005$ ) but increases to .13 ( $p > .1$ ) at high levels (+2SD) of information sharing.

Consistent with H3, we find a significant, positive interaction of promises and assertiveness (.14,  $p < .05$ ) on buyer attention. When assertiveness is low (-2 SD), the impact of promises on buyer attention is negative and significant (-.28,  $p < .04$ ) (Figure 2). As assertiveness increases to .1 SD, the effect of promises becomes positive and significant (.01,  $p < .04$ ) and grows (.28,  $p < .04$ ) at +2SD. Conversely, the marginal effect of assertiveness on buyer attention is -.28 ( $p < .04$ ) at low levels (-2SD) and .28 ( $p < .04$ ) at high levels (+2SD) of promise.

\*\*\*\*\*Insert Figure 2 here\*\*\*\*\*

*Robustness checks.* We conduct a battery of robustness checks, as detailed in Table 7a and 7b, including subsample analyses in which we randomly drop 5% of the data, drop long sales e-negotiations with more than 10 slices, or vary the number of observations by defining a slice as 14 days. We also examine changes in buyer attention as the interaction unfolds by regressing buyer attention on time-sequenced slices and extracting the slope for all 43 sales e-negotiations to capture the rate of change in buyer attention. The contract-specific slopes provide an independent variable in the sales contract model. The change in buyer attention exerts a positive impact (2.41,  $p < .06$ ) on successfully closed contracts. Together, these results confirm the robustness of our key findings.

\*\*\*\*\*Insert Table 7a and 7b here\*\*\*\*\*

## DISCUSSION

This research advances our understanding of selling effectiveness in B2B e-negotiations, a medium that is increasingly favored by buyers because of its accessibility, transparency and diversity. Advances in this area have been hampered by the demands of conducting research on influence tactics deployed as e-communications. Among them are unfettered access to the entirety

of e-communications between salespeople and buyers, measuring and modeling sales influence tactics by using unstructured text data, and theorizing an influence process that provides the mediating mechanism linking salesperson's influence tactics and buyer's decision of contract award. To navigate these challenges, and advance insights into the effectiveness of sales influence tactics in B2B e-communications, we outline four main contributions.

First, we provide a roadmap for sales research that uses unstructured data obtained from salesperson-buyer interactions to test theoretical models of sales mechanisms; our study demonstrates how they can use buyer and seller emails as data to capture influence tactics and their effects. Second, we establish the theoretical and managerial significance of buyer attention as a key mediator in the relationship between salesperson's use of influence tactics and buyer's decision of contract award. Past studies in marketing have examined direct effects of influence tactics on sales outcomes, but rarely examined the mechanism that underlies these effects. Third, we advance the theoretical foundations of influence tactics by conceptualizing and demonstrating that influence tactics as textual cues are invariably more effective in winning contracts when they are used in combination than when they are used individually. Past research has overlooked the gains from concurrently using different influence tactics in B2B negotiations. Fourth, we demonstrate that the concurrent use of complementary influence tactics as textual cues is effective in securing contract awards only when the tactics are consistent in prompting *either* internalization (internal-analyzing) *or* compliance (risk-shifting).

### ***Limitations***

Several limitations of our study warrant consideration. First, we investigate negotiations that feature a single seller and multiple buyers; more research across disparate contexts would be needed to infer generalizable patterns. Second, tools for analyzing unstructured text data continue

to improve, promising the ability to account for paratextual cues such as amplifiers (e.g., different colored text) or accentuators (e.g., exclamation marks). Investigations that include such paratextual cues would expand our investigation of textual cues. Third, we gather emails as e-negotiation data, without considering the devices used to engage in these e-communications. The device type (e.g., PC vs. mobile) might alter communication tactics or influence mechanisms, a possibility that should be addressed by further inquiries. Fourth, while we obtain empirical support for the proposed buyer attention mechanism, we do not examine the underlying cognitive or neurological processes which would be an interesting avenue for future research.

### ***Influence Tactics as Textual Cues in Sales e-Negotiations***

Constructs are the building blocks that bridge our theories of a phenomenon with empirical analysis of observations of this phenomenon. Getting the study constructs "right" so they are rich in theoretical content and evidence validity in empirical representation is a challenge with unstructured data. Much has been discussed about the pros and cons of bottom-up and top-down approaches for extracting meaningful constructs from unstructured data to permit their use in building empirical models and in analytics engines that yield insights. We offer a five-step roadmap for developing and validating theoretical constructs from textual cues by outlining objectives, techniques, activities and outcomes for each step and showing empirical evidence of their validity (Table 3). This roadmap provides guidance to future researchers who seek to apply, adapt or advance this method. We invite future contributions that enhance and enrich this roadmap to bolster the field's building blocks for theory development.

### ***Buyer Attention as a Key Mediator in e-Negotiating Contract Awards***

We advance the literature by (a) conceptualizing buyer attention in the context of B2B e-negotiations, (b) capturing variations in buyer attention from textual cues during the sales

negotiation process, and (c) theorizing and empirically examining its role as a key mediator.

Conceptually, we show that, while past research explains what influence tactics are effective in different sales contexts, our study explains *how* influence tactics work. We draw from the attention based-view framework to posit that buyer attention explains how buyers notice, process and respond to salesperson stimuli (influence tactic) in accord with attention's role in a selection, resource-allocation and action-motivation mechanism, respectively (MacKenzie 1986; Bonner and Calantone 2005; Coleman and Williams 2015).

Operationally, accessing the variations in the attentional mindset of buyers while they are in the midst of the sales negotiation process is challenging. As a first step, this research relied on the linguistic content of buyer emails to extract their attentional mind-set. While composed emails are likely to be incomplete and constrained representation of buyer attention, they have the advantage of accuracy (e.g., buyer's own words) and time sensitivity (e.g., stamped by time of writing email). The results from the empirical study show that buyer attention fully mediates the effect of salesperson's use of influence tactics on the likelihood of sales contract award. Our insight is that the waxing and waning of buyer attention in B2B sales negotiation, visible in the signals of buyer's message length, speed and urgency among others, provide an early indication of sales effectiveness that is relatively robust and remarkably diagnostic of likelihood of sales contract award. Extant research that examines buyer attention in related research domains aligns with our studies. For instance, in a study of B2B purchasing managers, Bonner and Calantone (2005) found that buyer attention fully mediates the effect of sellers' relationalism on buyer purchase behaviors, with strong empirical support for the mediated effects. They also found that the effect of seller reputation on buyer's purchase behavior was also fully mediated by buyer attention. As such, buyer attention warrants consideration in future research as a critical construct for unpacking the mechanisms of salesperson influence tactics in B2B settings.

### ***The Advantage of Complementary Influence Tactics as Textual Cues***

This study contextualizes the conceptualization of Kelman's original social influence mechanisms for sales e-negotiations by building upon and extending the past literature on influence tactics in sales management. Internalization involves internal-analyzing that primes the buyer to bear the risk of evaluating the benefits and costs of alternative options and is stimulated by use of textual cues that involve information-sharing and making recommendations. Compliance involves risk-shifting that nudges the buyer to shift decisional risk to the seller by leaning toward the guaranteed outcome and is stimulated by the use of textual cues that involve assertiveness and making promises. The study results provide compelling support for our conceptual contribution. The influence tactics constructs extracted from textual cues in salespersons' e-communications using the proposed roadmap show (a) evidence of convergent and discriminant validity, (b) a consistent factor pattern at the second-order level that confirms the presence of two (and *no more than two*) underlying second-order "factors" to indicate mechanisms (internalization and compliance), (c) support for the four (and *no more than four*) hypothesized first-order "factors" to indicate influence tactics. Moreover, in accord with the posited hypotheses and as evidence of nomological validity, the results from the study confirm that concurrent use of complementary influence tactics indicated by a positive interaction effect heightens buyer attention.

Past studies show that each influence tactic, when used individually, can be effective at times but most have missed theorizing or testing the concurrent use of multiple influence tactics. This is surprising since, in practice, salespeople flexibly use multiple influence tactics by instinct. Without theorizing the underlying influence mechanism, it is a challenge to hypothesize effective combinations. Our study fills this void and advances the field by demonstrating that gaining B2B buyer attention is more effective when different (rather than same) influence tactics are used concurrently as long as the influence tactics are complementary in prompting either internalization

**or** risk-shifting.

We also find that when salespeople concurrently use competing influence tactics, it results in diminished buyer attention and lower contract closing success. Few past studies have examined such competing combinations. For instance, parallel work in field of product management examined the effect of salespeople's efforts to combine compliance-generating (e.g., "rationality") and compliance-impeding ("assertiveness") tactics on product manager compliance (Joshi 2011). Though our theorizing deviates from Joshi by drawing on Kelman's work to conceptualize information sharing and recommendation as a tactics for stimulating internal-analyzing cognitions and promise and assertiveness as tactics for stimulating risk-shifting cognitions, the obtained results seem to be aligned with Joshi's intuition about the disadvantage of stimulating inconsistent cognitions. This insight regarding the disadvantages of concurrently using internal-analyzing and risk-shifting tactics is interesting and calls for further empirical testing as it can make the difference between winning or losing contracts in e-negotiations.

### ***Managerial Implications***

Salespeople are instrumental for guiding customers throughout sales e-negotiation processes. In addition to suggesting best practices for how to e-negotiate, this study offers insights into how salespeople, depending on the scope and dynamics of their sales interactions, might improve their skills and influence business buyers. We offer three novel insights to sales managers and sales professionals. First, sales organizations need to offer training and guidelines for how to build buyer attention during sales e-negotiations. During the conducted interviews, we learned that seasoned salespeople, with proven traditional sales performance (e.g. face-to-face; phone), often struggle to assess the buyer's mindset in e-communications. Our findings show that if salespeople seek to gain buyer's attention, they are likely to navigate the e-negotiation to a successful contract

close. In motivating salespeople, sales managers could specify buyer attention as an outcome metric. By measuring buyer attention for each e-negotiation on an ongoing basis the manager can establish a new KPI and also identify skill gaps that require more directed coaching.

*Second*, beyond pursuing buyer attention, salespeople must gain a nuanced understanding of how to leverage influence tactics during e-negotiations. Sales settings are inherently complex and require unique expertise; a successful outcome often results from the combination of multiple tactics (Cocivera 2017), based on an understanding of the sales context. The salespeople we interviewed attested to the poor effectiveness of negotiation tactics that had been previously successful in face-to-face interactions, when applied to e-negotiations. By isolating the benefits of the concurrent use of complementary influence tactics, we suggest a path to winning contracts: Salespeople should concurrently deploy complementary tactics within each e-negotiation slice, emphasizing either internalization tactics (information sharing, recommendation) or compliance tactics (promise, assertiveness), to initiate their amplifying effects on buyer attention.

Finally, the validated textual cue measures from this study can be applied to design training and assessment methods and diagnose selling effectiveness. The fact that firms may be dealing with much larger data sets than the one we have used for this research, motivated us to offer a measurement design that is managerially useful. Practitioners can adopt our proposed machine learning algorithm and its outcome, the library of validated words and phrases, according to their own sales context. More context-specific refinements of these influence tactic cues (words and phrases) can further enhance sales effectiveness. Participation of professional sales staff in this refinement can also aid in promoting ownership and building commitment. Looking forward, sophisticated and contextualized dictionaries of linguistic cues for successful e-selling can be used as a tool in building and sustaining the competitive advantage of the sales organization.

**Table 1. e-Communication Affordances and Implications for B2B Sales e-Negotiations**

| <b>Attribute</b> | <b>Definition</b>                                                                                                                      | <b>Implications for the Sender</b>                                                                                                                                      | <b>Implications for the Receiver</b>                                                                                                                      |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Accessibility    | Emails are accessible (24/7) to receivers, with the possibility of almost immediate feedback.                                          | <b>Pros:</b> Flexibility to compose messages any time.<br><b>Cons:</b> Probability of receiving replies varies from minutes to days.                                    | <b>Pros:</b> Respond to incoming messages at will.<br><b>Cons:</b> Quantity and distribution of messages increase over time.                              |
| Transparency     | Emails are verifiable and stored digitally for review, as well as visible, which provides others in the firm access to them.           | <b>Pros:</b> Promotes messages that are open, direct, and without puffery.<br><b>Cons:</b> Lack of context can lead to misinterpretation by others in the organization. | <b>Pros:</b> Permits a check on the veracity of a claim made by the sender.<br><b>Cons:</b> Requires critical analysis and cross-checking of the content. |
| Diversity        | Emails allow attachments that can embed documents, links, embellishments, and so on, which then can substantiate or augment a message. | <b>Pros:</b> Allows documents to be easily attached.<br><b>Cons:</b> Requires collection of varied documents that support an argument.                                  | <b>Pros:</b> Arguments are substantiated.<br><b>Cons:</b> Require triangulation of diverse materials.                                                     |
| Flatness         | Emails are constrained in length and in the use of emotional cues.                                                                     | <b>Pros:</b> Only requires use of textual cues to compose the message.<br><b>Cons:</b> Limits the use of emotion.                                                       | <b>Pros:</b> Keeps message length short<br><b>Cons:</b> Encourages cognitive processing of messages.                                                      |

**Table 2. Definitions of Influence Tactics, Buyer Attention, Related Features, and Conceptual Underpinning**

| <b>Influence Tactic</b>                                                                                                                                                                                                                                             | <b>Key Features and Linguistics Cues</b>                                                                                                                               | <b>Conceptual Ground</b>                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| <b>Information Sharing</b> Asynchronous communicating and exchanging (giving and asking) of relevant information (e.g., details, knowledge, data) about solutions, services, and products without recommendations or promises, whether upon request or voluntarily. | Definitive verbs (e.g., attach, forward, provide, enclosed) conjugated with informational nouns (e.g., product specs, quality certificates).                           | Internalization (internal analyzing of prioritized and expert knowledge)        |
| <b>Recommendation</b> Explicit suggestions to buyers in asynchronous interaction in favor of a particular product, service, or solution by emphasizing product benefits, uniqueness, or usability, whether solicited or not.                                        | Action verbs (e.g., recommend, offer, advice, believe) conjugated with proposition quality (e.g., clearly, strongly, acceptable, highest)                              | Internalization (internal analyzing of counter arguments to highlight benefits) |
| <b>Promise</b> Committing to a future course of action, activity, and/or benefit, typically to follow up on a buyer's current request or future action in asynchronous communication.                                                                               | Action verbs (e.g., perform, review, send, respond) conjugated with modals (e.g., will, can, would)                                                                    | Compliance (risk-shifting by committing to an action)                           |
| <b>Assertiveness</b> Initiating a call-to-action or attention to the buyer in asynchronous communication that ensures the continuity of the business exchange and/or relationship, implicit or explicit.                                                            | Pronouns (e.g., we, I, you) conjugated with action verbs (e.g., need, would, should)                                                                                   | Compliance (risk-Shifting by suggesting an action)                              |
| <b>Ingratiation</b> Asynchronously building rapport, engaging in flattery, and gaining approval of the buyer.                                                                                                                                                       | Affective words (e.g., thank you, appreciate, help, welcome, sorry, enjoy) conjugated with personal pronouns (e.g., we, I, you)                                        | Identification (prosocial)                                                      |
| <b>Buyer Attention</b> Degree to which a buyer displays heightened interest and behavioral engagement in response to salesperson's email communications                                                                                                             | Instrumental words (e.g., do, get, send), valence words (good, best, excellent, etc.), and time-related /temporal contiguity words (today, tomorrow, next week, asap). | Attention-based view                                                            |

**Table 3. Measure Development from Email Data**

| Objective                            | Technique                                                      | Activities                                                                                                                                                                                                                                                                                                                                     | Outcome                                                                                                                                                                                                                                                |
|--------------------------------------|----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Establish operational definitions | Structured interviews; combine purposive and naturalistic data | 1. Purposive data are assembled by asking four salespeople who work in the same industry to write sample emails that contain one specific influence tactic. With purposive sampling, we collect information-rich cases that use emails deliberately to convey influence tactics.                                                               | 1. A sample of 20 emails (113 sentences), each with a specific influence tactic, is assembled.                                                                                                                                                         |
|                                      |                                                                | 2. Naturalistic data are compiled by randomly selecting four sales e-negotiations (~10%) from the complete data set (43 sales e-negotiations ~ 90% of the data set is used for hypothesis testing). Naturalistic data enhance external validity.                                                                                               | 2. Four sales e-negotiations containing 360 sentences are merged with 113 sentences from the purposive data collection. The sample of 473 sentences is used to generate and augment measurement items, referred to as the "training sample" hereafter. |
| 2. Generate measurement items        | Grounded analysis                                              | 3. Sales managers and academics examine the use of influence tactics in the combined purposeful and naturalistic data set to revisit and contextualize the definition of influence tactics. Sales managers offer guidance from practice to adapt the influence tactic definitions to the email context.                                        | 3. The contextualized definitions of influence tactics are agreed on by sales managers and academics, ensuring relevance for both practice and research.                                                                                               |
|                                      |                                                                | 1. From the influence tactics definitions, sales managers and academics code each sentence in the training sample according to the (a) presence of each influence tactic and (b) specific textual cues (words/phrases) indicative of that influence tactic. Manual coding by experts ensures accurate identification of influence tactic cues. | 1. Training sample sentences are coded for the presence or absence of the five influence tactics.                                                                                                                                                      |
|                                      |                                                                | 2. Interrater reliability for textual coding by sales managers and academics is computed to assess the consistency of textual representations or cues of specific influence tactics.                                                                                                                                                           | 2. A corpus of textual cues, organized as linguistic markers in a dictionary, is obtained for each influence tactic. Interrater reliability indicates high agreement (>93%) regarding the identified influence tactics.                                |

|                                    |                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                            |
|------------------------------------|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3. Augment measurement items       | Machine learning             | <p>1. Textual cues (words, phrases) identified by tokenizing email sentences, using tools widely available in machine learning, such as TF-IDF and the co-occurrence matrix.</p> <p>2. Identified textual cues are combined with the dictionary of textual cues for each influence tactic from the "Generate measurement items" stage. Integrating human and machine identified cues ensures a comprehensible dictionary.</p> <p>3. Logistic regression selects textual cues that can accurately predict the presence or absence of influence tactic in each sentence. The predictive ability of textual cues is then tested with a support vector machine algorithm. Classification algorithms can test if the selected textual cues can predict out-of-sample data accurately</p> | <p>1. All possible textual cues in the training sample are identified.</p> <p>2. An augmented dictionary of textual cues (identified by humans and machine learning tools) is formed.</p> <p>3. The support vector machine classification algorithm offers the highest prediction accuracy (- 85%).</p>                    |
| 4. Deploy measurement items        | Machine learning             | <p>1. A support vector machine, trained on the training sample, codes the hypothesis testing data set (4094 email sentences in 43 sales e-negotiations) for the presence or absence of specific influence tactics.</p> <p>2. Two research assistants independently code 100 randomly selected email sentences from the test data.</p> <p>3. Coding of the 100 email sentences provided by the research assistants is compared with that provided by the support vector machine.</p>                                                                                                                                                                                                                                                                                                 | <p>1. Hypothesis testing data are coded by support vector machine.</p> <p>2. An agreement of 91% is achieved between the two research assistants.</p> <p>3. Human and support vector machine classification matches 86% of the time.</p>                                                                                   |
| 5. Assess validity and reliability | Confirmatory factor analysis | <p>1. Internal validity of the labeled test data is assessed by convergent and discriminant validity.</p> <p>2. External validity is assessed using measures to predict key outcomes (e.g., sales). We test the robustness of the findings to a 14-day slice.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <p>1. A CFA model indicates acceptable model fit and support for both convergent (AVE &gt; .50) and discriminant (AVE &gt; MSV) validity. Reliabilities of all constructs are greater than .67 (Table 4).</p> <p>2. Influence tactic constructs based on text-based measures behave as hypothesized (Table 7a and 7b).</p> |

**Table 4. First- and Second-Order Confirmatory Factor Analysis of Influence Tactics and Buyer Attention**

|                                      | Loading <sup>a</sup> | t-value | Reliability <sup>b</sup> | AVEC | MSV <sup>d</sup> |
|--------------------------------------|----------------------|---------|--------------------------|------|------------------|
| <b>First-Order Factor Structure</b>  |                      |         |                          |      |                  |
| Information Sharing                  |                      |         | .67                      | .51  | .49              |
| Item 1                               | .69                  | 11.98   |                          |      |                  |
| Item2                                | .88                  | 15.97   |                          |      |                  |
| Recommendation                       |                      |         | .78                      | .65  | .49              |
| Item3                                | .88                  | 17.16   |                          |      |                  |
| Item4                                | .91                  | 17.71   |                          |      |                  |
| Promise                              |                      |         | .86                      | .75  | .42              |
| Item 5                               | .96                  | 20.82   |                          |      |                  |
| Item 6                               | .94                  | 20.02   |                          |      |                  |
| Assertiveness                        |                      |         | .78                      | .65  | .42              |
| Item 7                               | .93                  | 17.81   |                          |      |                  |
| Item 8                               | .86                  | 16.09   |                          |      |                  |
| Buyer Attention                      |                      |         | .82                      | .61  | .06              |
| Instrumental                         | .70                  | 12.94   |                          |      |                  |
| Valence                              | .95                  | 20.07   |                          |      |                  |
| Temporal Contiguity                  | .91                  | 18.52   |                          |      |                  |
| <b>Second-Order Factor Structure</b> |                      |         |                          |      |                  |
| Internalization                      |                      |         | .77                      | .62  | .34              |
| Information Sharing                  | .98                  | 8.91    |                          |      |                  |
| Recommendation                       | .72                  | 10.09   |                          |      |                  |
| Compliance                           |                      |         | .70                      | .54  | .34              |
| Promise                              | .90                  | 12.43   |                          |      |                  |
| Assertiveness                        | .73                  | 9.58    |                          |      |                  |

<sup>a</sup>The estimates are standardized coefficients with corresponding t-values in the adjacent column.

<sup>b</sup>Estimated composite reliability, per Fornell and Larcker (1981).

<sup>c</sup>Estimated average variance extracted by the corresponding latent construct from its hypothesized indicators, per Fornell and Larcker (1981).

<sup>d</sup>Maximum shared variance between any two latent constructs.

**Table 5. Descriptive Statistics**

| Variables                       | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8     | 9     | 10     | 11    | 12  | 13   | 14    | 15    | 16   |
|---------------------------------|--------|--------|--------|--------|--------|--------|--------|-------|-------|--------|-------|-----|------|-------|-------|------|
| 1. Sales Contract Award         |        |        |        |        |        |        |        |       |       |        |       |     |      |       |       |      |
| 2. Buyer Attention              | .12**  | 1      |        |        |        |        |        |       |       |        |       |     |      |       |       |      |
| 3. Assertiveness                | .12**  | -.02   |        |        |        |        |        |       |       |        |       |     |      |       |       |      |
| 4. Ingratiation                 | .15**  | .25*** | .25*** |        |        |        |        |       |       |        |       |     |      |       |       |      |
| 5. Information Sharing          | .06    | .20*** | .39*** | .32*** |        |        |        |       |       |        |       |     |      |       |       |      |
| 6. Promise                      | .17**  | -.07   | .24*** | .25*** | .44*** |        |        |       |       |        |       |     |      |       |       |      |
| 7. Recommendation               | .05    | .07    | .11*   | .02    | .26**  | .21**  |        |       |       |        |       |     |      |       |       |      |
| 8. Customer orientation         | .59*** | .03    | .04    | .07    | -.02   | .08    | .06    |       |       |        |       |     |      |       |       |      |
| 9. Salesperson Experience       | .26*** | .07    | .06    | .19*** | .07    | -.02   | -.18** | .25*  |       |        |       |     |      |       |       |      |
| 10. Salesperson education       | -.11*  | -.02   | -.11*  | -.24** | -.01   | .001   | -.09   | -.26* | -.03  |        |       |     |      |       |       |      |
| 11. Alternative meeting         | .09    | -.15** | .14**  | .13**  | .16**  | .29*** | .01    | .08   | .14** | -.03   |       |     |      |       |       |      |
| 12. Linguistic style matching   | -.09   | .18**  | -.21** | -.12** | -.16** | -.18** | -.13** | .01   | .00   | .07    | -.03  |     |      |       |       |      |
| 13. Preferred vendor            | .02    | -.01   | -.08   | .06    | .01    | .00    | .09    | .02   | .10*  | -.21** | .12** | .08 | 1    |       |       |      |
| 14. Price                       | -.27** | .05    | -.01   | .04    | .21**  | -.10*  | -.06   | -.33* | .17** | .42**  | .07   | .10 | -.02 |       |       |      |
| 15. Salesperson time to respond | .03    | -.02   | -.08   | -.08   | -.07   | -.10*  | -.05   | .04   | .05   | .11*   | -.08  | .09 | -.06 | .00   |       |      |
| 16. Salesperson perf.           | .44**  | .12*   | -.01   | .02    | .04    | -.03   | .08    | .53*  | .02   | .00    | -.05  | .02 | .02  | -.10* | .00   |      |
| Mean                            | .52    | 0      | .45    | .62    | 1.49   | .45    | .21    | 4.61  | 6.87  | 1.97   | .33   | .65 | .45  | 2.16+ | 2.27  | 3.65 |
| SD                              | .50    | 1      | .61    | .76    | 1.62   | .62    | .37    | .38   | 5.76  | 1.4    | .47   | .32 | .50  | 3.62  | 12.01 | .44  |

\* $p < .1$ , \*\* $p < .05$ , \*\*\* $p < .001$  (two-tailed tests).

**Table 6. Impact of Influence Tactics as Textual Cues on Buyer Attention and Sales Contract Award**

| Variables                                          | Buyer Attention -<br>Control only | Buyer Attention -<br>Hypothesized model | Sales Contract<br>Award- Controls<br>only | Sales Contract<br>Award-<br>Hypothesized model |
|----------------------------------------------------|-----------------------------------|-----------------------------------------|-------------------------------------------|------------------------------------------------|
| Intercept                                          | -1.26 (1.07)                      | -.54 (.81)                              | -8.80 (1.35)***                           | .70 (.31)**                                    |
| Buyer Attention                                    |                                   |                                         |                                           | 16.32 (7.37)**                                 |
| Information Sharing                                |                                   | -.10 (.07)                              |                                           | .04 (.24)                                      |
| Recommendation                                     |                                   | -.14 (.04)***                           |                                           | .21 (.17)                                      |
| Promise                                            |                                   | -.01 (.06)                              |                                           | .30 (.25)                                      |
| Assertiveness                                      |                                   | -.03 (.07)                              |                                           | .31 (.28)                                      |
| Information Sharing x Recommendation               |                                   | .15 (.05)***                            |                                           | .20 (.22)                                      |
| Promises x Assertiveness                           |                                   | .14 (.06)**                             |                                           | .11 (.15)                                      |
| Promises x Information Sharing                     |                                   | .06 (.04)                               |                                           | -.01 (.30)                                     |
| Promises x Recommendation                          |                                   | -.10 (.04)**                            |                                           | .15 (.25)                                      |
| Assertiveness x Information Sharing                |                                   | -.01 (.05)                              |                                           | .06 (.34)                                      |
| Assertiveness x Recommendation                     |                                   | -.30 (.05)***                           |                                           | .29 (.21)                                      |
| Ingratiation                                       |                                   | -.06 (.05)                              |                                           | -.05 (.40)                                     |
| Buyer Attention Lagged                             |                                   | .12 (.12)                               |                                           | .20 (.22)                                      |
| Slice                                              | -.03 (.02)                        | .01 (.01)                               |                                           |                                                |
| Salesperson Customer Orientation                   | .22 (.18)                         | .05 (.14)                               | 3.01 (.60)***                             |                                                |
| Salesperson Customer Orientation x Buyer Attention |                                   |                                         |                                           | -4.15 (1.34)***                                |
| Salesperson Education                              | -.02 (.04)                        | -.05 (.03)                              | .17 (.17)                                 |                                                |
| Salesperson Education x Buyer Attention            |                                   |                                         |                                           | .01 (.26)                                      |
| Salesperson Tenure with the Firm                   | .02 (.01)**                       | -.01 (.01)                              | .10 (.03)***                              |                                                |
| Salesperson Tenure with the Firm x Buyer Attention |                                   |                                         |                                           | -.18 (.06)***                                  |
| Salesperson Performance                            | .01 (.06)                         | .07 (.05)                               | .43 (.18)**                               |                                                |
| Salesperson Performance x Buyer Attention          |                                   |                                         |                                           | -.43 (.34)                                     |
| Response Time                                      | .01 (.01)                         | -.01 (.01)                              | .01 (.01)                                 | .01 (.01)                                      |
| Linguistic Style Matching                          | 1.03 (.07)***                     | .54 (.11)***                            | -.84 (.52)                                | -.47 (.47)                                     |
| Alternative Mode of Communication                  | .02 (.10)                         | -.16 (.08)*                             | .41 (.35)                                 | .18 (.32)                                      |
| Log of Contract Price                              | -.01 (.08)                        | .02 (.06)                               | -.96 (.29)***                             |                                                |
| Log of Contract Price x Buyer Attention            |                                   |                                         |                                           | 1.05 (.55)*                                    |
| Preferred Vendor Status                            | -.09 (.11)                        | -.06 (.08)                              | -.04 (.35)                                |                                                |
| Preferred Vendor Status x Buyer Attention          |                                   |                                         |                                           | -.26 (.74)                                     |
| Log likelihood (df)                                | -348.35 (16)                      | -221.16 (39)                            | -135.58 (10)                              | -115.76 (23)                                   |
| Akaike information criterion                       | 728.7                             | 520.3                                   | 289.2                                     | 277.5                                          |

\* $p < .1$ , \*\* $p < .05$ , \*\*\* $p < .001$  (two-tailed tests).

**Table 7a. Robustness Checks: Impact of Influence Tactics as Textual Cues on Buyer Attention**

| <b>Variables</b>                     | <b>Buyer Attention -<br/>5% drop</b> | <b>Buyer Attention - drop<br/>&gt; 10 slices</b> | <b>Buyer Attention -<br/>14-day slice</b> |
|--------------------------------------|--------------------------------------|--------------------------------------------------|-------------------------------------------|
| Intercept                            | -.85 (.98)                           | -.64 (.95)                                       | -.16 (.97)                                |
| Information Sharing                  | -.09 (.08)                           | -.10 (.07)                                       | -.02 (.08)                                |
| Recommendation                       | -.15 (.07)**                         | -.19 (.06)***                                    | .01 (.06)                                 |
| Promise                              | -.01 (.07)                           | -.03 (.07)                                       | -.11 (.07)                                |
| Assertiveness                        | -.02 (.08)                           | -.12 (.07)                                       | -.07 (.06)                                |
| Information Sharing x Recommendation | .07 (.04)*                           | .07 (.05)                                        | .10 (.05)**                               |
| Promises x Assertiveness             | .15 (.07)**                          | .29 (.08)***                                     | .16 (.09)*                                |
| Promises x Information Sharing       | .06 (.05)                            | .08 (.05)                                        | .08 (.05)                                 |
| Promises x Recommendation            | -.09 (.04)**                         | -.17 (.05)***                                    | -.13 (.05)***                             |
| Assertiveness x Information Sharing  | -.06 (.06)                           | -.05 (.08)                                       | -.05 (.06)                                |
| Assertiveness x Recommendation       | -.19 (.06)***                        | -.49 (.08)***                                    | -.13 (.07)*                               |
| <b>Controls</b>                      |                                      |                                                  |                                           |
| Ingratiation                         | -.06 (.06)                           | -.02 (.09)                                       | -.06 (.06)                                |
| Buyer Attention Lagged               | .17(.12)                             | .13 (.10)                                        | .18(.11)                                  |
| Slice                                | -.03 (.02)                           | -.01 (.02)                                       | .01 (.03)                                 |
| Salesperson Customer Orientation     | .14 (.14)                            | .14 (.16)                                        | .06 (.16)                                 |
| Salesperson Education                | .01 (.04)                            | .01 (.04)                                        | .08 (.04)**                               |
| Salesperson Tenure with the Firm     | .01 (.06)                            | .01 (.05)                                        | .01 (.05)                                 |
| Salesperson Performance              | .03 (.06)                            | -.03 (.05)                                       | .09 (.05)                                 |
| Response Time                        | -.01 (.01)                           | -.01 (.01)                                       | -.01 (.05)                                |
| Linguistic Style Matching            | .44 (.14)***                         | .44 (.13)***                                     | .46 (.12)***                              |
| Alternative Mode of Communication    | -.19 (.10)*                          | -.19 (.09)*                                      | -.16 (.10)                                |
| Log of Contract Price                | -.02 (.07)                           | -.04 (.07)                                       | -.08 (.07)                                |
| Preferred Vendor Status              | .02 (.10)                            | .07(.10)                                         | .22 (.10)**                               |
| Log likelihood (df.)                 | -209.59 (39)                         | -203.58 (39)                                     | -194.33 (39)                              |
| AIC                                  | 497.2                                | 485.2                                            | 466.7                                     |

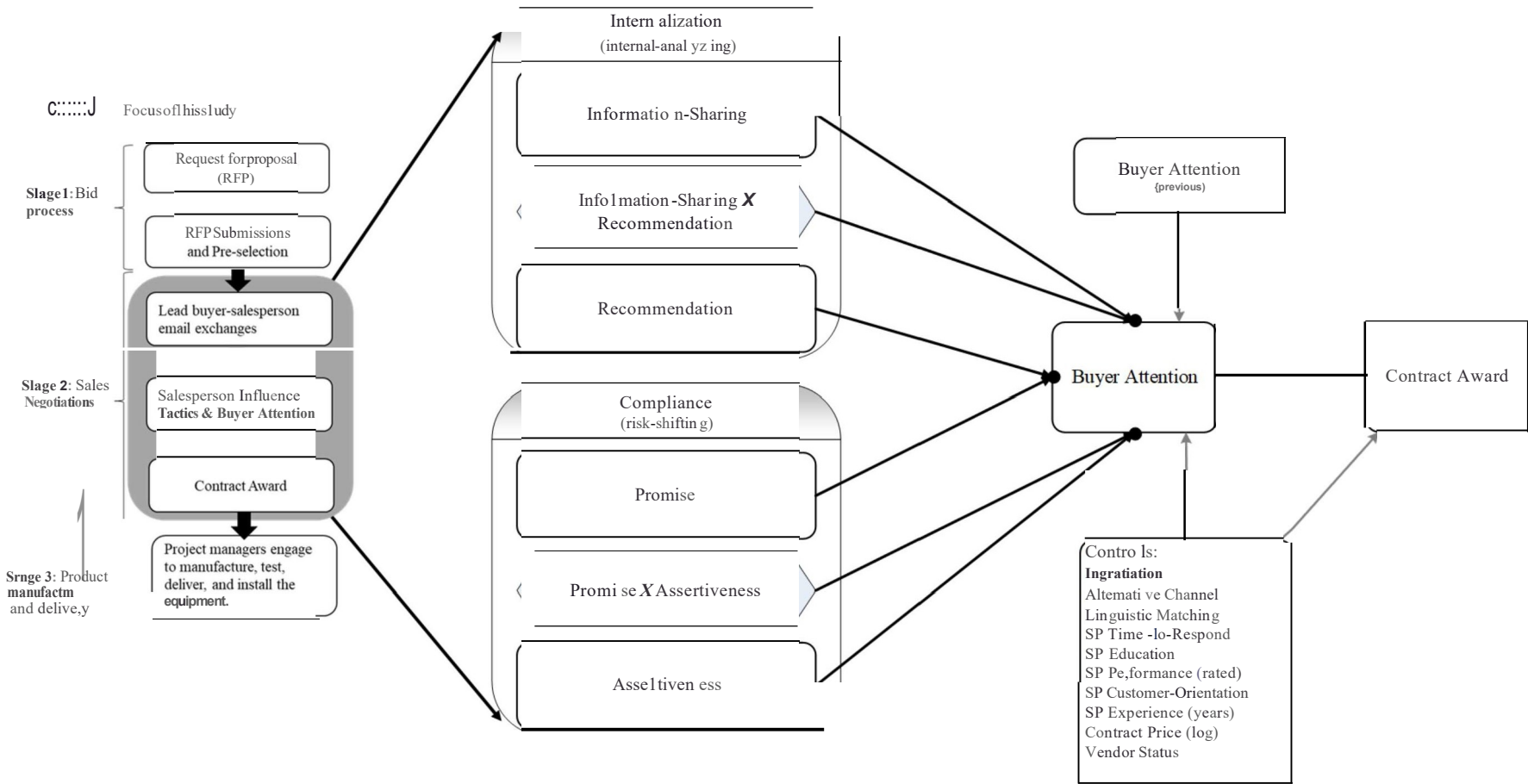
**Table 7b. Robustness Checks: Impact of Influence Tactics as Textual Cues on Sales Contract Award**

| Variables                                          | Sales Contract Award<br>5% drop | Sales Contract Award<br>drop > 10 slices | Sales Contract Award<br>14 day slice |
|----------------------------------------------------|---------------------------------|------------------------------------------|--------------------------------------|
| Intercept                                          | .64 (.35)**                     | .67 (.34)**                              | .96 (.42)**                          |
| Buyer Attention                                    | 18.25 (8.33)**                  | 20.57 (7.98)**                           | 25.07 (9.82)**                       |
| Information Sharing                                | .04 (.25)                       | .07 (.25)                                | .35 (.46)                            |
| Recommendation                                     | .21 (.17)                       | .19 (.18)                                | .14 (.19)                            |
| Promise                                            | .35 (.27)                       | .34 (.27)                                | .48 (.37)                            |
| Assertiveness                                      | .26 (.31)                       | .23 (.28)                                | .37 (.41)                            |
| Information Sharing x Recommendation               | .13 (.15)                       | .12 (.16)                                | .14 (.19)                            |
| Promises x Assertiveness                           | -.05 (.34)                      | -.14 (.37)                               | -.10 (.44)                           |
| Promises x Information Sharing                     | .13 (.24)                       | .08 (.22)                                | .11 (.23)                            |
| Promises x Recommendation                          | .04 (.36)                       | .10 (.29)                                | .07 (.31)                            |
| Assertiveness x Information Sharing                | .39 (.23)*                      | .41 (.24)*                               | .58 (.31)*                           |
| Assertiveness x Recommendation                     | -.04 (.44)                      | -.01 (.42)                               | .03 (.44)                            |
| <b>Controls</b>                                    |                                 |                                          |                                      |
| Ingratiation                                       | .15 (.23)                       | .13 (.23)                                | .12 (.24)                            |
| Salesperson Customer Orientation x Buyer Attention | -4.72 (1.60)***                 | -4.98 (1.58)***                          | -6.32 (2.08)***                      |
| Salesperson Education x Buyer Attention            | .16 (.32)                       | .14 (.31)                                | .25 (.35)                            |
| Salesperson Tenure with the Firm x Buyer Attention | -.21 (.07)***                   | -.13 (.07)*                              | -.16 (.08)**                         |
| Salesperson Performance x Buyer Attention          | -.48 (.37)                      | .01 (.35)                                | .01 (.40)                            |
| Log of Contract Price x Buyer Attention            | 1.13 (.59)*                     | .89 (.59)                                | 1.26 (.68)*                          |
| Preferred Vendor Status x Buyer Attention          | .18 (.82)                       | -.46 (.82)                               | -.41 (.90)                           |
| Response Time                                      | .01 (.02)                       | .01 (.02)                                | .01 (.01)                            |
| Linguistic Style Matching                          | -.18 (.56)                      | -.22 (.56)                               | -.22 (.57)                           |
| Alternative Mode of Communication                  | .16 (.32)                       | .15 (.33)                                | .17 (.35)                            |
| Log likelihood (df.)                               | -109.55 (23)                    | -107.37 (23)                             | -95.76 (23)                          |
| AIC                                                | 265.1                           | 260.7                                    | 237.5                                |

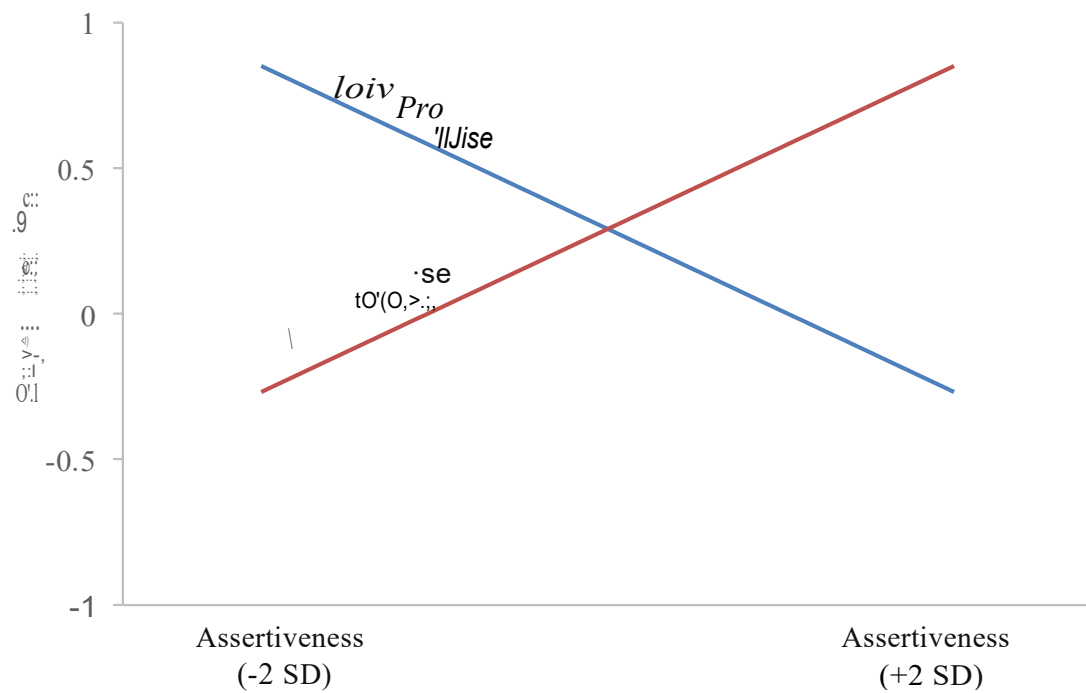
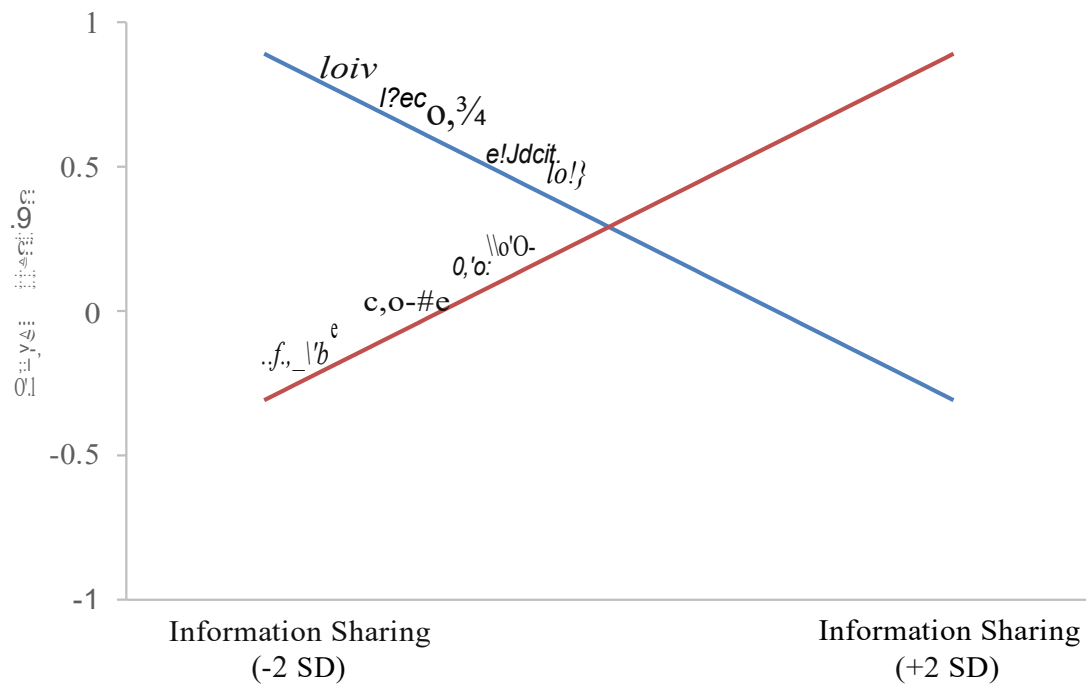
\* $p < .1$ , \*\* $p < .05$ , \*\*\* $p < .001$  (two-tailed tests).

Notes: 5% drop = randomly drop 5% of data; drop > 10 slice = drop sales e-negotiations that have greater than 10 slices; 14-day slice = use 14 days to create slices .

Figure 1. Managing Buyer Attention during B2B e-Negotiations for Sales Contract Award



**Figure 2. Effect of Concurrent Use of Complementary Influence Tactics on Buyer Attention (Predicted Scores)**



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