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Why, did I lose? Debriefing quality and its effects on justice, protests, and sales loss attributions

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ABSTRACT

When suppliers lose in a competitive tender process, they need feedback to make accurate sales loss attributions and adjustments to their competitive strategy. Unfortunately, buyers seldomly provide sufficient feedback to enable diagnostics, learning, and adaptation. The purpose of this research is to explore a buyer's debriefing as an effective feedback mechanism. Based on data from a sample of 218 U.S. government source selections, a new construct, debriefing quality, is developed as a multi-dimensional construct comprised of: proposal efficacy information, procedural compliance and decision understanding information, and competitive intelligence information. Results show that debriefing quality enhances procedural justice and internal and external attributions and reduces supplier opportunism and perceptions of buyer opportunism. Further, the underlying procedural justice of the source selection deters bid protests, and debriefing quality can impact perceptions of procedural justice. Importantly, debriefing quality is essential in the assignment of loss attributions to strategy, thus affecting strategy change. These findings expand attribution theory by identifying new external attributions particular to a business-to-business context, namely suspicion of buyer opportunism and procedural justice. The study closes with specific information buyers can provide to suppliers to mitigate bid protests and help suppliers learn from the tender enabling future strategy improvements.

1. Introduction

The United States Post Office has a fleet of 190,000 delivery vehicles, of which over 150 have caught on fire. This fleet was scheduled to be replaced within the next two years. Oshkosh Defense won the bid to replace the aging fleet but one of the competitors, Workhorse Group, challenged the decision (Sharp 2021). The value of the contract is between \$482 million and \$3.1 billion. The challenge will likely significantly extend the time it will take to replace the aging fleet of delivery vehicles. Airbus and Boeing had multiple bids awarded and overturned for a \$35 billion contract for refueling tankers (Katz 2018). Microsoft and Amazon disputed the \$10 billion JEDI (Joint Enterprise Defense Infrastructure) contract, and the Pentagon ultimately canceled the tender settling on a new strategy for its cloud computing requirements

(Feiner and Macias 2021; Hawkins et al., 2021). If the bid process for contracts is transparent, effective, and fair, why then do companies that lose end up protesting bid awards?

One explanation for why bids are protested is that the “losers” believe that justice has somehow been violated. That is, managers may blame (i.e., attribute) the loss on perceptions that procedures were not followed or that the buyer is behaving opportunistically. In a recent literature review, Bouazzaoui et al. (2020, p. 129) state that “very limited research has been conducted on inter-organizational justice, and existing studies have tended to ignore the basic features of inter-organizational relationships”. Attribution theory provides a theoretical foundation to explain how individuals view the causes of success or failure (Kelley, 1973). Attributions constitute one of the most important inter-organizational relationship features that influence how

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perceptions of justice affect behavioral outcomes. For example, a perceived violation of relational norms (justice) in a strong relationship can provoke a sense of betrayal (external attribution) that drives the offended party to punish the offender (Grégoire and Fisher, 2008).

Justice attributions therefore hold the potential to be either beneficial (Groth 2005) or dysfunctional in buyer-supplier relationships. In the business context where organizations must follow a bid process, what can buyers do to help prevent “losers” from protesting the contract and, potentially, greatly delaying the process? Because relationship quality has been linked to critical performance outcomes such as customer value (Palmatier 2008), supply chain performance, increase in sales, service quality, customer retention, and decreases in opportunism (Athanasopoulou 2009), can buyers provide feedback that supports supplier's learning in order to evaluate and improve their competitive abilities?

When buyer feedback is provided, it is communicated after the conclusion of source selection in a forum called a debriefing (Carter and Choi 2008; Kovács 2004). While there is structure surrounding debriefings in public and international tenders – recognized as a requirement by the Federal Acquisition Regulation (FAR), World Bank, and United Nations Commission on International Trade Law (UNCITRAL) (Kovács 2004) – there is significant variance in the extent and quality of feedback. Some research suggests that bid protests can be deterred when buyers provide unsuccessful offers with high-quality feedback regarding their loss (Arena et al., 2018).

Unfortunately, the debriefing literature is sparse at best. The true extent that debriefings might deter bid protests has not been empirically measured or tested. Thus, there is a significant need for exploratory research into how organizations and companies handle what happens after bids are opened and awarded. Furthermore, the U.S. government represents the single largest and unique business customer in the world, yet the business-to-government (B2G) market remains grossly understudied (Josephson et al., 2019). The United States Government contracts alone in 2020 accounted for over \$682 billion (Bloomberg Government¹), roughly equivalent to the total GDP of Poland (World Bank²). What is needed, then, is more exploratory research of the factors that may reduce bid protests and improve a supplier's understanding for areas of improvement in general and, for the purpose of this research, in the context of the single largest customer in the world.

The purpose of this research, therefore, is to explore the role of buyers' debriefings, especially as they relate to sales loss attributions (i.e., the perceived reasons the supplier did not win), supplier opportunism, and bid protests. We specifically address whether high-quality feedback regarding bid loss can influence loss attributions and diminish opportunism (Arena et al., 2018). This research contributes to the literature in the following ways. First, we develop a new construct—debriefing quality—and define its essential dimensions. Second, we test its importance in the buying process by exploring how it affects sales loss attributions. Third, we explore the role of debriefing quality in curtailing opportunism. Fourth, we highlight that procedural justice can serve as an important external attribution that has been overlooked in the attribution literature. Lastly, we contribute to managerial practice by articulating the effect of debriefing quality on bid protests and by providing guidance on what organizations can do to provide better debriefings to their suppliers.

The remainder of this manuscript is organized as follows. First, we review the literature on debriefings and attribution theory in buyer-seller relationships. Research hypotheses are then developed that relate debriefing quality to key post-award outcomes. We then explain the research design and present the results of model testing along with major findings, including results of our exploratory survey. We close with implications for theory and practice as well as study limitations and

recommendations for future research.

2. Literature review

2.1. Debriefings

Debriefings are forums used by buyers to share information with unsuccessful bidders (Carter and Choi, 2008). They serve two primary purposes. First, debriefings serve as a feedback mechanism, helping suppliers develop their future offerings (Tran et al., 2017), improving supplier insight into proposal deficiencies (Gilliland 1993) and providing suppliers with competitive intelligence into their relative standing (Sturgis, 2009). Sales teams need quality feedback in order to attribute causes to sales successes and losses (Dixon and Schertzer, 2005) and use prior performance to forecast future sales outcomes (Bonney et al., 2020).

Second, buyers use debriefings to assure suppliers that bid procedures were properly followed, in addition to any regulations, statutes, and case law (Sturgis, 2009). Suppliers desire a justification for the buyer's award decision (Tran et al., 2017), seeking to confirm that all aspects of their proposal are fully understood by the buyer and that selection decisions are made fairly and with accurate information (Gilliland, 1993). Along these same lines, buyers desire to guard against suppliers' misuse of protests, and rely on debriefings to establish the legitimacy of their selection decisions. Often, protests result from alleged mistakes and errors committed by buying organizations that result in unfair prejudice, such as poorly written or vague contract requirements, failure to follow the process or criteria laid out in the request for proposals, and failure to adequately document findings (GAO, 2014).

Buyers loathe the receipt of a bid protest (Hawkins et al., 2016); bid protests and the threat thereof drive buyers to incur costs to: (1) prevent bid protests (e.g., by thoroughly documenting and substantiating proposal evaluations and trade-off decisions), (2) defend against protests, and (3) take corrective actions toward resolving protests (either allowing proposals to be revised or starting the procurement process anew). Debriefings are seen by buyers as a primary mechanism to allay supplier concerns regarding illegitimacy of selection decisions and to mitigate cost risks associated with receipt of a bid protest.

Nevertheless, there is substantial variation in how debriefings are conducted and in the quality of information provided. Suppliers have characterized their debriefing experiences as sometimes scant, adversarial, evasive, and lacking reasonable responses to questions (Arena et al., 2018). In 2017, upon the direction of Congress, the RAND Corporation examined the use of debriefings in public-sector procurement and found that low-quality debriefings often drove unsuccessful suppliers to resort to the use of protests to discover information into a selection decision. Unfortunately, despite the apparent importance of debriefing quality to purchasing processes, the concept is not well-established or well-researched, begging the question: what makes a debriefing high or low in quality?

We define debriefing quality as the degree to which the buyer provides information that assures the supplier it received a fair chance to win and learned ways to improve its offering in the future. Consistent with the extant literature on debriefings, we conceptualize debriefing quality as a multi-dimensional construct comprised of: proposal efficacy information (i.e., buyer understanding of the proposal), procedural compliance and decision understanding information, and competitive intelligence.

2.2. Attribution theory

Understanding underlying causes of behavior is the focus of attribution theory (Kelley, 1973). It concerns the processes individuals use to interpret others' actions (i.e., to infer causes of the behaviors). In order to infer causes, individuals will seek additional information. The perceived causes then directly affect an individual's decision as to the

¹ <https://about.bgov.com/bgov200/>.

² https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?most_recent_val_ue_desc=true.

course of action to take in the future (Kelley, 1973; Dixon and Schertzer, 2005). In the sales literature, several causes of success (e.g., a sale) and failure (e.g., a sales loss) have been explored, such as ability, effort, strategy, luck, mood, and task difficulty. These causes are categorized into dimensions including locus of causality (internal to oneself [e.g., ability] or external to oneself – another party or environmental factors [e.g., task difficulty]), stability (i.e., the extent to which a cause is fixed [e.g., ability] or fluctuates over time [e.g., effort]), and controllability (i.e., whether the cause is under someone's volitional control [e.g., strategy] or not [e.g., task difficulty]) (Mallin and Mayo, 2006).

Sometimes individuals have personal theories explaining why actions occur, then act on those *a priori* beliefs. Other times, individuals rely on multiple past observations of causes and effects and will conclude a linkage based on past correlations. Past performance information can be classified as three types: consistency, consensus, and distinctiveness (Teas and McElroy, 1986). If a salesperson attains successes with a particular approach (consistency), he or she is likely to attribute that to a stable source such as ability and continue to rely on the approach during the next tender. Likewise, if a salesperson observed a coworker achieving success with a particular practice (consensus), he or she is likely to attribute that outcome to a stable source. Distinctiveness is the extent to which an event is causally associated with a particular external entity but not causally associated with other external entities, and typically results in external attributions. A salesperson who wins several similar tenders using the same strategy but all of a sudden loses one will look externally to the peculiarities of the task or the situation.

In the context of competitive tenders, attributions manifest in future behavior (Hibbard et al., 2001). For instance, sales teams need to understand factors that contribute to winning or losing sales. If there were weaknesses in strategy, for example, a team can seek actions to develop better strategies for the next tender. Debriefings may provide the information to enable such an assessment and, in some instance, may induce a supplier to revise its strategy on the next tender or its competitive strategy in general. If, however, distinctiveness is high then a seller will seek external causes such as the buyer's error or opportunism. In this case, a bid protest might be the ultimate course of action. In the case that the seller does not have sufficient information to make a reasonable attribution, the seller may protest in order to obtain the information.

2.3. Hypothesis development

The intended purpose of bid protests is to serve as a remedy for unfair procedures. However, one of the unintended consequences of protests is that they can be leveraged opportunistically to further organizational gains or cause a loss to a competitor (Maser et al., 2012). They can also be used as a second-chance mechanism for unsuccessful offerors. Further, an offeror can use a protest to probe for, theretofore, unknown bases for protest (e.g., errors, biases, etc.) (Chierichella, 2005) that could emerge from the plaintiff's counsel's access to the buyer's administrative record which includes the documented proposal evaluations, comparative analysis, and decision rationale. Protestors have protested in order to negotiate a subcontract with the winner of the contract to gain a portion of the work in exchange for withdrawing the protest (Maser and Thompson, 2010). For recurring contracts, incumbent suppliers have protested in order to keep the contract for a longer period of time while the protest is adjudicated (Maser et al., 2012). Finally, some suppliers use protests as a competitive weapon to harm their competitors (Maser et al., 2012).

The more information that is shared with the supplier, the less the need to use a protest as a means to obtain it. On the other hand, extensive feedback to unsuccessful suppliers can also be risky in highly competitive markets. If extensive feedback is given, there's practically 'always' something an unsuccessful supplier could (mis)use to challenge the award decision. Additionally, the buyer runs the risk of divulging

proprietary processes or trade secrets from competitors. Nevertheless, a debriefing that transparently conveys the information needed by the supplier should muster confidence in the selection process and in the integrity of the buyer. In turn, suppliers will be less apt to retaliate or direct their ire toward competitors. Thus, it is posited that:

H1. Debriefing quality is negatively related to supplier opportunism intention.

Organizational justice theory traces back to equity theory (Adams, 1965; Greenberg, 1990). Equity theory holds that individuals compare their get-versus-give ratio to that of another person or entity. When the ratios are not equal, the party with the higher ratio experiences guilt while the party with the lower ratio experiences anger. Equal ratios result in satisfaction (Greenberg, 1990). Procedural justice represents an organization's perception of the fairness (Matopoulos et al., 2019) of its exchange partner's procedures and processes in relation to itself (Kumar et al., 1995). Procedures are seen as just when they include the following six principles: (1) bilateral communication, (2) impartiality (equal opportunity), (3) refutability, (4) explanation, (5) familiarity, and (6) respect (Kumar 1996). Of particular relevance to government buying where government regulations define the purchase process, asymmetric dependence in a relationship predominates as an influence on opportunism (Hawkins et al., 2008), and, "Procedural justice asymmetry occurs when one party perceives that their counterpart exhibits procedurally inappropriate behavior like intentionally hindering transparency" (Bouazzaoui et al., 2020, p. 133).

A debriefing enables a bilateral exchange of information about the selection process. Transparent feedback offered by the buyer during the debriefing instills confidence that the supplier was afforded an equal opportunity for a contract award – that the decision was arrived at fairly and impartially. The effect of transparency is confirmed when examining the other side of the dyad; a supplier's cost transparency increases a buyer's perception of procedural justice (Septianto et al., 2021). Through a debriefing, the buying team has an opportunity to demonstrate its familiarity with the supplier's proposal and provide an explanation of the selection decision.

Perceptions of procedural justice are associated with consistency, bias suppression, and accuracy (Bouazzaoui et al., 2020). The procedural [in]justice afforded by the buyer to the prospective supplier is external to the supplier. For example, a buyer may scrutinize one supplier's references, while accepting those of another supplier at face value without further investigation. The added scrutiny may reveal weaknesses in how well the supplier performed prior work, and the evaluation of its proposal may, thus, suffer resulting in the loss of the tender. Such an imbalanced treatment of two suppliers would be unfair - procedurally unjust - since the other supplier may also have weaknesses in prior performance, but the buyer never pursued the information.

Supplier evaluation is commonly a subjective process that hinges on not only the chosen evaluation criteria but also how the evaluators evaluate those criteria (Kumar et al., 2019). Suppliers often suspect that buyers are biased by preferences and will attempt to steer awards to coveted suppliers. They may also suspect that errors in evaluations occur, and that their proposal is not fully understood. Thus, debriefings that are open and honest should result in perceptions of fairness in procedures (Gilliland, 1993). In other words, a sales loss on the merits of the proposals is easier to accept than is a loss due to a procedural flaw. Thus, it is posited that:

H2. Debriefing Quality is related to external attributions.

H2a. Debriefing quality is positively related to the supplier's perceived procedural justice.

Buyers may behave, or be perceived to behave, opportunistically. Opportunistic behaviors of the buyer during debriefings could include withholding information (Sturgis, 2009), providing misleading information, (dis)favoritism (Landeros and Plank, 1996), or deliberate

penalizing. Suppliers sometimes do not trust that buyers have properly evaluated the proposals according to established procedures and any applicable rules and precedents. “Any reticence or lack of success on the part of the government personnel in explaining their agency’s findings may fuel suspicions that the process was unfair or even rigged in favor of the eventual winner” (Edwards 2006, p. 327). “If neglected, injustice may foster potential opportunism” (Bouazzaoui et al., 2020, p. 128). Not only is there a direct effect of perceived unfairness on opportunism, it also exacerbates the effects of economic forces on opportunism (Trada and Goyal, 2017). On the other hand, a distrusting unsuccessful supplier may interpret extensive feedback as concealment of the real reason(s) for non-selection. Overall, however, by providing an open and transparent debriefing, buyers should be able to mitigate supplier concerns of buyer opportunism. Therefore, we posit that:

H2b. : Debriefing quality is negatively related to suspicion of buyer opportunism.

Once a buyer has made a selection decision, salespeople assess their performance and make attributions for the (un)successful outcomes (DeCarlo et al., 1997). In buyer-seller relationships, three objects of attributions can be made – self (i.e., internal), partner (i.e., external), or external circumstances (Hibbard et al., 2001). Salespeople tend to make external attributions for sales losses (Johnston and Kim, 1994; DeCarlo et al., 2007). The sales literature has established several external attributions for sales losses such as: task difficulty, luck, effort, ability (Teas and McElroy, 1986), and strategy (Dixon et al., 2001).

A difficult proposal development task may, for example, stem from uncertain or changing buyer requirements, technological dynamism, a broad scope of work such as many performance objectives, many different types of work, and many work locations. Buyer feedback of the source selection can help the supplier judge whether its loss was caused by the difficulty of the task. The loss (win) could also be determined to be luck, or random – the result of uncontrollable and changing (i.e., unstable) events. Feedback from the buyer would help suppliers rule out other causes and conclude luck, or to identify environmental changes that affected the buyer’s needs and evaluations. For example, since the 1990s, many firms have moved to just-in-time supply and offshoring. When the COVID-19 pandemic hit, they found themselves with supply cut off and unable to meet customer demand. They were suddenly disadvantaged by firms that held inventory for critical supplies such as personal protective equipment, test kit reagents, and ventilators. From the buyer’s feedback, suppliers may see the ratings of the winner’s proposal and get a glimpse at why those ratings were applied. A comparison to the winner’s proposal may reveal gaps in effort or ability. It could become apparent that the proposal did not have enough needed detail or did not adequately address performance risks of which the buyer would be concerned. Perhaps the supplier did not have sufficient time to apply sufficient effort. Or, the supplier may have the wrong skill mix of employees preparing the proposal and planned for the work. This shortfall could extend to the supplier’s proposed subcontractors and partners. Finally, the supplier’s proposal strategy may have missed the mark. For example, the supplier may have assumed that a low price was important to the buyer and offered lower-quality labor or materials in order to lower the price, but in reality the buyer may have been more concerned about performance risk of using those lower-quality resources – information that could be revealed during a debriefing.

Accurate feedback may influence salesperson attributions (Stajkovic and Sommer, 2001). With greater information sharing regarding understanding of the proposal (i.e., proposal efficacy), compliance with the RFP and other rules, an understanding of the rationale for the award decision, and competitive intelligence, suppliers should be able to more accurately pinpoint the cause(s) of a sales loss. With greater certainty of the cause(s), the supplier will be able to determine the role of attributions, which are critical because “inaccurate explanations increase the likelihood that subsequent selling efforts will prove ineffective” (Mallin and Mayo 2006, p. 345). Therefore, it is posited that:

H2c. Debriefing quality is positively related to an attribution of task difficulty.

H2d. : Debriefing quality is positively related to an attribution of luck.

H3. Debriefing quality is positively related to internal attributions.

H3a. Debriefing quality is positively related to an attribution of effort.

H3b. Debriefing quality is positively related to an attribution of ability.

H3c. Debriefing quality is positively related to an attribution of strategy.

2.3.1. Key outcomes

As mentioned previously, the bid protest can be weaponized to serve the supplier in ways unintended by public policy. They may use the protest as a means to find an unknown basis in which to challenge (and hopefully overturn) a supplier selection decision. More disturbingly, a supplier may use the protest to better itself financially in the face of a sales loss by either: (1) if the incumbent, extending the contract several months, or (2) by preserving revenue from a coerced subcontract award to perform a portion of the work in exchange for dropping the bid protest. As such, it is posited that:

H4. Supplier opportunism intention is positively related to protest intent.

A sales loss is experienced as a negative life event, and salespeople may experience anger and grief in response to a sales loss (Goodwin et al., 1997). Salespeople tend to make attributions of loss to external factors (Johnston and Kim, 1994). Additionally, decision makers tend to incorporate sunken costs into project calculations when faced with the decision to continue or abandon a sales project (Mayberry et al., 2018). In cases where injustice is perceived – either unjust outcomes or during the process to arrive at the outcome, suppliers are likely to escalate commitment to seek relief. Additionally, the conservation of resources theory suggests that individuals will select an alternative that can protect resources (e.g., job security, energies, and psychological hardiness) when faced with an event that poses a threat (Mayo and Mallin, 2010). Procedural fairness reduces a supplier’s potential to dispute (Maqsoom et al., 2020) because it is likely to increase partner’s perception of fairness in the supplier selection process. Injustice, on the other hand, increases the potential for conflict (Bouazzaoui et al., 2020). Therefore, we posit that:

H5. External attributions are related to protest intent.

H5a. Procedural justice is negatively related to protest intent.

Since socially responsible supplier selection includes ethics, considered as the level of honesty (Thornton et al., 2013), suppliers have come to expect the truth from buyers in their dealings. Suppliers are less likely to accept losses in cases in which the buyer is suspected of behaving opportunistically, either by withholding information, providing misleading information, (dis)favoring another supplier, or seeking to penalize a supplier. “In the presence of perceived unfairness, a channel member likely finds the [offending party] more accountable and responsible, with a higher degree of intentionality, for any ensuing conflict and opportunism and therefore may react more punitively” (Samaha et al., 2011, p. 102). “The perception of being treated unfairly causes anger and brings with it a desire for retributive justice, even if it requires some financial sacrifice on the part of the [offended party]. Under such circumstances, dealers will feel compelled to vent their displeasure.” (Hibbard et al., 2001, p. 48). In such cases, it can be expected that retaliation or relief will be pursued. As such, it is posited that:

H5b. Suspicion of buyer opportunism is positively related to protest intent.

In cases in which the supplier discerns that the cause for the sales loss was due to its own shortcoming (i.e., internal attribution) – either in effort, ability, or strategy – the supplier will accept the loss. Research suggests that on the next competitive tender a supplier would either increase effort, seek assistance, avoid the task, or change its strategy (Dixon et al., 2001). In cases of internal attribution, it is illogical to retaliate against the buyer. Additionally, there is no basis for which to seek relief via bid protest, meaning a protest would be frivolous and, thus, unsuccessful. Therefore, it is posited that:

H6. Internal attributions are related to protest intent.

H6a. Loss attribution to effort is negatively related to protest intent.

H6b. Loss attribution to ability is negatively related to protest intent.

H6c. Loss attribution to strategy is negatively related to protest intent.

Suppliers contend that they need better feedback on details explaining why they did not win a contract, and that this information is needed in order to improve their competitive positioning in the future. Intuitively, if the sales loss is attributed to an inadequate strategy, a change in strategy is prudent (Dixon et al., 2001). Conversely, if a sales loss was due to chance (i.e., lack of luck), no change to the strategy would appear necessary (Dixon et al., 2001). However, a debriefing may yield the insights from competitive intelligence information that indicates aspects of the proposal that could or should be changed in order to eliminate a weakness or create a strength. These opportunities, coupled with a loss attributed to the difficulty of the task, should result in pursuit of an altered strategy in the future (Dixon et al., 2001). For these reasons, it is posited that:

H7. External attributions are related to strategy change.

H7a. Loss attribution to task difficulty is positively related to strategy change.

H7b. Loss attribution to luck is negatively related to strategy change.

H8. An internal attribution is related to strategy change.

H8a. Loss attribution to strategy is positively related to strategy change.

3. Methodology

This research employed a mixed method approach. First, interviews of four suppliers and two protest attorneys served to validate the objectives of the research, research questions, the conceptual model, and helped inform the development of the questionnaires. Then, quantitative data was collected via questionnaire to test the conceptual model.

3.1. Interviews

The interview protocols (Appendixes A and B) were developed based on a review of the literature. Five interviews occurred via phone, and one occurred face-to-face. The sample of informants was drawn from the researchers' professional contacts in academia, industry, and government and from lists of suppliers competing for government contracts found on [fedbizopps.gov](https://www.fedbizopps.gov) (now [SAM.gov](https://www.sam.gov)). Informants did not permit recording of the interviews. During the interviews, informants identified the specific feedback information they needed. They confirmed how the information helps them decide on courses of action such as whether to lodge a bid protest or to change their proposal strategy in the future. They also mentioned other needs such as to account to upper management and stakeholders. When asked what makes a debriefing "good", one informant mentioned that the buyer understood the value being offered (i.e., proposal efficacy). Another mentioned that for more than half of debriefings, the buyer did not fully understand the proposal. Another informant mentioned collecting information about the competition (i.e., competitive intelligence). Another informant mentioned

gaining actionable information about strengths and weaknesses (i.e., proposal efficacy). Many lamented the confusion as to why the buyer decided that a different offeror's proposal was rated higher or deemed more valuable (i.e., decision understanding). One informant stated that it is hard to know whether the buyer selected the offer that represents the best value (i.e., decision understanding). Two informants mentioned a need for a point-by-point comparison of the key discriminating evaluation criteria to the competitors (i.e., competitive intelligence and decision understanding). All informants mentioned the need to know that the source selection was conducted fairly and impartially (procedural compliance). Across all interviews, the relationships among constructs in the conceptual model were supported by the interview data.

3.2. Survey

3.2.1. Pretest

As pre-test of the questionnaire, we sought input from the stakeholder communities and from academics. Two academics, two supplier representatives, and two buyer representatives reviewed the questionnaire. Feedback was solicited regarding whether the questionnaire items: (1) captured the full domain of the construct (content validity), (2) were unambiguous, (3) were simple to understand, and (4) were consistently interpretable (Dillman, 2000). The feedback was used to improve the instructions and item wording where necessary.

3.2.2. Pilot test

The questionnaire was first pilot tested on a randomly selected subset of the sample. It was distributed via email to 597 representatives of government contractors. These individuals were identified by data publicly available in the government's system for advertising government contract opportunities (now [SAM.gov](https://www.sam.gov)), including bidder's lists from the buying offices. The representatives were typically senior leaders of firms or those responsible for proposal development or new business capture. However, some contacts were technical representatives or those only interested in a subcontracting opportunity, not responsible for proposal development. Of the 597 invited, 34 responded. As a result of exploratory factor analysis (EFA) (Appendix C), the wording of scale items measuring procedural justice were edited and additional items were added to the full deployment in order to distinguish it from suspicion of buyer opportunism.

3.2.3. Full sample

Data were collected via questionnaire for quantitative analysis. The unit of analysis for the research was a buyer's debriefing of a government source selection decision involving non-price evaluation criteria (i.e., omitted sealed bidding). Respondents were representatives of firms who competed in a government tender and received a debriefing. In order to mitigate selection bias (e.g., selecting a lost tender for which a respondent was overly angry), respondents were asked to answer the questions based on the most recent debriefing experienced.

One challenge to generate useful survey responses is reaching the target population of interest. A sample was drawn of 5821 supplier representatives from data publicly available in the government's system for advertising government contract opportunities, including bidder's lists from the buying offices. Although supplier representatives on bidder's lists and attending pre-proposal conferences typically are senior firm leaders or those responsible for proposal and new business development, they may also be technical, marketing, sales, or subcontractor personnel not responsible for proposal development. Hence, it is likely that some of those on the list never attended a debriefing and, thus, were not eligible to complete the questionnaire. Thus, we were unable to determine a response rate. The questionnaire was distributed to the supplier representatives via email. Useable surveys were completed by 218 supplier representatives; 184 responses were sales losses while the other 34 were from wins. The hypotheses are tested with the 184 sales losses. In keeping with oft-cited guidelines for scale development

(Worthington and Whittaker, 2006; Netemeyer et al., 2003; Carpenter, 2018), a sample size of 150–200 suffices when communalities exceed 0.50; additionally, a ratio of 20:1 participants-to-items is considered robust. Our sample exceeds these specifications and follows the model of past supply chain studies that used exploratory surveys to develop scales (e.g., Åhlström and Westbrook, 1999; Ashenbaum, 2018; Brewer and Arnette, 2017; Kiratli et al., 2016; Saeed et al., 2019; Wallenburg et al., 2019; Park et al., 2016). The sample characteristics of respondents and the contracts on which they reported show a wide representation across many dimensions (Table 1), bolstering generalizability.

EFA of the data (Appendix C) supported the model with two exceptions. First, the aspects of debriefing quality – procedural compliance and decision understanding – loaded on the same factor. Therefore, we combined these aspects into one dimension. Second, suspicion of buyer opportunism co-loads with procedural justice. However, theory suggests that the two constructs are different and, based on our analysis (detailed later), evidence suggests a difference between the two constructs (Hemmer et al., 2016; Huo et al., 2016; Luo et al., 2015). The results of the confirmatory factor analysis described below confirm that the two constructs are indeed different.

3.2.4. Measurement

Existing scales with established reliability and validity were used where possible (Appendix C). Measures were created for constructs with no existing scales based on the literature and on comments from the interviews. New scales were used to measure debriefing quality (a second-order reflective construct comprised of: proposal efficacy information, procedural compliance and decision understanding information, and competitive intelligence), supplier opportunism intention, protest intent, and strategy change. A scale for Suspicion of Buyer Opportunism was adapted from Jap (2003). Procedural justice was measured using scales from Brashear et al. (2004), Kumar et al. (1995), and Smith et al. (1999). Sales loss attributions to task difficulty, luck, effort, ability, and strategy were measured by scales adapted from Dixon et al. (2001).

3.3. Control

The bid protest mechanism is designed as a remedy for non-compliant procedures. Thus, most protests result from mistakes or deliberate violations of law, regulation, or policy. To control for this primary source of protest, we included a proxy variable to represent said violations – winning protest odds (WPO). To measure WPO, we asked offerors to estimate the odds of winning a bid protest from zero to 100%, in increments of 10%.

3.4. Non-response and social desirability biases

Non-response bias was assessed by comparing responses from early and late respondents (Armstrong and Overton, 1977). A Chi-square test showed no difference across sex. Additionally, no difference was found in the number of debriefings experienced by the respondents. Independent samples t-tests explored differences in each of the latent constructs measured by continuous measures and found none. These results suggest that the sample was not affected by a non-response bias. Anonymity was assured to respondents as a technique to reduce the respondent's motivation to respond in a socially acceptable way.

3.5. Common method bias

We employ a multifaceted approach to show that common method bias is not a concern in the data (Conway and Lance, 2010). First, all the participants were assured of confidentiality and anonymity (Chang et al., 2010). Second, throughout the survey, filler questions were asked to create a psychological separation between constructs (Podsakoff et al., 2003; Shukla, 2012). Third, we followed Richardson et al.'s

(2009) advice on employing a latent common method factor; however, due to the small sample size (Bentler and Cho, 1988; Hult et al., 2004), we ran two separate models (one for exogenous latent factors and the other for endogenous latent factors) and found common method variance to be 20.3% in the exogenous model and 1% in the endogenous model, much lower than the threshold value of 50%. Fourth, we followed the approach suggested by Johnson et al. (2011) by introducing a latent factor as a marker variable in the model. The significance and path coefficients remained nearly identical after the idle factor was introduced for the exogenous model (original model-without the factor for common method: common method: CFI = 0.919, TLI = 0.910, χ^2/df = 1.77, RMSEA = 0.065; model with a common method factor: CFI = 0.917, TLI = 0.907, χ^2/df = 1.75, RMSEA = 0.064). We obtained similar results for the endogenous model (original model-without a factor for common method: CFI >0.99, TLI >0.99, χ^2/df = 0.45, RMSEA <0.01; model with a common method factor: CFI >0.99, TLI >0.99, χ^2/df = 0.55, RMSEA <0.01). In all, the multi-pronged approach indicates that the data has minimal common method bias.

3.6. Validity and reliability

We assessed the measurement properties of our latent constructs through confirmatory factor analysis (CFA) in MPlus version 8.6. Estimation of the measurement model was performed via maximum likelihood. Due to the sample size restrictions, and to fit the constraint of five to one ratio of sample size to estimate parameters, we used two CFA models - one for the exogenous and a second one for the endogenous constructs (Bentler and Cho, 1988; Hult et al., 2004). The model-implied covariance matrix differs from that observed in the sample for the exogenous model (χ^2/df = 2.23, p < .01); however, the exogenous measurement model offers reasonable fit to the sample data as assessed by the Comparative Fit Index (CFI) value of 0.96, the RMSEA value of 0.08, and the Tucker Lewis Index (TLI) value of 0.95, all of which fall within common standards for acceptable fit (e.g., Kline, 2010). Similarly, the model-implied covariance matrix does not differ from that observed in the sample for the endogenous model (χ^2/df = 1.54, p > 0.1), and the model offers good fit to the sample data with the CFI value of 0.96 and TLI value of 0.95, and RMSEA of 0.05. Table 2 provides the intercorrelations between constructs, and Table 3 presents the item means and standard deviations, as well as scale reliabilities and factor loadings. The composite reliability of each scale exceeds the generally accepted standard of 0.70 (Nunnally, 1978). Further, the average variance extracted (AVE) for each construct exceeds the 0.50 threshold (Fornell and Larcker, 1981), providing evidence for convergent validity. Lastly, AVE for each latent construct was significantly greater than its squared correlation, lending evidence for discriminant validity (Fornell and Larcker, 1981).

4. Results

4.1. Hypothesis testing

The proposed research model was tested using a covariance based structural equation model (CBSEM) (see Fig. 1). The structural relationships conducted to determine support for the hypotheses, along with the model fit indices are reported in Fig. 2. The model-implied covariance matrix differs from that observed in the sample (χ^2/df = 1.77, p < .01). Nevertheless, the model fit indices (CFI = 0.90, TLI = 0.90, and RMSEA = 0.065) meet threshold requirements (Barrett, 2007).

The data provides support for debriefing quality as a second order reflective construct comprised of three, rather than four, dimensions. The sample, at large, did not distinguish between compliance with source selection rules and understanding the buyer's basis for its award decision. Nevertheless, both of these sets of items loaded on a single factor that we named *compliance and decision understanding information*. Proposal efficacy (i.e., the buyer's understanding of the proposal) and

Table 1
Demographics.

Contract Value	Frequency	Debriefings Experienced	Frequency
0-\$499,999	23	0-10	71
\$500K - \$999,999	10	11-20	40
\$1M - \$9,999,999M	45	21-30	22
\$10M - \$49,999,999	41	31-40	9
\$50M - \$99,999,999	13	41-50	9
\$100M - 499,999,999	21	51-100	10
\$500M - \$999,999,999	5	>100	11
\$1B +	4	unreported	12
unreported	22		

Debriefing Timing	Frequency	Percentage	Sex	Frequency	Percentage
Pre-award	22	12	Male	122	66.3
Post-award	162	88	Female	54	29.3
			Not Indicated	8	4.4

Debriefing Format	Frequency	Percentage	Highest Degree Attained	Frequency
Face-to-face	38	1	High School	2
Internet Conference	5	3	Associates	12
Telephone	70	38	Bachelors	66
Written	71	38	Masters	78
			Professional/Doctorate	18

Source Selection Result	Frequency	Percentage	Firm Size/Category	Frequency	Percentage
Won	34	16	SB set aside	119	65
Did not win	184	84	Large Business	48	26
Protested	22	10	Small Business	129	70
			Unknown	8	4

Award Type	Frequency	Percentage
Contract	145	79
Delivery/Task Order	35	19
Other	4	2

Title	Frequency	Product/Service Code	Frequency
CEO/President/Owner	41	Research and Development (R&D)	13
Principal/Partner	6	Information Technology & Telecommunication	14
CFO, COO, CDO, CIO, CR/GO	10	Professional, Administrative and Management Support Services	70
VP	28	Weapons, Ammunitions and Explosives	3
Sales Exec/Bus Dev Exec/Capture Lead	6	Aircraft and Components and Accessories	4
Director	25	Space Vehicles	1
Manager	31	Equipment	11
Counsel	1	Engines, Turbines, and Components	1
Consultant/Strategist	7	Facility Construction, Repair, Alteration, and Building Materials	23
Engineer	2	Education and Training Goods and Services	8
Contracts/Proj Administrator/Specialist	5	Other Services	19
Other	13	Electrical Components & Equipment	2
Unreported	9	Miscellaneous	10
		Unreported	5

Table 2
Correlations between constructs.

	Mean	SD	PE	CDUI	CI	BO	PI	SC	SOI	PJ	E	A	TD	S	L
PE	4.35	1.60	.706												
CDUI	4.19	1.57	.611**	.624											
CI	3.41	1.74	.378**	.495**	.708										
BO	3.75	1.62	-.489**	-.720**	-.353**	.576									
PI	3.32	1.84	-.351**	-.504**	-.200**	.449**	.849								
SC	4.77	1.55	.239**	.409**	.403**	-.338**	-.234**	.784							
SOI	2.22	1.12	-.159*	-.252**	-.133	.274**	.387**	-.036	.592						
PJ	3.97	1.45	.623**	.778**	.407**	-.739**	-.541**	.327**	-.245**	.738					
E	1.93	1.13	0.088	.231**	0.084	-.183*	-.284**	0.129	-.014	.244**	.881				
A	2.86	1.69	0.116	.261**	.162*	-.305**	-.324**	.207**	-.0140	.275**	.500**	.791			
TD	3.64	1.52	.173*	0.105	0.134	-.067	0.043	0.031	0.085	0.104	0.092	.149*	.858		
S	2.86	1.47	-.011	.144	-.004	-.098	-.149*	.201**	-.012	0.114	.404**	.384**	0.111	.866	
L	2.44	1.39	0.081	.202**	0.031	-.081	-.059	0.073	0.038	.188*	.298**	.229**	0.047	0.082	.818

**Significant at the <0.01 level; *Significant at the <0.05 level. Average Variance Extracted on the diagonal. PE: Proposal Efficacy Information, CDUI: Compliance & Decision Understanding Info, CI: Competitive Intelligence Information, BO: Suspicion of Buyer Opportunism, PI: Protest Intent (or) Loss Unacceptance, SC: Strategy Change, SOI: Supplier Opportunism Intention, PJ: Procedural Justice, E: Effort, A: Ability, TD: Task Difficulty, S: Strategy, L: Luck.

Table 3
Confirmatory factor analysis and reliability measures.

Items	Mean	SD	Factor Loadings	AVE	CR	Items	Mean	SD	Factor Loadings	AVE	CR
PE1	4.65	1.78	0.831	0.706	0.878	SOI2	2.10	1.28	0.742	0.592	0.813
PE2	4.37	1.79	0.873			SOI3	2.32	1.31	0.804		
PE3	4.04	1.78	0.816			SOI4	2.26	1.37	0.761		
PD1	3.69	1.98	0.787	0.624	0.908	PJ1	3.82	1.68	0.917	0.738	0.918
PD2	4.45	2.02	0.706			PJ2	3.90	1.63	0.834		
PD3	4.59	2.00	0.719			PJ3	4.16	1.57	0.726		
PC1	4.35	1.84	0.886			PJ4	4.02	1.58	0.943		
						E1	1.96	1.19	0.878	0.881	0.957
PC3	4.07	1.69	0.777			E2	1.93	1.17	0.960		
PC4	3.98	1.73	.848								
CI1	3.34	2.03	0.877	0.708	0.879	E3	1.91	1.19	0.975		
CI2	2.99	1.79	0.798			A1	2.69	1.76	0.915	0.791	0.919
CI3	3.91	1.99	0.848			A2	2.77	1.81	0.904		
BO1	3.53	1.84	0.666	0.576	0.869	A3	3.12	1.91	0.848		
BO2	4.43	2.12	0.818			TD1	3.55	1.56	0.904	0.858	0.948
BO3	3.70	2.00	0.860			TD2	3.58	1.56	0.991		
BO4	3.66	1.94	0.589			TD3	3.78	1.69	0.881		
BO5	3.46	2.04	0.824			S1	2.86	1.55	0.843	0.866	0.951
PI1	3.48	2.00	0.915	0.849	0.944	S2	2.84	1.52	0.985		
PI2	3.27	1.94	0.954			S3	2.88	1.56	0.957		
PI3	3.20	1.87	0.895			L1	2.54	1.48	0.997	0.818	0.931
SC1	4.79	1.64	0.881	0.784	0.915	L2	2.46	1.47	0.891		
SC2	1.64	1.64	0.968			L3	2.33	1.40	0.817		
SC3	4.71	1.77	0.799								

AVE: Average Variance Extracted; CR: Composite Reliability; SD: Standard Deviation.

competitive intelligence are the other two dimensions of debriefing quality.

The model results show that debriefing quality reduces the supplier's opportunism intention, supporting H1. The results overall show strong support for the effects of debriefing quality on internal and external attributions (H2a – H2d, and H3a – H3c). Marginal support is found for the effect of debriefing quality on task difficulty, H2c. However, task difficulty was measured as the extent of difficulty rather than the extent that the sales loss was due to task difficulty. This measurement error prevents us from drawing conclusions about the effect of debriefing quality on an attribution of task difficulty and the ensuing effect of an attribution of task difficulty on strategy change.

The results show that H4 is supported; supplier opportunism intention increases protest intent. We also found support for only one attribution affecting protest intent – procedural justice (H5a), which is an external attribution. For hypotheses 5b, our results did not find support; a positive relationship between suspicion of buyer opportunism and protest intent was not found. A possible explanation is that protests must be supported by evidence. Frivolous protests are those that are based on arguments “that are beyond the reasonable contemplation of fair-minded people” with no basis in law or in fact (GAO, 2009). A

respondent may not have been able to muster evidence that a buyer provided misleading information, favored another offeror for reasons unrelated to the evaluation criteria, disfavored the protestor, improperly withheld information, or sought ways to penalize the protestor's proposal. The results also show that only one attribution affects strategy change, an internal attribution of strategy (supporting H8).

4.2. Additional results

We also inquired about the firms' feedback experiences from non-government tenders asking: “For the commercial (i.e., non-government) source selections in which my firm has participated, the buying firm tells us exactly why we did not win the business.” On a 1–7 scale, the average agreement was 4.3, meaning feedback from for-profit-sector prospects is lacking. We then asked: “Compared to commercial (i.e., non-government) source selections in general, the explanation we received as to why we did not win the contract/order was: substantially worse (1) or substantially better (7).” The mean response was 4.0, indicating parity in debriefings received from prospective clients across sectors. Thus, the weaknesses explored and findings from this research could be useful to firms pursuing business not only in the government

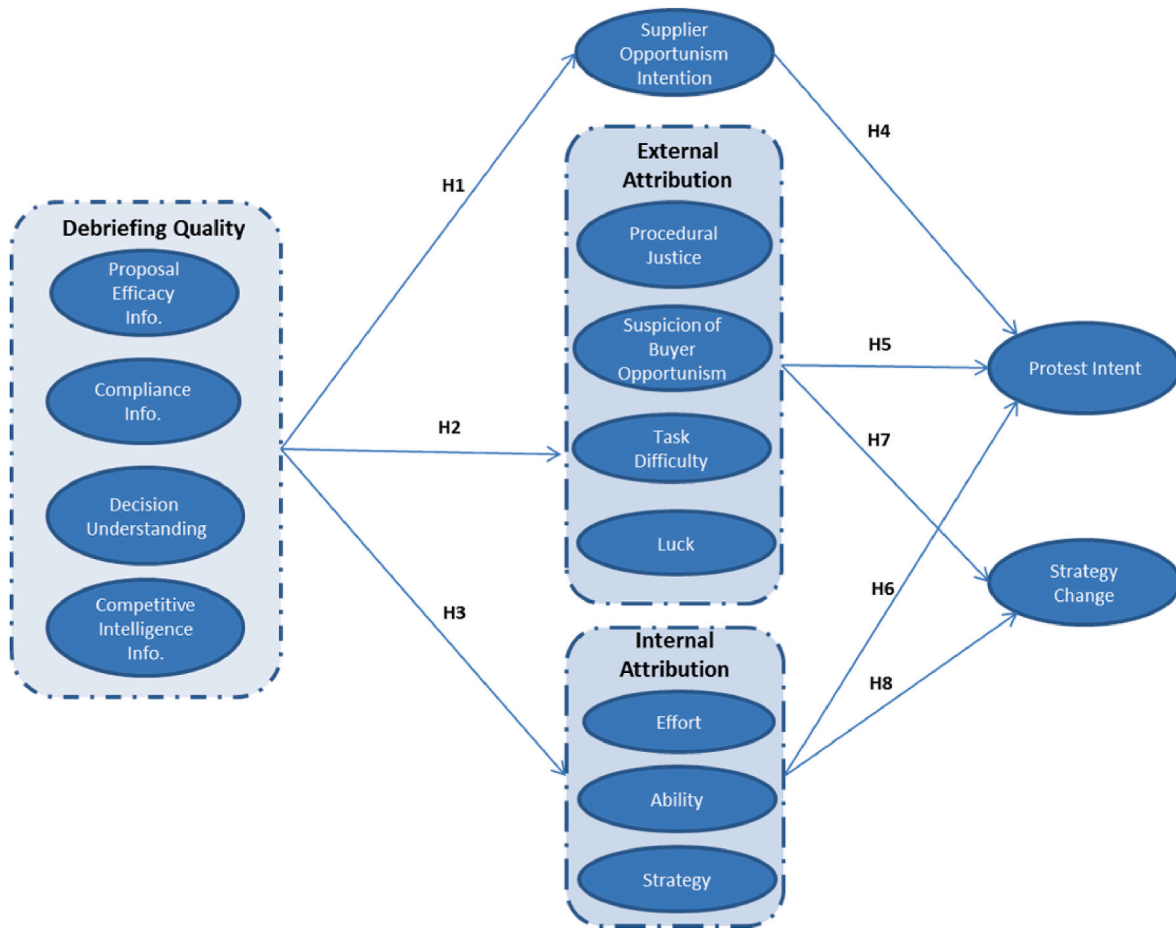


Fig. 1. Hypothesized Model

***Significant at the <0.01 level; **Significant at the <0.05 level; *Significant at the <0.1 level.

sector, but in the for-profit sector as well.

5. Discussion

Suppliers have for some time complained about the poor quality of feedback from source selections (Arena et al., 2018); this is the first research to empirically assess the effects of providing such feedback. Competing in tenders can consume significant effort and resources. Suppliers can only afford so many losses; they depend on feedback to learn, develop, improve, and win future business. Particularly in government sourcing wherein fairness is promised, suppliers also need to know they had a fair chance at winning. Hence, feedback drives supplier decisions to either challenge the award decision and/or make internal changes to competitive strategy and positioning in the marketplace to improve. Nevertheless, the literature has been silent on exactly what information renders feedback as “good quality.” Therefore, the purpose of this research was to define debriefing quality, explore how it helps suppliers make attributions for a sales loss, then take action accordingly – by protesting an award decision or by changing their proposal or overall competitive strategy.

5.1. Theoretical implications

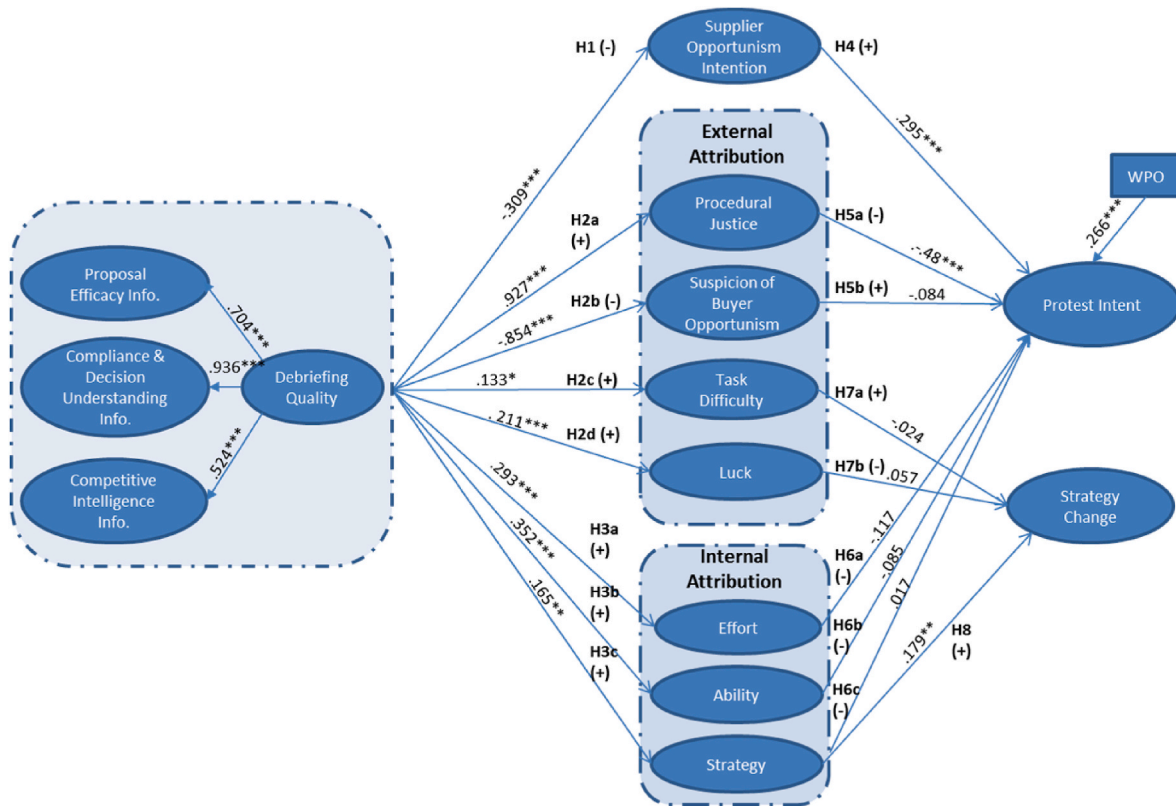
This research makes several contributions to theory. Specifically for government suppliers (Hawkins et al., 2011; Josephson et al., 2019), we develop and test a model that advances the literature by improving our understanding how to influence supplier behavior in response to losing a bid. This explorative study identifies a new construct—debriefing

quality—that is shown to be an important antecedent to central constructs of the most prominent theories in buyer-supplier relationships including justice theory and attribution theory. Based on extant research and interviews, debriefing quality is conceptualized as a multi-dimensional latent construct consisting of proposal efficacy information, compliance and decision understanding information, and competitive intelligence. Proposal efficacy information assures the supplier that the buyer understood its proposal giving the supplier confidence that appropriate ratings were applied. Compliance and decision understanding information assures the supplier that the selection process was fair and that the basis of the selection decision was not flawed. Competitive intelligence helps the supplier learn and improve.

Suppliers are often suspicious that buyers have preferred suppliers and find ways to award them competitive tenders (Edwards, 2006). Sales losses could be attributed to this external cause. This research finds that debriefing quality mitigates such suspicion of buyer opportunism. A quality debriefing can prevent misattribution to buyer opportunism allowing suppliers to figure out and act upon the real reason for the lost tender.

We discovered that debriefing quality appears to be instrumental in helping suppliers figure out why they lost the tender – that is, to make attributions. This research supplements attribution theory by further exploring the role of procedural justice. Our research suggests that suppliers may blame losses on unfair actions, mistakes, or omissions of an external entity beyond their control.

The role of fairness may have been overlooked decades ago in the prime of attribution research; at that time, fairness in source selection was not expected in the for-profit sector. Fairness has for some time been



***Significant at the <0.01 level; **Significant at the <0.05 level; *Significant at the <0.1 level

Fig. 2. Model results.

a cornerstone of public policy research, making the context of this study important. We also observe that fairness and transparency in for-profit-sector sourcing is growing in importance (e.g., Wei et al., 2020) as more information becomes available and discoverable. As such, supplier expectations for fair source selections may become a salient factor of sourcing ethics. This study demonstrates the components and effects of quality feedback in growing and maintaining a viable supply base, suggesting an avenue for improvement to obscure selection practices.

This research confirms the application of well-established internal and external attributions in the sales literature—namely, task difficulty, luck, effort, ability, and strategy. A higher quality debriefing increases attributions to each of these causes. A particular sales loss may not show an increase in all attributions. For example, an increased attribution to bad luck likely will not coincide with an increased attribution to ability. However, across the entire sample of many source selections, collectively, in general, more information enables more attribution. Therefore, buyers should seek to divulge more information. While task difficulty cannot be confirmed as an attribution per se (due to aforementioned measurement imprecision), our results show that debriefing quality affects the extent of task difficulty. It could be that the unsuccessful offeror does not realize exactly how difficult the task was until hearing about the competitors' offers (or at least the winner's) from the debriefing.

Our findings add to the limited body of research on inter-organizational justice (Bouazzaoui et al., 2020) by discovering that debriefing quality appears to improve perceptions of procedural justice which, in turn, can diminish protest intent. This parallels past findings of the importance of procedural justice's role in service recovery (Orsingher et al., 2010), and procedural justice plays an even more prominent role in B2B relationships (Brock et al., 2013). This finding is also consistent with attribution theory logic that a recent negative incident may result in negative external attribution (i.e., the supplier

blames the buyer) whereas a quality debriefing experience focused on educating the supplier about the buyer's due diligence regarding procedural justice practices may shift the attribution to an internal attribution as a "temporary aberration" as part of relationship learning (Shamsollahi et al., 2021).

Extending research findings that supplier assessments and evaluations provide valuable feedback that enables collaboration (Gimenez and Sierra, 2013), debriefing quality may also play a role as a mechanism for firms to learn how to change their proposal strategy. Our results suggest that debriefing quality positively influences an internal attribution – strategy – that, in turn, influences strategy change. This is consistent with the premise of resource-advantage theory (Hunt and Morgan, 1995) where companies learn through market interactions and may choose to make changes to their strategy for future opportunities. Thus, we contribute to the supply management literature by demonstrating the value of a transparent debriefing as the result of learning from the sales loss, thus, that a debriefing should be added to the sourcing process. Ultimately, this research links the transparent disclosure of how the source selection was conducted (i.e., debriefing quality) to key sourcing outcomes such as protest intent and supplier strategy change.

Extant theory suggests that protest intent should be influenced by several forms of internal and external attributions. Our study explores the role of attributions in inter-organizational justice by discovering how debriefings appear to influence attributions which subsequently influence supplier behavioral outcomes. Contrary to our expectations, we find that bid protest intent is only influenced by perceptions of supplier opportunism and procedural justice. Suspicion of buyer opportunism plays no role, perhaps because suppliers may struggle to muster evidence to substantiate the claim.

Anecdotal public procurement literature suggests that debriefings may thwart bid protests (Arena et al., 2018). Our results suggest that

high quality debriefings may help reduce unnecessary bid protests by reducing supplier opportunism intention and by increasing perceptions of procedural justice. Procedural justice, in turn, decreases protest intent. That is, quality debriefings provide information that may make bid protests less likely, even when the supplier intended to misuse the protest mechanism for another chance to win.

Where most research focuses on the sales perspective, our findings contribute to the dearth of research examining the customer's diagnosis of failed sales offerings (Friend, 2010). On the supplier-side of the dyad, the effectiveness of the selling function is said to be on the decline, possibly due to a lack of research on the purchasing function (Paes-brugghe et al., 2018). While a salesperson's self-perceived attributions for sales losses have been explored (Teas and McElroy, 1986), surprisingly, feedback from organizational buyers of actual attributions has received little attention (Johnson, 2006). This feedback is crucial since it can affect sale loss attributions, and absent such feedback, the risk of misattribution increases (Fang et al., 2005). Debriefing quality provides a theoretically sound construct to develop the under-researched exploration of buyer feedback and seller attributions of failure.

5.2. Managerial implications

By defining debriefing quality into its multiple dimensions, we can better understand how well debriefings are being conducted and diagnose the dimensions that are performed well and those needing improvement. This precision should offer diagnostics to buyers and sellers as they navigate a tenuous competitive tender process. Weaknesses in source selection feedback can be identified that should lead to improvements in the: (1) content and practice of debriefings, (2) supplier selection process, (3) attributions for the sales loss, and (4) supplier's competitive positioning in the future.

A quality debriefing should help the supplier understand its competitive positioning. Offerors need to know the value offered by their competitors (not necessarily limited to the winning price). They also need useful information about competitors' strategies. Our findings show that this feedback is crucial since debriefing quality helps offerors make attributions for sales losses to their proposal strategy, which, in turn, leads to future strategy changes – either to a specific tender or a general competitive strategy. Organizational purchasing policies fail to address the information that offerors should be provided to learn and improve, requiring only very limited information be provided about the winner (i.e., only the technical rating), omitting that of other competitors. Conversely, this research shows that offerors need to know the value that competitors offered, the competitors' strategies, and, thereby, be able to understand their positioning. Policy makers should broaden the information allowed to be disclosed, then provide guides and training to buyers for proper implementation. Sharing proposal rankings could help the supplier without divulging proprietary information. Sharing the number of offers received could also be helpful. Providing the ratings (or scores) of non-price evaluation criteria of all suppliers (not just that of the winner) would also be beneficial. Explaining why offerors received the ratings would also be helpful, but, in some cases, buyers would need to speak in generalities to protect proprietary information. Thereby, suppliers could systematically collect and analyze their ratings and the ratings of their competitors using artificial intelligence in order to improve their bid strategy. Admittedly, this creates at least two dilemmas; (1) revealing the details of the rationale could violate the duty to protect competitors' proprietary information (e.g., trade secrets, intellectual property, etc.), and (2) revealing the details of the procedure could divulge an error or omission opening the door to a bid protest. Techniques to manage these two dilemmas is an area ripe for future research.

Buyers seeking to develop quality debriefings should focus on enabling suppliers to develop their capabilities and assuring suppliers that their offers were fully understood, discussing technical aspects, strengths, and value. A quality debriefing also communicates that the

buyer properly adhered to procedures and rules, which bolsters perceptions of procedural justice. Since those policies, regulations, and laws are the rules of the game, offerors expect to be treated as prescribed. Thus, buyers must invest in training the entire source selection team of the procedural rules and requirements then strictly follow them. A buyer should also explain the selection, creating a dialog that provides a sense of the buyer's logic and value assessment. This presumes that the buyer established evaluation criteria and evaluated them according to the RFP. It also suggests that a two-way dialog is necessary to ensure the offeror understood the decision. As such, a practice of only providing written debriefings should be avoided.

A RAND study (Arena et al., 2018) suggested that an improved debriefing will deter bid protest. This research elaborates *how* debriefing quality can help deter bid protest. Debriefing quality influences protest intent through its influence procedural justice. Therefore, buyers should focus efforts and resources ensuring the selection process is fair, then communicate those fairness efforts to suppliers during the debriefing.

This research is the first to quantitatively confirm offerors' nefarious uses of bid protests to attain favorable outcomes contrary to the intent of the protest mechanism – fairness. It is no surprise that many offerors (25%) considered using the bid protest as a means to force disclosure of additional documentation of the proposal evaluations in hopes of finding an error that could serve as the basis of a follow-on sustainable protest. What is surprising however, is that offerors (6.4%) considered protesting in order to extort a subcontract award from the winner in exchange for withdrawing the protest – a practice termed “green-mailing.” Offerors will also consider protesting to preserve their reputation (9.5%) and to affect their competitors (8.6%). Some offerors (7.3%) also agreed that the effectiveness rate of protests is so high, it just makes sense to protest. Thus, there are some opportunities so attractive (e.g., high dollar value, enduring path dependencies, and sustained competitive advantages), or offerors so opportunistic, that no matter how fair the buyer's process is, the source selection is going to be protested. In those opportunistic cases, buyers should factor bid protest adjudication into the procurement lead time.

Although the context of this study is government procurement, the underlying principles of transparency and fairness grounded in theory and in our findings could be applicable and helpful toward improving the practice of supplier selection and debriefings in the for-profit sector as well. In fact, it may be that offering suppliers an extraordinary degree of fairness may be the next frontier of differentiation, and thus, a competitive advantage for buyers.

5.3. Study limitations and future research

This study has several limitations, some that may inspire future research. First, we were unable to determine a response rate which calls into question the generalizability of the results. Another limitation could include self-selection bias; respondents to the survey who were highly opinionated about injustices experienced during source selections may outnumber others (e.g., angry suppliers). Angry suppliers may not want to reduce their protest intent or change their strategy which could explain why some of the attributions had no effect on protest intent or strategy change. Additionally, although the data was collected anonymously, the questionnaire did not measure socially-desirable response bias. Future research could explore its effect, particularly the extent to which supplier representatives: (1) truly disclose their opportunistic intentions by misusing bid protests or (2) admit to the underlying reasons for sales losses (i.e., attributions), particularly if they were to blame. Understated levels of these constructs could distort estimates of the relationships between them and the key outcomes explored (protest intent and strategy change). Factor analysis did not support decision understanding as a distinct dimension of debriefing quality, which could be due to the sample size. Future research could explore whether it differs from procedural compliance as a distinct dimension. Finally, the new scales developed in this study require further validation using a

larger sample.

This study employed a multi-method assessment in the B2G context which, while a substantial portion of the national economy, should be replicated in a B2B context. Also, the practice of debriefings is not as widespread in private-sector purchasing; theoretical and practical implications suggest that debriefings hold great potential for benefiting commercial inter-organizational relationships, yet this remains unproven. Corporate practices at-large have seen an increase in oversight by stakeholders (Brower and Mahajan, 2013) and an increased emphasis on fairness in inter-organizational relationships (Bouazzaoui et al., 2020), suggesting a greater alignment with B2G purchasing practices. Insights from the study of public procurement may prove illuminating in the B2B setting. Future research might also develop constructs related to eco-systems and test the effects of debriefing quality on buyer-supplier relationships. Does high debriefing quality have a significant positive impact on such constructs? To what extent do low quality debriefing harms such networks on the long term?

6. Conclusion

This exploratory research is the first to show empirically that debriefing quality reduces opportunism while increasing internal and external attributions by suppliers, giving them more information to sense and respond to their markets, while giving buyers a tool to shape the supplier market. Given the central role of justice attributions to the beneficial or dysfunctional relational outcomes of buyer-supplier relationships (Bouazzaoui et al., 2020; Luo et al., 2015), debriefing quality is an important component of supplier feedback that influences the perception of justice and supplier behavior following a bidding experience. High-quality debriefings may also reduce incidents of bid protests, which continue to cause concern. Supplier improvement via quality debriefings offers a win-win to buyers and suppliers. Hence, prospective suppliers can win without winning.

Author statement

The work described has not been published previously, it is not under consideration for publication elsewhere, its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, including electronically without the written consent of the copyright-holder.

Declaration of competing interest

None.

Data availability

Data will be made available on request.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.pursup.2023.100819>.

References

- Adams, J.S., 1965. Inequity in social exchange. In: Berkowitz, L. (Ed.), *Advances in Experimental Social Psychology*, vol. 2. Academic Press, New York, pp. 267–269.
- Åhlström, P., Westbrook, R., 1999. Implications of mass customization for operations management: an exploratory survey. *Int. J. Oper. Prod. Manag.* 19 (3), 262–274.
- Arena, M.V., Persons, B., Blickstein, I., Chenoweth, M.E., Lee, G.T., Luckey, D., Schendt, A., 2018. Assessing Bid Protests of U.S. Department of Defense Procurements: Identifying Issues, Trends, and Drivers. RAND Corporation, Santa Monica, CA.
- Armstrong, J.S., Overton, T.S., 1977. Estimating nonresponsive bias in mail surveys. *J. Market. Res.* 14 (3), 396–402.
- Ashenbaum, B., 2018. From market to hierarchy: an empirical assessment of a supply chain governance typology. *J. Purch. Supply Manag.* 24 (1), 59–67.
- Athanasopoulou, P., 2009. Relationship quality: a critical literature review and research agenda. *Eur. J. Market.* 43 (5), 583–610.
- Barrett, P., 2007. Structural equation modelling: adjudging model fit. *Pers. Individ. Differ.* 42 (5), 815–824.
- Bentler, P., Cho, C.P., 1988. Practical issues in structural modeling. In: Long, J. (Ed.), *Common Problems/Proper Solutions: Avoiding Error in Quantitative Research*. Sage, Newbury Park, CA, pp. 161–192.
- Bonney, L., Plouffe, C.R., Hochstein, B., Beeler, L.L., 2020. Examining salesperson versus sales manager evaluation of customer opportunities: a psychological momentum perspective on optimism, confidence, and overconfidence. *Ind. Market. Manag.* 88, 339–351.
- Bouazzaoui, M., Wu, H., Roehrich, J.K., Squire, B., Roath, A.S., 2020. Justice in inter-organizational relationships: a literature review and future research agenda. *Ind. Market. Manag.* 87, 128–137.
- Brashers, T.G., Brooks, C.M., Boles, J.S., 2004. Distributive and procedural justice in a sales force context Scale development and validation. *J. Bus. Res.* 57, 86–93.
- Brewer, B., Arnette, A.N., 2017. Design for procurement: what procurement driven design initiatives result in environmental and economic performance improvement? *J. Purch. Supply Manag.* 23 (1), 28–39.
- Brock, C., Blut, M., Evanschitzky, H., Kenning, P., 2013. Satisfaction with complaint handling: a replication study on its determinants in a business-to-business context. *Int. J. Res. Market.* 30 (3), 319–322.
- Brower, J., Mahajan, V., 2013. Driven to be good: a stakeholder theory perspective on the drivers of corporate social performance. *J. Bus. Ethics* 117 (2), 313–331.
- Carpenter, S., 2018. Ten steps in scale development and reporting: a guide for researchers. *Commun. Methods Meas.* 12 (1), 25–44. <https://doi.org/10.1080/19312458.2017.1396583>.
- Carter, J.R., Choi, T.Y., 2008. *Foundation of Supply Management*. Institute For Supply Management, Inc. Tempe, AZ.
- Chang, S., Van Wittenloostuijn, A., Eden, L., 2010. From the editors: common method variance in international business research. *J. Int. Bus. Stud.* 41 (2), 178–184.
- Chierichella, J.W., 2005. GAO Protests: Right and Wrong Ways to Claim 'foul'. *Washington Business Journal*, Arlington, VA. June 24–30.
- Conway, J.M., Lance, C.E., 2010. What reviewers should expect from authors regarding common method bias in organizational research. *J. Bus. Psychol.* 25 (3), 325–334.
- DeCarlo, T.E., Agarwal, S., Vyas, S.B., 2007. Performance expectations of salespeople: the role of past performance and causal attributions in independent and interdependent cultures. *J. Personal Sell. Sales Manag.* 27 (2), 133–147.
- DeCarlo, T.E., Teas, R.K., McElroy, J.C., 1997. Salesperson performance attribution processes and the formation of expectancy estimates. *J. Personal Sell. Sales Manag.* 17 (3), 1–17.
- Dillman, D.A., 2000. *Mail and Internet Surveys: the Tailored Design Method*, second ed. John Wiley and Sons, Inc, New York.
- Dixon, A.L., Schertzer, S.M.B., 2005. Bouncing back: how salesperson optimism and self-efficacy influence attributions and behaviors following failure. *J. Personal Sell. Sales Manag.* 25 (4), 361–369.
- Dixon, A.L., Spiro, R.L., Jamil, M., 2001. Successful and unsuccessful sales calls: measuring salesperson attributions and behavioral intentions. *J. Market.* 65 (3), 64–78.
- Edwards, V.J., 2006. *Source Selection Answer Book*, second ed. Management Concepts, Vienna, VA.
- Fang, E., Evans, K.R., Landry, T.D., 2005. Control systems' effect on attributional processes and sales outcomes: a cybernetic information-processing perspective. *J. Acad. Market. Sci.* 33 (4), 553–574.
- Feiner, L., Macias, A., 2021. Pentagon Cancels \$10 Billion JEDI Cloud Contract that Amazon and Microsoft Were Fighting over. Retrieved from. <https://www.cnbc.com/2021/07/06/pentagon-cancels-10-billion-jedi-cloud-contract.html>.
- Fornell, C., Larcker, D.F., 1981. Structural equation models with unobservable variables and measurement error: algebra and statistics. *J. Market. Res.* 18 (3), 382–388.
- Friend, S.B., 2010. Why Are You Really Winning and Losing Deals: A Customer Perspective on Determinants of Sales Failure. Dissertation, Georgia State University, 2010.
- Gilliland, S.W., 1993. The perceived fairness of selection systems: an organizational justice perspective. *Acad. Manag. Rev.* 18 (4), 694–734.
- Gimenez, C., Sierra, V., 2013. Sustainable supply chains: governance mechanisms to greening suppliers. *J. Bus. Ethics* 116 (1), 189–203.
- Goodwin, C., Mayo, M., Hill, R.P., 1997. Salesperson response to loss of a major account: a qualitative analysis. *J. Bus. Res.* 40 (2), 167–180.
- Government Accountability Office, 2009. Report to congress on bid protests involving Defense procurements (B-401197). Available at. <https://www.gao.gov/products/b-401197>.
- Government Accountability Office, 2014. GAO Bid Protest Annual Report to Congress for Fiscal Year 2013. GAO-14-276SP. [Online]. Available at. www.gao.gov/assets/66/0/659993.pdf.
- Greenberg, J., 1990. Organizational justice: yesterday, today, and tomorrow. *J. Manag.* 16 (2), 399–432.
- Grégoire, Y., Fisher, R.J., 2008. Customer betrayal and retaliation: when your best customers become your worst enemies. *J. Acad. Market. Sci.* 36 (2), 247–261.
- Groth, M., 2005. Customers as good soldiers: examining citizenship behaviors in internet service deliveries. *J. Manag.* 31 (1), 7–27.

- Hawkins, T.G., Gravier, M.J., Powley, E.H., 2011. Public versus private sector procurement ethics and strategy: what each sector can learn from the other. *J. Bus. Ethics* 103 (4), 567–586.
- Hawkins, T., Gravier, M., Niranjana, S., 2021. Predicting bid protests: what should sourcing teams (not) do? *J. Bus. Ind. Market.* <https://doi.org/10.1108/JBIM-06-2021-0284> ahead of print.
- Hawkins, T., Gravier, M., Yoder, E.C., 2016. Federal bid protests: is the tail wagging the dog? *J. Public Procure.* 16 (2), 152–190.
- Hawkins, T., Wittmann, M., Beyerlein, M., 2008. Antecedents and consequences of opportunism in buyer-supplier relations: research synthesis and new frontiers. *Ind. Market. Manag.* 37 (8), 895–909.
- Hemmett, M., Kim, D., Kim, J., Cho, B., 2016. Building the supplier's trust: role of institutional forces and buyer firm practices. *Int. J. Prod. Econ.* 180, 25–37.
- Hibbard, J.D., Kumar, N., Stern, L.W., 2001. Examining the impact of destructive acts in marketing channel relationships. *J. Market. Res.* 38 (1), 45–61.
- Huo, B., Wang, Z., Tian, Y., 2016. The impact of justice on collaborative and opportunistic behaviors in supply chain relationships. *Int. J. Prod. Econ.* 177, 12–23.
- Hult, G.T.M., Hurley, R.F., Knight, G.A., 2004. Innovativeness: its antecedents and impact on business performance. *Ind. Market. Manag.* 33 (5), 429–438.
- Hunt, S.D., Morgan, R.M., 1995. The comparative advantage theory of competition. *J. Market.* 59 (2), 1–15.
- Jap, S.D., 2003. An exploratory study of the introduction of online reverse auctions. *J. Market.* 67 (3), 96–107.
- Johnson, M.S., 2006. A bibliometric review of the contribution of attribution theory to sales management. *J. Personal Sell. Sales Manag.* 26 (2), 181–195.
- Johnson, R.E., Rosen, C.C., Djurdjevic, E., 2011. Assessing the impact of common method variance on higher order multidimensional constructs. *J. Appl. Psychol.* 96 (4), 744–761.
- Johnston, W.J., Kim, K., 1994. Performance, attribution, and expectancy linkages in personal selling. *J. Market.* 58 (4), 68–81.
- Josephson, B.W., Lee, J.Y., Mariadoss, B.J., Johnson, J.L., 2019. Uncle Sam rising: performance implications of business-to-government relationships. *J. Market.* 83 (1), 51–72.
- Katz, B., 2018. Airbus teams with Lockheed to renew tanker challenge to Boeing. *Bloomberg*, December 4. <https://www.bloomberg.com/news/articles/2018-12-04/airbus-teams-with-lockheed-to-renew-tanker-challenge-to-boeing>.
- Kelley, Harold H., 1973. The process of causal attribution. *Am. Psychol.* 28 (February), 107–128.
- Kiratli, N., Rozemeijer, F., Hilken, T., de Ruyter, K., de Jong, A., 2016. Climate setting in sourcing teams: developing a measurement scale for team creativity climate. *J. Purch. Supply Manag.* 22 (3), 196–204.
- Kline, R.B., 2010. Promise and pitfalls of structural equation modeling in gifted research. In: Thompson, B., Subotnik, R.F. (Eds.), *Methodologies for Conducting Research on Giftedness*. American Psychological Association, Washington DC, pp. 147–169.
- Kovács, A., 2004. *Enhancing Procurement Practices: Comprehensive Approach to Acquiring Complex Facilities and Projects*. Kluwer Academic Publishers, Boston, MA.
- Kumar, N., 1996. The power of trust in manufacturer-retailer relationships. *Harv. Bus. Rev.* 74 (6), 92–106.
- Kumar, N., Scheer, L.K., Steenkamp, J.B.E., 1995. The effects of supplier fairness on vulnerable resellers. *J. Market. Res.* 32 (1), 54–65.
- Kumar, R., Padhi, S.S., Sarkar, A., 2019. Supplier selection of an Indian heavy locomotive manufacturer: an integrated approach using Taguchi loss function, TOPSIS, and AHP. *IIMB Manag. Rev.* 31 (1), 78–90.
- Landeros, R., Plank, R.E., 1996. How ethical are purchasing management professionals? *J. Bus. Ethics* 15 (7), 789–803.
- Luo, Y., Liu, Y., Yang, Q., Maksimov, V., Hou, J., 2015. Improving performance and reducing cost in buyer-supplier relationships: the role of justice in curtailing opportunism. *J. Bus. Res.* 68 (3), 607–615.
- Mallin, M.L., Mayo, M., 2006. Why did I lose? a conservation of resources view of salesperson failure attributions. *J. Personal Sell. Sales Manag.* 26 (4), 345–357.
- Maqsoom, A., Wazir, S.J., Choudhry, R.M., Thaheem, M.J., Zahoor, H., 2020. Influence of perceived fairness on contractors' potential to dispute: moderating effect of engineering ethics. *J. Construct. Eng. Manag.* 146 (1), 1–11. [https://doi.org/10.1061/\(ASCE\)CO.1943-7862.0001740](https://doi.org/10.1061/(ASCE)CO.1943-7862.0001740).
- Maser, S.M., Thompson, F., 2010. Understanding and Mitigating Protests of Department of Defense Acquisition Contracts. Atkinson Graduate School of Management, Center for Governance and Public Policy Research, Willamette University, Salem, OR.
- Maser, S.M., Subbotin, V., Thompson, F., 2012. How bid-protest mechanisms mitigate opportunism in government contracting. *Int. Publ. Manag. J.* 15 (2), 137–159.
- Matopoulos, A., Didonet, S., Tsanasidis, V., Fearn, A., 2019. The role of perceived justice in buyer-supplier relationships in times of economic crisis. *J. Purch. Supply Manag.* 25 (4), 100554.
- Mayberry, R., Boles, J.S., Donthu, N., 2018. An escalation of commitment perspective on allocation-of-effort decisions in professional selling. *J. Acad. Market. Sci.* 46 (5), 879–894.
- Mayo, M., Mallin, M.L., 2010. The impact of sales failure on attributions made by "resource-challenged" and "resource-secure" salespeople. *J. Market. Theor. Pract.* 18 (3), 233–248.
- Netemeyer, R.G., Bearden, W.O., Sharma, S., 2003. *Scaling procedures: Issues and applications*. Sage Publications.
- Nunnally, J.C., 1978. *Psychometric Theory*, second ed. McGraw-Hill Psychology Series, New York.
- Orsingher, C., Valentini, S., De Angelis, M., 2010. A meta-analysis of satisfaction with complaint handling in services. *J. Acad. Market. Sci.* 38 (2), 169–186.
- Paesbrughe, B., Sharma, A., Rangarajan, D., Syam, N., 2018. Personal selling and the purchasing function: where do we go from here? *J. Personal Sell. Sales Manag.* 38 (1), 123–143.
- Palmar, R.W., 2008. Interfirm relational drivers of customer value. *J. Market.* 72 (4), 76–89.
- Park, K., Min, H., Min, S., 2016. Inter-relationship among risk taking propensity, supply chain security practices, and supply chain disruption occurrence. *J. Purch. Supply Manag.* 22 (2), 120–130.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y., Podsakoff, N.P., 2003. Common method biases in behavioral research: a critical review of the literature and recommended remedies. *J. Appl. Psychol.* 88 (5), 879–903.
- Richardson, H.A., Simmering, M.J., Sturman, M.C., 2009. A tale of three perspectives: examining post hoc statistical techniques for detection and correction of common method variance. *Organ. Res. Methods* 12 (4), 762–800.
- Saeed, K.A., Malhotra, M.K., Abdinnour, S., 2019. How supply chain architecture and product architecture impact firm performance: an empirical examination. *J. Purch. Supply Manag.* 25 (1), 40–52.
- Samaha, S.A., Palmatier, R.W., Dant, R.P., 2011. Poisoning relationships: perceived unfairness in channels of distribution. *J. Market.* 75 (3), 99–117.
- Septianto, F., Kemper, J.A., Fandy, T., Widya, P., 2021. The role of authentic (vs. hubristic) pride in leveraging the effectiveness of cost transparency. *J. Bus. Ethics* 174 (2), 423–439.
- Shamsollahi, A., Chmielewski-Raimondo, D.A., Bell, S.J., Kachouie, R., 2021. Buyer-supplier relationship dynamics: a systematic review. *J. Acad. Market. Sci.* 49 (2), 418–436.
- Sharp, D., 2021. Lawsuit could delay replacement for aging postal fleet. Retrieved from *Federal Times website*: <https://www.federaltimes.com/acquisition/2021/08/12/lawsuit-could-delay-replacement-for-aging-postal-fleet/>.
- Shukla, P., 2012. The influence of value perceptions on luxury purchase intentions in developed and emerging markets. *Int. Market. Rev.* 29 (6), 574–596.
- Smith, A.K., Bolton, R.N., Wagner, J., 1999. A model of customer satisfaction with service encounters involving failure and recovery. *J. Market. Res.* 36 (3), 356–372.
- Stajkovic, A.D., Sommer, S.M., 2001. Self-efficacy and causal attributions: direct and reciprocal links. *J. Appl. Soc. Psychol.* 30 (4), 707–737.
- Sturgis, A., 2009. The illusory debriefing: a need for reform. *Publ. Contract Law J.* 38 (2), 469–485.
- Teas, R.K., McElroy, J.C., 1986. Causal attributions and expectancy estimates: a framework for understanding the dynamics of salesforce motivation. *J. Market.* 50 (2), 75–86.
- Thornton, L.M., Autry, C.W., Gligor, D.M., Brik, A.B., 2013. Does socially responsible supplier selection pay off for customer firms? A cross-cultural comparison. *J. Supply Chain Manag.* 49 (3), 66–89.
- Trada, S., Goyal, V., 2017. The dual effects of perceived unfairness on opportunism in channel relationships. *Ind. Market. Manag.* 64, 135–146.
- Tran, D.Q., Molenaar, K.R., Kolli, B., 2017. Implementation of best-value procurement for highway design and construction in the USA. *Eng. Construct. Architect. Manag.* 24 (5), 774–787.
- Wallenburg, C.M., John, D., Cichosz, M., Goldsby, T.J., Knemeyer, A.M., 2019. Alignment mechanisms for supplier-initiated innovation: results from the logistics service industry. *J. Purch. Supply Manag.* 25 (5), Article 100575.
- Wei, S., Ke, W., Lado, A.A., Liu, H., Wei, K.K., 2020. The effects of justice and top management beliefs and participation: an exploratory study in the context of digital supply chain management. *J. Bus. Ethics* 166 (1), 51–71.
- Worthington, R.L., Whittaker, T.A., 2006. Scale development research: a content analysis and recommendations for best practices. *Counsel. Psychol.* 34 (6), 806–838.