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A Sociocognitive View of Repeated Interfirm Exchanges: How the Coevolution of Trust and Learning Impacts Subsequent Contracts

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Abstract. I augment the study of repeated interfirm exchanges with social cognition to expand the understanding of trust development and learning and how these combined forces shape subsequent contracts. Although scholars have extensively examined the independent effects of trust and learning on contracts in repeated exchanges, their coevolution and combined impact have received much less attention. I argue this omission occurs largely because social cognition is not typically considered in these literatures, even though both trust development and learning are sociocognitive processes influenced by each other, as well as by heuristics (contract frames) and cognitive biases (intergroup attribution bias). When these processes are examined in a positive exchange, the contract frame (prevention or promotion) influences initial reputation-based trust or prior development of knowledge-based trust (competence or integrity), which biases what is learned. This biased learning further impacts knowledge-based trust development, and together these factors shape adjustments to subsequent contracts. In a negative exchange, the contract frame, prior reputation-based trust, and partner explanation (internal versus external) impact what is learned from partner violations (competence or integrity). This biased learning influences knowledge-based trust development, and together they shape how subsequent contracts are adjusted. I also propose that biased learning influences when contracts act as complements or substitutes for different types of trust, addressing existing debates and critiques in these literatures. Finally, I discuss the dark side of integrity trust and trust repair under promotion contracts in repeated exchanges.

Keywords: psychological processes • interorganizational relationships • organizational capabilities

Introduction

Trust and learning coevolve when parties work together over time (Inkpen and Currall 1998), suggesting that their development and impact on future exchanges with the same party are intertwined. Yet, interfirm exchange scholars primarily examine how either trust (e.g., Poppo and Zenger 2002) or learning (e.g., Mayer and Argyres 2004) independently impacts subsequent contracts in repeated exchanges. These independent investigations primarily occur because these literatures do not typically consider that trust development and learning are sociocognitive processes systematically influenced by each other, as well as heuristics (contract frames) and cognitive biases (intergroup attribution bias). The inadvertent omission of sociocognitive processes and influences prevents us from understanding how learning and trust coevolve in repeated exchanges, as well as contributes to long-standing debates and critiques in the interfirm trust and learning-to-contract literatures.

Although interfirm trust scholars largely agree that interorganizational trust develops as two firms interact over time (Granovetter 1985), because of knowledge exchange and norm development (Shapiro et al. 1992), there is little consensus about whether contracts and trust act as complements (e.g., Poppo and Zenger 2002) or substitutes (e.g., Corts and Singh 2004). If contracts and trust are substitutes, contract length or detail decreases over time as informal governance eliminates the need for the contract. In contrast, if contracts and trust are complements, the contract becomes longer or more detailed over time as greater specification promotes cooperation and trust development. However, when the sociocognitive processes of learning and trust development are considered, biased learning systematically influences whether contracts and trust act as complements or substitutes in repeated exchanges, which addresses the conflicting empirical evidence that has continued to fuel this debate.

Additionally, in the learning-to-contract literature, learning is synonymous with uncovering relevant clauses or details absent in an unavoidably (because of bounded rationality) incomplete contract and adding them to subsequent contracts to prevent the same issues in future exchanges (e.g., Mayer and Argyres 2004). Ryall and Sampson (2009) challenge this view, suggesting that learning could lead to removing contract clauses or detail from future contracts instead. However, they concede that we do not yet have theory to explain when addition versus removal would occur. Again, examining the intertwined sociocognitive processes of learning and trust development allows for the identification of systematic learning biases, which result in predicable additions to and deletions from subsequent contracts.

Specifically, when social cognition is considered in these literatures, a more nuanced understanding of the coevolution of trust and learning, and their combined impact on repeated exchanges, emerges. In positive exchanges (no perceived issues), contract frames and initial reputation-based trust influence focal firm managers' attributions of partner behavior, shaping what is learned from the exchange. Thus, learning in the focal firm is systematically biased, as what is learned directly depends on the type of contract frame and reputation-based trust present in the focal exchange. This biased learning further impacts the type of knowledge-based trust (competence or integrity) developed. The biased learning and knowledge-based trust then jointly influence adjustments to subsequent contracts. In negative exchanges (perceived issues), partner explanations (internal or external), in addition to the contract frame and initial reputational trust, shape attributions of competence (lack of skill) and integrity (intentional breach) violations. Again, this biased learning impacts the evolution of knowledge-based trust, and together they shape adjustments to subsequent contracts.

In sum, by incorporating social cognition and uncovering the coevolution of trust development and learning in repeated interfirm exchanges, I make four important contributions to the interfirm governance literature in general and the contracting and interfirm trust literatures more specifically. First, I propose that different cognitive elements (contract frames, reputation- or knowledge-based trust, partner explanations of violations) shape the type of knowledge-based trust (competence or integrity) developed in ongoing exchange relationships. Second, I highlight the importance of attributions in the coevolution of interorganizational trust and learning in repeated exchanges. Attributions shape the learning that takes place in the exchange, which further influences the evolution of trust, impacting how subsequent contracts are adjusted. Third, I address prior debates and critiques in the interfirm contracting literature by suggesting that biased learning in the exchange influences when contracts act as complements or substitutes, and that together biased learning and the type of trust developed impact when details or clauses are added to or removed from future contracts. Finally, I examine the dark side of integrity trust and trust repair under promotion contracts, focusing on how these factors may prolong ineffective relationships between exchange partners. Together, these contributions allow for a much more nuanced understanding of how interfirm contracts evolve over time.

I begin this article by briefly discussing the implicit assumptions in the interfirm learning and trust literatures that largely deter examination of the coevolution of interorganizational trust development and learning in repeated exchanges. I then explore the sociocognitive processes underlying learning and trust development, as well as factors (contract frames and intergroup attributional bias) that may systematically bias them. Next, I develop propositions examining the coevolution of learning and trust development in positive exchanges, concentrating on the impact of reputational trust and contract frames and intergroup attributional bias, which systematically shape subsequent contracts. In doing so, I also discuss how biased learning influences when contracts act as complements or substitutes for different types of trust. I then predict how the codevelopment of learning and trust in negative exchanges impacts future contracts, by adding the influence of partner explanation (internal or external blame) on the attributions of competence and integrity violations. Finally, I conclude by discussing the implications of these propositions for learning spillovers, the potential dark side of integrity trust and trust repair in repeated interfirm exchanges, limitations of this study, and ideas for future research.

Coevolution of Trust and Learning in Repeated Exchanges

Although trust and learning coevolve over time in interfirm exchanges (Inkpen and Currall 1998), scholars have not yet extensively examined how they impact each other in this process. In one notable exception, Nooteboom (1996) suggests that trust and learning have a positive circular relationship; that is, learning increases trust in subsequent exchanges by increasing cooperation between the parties, and trust advances learning by increasing information flow between the parties. However, this view does not consider that trust development and learning are both sociocognitive processes that are shaped by heuristics and cognitive biases (Crossan et al. 1999). When these sociocognitive influences are considered, learning may be systematically biased, resulting in the development of specific types of trust, which may further shape what is learned from repeated exchanges.

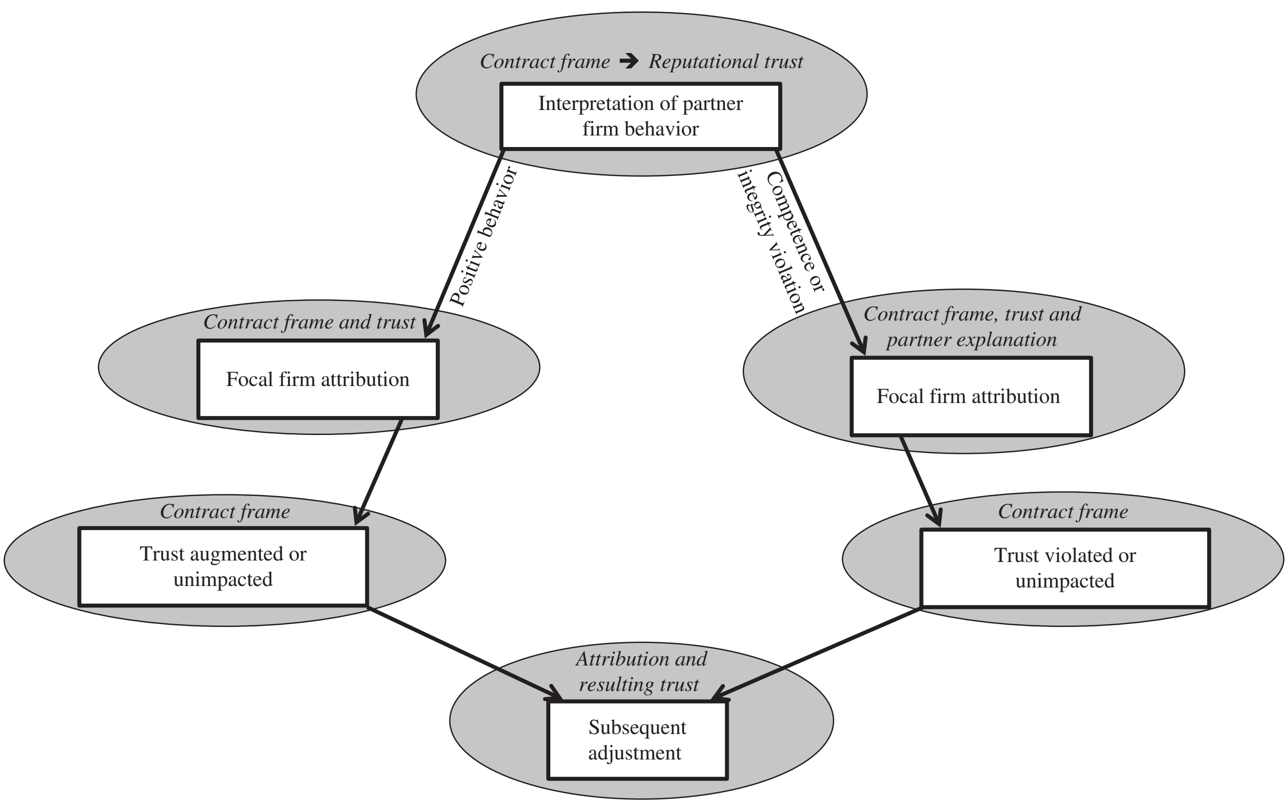
Two implicit assumptions in the interfirm trust literature preclude examination of the social cognitive process underlying trust development. First, trust is assumed to develop linearly from repeated interactions and is thus often operationalized as prior experience (e.g., Gulati 1995). Under this view, all interactions between the partners are assumed to be positive and increase trust, which prevents examination of how trust develops and any biases that may potentially lead to different outcomes. Second, interfirm trust is generally defined as a belief that exchange parties will not intentionally take advantage of each other when the opportunity presents itself (e.g., Zaheer et al. 1998). As such, it is assumed to mitigate potential opportunistic behavior in future exchanges with the same partner (e.g., Bradach and Eccles 1989). This dominant definition only encompasses integrity trust, which develops when one party believes that the other will display goodwill or principled behavior (Mayer et al. 1995). However, competence trust, which arises when one party believes that the other has the skills to accomplish the exchange task (Butler and Cantrell 1984), is inadvertently omitted. Thus, the dominant definition of trust in the interorganizational trust literature typically prevents examination of how different types of trust develop, which is likely to influence whether contracts acts as a complements or substitutes.

Similarly, assumptions in the learning-to-contract literature, which augments transaction cost economics (TCE; Williamson 1985) with organizational learning (e.g., Argyris and Schon 1978), largely discourage examination of how learning occurs. TCE's bounded rationality assumption limits managers' information processing capacities (Simon 1957), preventing them from including all possible relevant contingencies in the contract (Williamson 1985). However, it does not encompass cognitive economizing (heuristics) or cognitive biases (Foss and Weber 2016), the other two interrelated dimensions of bounded rationality that alter interpretations of information that is processed. Absent these cognitive influences, learning occurs when relevant clauses that were not previously included in the contract are uncovered. Thus, learning in this literature is an unbiased, albeit incremental and local, process that increases performance in future exchanges (Mayer and Argyres 2004), rather than a sociocognitive process that is subject to systematic influence by heuristics and cognitive biases. By reconsidering these assumptions, the sociocognitive processes underlying both trust development and learning may be incorporated into the study of repeated interfirm exchanges, allowing for an understanding of how learning and trust development impact each other and the evolution of contracts in repeated exchanges.

Biases in the Sociocognitive Processes of Learning and Trust Development

Both interorganizational learning and trust development stem from the individual cognitive processes of the actors involved. See Figure 1 for an overview of the sociocognitive mechanisms of trust development and

Figure 1. Sociocognitive Mechanisms and Biases Underlying Trust Development and Learning from Prior Exchanges and Their Impact on Subsequent Contracts in Repeated Exchanges



learning in repeated exchanges, and how they impact subsequent contracts between the same partners.

Learning from Prior Exchanges. Learning from prior exchanges involves active social cognition, in which boundedly rational actors process exchange information and act on it to impact future firm behavior (Crossan et al. 1999, Levitt and March 1988). Three mechanisms underlie this process: interpretation, attribution, and adjustment.

Interpretation. To learn from a prior transaction, focal firm employees first interpret whether the exchange behavior is positive or negative. Interpretation is an active process subject to heuristics and biases. For example, when a partner firm intentionally takes advantage of the focal firm, its behavior is perceived as very negative if focal firm managers trust the partner firm and only slightly negative if the partner firm is viewed as potentially opportunistic.

Attribution. Second, focal firm managers determine the cause of the perceived positive or negative exchange behavior, which is critical for encouraging or preventing it in future transactions. Focal firm managers attribute partner actions to their internal characteristics (e.g., opportunistic nature) or external factors (e.g., unanticipated bad weather) (Heider 1958). Where focal firm managers place blame and assign credit for partner exchange behavior directly impacts what is learned from the prior transaction.

Adjustment. Finally, focal firm managers apply the information they learned (source of the perceived positive or negative behavior) to subsequent exchanges by (1) leaving the contract untouched, (2) adding or removing clauses or details from subsequent contracts, or (3) addressing the issue outside of the contract. So, in contrast to prior learning-to-contract literature, learning can occur even when clauses or detail are not added to subsequent contracts.

Trust Development. Trust is "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (Mayer et al. 1995, p. 712). Because firms cannot trust other firms, interorganizational trust arises when parties from one firm believe that the other organization will perform the expected and valued behavior (Zaheer et al. 1998). Interorganizational trust is generally desired because it is assumed to increase exchange performance and reduce transaction costs in exchanges (Bromiley and Harris 2006).

Trust development occurs in two stages. First, managers must have some initial trust in the partner firm to enter a contractual relationship. The first time the parties work together, this initial trust is based on the partner firm's reputation. As the focal firm develops first-hand knowledge of the partner firm's competence or integrity, this reputation-based trust is either replaced by knowledge-based trust or undermined (e.g., McKnight et al. 1998).

Competence trust. Competence trust is a belief that the partner firm has the skills to complete the task (Butler and Cantrell 1984). It develops when focal firm managers perceive the partner firm has fulfilled the task requirements in an exchange and attribute the positive outcome to the partner's skills rather than luck or other external factors. Thus, under competence trust, focal firm managers expect the partner firm to successfully complete the task, but not necessarily to behave in a nonopportunistic manner.

Integrity trust. In contrast, integrity trust is a belief that the partner firm will behave morally and will not purposely harm the other party (Mayer et al. 1995). Integrity trust arises when focal firm managers perceive that the partner firm could have taken advantage of the focal firm in an exchange but did not, and this positive behavior is attributed to the partner firm's integrity rather than external sources, such as the threat of penalties in the contract. Integrity trust leads the focal firm managers to expect that the partner firm will not behave in an opportunistic manner but does not remove the possibility of performance issues arising in future exchanges.

Sources of Influence and Bias. Like all sociocognitive processes, those underlying learning and trust development are subject to systematic biases. Specifically, contract frames and attribution bias impact what is learned from prior exchanges, which further shapes the type of knowledge-based trust developed in repeated exchanges.

Contract frames. Contract frames[1] are heuristics that shift the parties' attention to particular outcomes or behaviors in the exchange. Regulatory focus theory (Higgins 1998) suggests that the *same contract* is perceived as promotion focused if it is gain-framed and prevention focused if it is loss-framed (Roney et al. 1995). Prevention contracts focus attention on safeguarding against negative behavior, while promotion contracts encourage positive behavior (Weber and Mayer 2011). These frames significantly influence how partner behavior is perceived in an exchange and systematically bias attributions for this behavior, thus influencing the type of trust developed.

A prevention contract invokes the perception of the exchange goal as one that must be reached. If the goal is met, focal firm managers feel low-intensity contentment. However, if the goal is missed, they experience high-intensity agitation (Higgins et al. 1997). The intrinsic need to avoid high-intensity negative emotions outweighs the desire to experience low-intensity positive emotions, prompting a focus on detecting and avoiding negative task performance. In contrast, a promotion contract leads the same exchange goal to be viewed as ideal. If it is reached, focal firm managers experience high-intensity happiness. However, if it is missed, they feel low-intensity disappointment. The desire to experience high-intensity happiness overshadows the aspiration to avoid low-intensity disappointment, resulting in a focus on promoting positive performance through creative and integrative behavior (Galinsky et al. 2005).

In practice, prevention contracts are dominant in business for two reasons. First, lawyers, who often negotiate contracts, are more likely to have a dispositional prevention focus and be socialized in a prevention manner, prompting them to use prevention contracts to safeguard the exchange (Mayer and Weber 2015). Second, prevention frames dominate promotion frames (Weber and Mayer 2011), so promotion contracts arise only when managers from both firms negotiate a gain-framed contract or statement of work (governing the task) that is independent of the lawyer-negotiated prevention-framed terms and conditions (governing legal aspects). However, promotion contracts are gaining in popularity and are routinely used with new clients and with clients from prior negative exchanges.[2]

Intergroup attributional bias. Intergroup attributional bias (Forsyth and Schlenker 1977) significantly impacts where focal firm managers assign credit or blame for perceived positive or negative partner exchange behavior, respectively. Under this bias, group members make external attributions for their partner's positive behavior and internal attributions for their partner's negative behavior. Intergroup attributional bias is likely to occur in any context in which out-groups are highly salient (i.e., there is a clear-cut distinction between the in-group and out-group). Organizational identities are often very strong, so this cognitive bias is common in interorganizational exchanges (Staw et al. 1983).

Impact of Trust and Learning on Subsequent Contracts

In this section, I develop propositions that examine how the intertwined sociocognitive processes underlying learning and trust development shape subsequent contracts. Before developing them, however, it is necessary to specify boundary conditions. First, while learning and trust development are fairly limited in simplistic exchanges (e.g., when filling in the blanks of a purchase order), there is a significant opportunity to examine their coevolution in more complex exchanges, as they involve more interaction, ambiguous behavior without an obvious cause, and greater customization of future contracts. Second, I take the focal firm managers' perspective in the analysis because while both firms initially influence what is included in the contract, the focal firm is more likely to make changes to the contract to prevent similar issues in future exchanges following negative partner firm behavior. Additionally, although lawyers often play a role in drafting interfirm contracts, managers conduct the exchange with the partner firm, so managers' perceptions, learning, and beliefs about the partner determine how partner behavior is interpreted and attributed. Third, although the process for trust development and learning are the same in initial exchanges and later exchanges between the parties, I focus on the initial exchange to simplify theory development. Additionally, in later exchanges, the knowledge-based trust developed in prior exchanges is either strengthened or undermined by the current exchange; however, by discussing this process in the initial exchange, I can highlight the transition from reputation-based trust to knowledge-based trust in the on-going exchange relationship. Finally, in developing the propositions on negative exchanges, I focus on what is learned from the initial violation and how that impacts subsequent contracts between the parties. In most instances, the predicted effect is strengthened with repeated violations; however, if this is not the case, I specifically note the impact on the adjustment to the subsequent contract or the exchange relationship.

Impact of Positive Partner Behavior on Subsequent Contracts

Focal firm managers may perceive two types of positive behavior in an exchange with the partner firm. First, the partner firm can meet performance goals laid out in the contract (task-related behavior). Second, it can avoid taking advantage of the focal firm, even if there was opportunity to do so (integrity-related behavior). Focal firm managers learn very different things about their partner from these two types of perceived positive behaviors. What is learned is directly shaped by the contract frame, as well as attributions of the positive behavior to the partner firm or external factors. The resulting biased learning further impacts the type of knowledge-based trust that the focal firm managers develop for the partner firm, if any at all, determining whether the contract acts as a complement or substitute to competence or integrity trust. See Table 1 for an overview of the propositions when focal firm managers perceive positive partner behavior in the exchange under different contract frames.

Prevention Frame. Because task performance is paramount under prevention contracts, they promote reputation-based competence trust in initial exchanges through partner selection (Weber et al. 2011), as focal firm managers primarily negotiate these contracts with partners they feel are competent (McKnight et al. 1998). Additionally, prevention contracts contain

Table 1. Overview of Reactions to Positive Behavior Under Different Contract Frames

	Contract frame	
	Prevention	Promotion
Focus	Prevent negative performance	Promote positive exchange behavior
Reputational trust	Competence	Integrity
Attribution	Contract prevents opportunistic behavior (external), partner skill prevents missing minimal performance specifications (internal)	Partner's integrity promotes cooperative behavior (internal), external factors allow partner to achieve ideal performance goal (external)
Resulting trust	Competence	Integrity
Complement or substitute	Complement for competence trust, substitute for integrity trust	Complement for integrity trust, substitute for competence trust
Adjustment	No change to contract	Expand contract scope

detailed specifications about how to accomplish the exchange goal, creating much less room for interpretation of partner firm behavior. However, because contracts are not complete, initial competence trust positively colors any ambiguous task-related behavior, prompting focal firm managers to interpret it in a positive light. Interpretation of positive task-related behaviors prompts shallow cognition, which increases focal firm managers' tendencies to confirm prior beliefs of partner competence through internal attributions (Elsbach and Barr 1999). Additionally, organizational actors systematically assign greater weight to positive information about competence than negative information (Madon et al. 1997), further supporting internal attributions of positive task behavior to the partner firm. Finally, detailed task criteria in prevention contracts also remove ambiguity from the attribution process, further reducing the likelihood that positive task behavior will be attributed to external sources.

From this systematically biased interpretation and attribution, focal firm managers learn that the partner firm is competent to meet the detailed task specifications outlined in the prevention contract. This biased learning becomes the basis for the development of knowledge-based competence trust, which replaces initial reputation-based competence trust. Thus, prevention contracts act as complements to competence trust because they support its development in the exchange. However, in contrast to prior work (e.g., Poppo and Zenger 2002), trust development is not captured in the contract. Because focal firm managers trust that the partner firm is competent to meet the detailed task specifications specified in the prevention contract, they do not want to change subsequent contracts because this version already leads to desired partner behavior.

In contrast, under a prevention contract, focal firm managers do not need to trust a partner firm's integrity prior to conducting an initial exchange because the contract contains penalties to mitigate behavior that takes advantage of the firm. In addition, a prevention contract focuses focal firm managers on detecting negative behavior, leading them to implicitly view the partner firm as potentially opportunistic. Together, these factors contribute to a lack of initial reputation-based integrity trust in the exchange, prompting focal firm managers to interpret ambiguous integrity-related partner behavior in a negative light. As a result, under prevention contracts, focal firm managers are less likely to interpret integrity-related behavior positively. However, when it is obvious the partner firm did not deliberately take advantage of the focal firm, particularly when there was opportunity, focal firm managers experience shallow cognitive processing, making it more likely that they will confirm their prior beliefs that the partner firm is potentially opportunistic through external attributions. Additionally, because the partner firm is viewed as potentially opportunistic, its out-group status is highly salient, which exacerbates intergroup attribution bias, increasing the likelihood of an external attribution for positive integrity-related behaviors.

From this biased attribution, focal firm managers learn that the potentially opportunistic partner firm acts in a positive manner because it wants to avoid the penalties in the prevention contract. This biased learning does not allow for the development of knowledge-based integrity trust in the exchange, so prevention contracts act as substitutes to integrity trust. Consistent with prior literature, however, focal firm managers do not change subsequent contracts with the partner firm, as they view that the contract alone prevented the partner firm from behaving in an opportunistic manner.

Proposition 1a. *The likelihood that focal firm managers will change the subsequent contract decreases following a positive exchange with the partner firm under a prevention contract.*

Promotion Frame. Under promotion contracts, focal firm managers focus on working with the partner firm to accomplish an overarching exchange goal. Thus, it becomes important for them to negotiate promotion contracts with partners they feel have integrity, based on their prior reputation (McKnight et al. 1998).

Additionally, promotion contracts focus attention on detecting positive behavior in the exchange, prompting focal firm managers to view the partner firm as potentially cooperative and trustworthy, rather than opportunistic. As a result, promotion contracts increase the likelihood of reputation-based integrity trust in the initial exchange. Additionally, promotion contracts contain overarching goals, instead of detailed specifications, which increases ambiguity in interpreting and attributing partner behavior. However, reputation-based integrity trust leads focal firm managers to interpret ambiguous integrity-related behavior in a positive light, resulting in a greater likelihood of detecting positive integrity-related behavior. Interpretations of positive behavior once again trigger shallow cognitive processing, which leads to internal attributions supporting prior beliefs that the partner firm has integrity. Furthermore, the partner firm's out-group status is much less salient under a promotion contract, as the two parties work together to accomplish the exchange goal (Galinsky et al. 2005). Thus, intergroup attribution bias is reduced, further supporting attributions of positive behavior to the partner's integrity.

Focal firm managers learn that the partner firm has integrity from these biased attributions. This biased knowledge, as well as the positive emotions experienced under promotion contracts, supports the development of knowledge-based integrity trust (Gross and John 2005), which replaces the initial reputation-based trust. Thus, a promotion contract is a complement to integrity trust. This trust is incorporated into subsequent contracts, not through the addition of safeguards, but by expanding the relationship (length or scope) or adding exclusivity, to capitalize on the social capital developed under the promotion contract. Two examples illustrate this outcome. First, the chief executive officer (CEO) of a clothing company that uses promotion contracts explained, "Future contracts mirror the strong working relationship, but we up the ante, get a longer term from them. They want to add a category. We do it and give them a 15% discount on everything, but we make them give us a 10-year exclusive" (Anonymous 2015a). Additionally, an assistant vice president of area sales for a cleaning and sanitation solution company also adds about promotion contracts, "If everything is good, then we are looking to grow the contract—more value leads to a deeper relationship with the customer" (Bishop 2015). In both examples, focal firm mangers increase the scope of the contract to take advantage of the positive relationship with the client.

Because creative and cooperative behavior is much more important under a promotion contract than meeting detailed task specifications, focal firm managers do not need initial reputation-based competence trust in the partner to initiate the exchange. Additionally, promotion contracts do not contain detailed specifications, introducing ambiguity in interpreting task-related behavior. Although, promotion contracts prompt focal firm managers to view the partner firm as potentially cooperative and trustworthy, they do not necessarily induce a view of partner competence. As a result, ambiguous task-related behavior is less likely to be viewed in a positive light. In addition, it is unlikely that task performance will be consistently positive under a promotion contract, as the partner firm is encouraged to try out different creative solutions in reaching for the ideal exchange goal, rather than to meet strict performance specifications. Thus, there is an accumulation of negative information regarding partner competence in the exchange, which does not support the development of competence-based trust under a promotion contract.

Finally, in the occasional situation when there is little ambiguity that the partner firm did achieve the overarching exchange goal, focal firm managers experience shallow cognitive processing, making it more likely that they confirm their prior beliefs that the partner firm is not necessarily competent. Thus, external attributions for positive task-related behavior are more likely under a promotion contract. These biased attributions prompt the focal firm to learn that the partner is not necessarily competent, which again reduces the chance for the development of competence trust. So, a promotion contract is likely to act as a substitute to competence trust. However, because the focus under a promotion contract is not based on task performance, but cooperation and creative behavior, no changes are made to subsequent contracts to shape future task-related behavior.

Proposition 1b. *The likelihood that the focal firm will expand the scope, duration, or exclusivity of the subsequent contract increases following a positive exchange with the partner firm under a promotion contract.*

Impact of Negative Partner Exchange Behavior

Not all transactions in ongoing exchanges go smoothly. Instead, issues typically arise when performance falls short of expectations because of lack of partner skills (competence violations) or when the focal firm feels that the partner firm has taken advantage of them (integrity violations). When focal firm managers perceive problems in the exchange, they experience negative emotions, which prompt deep cognitive processing (Forgas 1998) and a search for the source of the violation. In this situation, the partner firm usually offers an explanation, blaming internal or external factors, in an attempt to downplay the negative impact on future exchanges (Kim et al. 2004). These explanations, together with the contract frame and initial reputation-based trust or existing knowledge-based trust, influence attributions that focal firm managers make for the violation. Thus, these factors *shape* what is learned and the impact this new knowledge has on subsequent contracts. See Table 2 for an overview of the violation propositions.

Competence Violations

Competence violations arise when the focal firm believes that the exchange goal is missed because of a partner's lack of skill (Butler and Cantrell 1984). This belief can arise from either focal firm managers' perceptions that a lack of partner skill led to the issue or hard evidence that reveals the partner's lack of competence. Although positive information is typically given more weight than negative information when judging competence (e.g., Snyder and Stukas 1999), this bias is less likely if a competence violation holds significant weight in a repeated exchange.

Prevention Frame. Because of the detailed specifications in a prevention contract, that there is less ambiguity in interpreting whether a firm missed a performance goal. Additionally, a prevention contract influences focal firm managers to select partner firms in which they have reputation-based competence trust. This initial trust colors focal firm managers' interpretations of ambiguous partner behavior, arising from incomplete contracts, in a positive light. As a result, a competence violation will only be interpreted when objective evidence reveals that the partner did not meet detailed task-related specifications in the exchange. However, a competence violation by the partner firm is a significant event under a prevention contract, as it represents a failure of focal firm managers to prevent the partner firm from missing the exchange goal. Thus, it leads focal firm managers to experience a very high-intensity negative emotional reaction, prompting reevaluation of partner trustworthiness (Tomlinson and Mayer 2009).

But the impact of the violation on competence trust in the exchange and subsequent contracts between the parties depends on focal firm managers' attributions. These attributions are shaped by partner firm explanations (blaming internal or external factors) for the behavior. Prior work suggests when transgressors offer internal explanations for competence violations, greater trust repair occurs than when they blame external factors (Kim et al. 2004). However, contract frames further shape the impact of the partner firm's attempts to influence focal firm managers' attributions in repeated exchanges.

External explanations. Three forces interact to shape focal firm managers' attributions when partner firms offer an external explanation for a competence violation. First, out-group salience is heightened under a prevention contract, increasing the likelihood of intergroup attributional bias, which leads focal firm managers to blame the partner firm for the violation. However, the prevention contract increases the likelihood of initial reputation-based competence trust in the partner firm. So, when the partner firm offers an external explanation for a competence violation, focal firm managers are less likely to believe that the partner firm is incompetent (Wason 1960). However, because cognitive processing has deepened, they are also not necessarily likely to accept the external explanation for the violation. Instead, because focal firm managers believe that the partner firm is potentially opportunistic under a prevention contract (Weber and Mayer 2011), they are more likely to interpret that a competence violation is actually an integrity violation in disguise; that is, the partner firm's opportunistic behavior negatively impacted task performance (e.g., shirking). They are also more likely to interpret the partner firm's explanation as an attempt to disguise its opportunistic behavior by blaming it on external factors. Thus, they learn that the partner is opportunistic but not necessarily incompetent. This biased learning prevents focal firm managers from even considering the possibility that the partner firm may not be opportunistic, but instead may not have been able to meet the exchange specification because of external circumstances. As such, there is no possibility that knowledge-based integrity trust will develop in the exchange.

Focal firm managers view detailed specifications and penalties in the prevention contract as the reason that partner firms meet exchange goals. So, when the partner firm offers an external explanation for a competence violation under a prevention contract, focal firm managers are motivated to add even more details and penalties to subsequent contracts to deter future opportunistic partner behavior. As a result, the biased learning in the exchange neither increases nor decreases focal firm managers' initial reputation-based or existing knowledge-based competence trust in the partner firm, but it does result in longer and more detailed contracts in subsequent exchanges with the same partner.

Another example illustrates this prediction. The director of food and beverage at a luxury hotel property explained that his hotel had a long-term contract with an overnight cleaning service that cleaned public spaces (e.g., lobby). While he had initially been satisfied with the quality of the cleaning, it had declined over the previous two years. The yearly contract contained several detailed specifications about what the cleaning service was to do daily and weekly, but no penalties for missing any of the specific requirements. When the director confronted the cleaning service, the company cited financial issues outside their control as the reason its service declined. In response, the director said, "We changed the contract, specifying a dollar amount for each service and when it doesn't happen, we penalize them that amount" (Sanders 2015). In this case, the focal firm manager believed the partner firm was competent, but behaving in an opportunistic

Table 2. Overview of Focal Firm Attributions of Competence and Integrity Violations, Impact on Trust, and Resulting Subsequent Adjustments

	Contract frame	
Violation and explanation	Prevention	Promotion
Competence		
External explanation	Internal attribution—Opportunism veiled as incompetence No effect on competence trust Add penalties/details	External attribution—External factors prevent positive behavior No effect on integrity trust Address outside contract
Internal explanation	Internal attribution—Incompetence causes violation Diminishes competence trust Exit relationship	Internal attribution—Incompetence prevents positive behavior No effect on integrity trust Remove obstacles
Integrity		
External explanation	Internal attribution—Opportunism causes violations No effect on competence trust Add penalties/details	External attribution—External factors prevent positive behavior No effect on integrity trust Address outside contract
Internal explanation		Internal attribution—Opportunism prevents positive behavior Diminishes integrity trust Exit relationship

manner, so added penalty clauses that were missing from the contract to prevent deviation from the detailed specifications.

Proposition 2a. *The likelihood that the focal firm will add penalties and/or details to subsequent contracts increases if the partner firm offers an external explanation for a competence violation under a prevention contract.*

Internal explanation. Prior research suggests that when the partner firm offers an internal explanation for a competence violation, competence trust is more likely to be repaired. However, competence is absolutely critical under a prevention contract, so that the partner firm does not miss the minimal exchange goal. When a partner firm admits that it was at fault when the exchange goal was not reached, the explanation has the opposite effect. Instead of repairing trust, focal firm managers attribute the competence violation to the partner firm's lack of skills and abilities. This new knowledge contradicts initial focal firm managers' beliefs about partner firm skills, undermining reputation-based competence trust. As a result, focal firm managers experience high-intensity negative emotions when a partner accepts blame for a competence violation (Burgoon 1993). In addition, focal firm managers view the partner as potentially opportunistic under a prevention contract, so they also suspect that the partner firm misled them regarding its skills and abilities during the selection process, creating further tension between the partners. A negative internal attribution for a competence violation is also viewed as stable (Weiner 1985); that is, when the partner firm admits responsibility for the competence violation, the focal firm managers learn that the partner firm will miss the minimal performance goal in future exchanges because of incompetence.

This biased learning undermines initial reputation-based competence trust. This degradation of competence trust directly impacts the exchange relationship. Because adding additional details or penalties will not address the partner firm's lack of skills, focal firm managers are more likely to terminate the exchange relationship with the partner firm following an internal explanation for a competence violation under a prevention contract because they learned the firm is incompetent and opportunistic.

Proposition 2b. *The likelihood that the focal firm will terminate the exchange relationship increases if the partner firm offers an internal explanation for a competence violation under a prevention contract.*

Promotion Frame. Under a promotion contract, the focus of the contract is on promoting positive exchange behavior and developing a relationship with the partner firm, not task performance. Additionally, the foundation of the relationship is based on initial integrity trust, arising from the partner firm's reputation. As a result, ambiguous partner firm behavior, occurring under promotion contracts because of a lack of detailed exchange specifications, is interpreted in a positive light. So, similar to a prevention frame, it is unlikely that competence violations will be detected unless there is objective evidence that a performance violation has occurred. In addition, a promotion contract incites creative behavior in the exchange in an attempt to meet the maximal exchange goal, which reduces the relative focus on meeting performance goals. As a result, focal firm managers only experience low-intensity disappointment when a competence violation occurs under a promotion contract, which does not lead to a reevaluation of trustworthiness of the partner firm in the exchange (Tomlinson and Mayer 2009). However, the violation still prompts the partner firm to attempt to explain whether the competence violation arose because of an internal trait of the partner firm or from an external factor. Again, these attributions impact what the focal firm managers learn from the exchange and how it shapes subsequent contracts.

External explanation. If the partner firm offers an external explanation for a competence violation, focal firm managers are likely to believe it. The initial integrity trust that led the focal firm managers to use a promotion contract supports the idea that the partner firm would not lie about the source of the issue. Additionally, intergroup attributional bias is attenuated under a promotion contract because the outgroup is less salient, so focal firm managers are also more likely to make an external attribution for the competence violation, even without the partner firm's explanation. Thus, when the partner firm's explanation matches the focal firm managers' inclinations, it is even more likely that an external attribution is made for the competence violation. This biased attribution leads focal firm managers to learn that the partner firm is telling the truth, leading to the development of knowledge-based integrity trust. However, this biased learning also has a dark side, as it prevents focal firm managers from learning that the partner firm is potentially incompetent. Thus, they may maintain the relationship and renew the contract in the face of clear evidence that the partner is not capable of completing the exchange task.

This biased learning and development of knowledge-based integrity trust also impact how focal firm managers adjust subsequent contracts in the exchange. When the partner firm offers an external explanation for a competence violation under a promotion contract, it suggests that the partner firm was not responsible for missing the ideal goal in the exchange. Because focal firm managers believe the partner firm, they are more likely to blame the external factor, and less inclined to add detailed specifications or even penalties to ensure adherence to them. Instead, focal firm managers trust the partner firm's integrity, so they are willing to work with the partner firm in an informal manner to address the external issue in subsequent exchanges. Thus, future contracts are not changed when the partner firm provides an external explanation for a competence violation under a promotion contract.

Again, a real-life example supports this theorizing. The director of food and beverage at a luxury hotel property explained, "We have a contract with an agency that handles our entertainment in the hotel. The contract doesn't specify hours or entertainers. It is much more loose. We've been working with the same guy for years, who secures our entertainment lineup. When something doesn't work, we give him feedback and work through it" (Sanders 2015). In this case, the entertainer booked for a specific audience might not generate a positive response, which prevents the agency from meeting the hotel's exchange expectations. However, because the director believes the agency has integrity, he is willing to work with the partner firm to resolve the issue outside of the formal contract. As a result, this biased learning and integrity trust development are not formally captured in subsequent agreements.

Proposition 3a. *The likelihood that the focal firm will address the issue outside of the contract increases if the partner firm offers an external explanation for a competence violation under a promotion contract.*

Internal explanation. Under a promotion contract, the focal firm managers do not view a competence violation as a significant negative event (Higgins 1998), so they still view the partner firm in a positive light even when it admits fault for performance issues. Additionally, taking the blame for missing the exchange goal increases the partner firm's integrity in the focal firm manager's eyes, increasing knowledge-based integrity trust. Finally, under a promotion contract, focal firm managers want the partner firm to try out many different potential solutions to achieve the ideal exchange goal. So, when a competence violation occurs, focal firm managers are more likely to attribute it to the fact that the partner firm has not yet found the right solution or is in a trial and error phase, not that it is incompetent. As a result, this internal attribution is viewed as unstable (Weiner 1985), suggesting that focal firm managers learn that the partner firm may still be able to meet future exchange goals, even though it did not meet this particular one. As with the external explanation, this biased learning may cause focal firm managers to ignore their partner's incompetence, even when there is clear evidence of it.

Additionally, in this scenario, focal firm managers develop knowledge-based integrity trust and believe that the partner firm is making an honest effort to accomplish the maximal exchange goal. Just as with an external explanation, the further development of knowledge-based integrity trust makes it less likely that focal firm managers will consider adding detailed specifications and penalties to the contract to reduce potential partner firm incompetence. This integrity trust also eliminates the need to add bonuses to the promotion contract, as they are not seen as necessary to motivate the partner firm. Instead, focal firm managers are more likely to restructure the terms of the exchange or redefine bonus terms in the contract to increase the likelihood that the partner firm will reach the ideal goal in future exchanges.

Another example demonstrates this theorizing. An assistant vice president of area sales for a global cleaning and sanitation solution company explained that when his partners have managers that are not using all the products in the contract because they do not understand why they are necessary, it makes more sense to explain the benefits to using their products to adhere to a certain standard of cleanliness, rather than threatening or penalizing them. If the customer still does not utilize all the products and falls short of the amount they committed to ordering, a vice president from the focal firm company reviews the contracts with the customers, restructuring the deal to make it work better for them. The assistant vice president suggests, "We are trying to set up a partnership right, by being honest with them" (Bishop 2015).

Proposition 3b. *The likelihood that the focal firm will remove barriers from subsequent contracts increases if the partner firm offers an internal explanation for a competence violation under a promotion contract.*

Integrity Violation

Integrity violations arise when the focal firm believes that the partner firm behaves in an opportunistic manner (Mayer et al. 1995). This belief can come either from focal firm managers' perceptions that a partner firm acted in an opportunistic manner or from hard evidence that reveals the partner's lack of integrity. Typically, negative information is given more weight than positive information when judging integrity (e.g., Snyder and Stukas 1999). This bias occurs because a person with integrity is not likely to behave in an opportunistic manner, so a single integrity violation is considered to be predictive of an overall lack of integrity. This bias is more likely to occur if integrity is particularly important in the exchange.

Prevention Frame. Under a prevention contract, the partner firm is implicitly assumed to be potentially opportunistic, so reputation-based integrity trust is largely absent. As a result, focal firm managers are much more likely to interpret ambiguous integrity-related partner behavior, resulting from incomplete prevention contracts, in a negative light. Thus, integrity violations are more likely to be detected under a prevention contract, even when the partner firm did not intend to act or did not act opportunistically.

Because a prevention contract is focused on competence and meeting minimal performance goals, and the partner firm is assumed to be potentially opportunistic, an integrity violation is not considered a significant event. So, perception of this type of violation induces only a low-intensity negative emotional reaction in focal firm managers, as it serves to confirm what they already believe about the partner firm. However, an integrity violation still prompts the partner firm to offer an internal or external explanation for the behavior under a prevention contract. Prior work suggests that external explanations for integrity violations lead to greater trust repair. However, once again, contract frames significantly shape how partner explanations for integrity violations bias learning, which impacts trust development and shapes subsequent contracts.

External and internal explanations. Under a prevention contract, if the partner firm offers an external explanation for an integrity violation, the focal firm managers are unlikely to believe it, instead attributing the violation to the partner firm's opportunism. Additionally, if the partner firm takes responsibility for the opportunistic behavior, focal firm managers will eagerly embrace the explanation, because it confirms their prior beliefs about the partner firm's opportunistic nature.

In both cases, focal firm employees make internal stable attributions for the integrity violation, regardless of the partner firm's explanation. This suggests that the focal firm managers learn that the partner firm is opportunistic. This biased learning prevents development of knowledge-based integrity trust in the ongoing exchange under a prevention contract. Additionally, it leads focal firm managers to learn that more detailed specifications and penalties are necessary in the contract to prevent further opportunistic behavior from the partner firm in future exchanges. As a result, focal firm managers increase the detail and/or length of subsequent contracts following integrity violations.

Once again, an example illustrates this biased learning and its impact on future contracts. The CEO of a print imaging supply company (Anonymous 2015b) offers an example of when a partner firm offered an external explanation for an integrity violation under a prevention contract: "We were selling products under their brand with a provision that excluded the manufacturer from aggressively pursuing other customers in the same geographic region. They could only pursue small customers. They were a Chinese company and we were their major US customer. They formed a separate company and sold to other customers in the US." He further explained, "The agreement wasn't well written so it was a matter of different interpretations. There was blood on both sides." To address this issue in future exchanges, he explained, "We worked it out and figured it out. There was a new agreement and we added more detail to safeguards."

Proposition 4. *The likelihood that the focal firm will add specifications and penalties to subsequent contracts increases following an integrity violation under a prevention contract, regardless of the explanation offered by the partner firm.*

Promotion Frame. A promotion contract increases the likelihood of reputation-based integrity trust through partner selection. As a result, ambiguous integrity-related partner behavior is interpreted in a positive light, suggesting that focal firm managers will only detect an integrity violation under a promotion contract when there is objective evidence that the partner firm behaved opportunistically. So, when an integrity violation is interpreted, it is a major incident in an exchange under a promotion contract (Higgins 1998). As a result, focal firm managers experience a high-intensity negative emotional reaction at the violation, leading to reevaluation of the partner firm's integrity. As always, the violation prompts the partner firm to attempt to explain the origin of the behavior based on either an internal or external cause.

External explanation. If the partner firm offers an external explanation for an integrity violation under a promotion contract, focal firm managers are likely to believe that the violation is a result of external factors. First, intergroup attributional bias is attenuated under promotion contracts, so negative partner firm behavior is more likely to be attributed to external factors. Thus, if the partner explanation matches the natural inclination of the focal firm managers, they are more likely to attribute the integrity violation to external factors. Second, because of initial reputation-based integrity trust, focal firm employees are looking for information that confirms their initial view that the partner firm has integrity.

Thus, focal firm managers learn that an external factor is responsible for the partner firm's negative behavior. This biased learning can prevent focal firm managers from leaving relationships with opportunistic partners who repeatedly blame external factors for their negative integrity-related behavior. Similar to a competence violation under a promotion contract, adding additional penalties or details to the contract will not prevent future integrity violations due to external factors. Instead, because of the integrity trust arising from the promotion contract, focal firm managers are willing to work with the partner firm to address these external causes in subsequent exchanges without changing the formal contract between the parties. So, the two parties will work together in an informal manner to address what to do when these factors arise. Again, the integrity trust in the exchange makes it less likely that focal firm managers will add detailed safeguards or penalties to subsequent contracts that could curb potentially opportunistic behavior, increasing the chance the partner firm will act opportunistically in the future. As such, the biased learning arising from a partner's external explanation for an integrity violation is not captured in subsequent promotion contracts.

Proposition 5a. *The likelihood that the focal firm will address the issue outside the contract increases if the partner firm offers an external explanation for an integrity violation under a promotion contract.*

Internal explanation. Prior work shows internal explanations for integrity violations damage trust more than external explanations, and this effect largely holds under a promotion contract. Promotion contracts increase the likelihood of reputation-based integrity trust in the partner firm. If the partner firm offers an internal explanation for an integrity violation, focal firm managers are more likely to feel that the partner's reputation was unfounded or that the partner firm duped them into believing it was trustworthy in prior exchanges. Additionally, an explanation for an integrity violation under a promotion contract provides explicit evidence of the partner's opportunism, which directly contradicts focal firm managers existing beliefs about its integrity. Second, evidence of partner firm opportunism highlights an "us versus them" mentality, increasing the salience of an out-group. As a result, intergroup attributional bias leads focal firm managers to make an internal attribution for the integrity violation. This attribution diminishes reputation-based integrity trust, irreparably damaging the focal firm's relationship with the partner firm.

This negative internal attribution provides new negative information about the partner's character, which now leads focal firm employees to believe that the partner firm is opportunistic and will take advantage of them in future exchanges (Weiner 1985). As a result, focal firm managers will likely protect themselves by severing the relationship as a result of this betrayal and will seek a more trustworthy partner for future exchanges. Alternatively, they may choose to remain with the partner firm, but punish it in subsequent contracts, which will become much more prevention framed to curb future opportunistic behavior by the partner firm.[3]

The CEO of a clothing company explained that a breach of contract stemmed from an integrity violation. He gave the partner company "a stern threatening warning," and although the partner company admitted they had behaved inappropriately, they promised that it would not happen again. The CEO explained, "We're not done extracting a pound of flesh on that one. It is a tool to use as something in the future. You know you screwed up. You are in breach. What do you want to do about it?" (Anonymous 2015a). In this case, focal firm managers learned that their partner was indeed opportunistic and not trustworthy as they had initially believed. In this example, the biased learning is captured in the next contract because punitive terms are added to penalize the opportunistic partner, which changes the nature of subsequent contracts in the ongoing exchange from promotion framed to prevention framed.

Proposition 5b. *The likelihood that the focal firm will punish the other firm in the subsequent contract or terminate the exchange relationship increases if the partner firm offers an internal explanation for an integrity violation under a promotion contract.*

Discussion

In this paper, I incorporate sociocognitive processes into the study of repeated interfirm exchanges to offer a more nuanced understanding of what focal firm managers learn from an exchange and how this biased learning influences trust development. By examining the coevolution of these sociocognitive processes, I make several contributions to the interfirm governance, contracting, and interfirm trust literatures. First, I suggest different types of trust (competence or integrity) develop in repeated exchanges depending on the choice of contract frame (which further influences initial reputation-based trust) and partner firm explanations for violations in negative exchanges. Second, I propose that what the partner firm learns from the exchange depends on where they assign credit or blame for behavior in the current exchange, which further shapes the type of trust developed. This biased trust and learning then influence how subsequent contracts in the exchange are adjusted. Third, I argue that biased learning in the exchange shapes when contracts act as complements or substitutes to specific types of trust. Finally, I probe the dark side of integrity trust and trust repair under promotion contracts, by focusing on how these factors may prolong ineffective relationships with an incompetent or opportunistic exchange partner.

Prior studies call for devoting resources to encourage widespread learning spillovers to develop contracting capabilities (Mayer and Argyres 2004). However, this study suggests that firms should be much more circumspect in the learning that they share across exchanges with different partners, as biased learning results in the accumulation of very different types of knowledge over repeated exchanges. Aggregation of learning under prevention contracts may lead to a contract template that is unnecessarily detailed and punitive. When this penalty-heavy contract template is used with a new partner, it may increase transaction costs due to the inclusion of potentially unnecessary penalties, as well as leave the partner firm feeling distrusted from the start of the exchange relationship (Ghoshal and Moran 1996). Thus, learning spillovers from prevention contracts may possibly lead the firm to internalize transactions that do not need to be governed under hierarchy, potentially undermining the development of contracting capabilities.[4] In contrast, learning spillovers from promotion contracts are more likely to lead to contract templates with fewer obstacles to positive behavior. The accumulation of this knowledge potentially decreases transaction costs with new partners and creates further goodwill and positive emotions, which increases future cooperation and reduces haggling costs. Thus, learning spillovers from promotion contracts are likely to allow the focal firm to contractually govern exchanges with high hazard levels, supporting the development of contracting capabilities.

However, promotion contracts can also lead to suboptimal exchange results, as there is a hidden dark side of integrity trust and trust repair under these contracts. Promotion contracts bias focal firm managers to learn that their partners have integrity, but not necessarily competence. Thus, even in the face of multiple competence violations, focal firm managers' may not terminate the exchange, as their trust in the partner firm's integrity grows from repeated interactions. As a result, focal firm managers may continue in an exchange relationship even in the face of clear evidence that the partner is incompetent, leading to long-term subpar task performance. Additionally, trust repair, which is generally positive and encouraged (Kim et al. 2004), may not always have the desired effect under promotion contracts. If the partner firm repeatedly offers external explanations for a competence violation, the focal firm may still resist adding safeguards to the contract to increase task performance. In addition, if the partner firm attempts to repair trust by offering an external explanation for an integrity violation, focal firm managers are more likely to continue in the exchange relationship with a partner who may be opportunistic, even in the face of repeated integrity violations. Thus, under promotion contracts, the development of integrity trust and trust repair involving external explanations for both competence and integrity violations may lead to decreased task performance or increased incidences of opportunistic behavior, both of which decrease exchange performance and run counter to traditional views on trust (e.g., Bromiley and Harris 2006).

These implications suggest that neither prevention nor promotion contracts are a panacea for repeated exchanges. Instead, focal firm managers must learn to reap the benefits and avoid the detriments of both types of contract frames. However, because there is such a bias toward prevention contracts because of the dominance of prevention frames and the significant involvement of lawyers in interfirm exchange negotiations, negotiating and using promotion contracts may become a valuable source of performance heterogeneity, which is critical to the development of a contracting capability. To develop this capability, firms must provide greater autonomy to managers to negotiate exchanges rather than automatically handing these discussions to lawyers. Additionally, internal counsel may be used to help managers craft promotion contracts if they are socialized in a prevention manner (Mayer and Weber 2015); that is, if an in-house attorney can be convinced that contracts are a tool for establishing a relationship, not just for safeguarding the exchange, they may be able to create contracts that build contracting capabilities, rather than hurt them.

Finally, this paper supports the idea that psychology can provide new insights into economic-based strategy research by allowing researchers to delve deeper into the mechanisms underlying traditional concepts (Agarwal and Hoetker 2007). The coevolution of trust and learning and the influence of contract frames and attributional biases on these intertwined processes were not largely considered in prior examinations of interorganizational learning, because the studies were conducted through an economic lens (Foss 2001). As this study demonstrates, using a psychological lens to explore these issues leads to very different conclusions than those in prior work.

Limitations and Future Research

Prior work has examined how prevention and promotion contracts impact exchange performance for tasks with varying transaction characteristics (Weber et al. 2011). This paper assumes that the contract frame and task characteristics are aligned in the initial and subsequent exchanges. As the previous studies argue, if the contract frame and transaction characteristics are misaligned in the initial exchange, it is less likely that future exchanges between the two parties will occur, so it is thus unlikely that the focal firm employees will be learning from repeated exchanges with the same party.

Additionally, this paper assumes that focal firm managers perceive contracts as either prevention or promotion framed. Although some experimental work induces this perception in managers through simple loss- and gain-framed contracts, there is still a need to understand what factors lead to these interpretations in more complex contracts. Specifically, experiments in which different aspects and percentages of the contract are framed in one manner versus another are important for understanding how managers perceive contract frames and how these frames impact learning and trust development.

Finally, the theory developed here highlights the need for future empirical and theoretical research. For example, a scenario experiment could be used to test how managers attribute negative behavior in an interfirm exchange and how this impacts levels of competence and integrity trust. Additionally, a laboratory experiment could be used to manipulate behavioral results for particular group members to test how attributions of negative behavior in the exercise impact changes to future contracts between participants conducting the same exercise in subsequent rounds. A field study could also be used to document how a firm makes attributions for negative behavior in interfirm exchanges in real time and measure the impact on trust and future exchanges with the same partners. Changes to contracts could also be assessed following lawsuits stemming from contractual breach in a big data set study, as these suits serve as an observable source of negative exchange behavior in archival data. Finally, the processes and biases identified in learning and trust development between firms can also be applied to similar processes within firms. Managers' individual cognitions are also impacted by intrafirm in-group/out-group dynamics, as well as cognitive biases. Thus, intraorganizational trust development and learning may be similarly biased. A field experiment inside an organization that frames interactions between departments in a prevention versus a promotion manner and collects information on what the managers learned from the transactions would provide empirical evidence for these processes, as well as potentially uncover nuances that are specific to intraorganizational exchanges.

Conclusion

This paper uses sociocognitive psychology to examine cognitive influences on trust development and learning from prior exchanges. In uncovering these underlying mechanisms and their potential biases, it also questions prior assumptions about learning and knowledge spillovers, the trust concept and its positive effects, and capability development. As a result, it has broad appeal beyond contract research. Additionally, the mechanisms underlying trust development and learning can be applied to other scenarios in which two firms interact over time (e.g., strategic alliances and merger and acquisition integration), as well as any instance when internal employees from different functional groups or divisions interact to produce an outcome (e.g., intrafirm cross-functional teams). Finally, implications for the sociocognitive processes of trust development and biased learning processes on capability development are important insights that are applicable across the vast literature on this topic, which should encourage deeper investigation into the mechanisms underlying capability development.

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Endnotes

[1] The frame in this context is a psychological frame, which is not merely two different interpretations of a contract. Instead, the contract is written using either prevention (loss-framed) or promotion (gain-framed) language. For example, a duration clause with both fixed and variable portions of the task, could be written as either an early termination clause or an extendibility clause. It could not be written in an ambiguous way to allow individuals to interpret it in either a prevention or promotion manner. Additionally, although the same contract can be framed as prevention or promotion, the parties in the exchange decide to frame the contract in one way or other, so only the version they chose to negotiate is observed.

[2] For example, an assistant vice president of area sales for an international cleaning and sanitation solution company suggests that promotion contracts are standard operating procedure, even with clients who have previously displayed negative exchange behavior. He suggests that this is because developing the relationship involves working with the client to overcome these issues, and adding penalties to a contract does not accomplish this goal.

[3] There is one exception to this prediction. If the partner firm offers an internal explanation for an integrity violation that suggests the cause is unintentional (Weiner et al. 1987) and/or unstable (McAuley et al. 1992), focal firm managers are more likely to still view the partner as trustworthy. The partner firm's willingness to take responsibility for the violation may act to increase integrity trust, as it is not likely to repeat the violation in the future. Additionally, initial reputation-based integrity trust increases the tendency of focal firm managers to believe the partner firm's explanation. So, an internal unintentional/unstable attribution leads focal firm managers to learn that the partner firm has integrity, increasing integrity-based trust. Thus, focal firm managers are likely to address this issue outside of the contract. However, focal firm managers are only likely to accept an internal unintentional/stable explanation for the initial violation, as repeated explanations that an integrity violation is unintentional or unstable become suspect, leading focal firm managers to believe the partner firm is taking advantage of them. Thus, this is an infrequent occurrence in a repeated exchange relationship.

[4] While reputational effects may overcome these issues, contract frames also influence the types of reputations that lead to reputational trust development. So, under a prevention contract, only a firm's reputation for competence will lead to initial reputation trust, which still may not allow the focal firm to overcome the negative impact of a penalty-laden contract template.

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