OPENING THE NEGOTIATION SYSTEM: AN INITIAL EXAMINATION OF A MULTISTAGE AND MULTILEVEL FRAMEWORK

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ABSTRACT

Negotiation scholars have attributed practitioner-researcher and researcher-researcher divides to a closed system paradigm embedded in the literature. This paradigm remains embedded despite calls to adopt an open system paradigm. However, presently there are no open system frameworks precise or prescriptive enough to facilitate the needed research. This dissertation addresses this research need in three sections. First, the theoretical foundations section expands upon existing theory on conflict management in teams and negotiations to define key dimensions of an open system. The first dimension focuses on Time and organizes the flow of the negotiation process. The second dimension focuses on Levels and articulates how the negotiation process unfolds across strata of social structures. The resulting theoretical framework comprises a novel contribution to the negotiation literature and greatly expands the traditional scope of negotiation research. Second, the systematic review section utilizes this theoretical framework to organize and critically evaluate recent publications in top negotiation outlets. Beyond synthesizing existing findings, this systematic review identifies numerous areas of the open system framework that are considerably understudied as well as areas of the open system framework where conventional wisdom is unlikely to hold true. Third, the empirical section examines one such area. Specifically, conventional wisdom holds that integrative strategies will outperform distributive strategies is optimizing joint outcomes. However, when challenges during agreement implementation necessitate a return to the bargaining table, integrative strategies can underperform distributive strategies. This study marks the first empirical examination of a multi-episodic negotiation involving the same partners working on the same task. The implications of the specific findings and the general framework of this dissertation to both practitioners and researchers are discussed.

For my wife and our children. Your trust and steadfastness have sustained us through the wilderness towards a future of promise.

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INTRODUCTION: OPENING THE NEGOTIATION SYSTEM

Dynamic contexts confront individuals in organizations with complex problems. These problems frequently require cooperation between parties with diverse interests. How effective these parties negotiate divergent interests has lasting implications for both individuals and organizations. Indeed, because negotiations punctuate key career milestones, individuals are motivated to develop their negotiation skills by learning from those with greater expertise (e.g., coursework in MBA programs) and experience (e.g., popular management books). Further, because negotiations are central to many business deals (e.g., strategic alliances, supply chain procurement contracts, etc.), organizations work to make negotiation a core competency (Movius & Susskind, 2009) as well as invest heavily in the negotiation skills of their employees through selection and training initiatives. For evidence-based initiatives, the research on negotiations is both highly influential and potentially problematic.

One broadly recognized problem is that practitioners focus on different areas of negotiations than researchers. Researchers primarily rely on "one shot" negotiation tasks and focus on a single stage (Pruitt, 2012). Indeed, of the studies covered in a recent review, 90 percent of negotiation research addressed the bargaining stage (Jang et al., 2018). Researchers focus on bargaining tasks largely because they are conducive to experimental control making them instrumental to strengthening causal inference (Cook & Campbell, 1979). In contrast, while recognizing bargaining is a pivotal point in the process, practitioners primarily focus on the planning and implementing stages. Indeed, a review of published prescriptions from specialists in various domains found less than 30 percent of recommendations addressed the bargaining stage (Jang et al., 2018). Practitioners focus on planning and implementing, largely because of the complex problems they face. For example, negotiators need to consolidate information across

levels of the organization as well as inputs from the broader market context before an actual negotiation. Further, many business relationships do not end after a negotiation—but rather are the formalization of the beginning of a relationship.

This divide persists because practitioners operate in an "open system" world while researchers continue to construct a "closed system" literature. The open system paradigm holds that researchers need to examine interactions between components of the system as well as between the system and the embedding context, while the closed system paradigm holds that researchers can examine components of the system in isolation and that the system is independent from the context (Bendersky & McGinn, 2010). Researchers have argued the closed system paradigm contributes to the practitioner-researcher divide (Hüffmeier et al., 2011). This divide remains where the limited scope of the literature precludes conclusive evidence for best practices in critical areas of the negotiation process (e.g., planning or implementing stages). Even worse, some established best practices for the bargaining stage (e.g., using integrative strategies to maximize joint gains) may have unintended consequences that are not immediately evident during a single stage or episode of a negotiation.

Beyond the practitioner-researcher divide, researchers have argued the closed system paradigm contributes to a weaker science and a researcher-researcher divide (Bendersky & McGinn, 2010). Closed system negotiation research negatively impacts knowledge dissemination through lower citation rates—both within the organizational sciences and between related fields (Bendersky & McGinn, 2010). Further, the predominance of cross-sectional research designs provide weak evidence for temporal precedence weakening causal inference (Cook & Campbell, 1979) as well as result in an unbalanced examination and piecemeal

representation of the negotiation process. Indeed, this is part of what has driven the calls for a general theory of negotiations (Jang et al., 2018).

To redress these issues, it is essential for the field to programmatically incorporate open system tenets into negotiation theory. The first section of this dissertation develops a theoretical framework of negotiations drawing on open system tenets from the study of a related phenomenon: team conflict management. Because conflict is frequently studied in teams, this literature has deep roots in the open system paradigm (Katz & Kahn, 1978). As a result of these roots, research on team conflict tends to have a more developed conceptualization of how relevant processes unfold across time and levels (Cronin & Bezrukova, 2019; DeChurch et al., 2013). Incorporating these developments into a theoretical framework generates a lens through which researchers can view the phenomenon of negotiations more holistically.

The second section of this dissertation utilizes this theoretical framework to conduct a systematic review of the most recent negotiation literature. This systematic review enables a comprehensive evaluation of the recent literature and aligns articles with various areas of the negotiation process. These aligned articles identify what we already know within an open system negotiation framework. By critically examining what we already know, this review also identifies the areas we need to know better. Importantly, the areas we need to know better are not limited to understudied areas. Rather, these limitations include conventional wisdom established by largely closed system approaches that research has yet to consider the implications within a more open system context.

The final section of this dissertation demonstrates empirically the need for the field to programmatically address negotiations from an open system perspective. This is demonstrated by examining perhaps the most frequently given, evidence-based recommendation: negotiators

should utilize integrative strategies to achieve optimal outcomes, as distributive strategies will yield suboptimal outcomes (Kong et al., 2014; Weingart et al., 1990). Because the evidence for this recommendation is derived predominantly within a closed system paradigm, research has not considered the consequences for this recommendation on subsequent episodes nor potential input from the negotiation context (e.g., the performance of the venture being negotiated or the economic relevance of relational capital; Hart & Schweitzer, 2022). This is a critical oversight, as incorporating an open system perspective yields a starkly different prediction: integrative strategies can *underperform* distributive strategies in achieving optimal outcomes for both parties.

Collectively, this dissertation has important implications for the art and science of negotiation. First, the theoretical framework is precise and prescriptive about what constitutes open system research on negotiations. This clarifies directions researchers can take to bridge the practitioner-researcher divide, researcher-researcher divide, and strengthen the science. Second, the systematic review leverages the proposed theoretical framework to organize and critically evaluate the recent literature. This provides a new perspective on what is already known as well as identify compelling future directions to develop a robust, open-system literature on negotiations. Third, the empirical portion demonstrates how this theoretical framework enables scholars to generate novel contributions by examining conventional wisdom in a new light. This highlights the importance of open system theorizing in generating evidence-based prescriptions for students and practitioners.

THEORETICAL FOUNDATIONS: NEGOTIATING IN AN OPEN SYSTEM

To advance the study of negotiations, researchers need a consensus regarding the constitution of an open system paradigm. This consensus remains elusive, despite the recognized need to move the literature in this direction (Bendersky & McGinn, 2010; Jang et al., 2018). Yet, despite efforts to move in this direction, there is only scattered evidence of open system elements in published research. This scattered evidence is in part because which elements precisely constitute an open system paradigm in negotiations and, more importantly, how these elements are related to one another remains ambiguous. To resolve these ambiguities, a new theoretical framework is necessary.

The proposed theoretical framework has two main divisions: time and levels. The time division focuses on the stages of negotiation (i.e., planning, bargaining, and implementing) as well as the transitions and recursions related to these stages. The levels division focuses on where negotiation processes occur (i.e., within-person, between-person, within-team, between-team) as well as the cross-level and contextual effects that occur between them. The development of each division of the framework includes (a) discussing the limitations of existing approaches and (b) outlining how the new proposed framework builds upon these past approaches. The scope of the past work considered in this theoretical section is limited to theoretical frameworks. The extent individual studies align with open system paradigm will occur in the systematic literature review.

Time

Existing efforts to understand the role of time across the negotiation process are best described within an input-process-output (IPO) framework. Brett and colleagues (Brett & Thompson, 2016; Brett, 2000), for example, outline a framework of the bargaining stage which

holds negotiation outcomes are a function of inputs and processes. The strategy of the negotiators (i.e., input) drives how they interact with one another in the negotiation (i.e., process). This model justifies the focus on developing adaptive strategies to manage interactions between parties to optimize outcomes (i.e., output). Further, the interests and priorities of negotiators comprise inputs that determine the outcome potential of the negotiation. This model suggests the process of gaining an accurate representation of the outcome potential will facilitate optimal outcomes, thus justifying the emphasis on efforts to correctly identify the interests and priorities of others.

While foundational, such IPO frameworks are limited in representing the open system nature of negotiations. The primary limitation of IPO frameworks is that they represent the transformation of inputs into outputs as a linear progression through a single iteration. That is, most negotiation frameworks do not account for recursion or carryover effects in substantive ways. It is noteworthy that research related to team conflict management has long since called for a moratorium on IPO research due to these limitations, instead advocating a more dynamic or recursive approach (Cronin et al., 2011; Ilgen et al., 2005).

The issue is less that negotiation research has rarely considered recursion, but more there is a not an established way to conceptualize negotiations as embedded within the flow of time. Indeed, there are several studies in the negotiation literature that address recursion. For example, research on concession-making spirals (Olekalns et al., 2003; Olekalns & Weingart, 2008), turning points (Druckman & Olekalns, 2013), or tit-for-tat strategies in repeated prisoner dilemma tasks (Axelrod & Hamilton, 1981). While some studies embrace an open system paradigm more than others, to move the field programmatically this direction requires greater clarity on how negotiations unfold across time.

Core Concepts

Before outlining the proposed framework regarding time, I will first define core concepts: stages and episodes (i.e., divisions of time) as well as transitions and recursion (i.e., relationships between divisions of time). *Stages* are divisions of the negotiation process, specifically: planning, bargaining, and implementing. Jang and colleagues (Jang et al., 2018) labeled these same divisions as phases. Consistent with lexicon in the team development literature, phases more aptly describe gradual transitions between divisions where stages describe defined transitions (Kozlowski & Bell, 2013). As discussed later, the proposed framework departs from the blurry boundaries of existing work that organizes phases by content to defined boundaries organizing stages by temporal milestones.

In the proposed framework, e*pisodes* are collections of stages. Specifically, the progression from planning to bargaining to implementing comprises a single episode. An episode is the fundamental unit of a negotiation, which frequently hinges on the bargaining stage. This emphasis on the bargaining stage is shared by both closed and open system approaches. These approaches differ in that a closed system paradigm is primarily concerned with optimal agreements from a single bargaining stage, while an open system paradigm is more concerned with realizing optimal outcomes across all stages and episodes (Jang et al., 2018).

The progression from one stage to another within an episode is an example of a transition. *Transitions* are forward progressions from one division of time to another. Transitions are important as the outcomes of one division of time become inputs for a subsequent division of time. These carryover effects from the past are important in understanding a phenomenon as embedded in time as well as a holistic understanding of a negotiation episode. The term transition could also describe the conclusion of a negotiation, when the negotiated agreement is

successfully implemented and the interdependence binding parties together is dissolved. The effects of the concluded negotiation could carryover as parties transition onto other endeavors.

While progression can occur by transitioning from one division of time to the next, progression can also occur reverting back to a previous division. *Recursion* in the proposed framework, in contrast to a forward progression, occurs when progression is achieved by cycling backward to begin a process again. While recursion can be adaptative (e.g., cycles of asking questions and sense-making; Maitlis & Christianson, 2014) or maladaptive (e.g., concessionmaking spirals; Olekalns et al., 2003), the defining feature is returning to a previous function. The possibility of returning to a previous function is central to an open system perspective as it accounts for non-linear progression.

While relatively undefined in the existing negotiation literature, in the proposed framework recursion can occur on various timescales involving different temporal units. The temporal units used in the conflict management literature include both moves and periods (Cronin & Bezrukova, 2019). A "move" is the smallest timescale and reflects a specific conflictrelated action taken by a party. In negotiations, this could take the form of an offer or counteroffer (Weingart et al., 1999). A "period" is the broadest timescale and reflects a portion of objective clock time over which moves and non-conflict related behavior can occur. In negotiations, this could refer to various areas, including an entire episode, a single stage, or the first few minutes of a stage (Curhan & Pentland, 2007). The timescale of a given phenomenon has important implications for testing theory regarding recursion and transitions.

The following sections discuss the relationship between stages, episodes, transitions, and recursion in conceptualizing how negotiations unfold across time. First, the "recursion within stages" section addresses the micro-dynamics that occur throughout a negotiation. Second, the

"transitions between stages" section discusses the typical progression through a negotiation episode. Third, the "transitions and recursion between episodes" section is concerned with the implications of multi-episodic negotiations. Together, these sections advance an open system framework of time in negotiations.

Recursion Within Stage

Despite researchers acknowledging the importance of recursion in negotiations (Jang et al., 2018), there is no developed framework for studying recursion within stages in the negotiation literature. However, there is in the team conflict management literature. Specifically, the System Dynamics Framework (Cronin & Bezrukova, 2019) details the role of change in open systems. This framework holds that as parties negotiate a conflict, meaningful change occurs in the system and in the conflict itself (Olekalns & Weingart, 2008; Weingart et al., 1999). This change is not conceptualized as strictly linear nor is it haphazardly chaotic. Rather, the change is systematic and predictable.

Part of the systematic and predictable nature of change in open systems is due to recursion. Within the System Dynamics Framework, variables display inertia as they maintain a given level over time (Cronin & Bezrukova, 2019). The levels of focal variable can increase or decrease depending on the presence of other variables. Together, these variables can have a mutual influence on each other. This mutual influence can contribute to escalation (e.g., competitive behavior from Party A incites negative affect in Party B, leading Party B to direct competitive behavior towards Party A), but also allows the possibility of exit (e.g., frustration with competitive behavior leads to one party terminating the negotiation, resulting in an impasse).

While the System Dynamics Framework is useful in predicting conflict dynamics, its utility for studying negotiations is limited in its current form. This limitation is because this framework is primarily focused on the process but does not specify the content. The process-orientation of the System Dynamics Framework is an asset in studying conflict management, where issues are often less concrete and efforts to resolve the blockage can be less structured. Indeed, this is why other conflict management researchers emphasize the recursion between processes and emergent states providing a sophisticated solution for studying a relatively less structured phenomenon (DeChurch et al., 2013). However, incorporating this structure with stage specific content of planning, bargaining, and implementing stages in the proposed framework can enhance the study of negotiations.

First, the content of recursion within the planning stage includes garnering information and assurances about the priorities and parties involved. For example, recursion in the planning stage could occur between gathering information and making sense of that information. Through repetition of these gathering-sensemaking cycles, negotiators refine their priorities, orient around concrete issues, and identify potential partners. This recursion is necessary, as a primary challenge in the planning stage is not the shortage of information, but how individuals are able to discern and locate the most valuable information while shedding the more peripheral. Once negotiators assess they have reached a saturation point, they exit the recursive cycle and transition to the bargaining stage. Typically, the study of negotiation begins after priorities and issues are established for participants. However, the recursive processes of how negotiators identify these priorities and issues or diagnose the problems without heavy researcher assistance has received little theoretical or empirical attention.

Second, the content of recursion within the bargaining stage includes tactics and psychological states. For example, the tactical responses of negotiators are in part due to how individuals interpret their counterpart's behavior (Weingart et al., 2015). Recursion in the bargaining stage includes reciprocation across the dyad between discrete moves (Axelrod & Hamilton, 1981; Weingart et al., 1999) as well as iterations of broader periods of distributive and integrative behavior (Adair & Brett, 2005; Olekalns & Weingart, 2008). Of the three stages, the current understanding of recursion is most developed in the bargaining stage. Indeed, research on turning points is an emerging area of study (Druckman & Olekalns, 2013), which includes ending a competitive spiral or initiating a cooperative spiral. While recursion between moves is important, there is unfortunately less attention afforded to the sensemaking (i.e., naming) and attributions (i.e., blaming) in response to specific moves that serve as key mechanisms in such recursive processes (Korsgaard et al., 2008).

Third, the content of recursion within the implementing stage includes balancing different factors to ensure the outcomes specified in the negotiated agreement are realized. Even after a mutually acceptable agreement is made, during goal pursuit unexpected challenges and setbacks frequently arise (Jang et al., 2018). Interdependent parties can adapt to these challenges through iterative cycles of surveillance and intervention. The recursive processes that negotiators use to maintain an equilibrium of the system and regulate efforts towards goal accomplishment are not well understood. Understanding the implementing stage requires greater attention to the adaptive and maladaptive processes that arise, including what predicts an exit from the relationship.

In summary, existing IPO approaches in the negotiation literature are limited in addressing within-stage recursion. The proposed framework moves beyond existing IPO approaches by adopting the theorized process outlined in the team conflict management literature

with the System Dynamics Framework. However, the System Dynamics Framework is limited in that it is process focused and does not describe specific content. My proposed framework addresses these limitations by providing direction on stage-specific content in negotiations. This content expands upon existing theoretical work on recursion between moves and offers in the bargaining stage (Axelrod & Hamilton, 1981; Druckman & Olekalns, 2013; Weingart et al., 1999) to include psychological states as well as behavior relevant in other stages.

Transitions Between Stages

Beyond the recursion that occurs *within* stages, the incumbent framework of how a negotiation progresses *between* stages is outlined by Jang and colleagues (Jang et al., 2018). This framework organizes the negotiation process into three central "phases" distinguished from each other by function: the planning phase is concerned with diagnosing a problem, the bargaining phase with generating a solution, and the implementing phase with translating agreements into outcomes. These authors explicitly acknowledge recursion, arguing that "negotiation rarely follows a rigid sequence; the parties often cycle back to an earlier phase" (Jang et al., 2018, p. 321).

This Three-Phase Framework poses considerable advantages over previous frameworks in negotiations. For instance, by moving beyond the bargaining phase and acknowledging the potential for recursion, this framework draws attention to challenges of the planning phase. Specifically, an important part of planning is strengthening the best alternative to the negotiated agreement (BATNA; Pinkley et al., 1994). Jang and colleagues (Jang et al., 2018) point out that strengthening a BATNA is a dynamic process that implies multilateral negotiations (i.e., multiple negotiations occurring in proximity to one another regarding the same task). Further, this framework draws attention to the implementing phase. Specifically, the agreements of the

bargaining phase do not automatically materialize into the desired outcomes. Rather, the parties must actively work to implement the agreed upon terms.

Stage vs. Phase

While the Three-Phase Framework is perhaps the most developed open system negotiation framework to date, it is not without limitations. The first limitation is how a phase is conceptualized. This limitation stems from tradeoffs in precision between two elements of phases. One element is the content of phases (e.g., diagnosing problems characterizes the content of the planning phase, etc.), and the other element is the temporal boundaries of phases. This framework prioritizes the precision about content of phases at the expense of precision about temporal boundaries of phases.

This prioritization is evident in how the Three-Phase Framework addresses recursion. For example, recursion to the planning phase would occur any time a negotiator diagnoses a problem. However, diagnosing perceived incompatibilities of positions between parties frequently arises while bargaining. Similarly, there are numerous problems that need to be diagnosed while implementing an agreement. While perhaps the principal efforts of diagnosing a problem occur in the planning phase, continued refinements span all phases of a negotiation. However, this precision in defining content requires frequent recursion, blurring the boundary between phases substantially. Hence, their use of the term "phase". For a visualization of the division of the negotiation process suggested by the Three-Phase Framework, see Figure 1.

Dividing the negotiation process into these phases is limited in its ability to facilitate open system negotiation research. To facilitate open system research, a framework needs to establish precise temporal boundaries. Without precise temporal boundaries, theorizing the flow of negotiations rapidly becomes unwieldy—not to mention the challenges of collecting the

Figure 1

Content-Centric Phases Suggested by Jang and Colleagues (2018)



Note. This visualization of the phase structure described by the Three-Phase Framework (Jang et al., 2018) is not proposed by the open system negotiation framework. Rather, this visualization is to distinguish the difference between existing functionality-focused phases (see Figure 1) and the proposed temporality-focused stages (see Figure 2).

requisite data. Precise temporal boundaries allow researchers to divide a complex phenomenon into manageable pieces that they can reasonably address in a single study. Indeed, the disadvantages of prioritizing precise content (as proposed by the Three-Phase Framework) over precise temporal boundaries (as proposed here) outweighs the advantages.

One disadvantage to prioritizing content is it creates the illusion that content is comparable regardless of when it occurs in a negotiation episode. In reality, processes are qualitatively different depending on when they occur in a negotiation episode. For example, diagnosing problems before sitting down at the bargaining table is a different process than diagnosing problems after an agreement is made. Rather than treating these diagnostic efforts as recursions of comparable processes, there is greater theoretical utility in examining the relationships between constructs that are occurring in closer temporal proximity (e.g., surveillance for problems and diagnosing potential interventions during the implementing stage).

Another disadvantage to prioritizing content is it artificially narrows relevant phenomenon. Indeed, diagnosing problems and solving problems can occur throughout a negotiation episode—not just during the planning and bargaining phases respectively. Ironically, organizing by content requires affording more attention to time, requiring researchers to trace complex changes and chaotic patterns involving the content. However, time is not a substantive variable, but a space in which substantive processes occur (Ancona et al., 2001). Organizing by clear temporal boundaries allows individual studies to define the theoretically relevant content while allowing for a more parsimonious way to organize multiple studies into a collective body of work.

However, these limitations of the *phase* framework (Jang et al., 2018) can be reduced substantially by instead adopting a *stage* framework as is proposed here. By reversing the

priorities, a stage conceptualization takes a different perspective on the content of stages as well as the relationships between stages. Rather than organizing the content by a general function (e.g., diagnosing a problem, etc.), the stage framework organizes the content around two milestones: arriving at the 'bargaining table' to exchange offers and arriving at a decision. The planning stage encompasses multiple functions that occur before arriving at the bargaining table. The bargaining stage encompasses multiple functions that occur between arriving at the table and arriving at a decision. The implementing stage encompasses multiple functions that occur between arriving at the table and arriving at a decision. The implementing stage encompasses multiple functions that occur after arriving at a decision. For a visualization of the division of the negotiation process proposed by this stage framework, see Figure 2. Organizing content around milestones instead of general functions enables a tradeoff, where the temporal boundaries are more precise, but the specific content is less precise (Bacharach, 1989).

The content of stages is less precise in part because a single stage allows for a broader array of functions compared to a single phase. This is because the stage framework distinguishes between functions and temporal milestones where the phase framework does not. Importantly, separating functions from milestones does not refute the organization of functions into categories made by the phase framework (i.e., planning is primarily concerned with problem diagnosis, etc.). Rather, the stage framework refutes the assumption that those categories of functions are orthogonal. That is, a function may primarily occur in one stage, yet still occur in another without being classified as recursion between phases. Rather, it is classified as a function spanning multiple stages. This simplifies the relationship between stages considerably without reducing the number of relevant functions. This change in organizing the content enables more precise temporal boundaries, which is necessary to programmatically study the relationships between divisions of the negotiation process and facilitates the accumulation of knowledge.

Transition vs. Recursion

A second limitation of the Three-Phase Framework is how it conceptualizes the relationships between divisions of the negotiation process. To conceptualize these relationships, the phase framework relies primarily on recursion to explain relationships between phases. This reliance on recursion is necessary due to the fluid temporal boundaries of a phase. However, the rigid temporal boundaries of a stage enable the open system framework to rely exclusively on considerably more parsimonious transitions to explain relationships between stages.

This reliance on transitions means the outputs of one stage become inputs for the next stage in a linear fashion. Specifically, the outputs of the planning stage become inputs for the bargaining stage, just as the outputs of the bargaining stage become inputs for the implementing stage. Importantly, within the stage framework, a linear transition between stages is not only the norm—but direct recursion between stages is not possible. This is because stages, unlike phases organized around discretionary functions, are organized around concrete milestones. Meaning, for example, negotiators cannot change from the bargaining stage back to the planning stage without going through some form of an implementing stage first. Importantly, this impossibility of direct recursion does not imply all stages are identical in terms of quality and duration. Variance in the quality of a stage is essential to consider when theorizing about the relationship between one stage and another.

While this is true for the quality and duration of all stages, this is perhaps most apparent regarding the implementing stage. Implementing stages begin once negotiators reach the milestone that concludes the bargaining stage: when negotiators reach a decision. Possible decisions encompass both agreements and impasses. Which decision is made at the end of the bargaining stage has important implications for the nature and quality of the subsequent

implementing stage. Not all implementing stages begin with the ideal agreement where the parties have achieved Pareto-optimal terms across all negotiated issues. Nor do all implementing stages maximize their quality by realizing the original agreement. This would occur when negotiators should not have made an agreement at all. For example, research on agreement bias recognizes that negotiators often make agreements when they should have reached an impasse (Cohen et al., 2014). If such agreements are enacted, the negotiators are unlikely to achieve their desired outcomes resulting in a lower-quality implementing stage. In such instances, disengaging from the agreement and terminating the relationship would result in a higher-quality implementing stage.

In contrast, sometimes negotiators decide on an impasse, when they should have decided to make an agreement. For example, a negotiator may "walk away" from a potential agreement, despite their BATNA being worse than that potential agreement (Pinkley et al., 1994). If such an impasse is enacted, then the negotiators are unlikely to achieve their desired outcomes resulting in a lower-quality implementing stage. In such cases, ceasing work on translating the agreement and preparing to return to the bargaining table would be characteristic of a higher-quality implementing stage. In this sense, an impasse—just like an agreement—is a decision that negotiators need to implement. Indeed, effectively managing the implementing stage following an impasse is important to avoid "burning bridges" as parties may need to interact in the future. This may be especially important when an impasse decision arises from concerns about the need for more time to gather information or consider alternatives before bargaining further.

Beyond the quality of stages, there is also considerable variance in the duration of stages. While true for all stages, this is perhaps most apparent with the planning stage. In an effort to comprehensively address all relevant information, negotiators may invest considerable resources

into the planning stage yielding higher durations. On the other hand, due to time pressures or an impromptu opportunity, negotiators may invest considerably less resources into the planning stage yielding lower durations. However, a brief stage is still a stage.

The quality and duration of stages is an essential element in theorizing about the relationships between stages. Identifying antecedents that predict changes in the quality and duration of the different stages would result in more robust theory and inform best practices. These best practices would enable negotiators to increase the quality of different stages and achieve optimal duration contingent on various circumstances. Beyond managing the antecedents, negotiators would also need to manage the consequences from the quality and duration of one stage on subsequent stages. Indeed, the quality and duration of one stage is likely to impact the economic and relational outcomes throughout the negotiation process.

In summary, while the Three-Phase Framework (Jang et al., 2018) is noteworthy for avoiding a singular focus on bargaining as well as explicitly considering recursion, two key theoretical limitations inhibit it from facilitating a programmatic study of open system negotiations. The first limitation is the conceptualization of function-oriented phases with blurry temporal boundaries. In contrast, my proposed framework addresses this limitation by dividing the negotiation process into milestone-oriented stages that have both more precise temporal boundaries and encompass a broader array of functions. The second limitation of the Three-Phase Framework is the excessive reliance on recursion to explain the relationship between phases. In contrast, my proposed framework addresses this limitation by arguing that the relationship between planning, bargaining, and implementing is more accurately described with between-stage transitions. Between-stage transitions highlight two key characteristics of a stage: quality and duration. By shifting away from both phases and an exclusive reliance on recursion,

Figure 2

Transition and Recursion in Negotiation Stages and Episodes



Note. Not all areas will be tested in the empirical section due to the breadth of the framework's scope.

the proposed framework emphasizes the utility of stages and includes both recursion and transitions. Indeed, the previous framework obscures the nature of the negotiation process as the broad label of recursion between-phases can encompass recursion within-stages, transitions between-stages, and recursion between-episodes. Overall, my proposed framework provides greater precision and parsimony, making it better equipped to facilitate programmatic research on open system negotiations. This is made possible through the framework's shift in priorities from organizing functionality (see Figure 1) to organizing temporality (see Figure 2).

Transitions and Recursions Between Episodes

Researchers nebulous use of the term "negotiation" to encompass a wide range of phenomena and processes obscures the fact that complex negotiations are comprised of manageable components. Indeed, as noted by Jang and colleagues (Jang et al., 2018), frequently what is described as a single "negotiation" is actually comprised of multiple negotiations with different partners, and frequently the same partners return to the bargaining table on multiple occasions. Meaning, what was once conceptualized as a single large Gestalt labeled a "negotiation" is better described as several discrete episodes—each with their own planning, bargaining, and implementing stages. Understanding transitions and recursions between these episodes is crucial in developing an open system framework of negotiations.

Importantly, the episode-centric approach advocated in my proposed framework simplifies efforts to understand the flow of the negotiation process. While understanding recursion between moves is essential when examining within-stage processes, applying the same timescale to the entire scope of the negotiation process is undesirable. Representing the microdynamics of the negotiation process in an uninterrupted stream can only be satisfactorily done with computational models (Cronin & Bezrukova, 2019). Therefore, an open system

framework that requires this level of temporal resolution cannot facilitate empirical research on a sustainable scale. Alternately, a feasible open system dynamics approach is centered on current and recent event management (Morgeson et al., 2015).

Conceptualizing negotiation as managing current and recent events reduces the burden of accounting for every moment that transpires in a negotiation. Instead, the emphasis falls on accounting for effects of past episodes on a focal episode. While a negotiation can comprise numerous episodes, the most important past episode is the one immediately preceding the focal episode. This is because the most recent episode explains the most variance, with each additional past episode explaining only incremental variance beyond the one preceding it. Therefore, an open system framework needs to address systematic differences in how one episode affects another episode.

The most developed existing approach for understanding transitions and recursions between episodes is found in the work of Curhan and colleagues (Becker & Curhan, 2018; Curhan et al., 2010). This work distinguishes between repeated and sequential negotiations, where *repeated* negotiations involve engaging in more than one negotiation episode with the same partner and *sequential* negotiations involve engaging in more than one negotiation episode with different partners. While not a formal framework, this Repeated-Sequential Approach acknowledges that the effect of one negotiation episode on another episode varies depending on the partner.

While the deliberate attempts of the Repeated-Sequential Approach to move beyond closed system bargaining is admirable, this approach remains quite limited in facilitating open system negotiation research. This limitation is due to focusing exclusively on the role of partners (same vs different) and failing to acknowledge the role of the task (same vs different). Indeed,

Figure 3

Degree of Strength for Between-Episode Relationships

	Same Partner	Different Partner
Same Task	Strongest	Strong
Different Task	Weak	Weakest

Note. Not all areas will be tested in the empirical section due to the breadth of the framework's scope.

both dimensions are essential in understanding the effects of one negotiation episode on another. For example, negotiating with several different car dealers for the same make and model of a car (i.e., different partners, same task) is qualitatively different than negotiating the price of a car relatively soon after negotiating the price of a house (i.e., different partner, different task). The following sections outline important theoretical processes and examples when crossing the dimensions of partner and task changes between episodes (see Figure 3).

Different Partner, Different Task

The effects between episodes are likely weakest when both the partners and task are different. This is because the effects of the prior episode are incidental to the focal episode. These incidental effects are in part because this relationship between episodes is best characterized as a transition, as the episodes are not nested within the partner or task. However, incidental effects can have an impact on decision-making, such as mood (Andrade & Ariely, 2009) or even anchoring by unrelated numbers (Mussweiler & Englich, 2005; Tversky & Kahneman, 1974). Additionally, when partners and tasks change with regularity, this may require negotiators to be especially mindful of prioritization, efficiency, and time constraints.

One area this type of between-episode relationship is most relevant is in contexts characterized by serial negotiations. For example, some decision-making positions in organizations may require individuals to engage in multiple loosely related negotiations. This could span various contexts, ranging from diplomacy to sales. Another area this type of betweenepisode relationship is most relevant is when individuals transition identities. For example, engaging in an inter-organizational negotiation one day, but an intra-organizational negotiation the next. As negotiations are not confined to the domain of work, this would also include the effect of negotiations at work on negotiations at home.

Same Partner, Different Task

The effects between episodes are likely weak when the partners are the same, but the task is different. This relationship is best characterized as recursion, as the episodes are nested within partner. These between episode effects are stronger than when the partners are different because of the shared history. This shared history becomes an asset if leveraged effectively, but a liability when poorly managed. For instance, negotiators may fail to adequately adjust to the new situation—relying too little or too much on experience. Further, personal matters can interfere such as negotiators turning a blind eye because of a good relationship (Curhan et al., 2008) or bad blood hampering a potentially effective interaction (Kilduff et al., 2016).

One area this type of between-episode relationship is most relevant is within-organization negotiations. For example, negotiating with a supervisor regarding personal career decisions (e.g., salary, promotions, etc.) as well as organizational decisions (intra-department budget allocations). Another area this type of between-episode relationship is most relevant is in long-term relationships. When one party works with or does business with another party long enough, eventually they will negotiate with the potential for multiple negotiations. In these instances, the history between parties will affect the negotiations.

Different Partner, Same Task

The effects between episodes are likely strong when the task is the same, but the partners are different. This relationship is best characterized as recursion, as the episodes are nested within the task. These between episode effects are stronger than when the partners are the same because the task is the reason the interdependent parties are negotiating. These relationships embedded in the task history affect changes in the negotiation process as well as satisfaction with this process. For instance, subjecting the present negotiation process to counter-factuals and

negative evaluations because it is worse than the past negotiation process or counter to expectations about the present. Further, individuals may satisfice because the present negotiation process is better than the past negotiation process or expectations about the present.

One area this type of between-episode relationship is most relevant is whenever a BATNA is possible. For example, developing a BATNA frequently requires negotiating with a different party, allowing for comparisons across offers and bargaining experiences. Another area this type of between-episode relationship is most relevant is when more than two people are involved. For example, over the course of a complex negotiation divided into multiple episodes, it is possible for the representative of one-party to change. This churn in the people involved can have an important effect on the negotiation processes. Indeed, such change can be strategically leveraged by a specific party to disrupt momentum, such as a "good cop, bad cop" approach. Alternatively, many forms of coalition building would fall within this category.

Same Partner, Same Task

The effects between episodes are likely strongest when both the partners and task are the same. This relationship is characterized as recursion, as the episodes are nested within partner and task. This type of between episode effect is strongest among the four types because both partners have a shared history in the present task. This shared history places a premium on adaptation. For instance, parties need to work together to manage new information, changing priorities, or shocks. Further, parties need to manage the superordinate goal each episode is working towards, rather than letting the present episode demand priority. More colloquially, parties cannot become so focused on winning the "battle," that they lose sight of the strategy to win the "war."

One area this this type of between-episode relationship is most relevant is in complex negotiations that require multiple episodes. For example, the sheer number of details and terms require sustained effort over time to arrive at an agreement across all terms (Helms et al., 2012). Another area this type of between-episode relationship is most relevant is when everything needed to achieve desired outcomes is not apparent in the initial episode. For example, frequently during the implementing stage, it becomes apparent that terms need to be revisited or additional terms considered (Jang et al., 2018).

In summary, the proposed framework provides considerable advantages over the Repeated-Sequential Approach in studying transitions and recursions between episodes. Rather than focusing purely on the effects of the partner in multi-episodic negotiations, my proposed framework also addresses the effect of the task, where the effects of the task are stronger relative to the effects of the partner. Importantly, focusing on the sequencing of episodes is analogous to sequencing of moves studied in the past. Rather than trace all possible communication dynamics throughout a bargaining stage, Weingart and colleagues (Kern et al., 2020; Sullivan et al., 2006; Weingart et al., 1999) pioneered the approach of sequencing communications and behaviors in the negotiation literature. After coding videos or transcripts, the researchers compare the counterpart's response to the negotiator (i.e., reciprocal vs. complementary) as well as the function (i.e., information seeking vs. offer extending) and orientation (i.e., distributive vs. integrative). This allows for meaningful simplifications of complex streams of negotiation processes. Thus, the logic of sequencing moves in the bargaining stage is extended in my proposed framework to sequencing episodes on a broader timescale.

General Summary on Time

In general, the proposed framework makes several contributions beyond existing frameworks as it pertains to negotiations and time. First, my proposed framework moves well beyond the IPO norm in negotiation research (Brett & Thompson, 2016) by addressing withinstage recursion. The process of within-stage recursion is incorporated from the System Dynamics Framework (Cronin & Bezrukova, 2019) in the team conflict management literature, while the unique content of within-stage recursion is outlined in my proposed framework.

Second, my proposed framework challenges how divisions of the negotiation process are conceptualized in the existing Three-Phase Framework (Jang et al., 2018) by addressing between-stage transitions. Rather than conceptualizing function-oriented phases with blurry temporal boundaries, my framework proposes milestone-oriented stages that have both more precise temporal boundaries and encompass a broader array of functions. Further, rather than relying extensively on recursion to understand the relationship between phases, my framework proposes that parsimonious transitions better describe the relationship between planning, bargaining, and implementing. These changes from phases to stages and from recursion to transitions facilitate a programmatic study of the negotiation process across time.

Third, my proposed framework meaningfully expands upon the Repeated-Sequential Approach (Becker & Curhan, 2018; Curhan et al., 2010) to address the role of the task as well as the partner in between-episode effects. In general, my newly proposed task effects are theorized to have stronger effects on subsequent negotiations than the partner effects in the existing literature. Specifically, a different task with a different partner will have the weakest effect, while the same task with the same partner will have the strongest. Together, my proposed open

system framework meaningfully expands existing theoretical conceptualizations of negotiations and time (see Figure 2).

Level

The open system paradigm not only recognizes that negotiations unfold across time, but also across levels. Negotiations, by definition, include interdependent parties working towards a joint decision (Thompson et al., 2010). This interdependence implies that negotiation is a multilevel phenomenon. Indeed, real world negotiations frequently occur between teams of negotiators (Mannix, 2005). These teams are often embedded in the strata of the organizations they represent. However, the multilevel nature of negotiations has received only a modest treatment in the negotiation literature (Cohen & Thompson, 2011). As discussed earlier, the current state of the study of negotiations in the organizational sciences is primarily characterized as a study of bargaining dyads.

For example, the incumbent framework of negotiations centers on the dyad. Brett and Thompson (2016) present a model of negotiations where individual level variables combine into dyadic processes. Specifically, individual interests and priorities combine to form the dyadic outcome potential, while individual strategies combine to form the dyadic interaction. This dyadic outcome potential and interaction predict the negotiated agreement and bargaining outcomes. Thus, the negotiation literature already recognizes that the multilevel nature of negotiations extends as far as the dyadic level.

However greater conceptual work is needed for an open system negotiation framework to incorporate additional levels in a programmatic way. Indeed, "resting on the laurels" of past research on dyadic negotiations is not an option, as there is evidence that best practices for negotiations at the dyadic level are not always best practices at the team level (Kern et al., 2020;

Moreland, 2010). Further, research related to team conflict management has made it clear that best practices in stand-alone teams frequently are not best practices in multiteam systems (Davison et al., 2012; Marks et al., 2005). Given that between-team negotiations are frequently used by organizations to address complex problems, it is crucial to develop a more robust representation of levels within an open system negotiation framework.

In the following sections, numerous developments in multilevel theory are incorporated into the negotiation process. This is essential as it is non-controversial to state that the research on team negotiations, while noteworthy, has not emphasized the multilevel nature of the phenomenon to nearly the same extent as the research on team conflict management or the team literature generally. Specifically, the next sections will focus on (a) what differentiates one level from another as well as (b) what effects one level has on another.

Divisions of Levels

This section focuses on the four levels of most relevance to social psychologists in the organizational sciences researching negotiations. As researchers have more thoroughly addressed the within- and between-person levels, the focus here is a critical overview of the types of phenomena examined at these levels. As the within- and between-team levels remain underexamined, these sections overview critical theoretical oversights as well as alternative ways to conceptualize these levels. Like the section on time, only a conceptual framework is outlined here. A more exhaustive discussion of existing research relevant to each of these levels is reserved for the systematic review.

Within-Person

Broadly, the within-person level constitutes the elements of negotiation primarily oriented around a single person. This includes individual affect, behavior, and cognition.

Negotiation research has a rich heritage of studying individual cognition and behaviors through, respectively, the study of decision-making biases (e.g., fixed-pie bias; Bazerman & Curhan, 2000) and discrete tactics (e.g., first offers; Hüffmeier et al., 2014). More recently, researchers have recognized affect as a critical component in the negotiation process (see van Kleef & Cote, 2018 for a review). Thus, the negotiation literature has accumulated an impressive array of findings on the within-person level.

Beyond these more robust areas of inquiry, the within-person level also includes individual differences and changes in an individual over time. Indeed, there is recent evidence that generally stable individual differences have a greater impact on negotiations than previously thought (Elfenbein et al., 2018). Alternatively, interactionist theories of individual differences define personality in terms of within-person consistency of behavior and have important implications for negotiation research (Elfenbein et al., 2022). Further, while there is research on patterns of concession-making over the course of a negotiation (Weingart et al., 1999), the collection of research on changes in an individual over time is less robust than other areas of negotiation. Conceptualizing within-person change as an important facet of within-stage recursion could facilitate important research in this area.

Between-Person

Broadly, the between-person level constitutes the elements of negotiation primarily oriented around dyadic relationships. This includes relationships in both singular dyads as well as collections of dyads in networks. The dyad is the most basic unit of negotiations (Brett & Thompson, 2016). Partially in response to criticisms of misalignment between dyadic theory and analyses (Krasikova & LeBreton, 2012), the study of negotiations is increasing the specificity of theory surrounding dyadic processes such as the nuances of social interaction (Boothby et al.,

2022) as well as the use of more sophisticated dyadic analyses such as the actor-partnerinterdependence model or social relations model (Elfenbein et al., 2022; Elfenbein et al., 2018).

Despite these steady advancements in the study of dyadic phenomenon in negotiations, there are considerably less advancements regarding the study of network phenomenon in negotiations. However, there are calls for researchers to "reconceptualize negotiations from largely one-shot, delimited interactions to a view of negotiations as involving *many actors over networks*, over time, and over space" (Gelfand & Gal, 2012, p. 445, emphasis added). Networks are often at play or implied in many existing areas of research, yet often go unexamined. For instance, the concept of a BATNA implies dyadic negotiations are embedded within a broader network of potential negotiation partners. Because researchers typically provide participants with BATNAs, little is understood about how negotiators navigate the network to effectively develop BATNAs despite BATNA development being inherently a network process.

For example, developing work on Phantom BATNAs suggests that the progress and timing of these network processes has important implications for subsequent episodes (Pinkley et al., 2019). For example, in labor markets employers frequently compete with one another to hire specific candidates and candidates compete with one another for a limited number of positions. Whether a negotiators BATNA only has potential (e.g., initial interviewing process) or is a fully realized agreement (e.g., an offer not yet accepted) will clearly have differential impacts on this process as well as the subjective outcomes following different bargaining episodes (Campagna et al., 2016). Thus, an important extension of the negotiation paradigm is to include collections of dyads in networks

Unfortunately, existing efforts to research networks in negotiations are incredibly limited. Researchers need to address this limitation in the literature by developing theory in negotiations
where more than two parties or members are involved. Often when multiple parties or members are involved there is the possibility of multiple simultaneous agreements between parties, as opposed to teams which require a single agreement to reflect the will of all parties. Whenever multiple simultaneous agreements are possible, arriving at the optimal solution is largely contingent on how individuals interact. These interactions include network structures, including Simmelian ties or triads, as well as network processes. Social networks will become increasingly important to consider as negotiation researchers move beyond studying singular dyads. Indeed, team conflict management researchers are beginning to appreciate the essential role of social networks play in mixed-motive contexts (Park et al., 2020; Shah et al., 2021).

Within-Team

The within-team level constitutes the elements of negotiation primarily oriented around a stand-alone team. In stand-alone teams, negotiators are motivated to optimize individual outcomes as well as collective outcomes. While pursuing collective outcomes, coalitions can and do form within teams (Gilin et al., 2013). However, in this level, one coalition cannot splinter off and enact their preferred terms independent of the other coalition. That is, typically multiple simultaneous agreements are not possible, rather a single agreement that reflects the will of all parties is required in teams. This is not to suggest network processes are not highly relevant within teams, as they are highly relevant. Rather, there are additional considerations beyond between-person processes when studying negotiations at the within-team level.

While there is certainly empirical research on stand-alone negotiation teams (Cohen & Thompson, 2011), what conceptually distinguishes dyadic negotiation processes from team negotiation processes remains ambiguous. This conceptual ambiguity is problematic, as evidenced by findings from dyadic negotiations failing to hold in negotiations involving stand-

alone teams (Kern et al., 2020; Moreland, 2010). This failure of findings to hold across levels suggests other frequently taught prescriptions may not yield the desired effects when applied in real world team negotiations. Fortunately, developments in multilevel theory in the organizational sciences can provide considerable conceptual clarity to guide the study of team negotiations.

A central tenet of multilevel theory is that teams are open systems susceptible to both process gains and losses (Katz & Kahn, 1978). Because teams collectively have access to greater resources compared to any single member (i.e., greater inputs), teams should outperform individuals (i.e., greater outputs) all else being equal. However, when there is a net process loss after accounting for process gains, teams may underperform individuals. Process loss is evident in the research on team decision-making. For example, hidden profile tasks show teams often do not fully utilize available resources (Toma & Butera, 2009). Further, social loafing and group think can lead teams underperform individuals (Price et al., 2006). Indeed, the possibility of process loss has led many negotiation scholars to argue that teams rarely outperform individuals (Hüffmeier et al., 2019) which some scholars believe justify the negotiation literature in remaining primarily a study of dyads.

However, this perspective that emphasizes dyads and process loss relies on assumptions that are largely inconsistent with the broader team literature. The first problematic assumption is that studying whether individuals outperform teams is a worthwhile endeavor in and of itself. This position is moot in many high stakes, real-world negotiations that are too complex or require more expertise than any one individual can provide. Indeed, it is because some tasks are too large for any one individual that justifies the existence of teams in the first place. Meaning,

simply enough, relying on a single individual is not always a viable option in real world negotiations.

Further, the definition of a team is two or more individuals pursuing an interdependent goal (Kozlowski & Ilgen, 2006). This makes a negotiating dyad, in the lexicon of the team literature, a two-person team engaged in a mixed-motive decision-making task (McGrath, 1984). There is no evidence in the team literature that mixed-motive tasks are an exception to the body of research on team size. While there is a curvilinear effect of team size on performance, there is no theory or evidence that satisfactorily justifies the assertion that a two-person team will consistently outperform a team of any other size. Indeed, the team literature has long moved past studying team size to other issues. One issue that might be particularly relevant to the study of negotiations is the work on over- and under-staffing, where the team size needs to increase commensurate with the complexity of the task. Answering *when* additional negotiators are required will yield higher utility prescriptions than attempting to answer *if* individuals outperform teams.

The second problematic assumption is that process loss is guaranteed, such as in distributive contexts (Cohen & Thompson, 2011). Process losses can exceed process gains, however research attempting to document contexts that this is prone to occur is not a substantive theoretical contribution nor is it particularly useful. A more useful approach is researching how to minimize process losses and maximize process gains, such as through leadership or communication structures. To accomplish this, negotiation researchers need to shift from "are teams relevant in negotiations?" to "how to optimize teams in negotiations?"

To facilitate this shift, negotiation researchers should consider the well-established distinction between processes and emergent states (Marks et al., 2001). Processes are "members"

interdependent acts that convert inputs to outcomes through cognitive, verbal, and other activities directed toward organizing task-work to achieve collective goals" (Marks et al., 2001, p. 357). Emergent states are "relatively enduring properties of the team rooted in individuals' thoughts and feelings" (DeChurch et al., 2013, p. 560). Both processes and emergent states are mechanisms for converting inputs into outputs (Ilgen et al., 2005). Indeed, meta-analytic evidence suggests distinguishing between processes and emergent states is key to advancing the study of team conflict management (DeChurch et al., 2013). These developments in related fields suggest research on team negotiations should programmatically study processes and emergent states in pursuit of embracing a more open system framework.

Between-Team

The between-team level constitutes the elements of negotiation primarily oriented around two or more teams working towards a common goal. Confronted with complex and dynamic problems too large for a single person to solve, organizations increasingly rely on teams of negotiators (Cohen & Thompson, 2011; Mathieu et al., 2017). For example, teams of negotiators are the norm in international negotiations, union negotiations, as well as in mergers and acquisitions (Mannix, 2005). As mentioned earlier, negotiation researchers begun to recognize that what is true for dyads is not necessarily true for groups (Howard et al., 2007; Kern et al., 2020; Moreland, 2010). This raises questions regarding the extent best practices for dyads are also best practices for groups. This is particularly troubling considering the relative scarcity of research on groups of negotiators.

To make matters worse, the groups of negotiators that are studied are not always comparable to the teams of negotiators frequently used in organizations. When researchers study negotiation in groups, they frequently take a multiparty approach using tasks like Towers Market

(Henderson et al., 2006) or SHARC (Epley et al., 2006). This multiparty approach can only adequately capture between-person or within-group dynamics. When researchers attempt to study negotiations between teams, they frequently scale up dyadic roles by assigning participants into two-person buyer and seller teams (Swaab et al., 2021). However, recent developments on multiteam systems demonstrate these scaled arrangements operate like standalone, cross-functional groups rather than two interdependent teams (Marks et al., 2005). They operate like standalone groups largely because there is insufficient specialization of roles (e.g., lead negotiator, legal expert, finance expert, etc.; (Mannix, 2005) and the systems are small (e.g., 4-6 members) rather than large (e.g., 10-15).

This distinction between small and large systems is critical as the conventional wisdom for standalone teams does not always hold in multiteam systems (i.e., "two or more teams that interface directly and interdependently... toward the accomplishment of collective goals"; Mathieu et al., 2002, p. 290). For example, dense communication networks in standalone teams helps team effectiveness, while in multiteam systems it has the opposite effect (Davison et al., 2012). This same pattern is also evident in other areas of team research, such as planning (Lanaj et al., 2013), mental models (Firth et al., 2015), and coordination (De Vries et al., 2016). There is even preliminary evidence in the negotiation literature, as within-team bargaining preparatory for between-team bargaining is qualitatively different from conventional within-team bargaining (Van Bunderen et al., 2018). In short, there is evidence for concern that findings established from studying negotiations in dyads and teams will not generalize to the multiteam systems increasingly used by organizations in high stakes situations.

Between-team negotiations in an open system paradigm are best conceptualized as multiteam systems. However, neither literature has yet begun to study between-team negotiations

Divisions of Levels



Note. Not all areas will be tested in the empirical section due to the breadth of the framework's scope.

as multiteam systems. On one hand, as discussed, the negotiation literature has primarily examined dyads and the equivalent of standalone teams. On the other hand, the multiteam system literature has near exclusively examined cognitive conflict, or resolving conflicts of viewpoints (Davison et al., 2012; De Vries et al., 2016). However, McGrath's (1984) circumplex of group tasks also identifies mixed-motive conflict, or resolving conflicts of interest. Mixed-motive conflicts frequently arise in negotiation contexts as well as in teams, yet multiteam system researchers have yet to address mixed-motive tasks. Thus, in both the negotiation and multiteam system literatures, there is no direct evidence substantiating best practices for the between-team negotiations organizations engage in.

In summary, negotiation scholars need to afford greater theoretical attention to the negotiation process at each of these four levels (see Figure 4). This is particularly necessary at the network level, the within-team level, and the between-team level. Fortunately, organizational scientists are uniquely equipped relative to other fields to conduct between-team negotiation research. This is because organizational researchers examine teams with greater frequency and sophistication compared to other fields that also study negotiations (e.g., marriage counseling, law enforcement, mergers and acquisitions, sales, legal, and international relations; Jang et al., 2018). Unfortunately, the research on team negotiation remains siloed from general team research compared to related work on team conflict management. However, negotiation scholars can incorporate the negotiation tradition with multilevel methodologies and theories as they further embrace an open system framework.

Cross-Level Effects

Not only are there multiple levels where negotiations take place in open systems, but

these levels are interdependent. Meaning, what occurs at lower levels can unfold upward affecting higher levels through "bottom-up" processes (Kozlowski & Klein, 2000). Further, what occurs at higher levels can cascade downward affecting lower levels through "top-down" processes (Kozlowski & Klein, 2000). Two important cross-level effects for the advancement of an open system negotiation framework include recursion between the context and the negotiation as well as entrainment between levels over time.

Recursion Between the System and Context

A key feature of an open system is that they are "open" to a constant flow of "environmental inputs" (Katz & Kahn, 1978), including input from the context the system is embedded in. This contextual input is both similar and dissimilar from the previously discussed inputs from (a) a prior time in the process (i.e., recursion within stages, transitions between stages, recursion and transitions between episodes) as well as (b) a distinct level (i.e., withinperson, between-person, within-team, between-team). Similar to these other inputs, contextual inputs are affected by the past output of the system (Ilgen et al., 2005). Dissimilar to other inputs, contextual input often exists at a higher level, making the effects less direct compared to other inputs.

For example, consider a negotiation between two organizations embedded in the same product market. The condition of the product market leading up to the negotiation serves as an important contextual input beyond the characteristics of each organization. The unique resources from the organizations (i.e., system input) combine with recent market changes increasing the demand for one organization's resources (i.e., contextual input) and affect the power of the organization with the desired resources (i.e., system process). As an aside, the effects of contextual inputs on the negotiation process can either affect parties differently (e.g., market

change affecting some resources) or similarly (e.g., time constraints). To continue the example, the organizations proceed with the bargaining stage. Once the bargaining is complete, the negotiators from each organization believe the agreement is instrumental and decided to begin work to implement the agreement. Implementing the negotiated agreement leads to increased performance for the organizations (i.e., system output). These changes in performance allow both organizations to capture a greater share of the product market (i.e., the context). This changed product market (i.e., contextual input) will affect subsequent negotiation episodes between the same organizations and may even inspire competing organizations to initiate their own negotiations to adapt to the changed market. This example illustrates that negotiations both affect and are affected by the context they are embedded in.

This recursion between system outputs and contextual inputs is a defining feature of an open system framework of negotiations. While previous open system efforts have encouraged negotiation scholars to examine the effect of the negotiation system on the context, such as broader organizational issues (Bendersky & McGinn, 2010), such bottom-up effects are only half of the picture (Katz & Kahn, 1978). In addition to bottom-up effects where the system affects the context (Schneider, 1987), there are also top-down effects where the context affects the system. Over time, there is a mutual and recursive influence between the context and the system. Both top-down effects from the context, bottom-up effects from the system, and their interplay over time are important for negotiation scholars to consider as they adopt an open system paradigm (see Figure 5).

Entrainment Between Levels of the System

Beyond the relationship between the context and the system, the different levels of the system are related to one another. Specifically, higher levels exert top-down influences on lower

Recursion Between the Context and Negotiation System



Note. Not all areas will be tested in the empirical section due to the breadth of the framework's scope.

levels and lower levels—through bottom-up processes—emerge into higher levels. Indeed, the emergent nature of these "throughputs" are fundamental in understanding how inputs are transformed into outputs in multilevel open systems (Katz & Kahn, 1978). Therefore, an open system negotiation framework needs to account for how this emergent process unfolds across levels and time. Key to conceptualizing emergence across levels and time in is entrainment.

Entrainment refers to "the active interplay among paces, cycles, and rhythms of different activities at different levels of analysis" (Ancona & Chong, 1996, p. 251). As applied to negotiations, entrainment can occur between stages and across levels. For example, leading up to a between-team negotiation, individuals begin planning by independently generating potential team strategies. These various potential strategies are weighed and evaluated as members of component teams meet in preparation for the negotiation. As part of this strategy selection process, team members bargain with each other to decide on a final plan for the negotiation. Thus, the between-team planning stage is entrained with the within-team planning and withinteam bargaining stages (see Figure 6). After reaching an agreement in the between-team planning stage, the component teams meet to begin the bargaining stage. The bargaining potential and interactions between-teams at this stage is a function of the priorities, interests, and strategies identified previously (Brett & Thompson, 2016). After reaching an agreement, the multiteam system would transition to begin implementing the decision. Thus, the between-team bargaining and between-team implementing stages are entrained within the within-team implementing stage (see Figure 6).

This example illustrates that the processes that occur at different levels of a negotiation episode can synchronize and resonate with one another. Importantly, entrainment is not limited to the stages of negotiation. Indeed, this entrainment between stages example relies on the

Entrainment of Stages across Levels



assumption that members of component teams have conflicts of interest requiring within-team bargaining before between-team bargaining, rather than merely conflicting points-of-view. This is a reasonable assumption (Halevy, 2008), however, as frequently negotiation teams are crossfunctional, representing different areas of expertise (e.g., finance, legal, etc.). It is possible that the terms of the between-team agreement may differentially impact members of the component teams and the divisions they represent. This potential conflict of interest also has important implications for the selection of representatives in negotiations.

General Summary on Level

When theorizing about negotiations from an open system perspective, the levels of the system, how levels interact with each other, and how levels interact with the context are all essential elements to consider. Regarding the division of levels, my proposed framework makes several contributions beyond existing approaches. For example, at the between-person level the proposed framework argues that networks are often implied, but rarely studied. However, there are numerous areas with considerable potential, including BATNA development, representatives, and multiple simultaneous agreements. At the within-team level my proposed framework argues that the incumbent approach to conceptualizing team negotiation is overly focused on comparing dyads and teams as well as process loss. However, drawing more deeply from the existing team literature might yield novel theoretical insights regarding staffing, interventions to maximize process gains and develop beneficial emergent states. Finally, at the between-team level my proposed framework argues that it is common practice to scale up a dyadic task and mislabel it as a "between-team negotiation." This suggests that much of the work demonstrating individuals outperform teams might simply demonstrate over-staffing effects, where adding team members with no unique specialization adds marginally to the input of the system while detracting

considerably in terms of process loss. Thus, not only the theory, but the research designs are contributing to the mixed findings in the literature.

My proposed framework also expands on the existing negotiation paradigm by articulating how the different levels of the system interact with each other and the context over time. Specifically, top-down and bottom-up effects drive recursive cycles between the context and the system over time. Further, the proposed framework argues that different levels of a negotiation are entrained across time. Specifically, entrainment of between-stage transitions across levels. However, entrainment across time and levels is not the only way time and level align. For instance, within-stage recursion and the within-person level frequently align as well as between-episode recursion and system-context recursion frequently align. Mapping negotiation

Overall, the proposed open system framework, with the broad divisions of time and level, vastly expands the scope of negotiation research. The scope of this framework is not limited to a specific set of constructs. Rather, this framework encompasses all constructs already studied in the negotiation literature and, more importantly, many that are yet to be studied. This breadth of scope is why no single study can—or should attempt—to encompass every aspect of this framework. Instead, this framework serves both to organize existing research and identify understudied areas that are prime candidates for future research. By informing future research, this framework can move the field considerably closer to adopting an open system paradigm.

EXISTING OPEN SYSTEM RESEARCH: A SYSTEMATIC REVIEW

While the theoretical foundations outlined the open system negotiation framework and evaluated existing theoretical approaches, it did not consider in depth existing empirical research. The following section uses the proposed framework to conduct a systematic review of recently published literature in top negotiation outlets. Such a review serves both to organize recent empirical research and critically evaluate the extent the negotiation literature addresses various domains of the open system paradigm. This organization and evaluation have more than mere diagnostic implications, however, and can also identify fruitful areas for future development. Thus, this systematic review organizes existing findings within the open system paradigm, evaluates the current state of the literature in each domain, and identifies potential future directions.

The Purpose and Need for the Current Review

The need for a systematic review of recent negotiation literature is evident when examining the topics and timespans of existing reviews. Many negotiation literature reviews focus on a specific subdomain of the literature, such as cross-cultural negotiations (Adler & Aycan, 2018), gender (Bowles et al., 2022), emotions (van Kleef & Cote, 2018), individual differences (Elfenbein, 2015), justice (Druckman & Wagner, 2016), or naivete and cynicism (Tsay et al., 2011). The more general literature reviews covered either dated or unclear timespans. For example, Bazerman and Curhan (2000) examined trends of research through the 1960's and 1990's, while Brett and Thompson (2016) and Boothby and colleagues (2022) did not disclose their sample selection procedures. The literature reviews relevant to open system paradigms also used dated or unclear timespans. For example, reviews of turning points in negotiations (Druckman & Olekalns, 2013) as well as the different levels negotiations take place (Thompson et al., 2010) did not disclose their sample selection procedures. Further, Jang and colleagues (2018) focused primarily on work published by specialized experts rather than negotiation research published in management and psychology journals. Indeed, they focused their review of empirical work to those published between 1990 and 2005 (see Table 1 in Jang et al., 2018). This comprised a sub-sample of the journals addressed in the first systematic review of the open system negotiation literature (Bendersky & McGinn, 2010). Thus, there is a clear need for a systematic evaluation of more recent negotiation research relevant to the open system negotiation paradigm.

Literature Search and Review Procedures

To determine the article sample, I followed the recommendations of Hiebl (2021) as well as the precedent of systematic reviews in the negotiation literature. Bendersky and McGinn (2010) conducted a systematic review to evaluate the presence of a closed versus open system paradigm in negotiation research. They examined the empirical research published in top negotiation outlets from the years 1990 to 2005. Such journal-centric approaches help safeguard the rigor of the articles included in the review as well as provide a transparent and traceable articles sample (Hiebl, 2021). I followed this same journal-centric approach, and examined the articles published in the same top negotiation outlets from the years 2006 to 2020. Specifically, I limited the review to articles published in *Academy of Management Journal, Administrative Science Quarterly, American Journal of Sociology, American Sociological Review, Journal of Applied Psychology, Organization Science, Organizational Behavior and Human Decision Processes, and Personality and Social Psychology Bulletin. Using the Web of Science database, I conducted a Boolean search for articles using "negotiat*" in search terms, titles, key words, or*

Percentage of Time Articles Across All Negotiation Publications in Top Outlets from 2006-2020



Note. k = 192. Percentages are rounded to balance interpretation and nearest approximation. This figure represents the ratio of different areas of the negotiation framework as represented by all negotiation studies in the sampled journals.

Percentage of Time Articles Across Open System Negotiation Publications in Top Outlets from 2006-2020



Note. k = 98. Combined percentages do not total 100% because some articles contributed to more than one area of the framework. This figure represents the ratio of different areas of the negotiation framework as found in the sampled articles.

Percentage of Level Articles Across All Negotiation Publications in Top Outlets from 2006-2020



Note. k = 192. Percentages are rounded to balance interpretation and nearest approximation. This figure represents the ratio of different areas of the negotiation framework as represented by all negotiation studies in the sampled journals.

Percentage of Level Articles Across Open System Negotiation Publications in Top Outlets from 2006-2020



Note. k = 98. Combined percentages do not total 100% because some articles contributed to more than one area of the framework or the findings were not directly relevant to any specific level. This figure represents the ratio of different areas of the negotiation framework as found in the sampled articles.

abstracts. This resulted in 349 potential articles.

I then read the abstracts to identify empirical studies of negotiation, excluding reviews, meta-analyses, as well as empirical studies not relevant to the purposes of the review (e.g., hidden profile tasks, prisoner dilemma tasks). This yielded 192 articles. To refine the article selection further to address open system negotiation research, I read the methods of the remaining articles and identified studies that exclusively measured cross-sectional data on one-shot, bargaining dyads. This identified 94 articles that could only have limited empirical evidence for an open system negotiation paradigm and were, therefore, omitted. This resulted in a final sample of 98 articles for full analysis that reflects the most open system negotiation research in top negotiation outlets from 2006 to 2020.

I then read each of the 98 articles in the final sample to assign each article to the category or categories of the open system framework their findings best aligned with. The categorization process quantifies the disproportionate focus of recent negotiation literature. Of the 192 total articles that examined negotiations, roughly 60.00% of findings primarily pertained to the bargaining stage with approximately 81.25% of findings primarily pertained to the dyadic level. Thus, there is evidence of a deeply entrenched closed system paradigm. Figures 7 and 8 are the proportion of the broader 192 articles in each domain of the open system framework. These figures illustrate the broader state of the negotiation literature. As some articles fit in multiple areas, rounding was necessary to ensure the total was equal to 100%. Figures 9 and 10 are the proportion of the final sample of 98 articles in each domain of the open system framework. These figures illustrate the breakdown of articles in the present review. The following sections synthesize the findings of these articles and reflect the state of open system negotiation research.

Time

Within-Stage

Planning

How soon planning activities occur relative to the bargaining stage qualitatively changes the type of planning that occurs. Indeed, the temporal distance between when negotiators prepared an agenda for the bargaining stage and when negotiators expected the bargaining stage to take place affected their construal level (Henderson et al., 2006). Specifically, when negotiators expected the bargaining stage to take place one month after the planning stage, negotiators adopted a higher construal level and chose a more cooperative agenda. In contrast, when negotiators expected the bargaining stage to take place immediately following the planning stage, negotiators adopted a lower construal level and chose a more competitive agenda.

These proposed agendas can have strategic implications. Kteily and colleagues (2013) found that the order of issues in proposed agendas (consequential issues first versus last) affected the decision of the recipient to accept or reject the invitation to engage in negotiations. Low-power recipients were more likely to reject agendas with consequential issues last, as they interpreted this as a stalling tactic. In contrast, high-power recipients were more likely to reject agendas with consequential issues first, as they interpreted this as a threat. Thus, a negotiation strategy begins when the parties begin to interact, which frequently starts during the planning stage via invitations (e.g., salary negotiations, international negotiations).

These strategic implications from different planning activities raise questions about what differentiates high-quality from low-quality planning stages. Existing research on this area is limited. One essential dimension of a quality planning stage pertains to gathering and making sense of information. During planning stages, the challenge is typically not a shortage of

bargaining relevant information. Typically, the challenge is copious amounts of information and uncertainty about which information is relevant to bargaining. Discerning relevant information is both essential and resource intensive. Therefore, future research on the planning stage needs to examine optimal and efficient information processing. This can be done using a novel technique used by van Kleef and colleagues (2013) to study information processing motivation and recall in the planning stage. Participants were given cash to purchase information from a grid. The price of information was commensurate with the relevance of the information, with more relevant information accrued during the planning stage yet held the potential to increase the total compensation by increasing performance during the bargaining stage. This tradeoff requires participants to balance the opportunity cost with the potential return on investment. Thus, researchers can adapt this task to study optimal and efficient information processing in a way that is both salient and meaningful to participants.

Such research would greatly advance the field, as currently there are scarce best practices for the planning stage that are evidence-based. Indeed, only 7% of published negotiation research examined the planning stage, while 52% of recommendations from expert practitioners pertained to the planning stage (Jang et al., 2018). While future theoretical work is needed to refine what constitutes the optimal quality and duration of the planning stage, an excellent place for researchers to start is understanding how individuals arrive where typical negotiation research begins. Typically, participants are presented with tidy and relevant information already consolidated, with priorities clearly defined, a BATNA developed, the negotiation counterpart identified, and the logistics of the meeting established. These luxuries afforded to participants in bargaining-centric research are rarely experienced by practitioners without considerable effort.

This new research could build on existing research examining how goals translate into reservation points (Miles & Clenney, 2012) or how individuals select negotiation partners based on information they believe will give them a competitive advantage (Gladstone & O'Connor, 2014).

Bargaining

Several themes emerged from research within the bargaining stage, including stability, timing, trends, and shocks. When the use of a tactic is stable after choosing to use it, predictors of the initial choice to use a tactic are crucial to understand. Sullivan and colleagues (2006) found that tactic-related self-efficacy affected the initial choice to use either distributive or integrative tactics. These initial choices demonstrated strong inertia, with prior tactic use strongly influencing subsequent tactic use. These later tactics were strong predictors of negotiation outcomes. Such stability may explain why conversational dynamics (e.g., vocal mirroring) in the first 5 minutes of the bargaining stage predicted 30% of the variance in value claimed (Curhan & Pentland, 2007).

While sometimes negotiators may use tactics in a stable way, many tactics have differential effects depending on the timing of when they are used during the bargaining stage. For example, mimicking early in bargaining positively related to value claimed, mimicking at the midpoint of bargaining positively related to value created, and mimicking late in bargaining negatively related to value claimed (Swaab et al., 2011). In contrast to mimicking, first offers that occurred late in the bargaining stage resulted in more integrative and creative solutions than did first offers that occurred early in the stage due to allowing for greater information exchange (Sinaceur, Maddux, et al., 2013). Further, implied threats (via anger) and explicit threats were

more effective at eliciting concessions later in bargaining compared to early due to the heightened salience of an impasse (Sinaceur et al., 2011).

Multiple studies examined, not just the timing of a tactic, but trends over multiple rounds (van Kleef et al., 2006). This research shows that what is ultimately effective is not always initially effect. For example, Côté and colleagues (Côté et al., 2013; van Kleef & Côté, 2007) found that anger did not have an immediate effect, but the effect became stronger over the course of the bargaining stage. More specifically, surface acting anger elicited stronger demands from the counterpart, where deep acting anger elicited weaker demands (Côté et al., 2013). This suggests the regulation of an emotion is important beyond the mere expression of an emotion. Other research has found that, beyond the stable level of an emotion, the change in emotion is important. Transitioning from happy to angry led to higher economic and relational outcomes compared to steady-state anger (Filipowicz et al., 2011). This positive relational outcome was due to the pre-transition happiness creating an emotional buffer against the post-transition anger. Beyond a single transition, alternating between expressing anger and happiness (i.e., emotional inconsistency) elicited greater concessions from the counterpart (Sinaceur, Adam, et al., 2013). This effect of emotional inconsistency was augmented when anger was the last expression as opposed to happiness.

Finally, not all within-bargaining findings dealt with continuous processes, but also addressed shocks. For example, contrary to conventional wisdom, taking a break during the bargaining stage to reflect about the negotiation led to more competitive behavior and lowerquality agreements (Harinck & De Dreu, 2008). Rather, distraction breaks or breaks defined by active cooperative reflection could offset this negative effect. This suggests that how negotiators respond to shocks is important. Further, how negotiators respond to the context can influence

behavior during a shock. When under threat of exploitation, negotiators developed more creative malevolent negotiation tactics during a break in the bargaining stage (Baas et al., 2019).

Implementing

The implementing stage centers on converting the bargaining stage agreement into actual outcomes, frequently via contracts. Some contracts align interests between parties while other contracts invoke a reciprocation norm. Ultimately, reciprocation was more effective than aligning interests at motivating implementing behavior (Bottom et al., 2006). Yet, parties only chose this superior contract form in the presence of trust. Negotiators can facilitate trust by incorporating rapport building into the structure of the negotiation, specifically during the time between bargaining and contracting (Mislin et al., 2011). This structural factor compliments the contractual factors (e.g., sufficiently contingent contracts).

Additional research on the implementing stage is essential, as individuals make promises during the bargaining stage in the form of agreements yet actually keep those promises during the implementing stage. In instances where these promises are not kept, one option is to enforce implementation through third party interventions. While these interventions can appear quick and even convenient, a default reliance on third parties can incur considerable costs (Mislin et al., 2011). These costs are often avoidable when the necessary resources are invested to cultivate relational capital over time (Gelfand et al., 2006). Future research could compare such "sword" and "sickle" approaches in enforcing prior agreements. Future research could also expand upon examinations of implementing stages which are often limited to the context of employment negotiations (Bottom et al., 2006; Mislin et al., 2011). Indeed, employment negotiations often imply a power differential (e.g., employer and employee), however in many implementing

contexts the different parties are peers. The role of contracts and aligning priorities is less clear in these contexts.

Between-Stage

Planning to Bargaining

Psychological states in the planning stage about the negotiation partner can alter behavior in the bargaining stage. For example, anticipated guilt for deceiving a counterpart with an honest reputation increased truthful behavior (SimanTov-Nachlieli et al., 2020). However, when negotiators engage in cognitive reappraisal (reframing a situation to change the emotional impact), experiencing guilt in the planning stage did not deter unethical behavior in the bargaining stage (Feinberg et al., 2020). This suggests that how psychological states are managed while planning is perhaps more important than the psychological states themselves.

Not only can planning behavior neutralize the effects of psychological states, but planning behavior can also neutralize the effectiveness of counterpart tactics in the bargaining stage. For instance, when negotiators processed information about the competitive personality of their counterpart while planning, decreased trust rendered counterpart expressions of disappointment and guilt while bargaining ineffective (van Kleef et al., 2006). Such information about counterparts can also improve negotiation outcomes. When exposed to information in the planning stage that aroused suspicion about the counterpart, negotiators engaged in more information seeking during the bargaining stage which increased value creation (Sinaceur, 2010). Finally, relational anxiety led to lower reservation points and plans to make more concessions, harming economic capital yet helping relational capital (Amanatullah et al., 2008).

Psychological states in the planning stage about the negotiation itself can also alter behavior in the bargaining stage. Brooks and Schweitzer (2011) found that negotiations in general prompt anxiety, which leads to lower expectations and aspiration points. When the negotiation is construed as a conflict, rather than displaying threat-rigidity, individuals displayed a motivated focus by generating more original competition tactics (De Dreu & Nijstad, 2008). In contrast to offensive motivations, when negotiators perceived an exploitation threat, this triggered an aggressive defense motivation leading to the development of more malevolent negotiation tactics (Baas et al., 2019). However, not all psychological states have such negative effects. Negotiators who garnered positive expectations during the planning stage had lower impasse rates as well as more positive evaluations of their counterpart and the negotiation process (Liberman et al., 2010).

Beyond the effect of psychological states during the planning stage, the plans themselves can have various effects. Plans can affect bargaining behavior through goals. Even extremely difficult goals established during the planning stage led to higher aspiration points, first offers, and value claimed. (Miles & Clenney, 2012). Some goals are not ends themselves, but rather means to a superordinate goal. Trötschel and Gollwitzer (2007) describe a self-regulation strategy, where if-then plans are formulated. Specifically, negotiators plan a course of action once a specific milestone or means goal is reached. These if-then plans serve to coordinate means goals in a manner that facilitates the pursuit of a superordinate goal. Such self-regulatory strategies led to greater value created and claimed as well as reduced the negative effects of lossframing (Trötschel & Gollwitzer, 2007).

While ideally plans have the intended effect, planning behaviors can also have unintended consequences. The effort in searching for missing information about an issue, as opposed to readily accessible information, led to the perception that the issue was more important (Young et al., 2012). This could potentially cause negotiators to conflate more difficult

to obtain information with more important or useful information. Beyond affecting perceptions of information, planning behavior can also affect perceptions of the counterpart's position. Indeed, preparing questions about a counterpart's adversarial position led to more positive evaluations of both the counterpart and their adversarial position (Chen et al., 2010). Finally, plans may have unintended effects because they are not based on accurate information. Because negotiators frequently underestimate the size of the bargaining zone (i.e., small-pie bias), estimates of counterpart's reservation points are often inaccurate and become self-fulfilling (Larrick & Wu, 2007). Negotiators are less likely to make an offer beyond the assumed reservation point, meaning most agreements will land further below the actual reservation point than negotiators realize. This results in a population-level bias, where negotiators overestimate the relative amount of value they claimed (i.e., large-slice bias). Only when confronted with strong disconfirming evidence did negotiators revise their original estimate (Larrick & Wu, 2007).

Another reason bargaining behavior differs from plans is because negotiators deliberately depart from their plans. This departure is adaptive when individuals incorporate new, meaningful information. For instance, negotiators develop a mental model about the issues of the negotiation during the planning stage. However, as the bargaining stage progresses, negotiators update their mental model. As the mental models of the negotiator and counterpart converge during the bargaining stage, fewer impasses occur and greater value is created (L. Liu et al., 2012). However, departures can also be maladaptive, such as when negotiating with a rival (Kilduff et al., 2016). When bargaining with a rival, negotiators were more likely to abandon their reservation point established during planning (Malhotra, 2010). This occurs because of a goal

substitution effect, where the goal became to beat the opponent rather than to achieve the desired outcomes.

This suggests negotiators may prioritize winning ideal agreements, but wind up losing the ideal outcomes. Indeed, a limitation of negotiation research on the transition between the planning and bargaining stages is the absence of theory about a specific strategy regarding how negotiators will actually achieve a desired agreement. A strategy involves specific and coordinated goals, plans, and tactics to achieve a superordinate negotiation goal. This conceptualization departs from general distributive and integrative "strategies" which are perhaps more reflective of pro-self and pro-social motivations or general priorities (De Dreu et al., 2000; Pruitt & Rubin, 1986). Future research should prioritize the development of theory regarding episode-centric strategies.

Bargaining to Implementing

The tactics used and perceptions formed during the bargaining stage can have long-term, downstream effects on the implementing stage. For instance, low- and equal-power targets of anger make concessions to their counterparts when bargaining face-to-face, unlike high-power targets. Yet, low-, equal-, and high-power targets of anger all covertly sabotaged their counterparts during the implementing stage (Wang et al., 2012). Meaning, even when tactics have no overt or obvious detriment during the short-term (i.e., bargaining stage), they can have negative implications in the long-term (i.e., implementing stage). These patterns highlight the importance of utilizing tactics without deleterious side-effects. Disappointment, for example, elicited greater cooperation in both the bargaining and implementing stages compared to anger (Wubben et al., 2009). Further, targets of disappointment experienced less anger themselves as well as evaluated their counterparts more positively and forgiving (Wubben et al., 2009).

However, even apparent low-risk tactics, such as perspective taking, can backfire. Epley and colleagues (2006) found that perspective taking lead to reactive egoism during the implementing stage, where negotiators predicted others would act selfishly ultimately leading the negotiators to personally act selfishly.

Such errors are related to inaccurate perceptions based on the past as well as the resulting perspective about the future. Trust-related issues inherently involve uncertainty in predicting the future. To achieve cognitive closure, negotiators may make quick and lasting judgements about trust during the bargaining stage (Acar-Burkay et al., 2014). Once established, such judgements can be robust against disconfirming feedback that can arise in the implementing stage (Acar-Burkay et al., 2014). However, it is not always the information that arises across time, but the temporal distance itself that can change negotiations. Indeed, when there is greater temporal distance between the agreement made during the bargaining stage and the expected realization of outcomes during the implementing stage, negotiators engage in greater integrative behavior due to higher construal levels (Henderson et al., 2006).

Beyond the tactics and perceptions that transpire during negotiations, the outcomes of the bargaining stage directly impact the implementing stage. Importantly, Curhan and colleagues (2009) observed in a field sample that subjective value (i.e., feelings about the deal, process, self, and relationship) from the bargaining stage during hiring negotiations predicted compensation satisfaction and job satisfaction one-year later—while economic outcomes from the bargaining stage did not. Indeed, economic outcomes alone are frequently insufficient to cause rigorous deal implementation, requiring both trust and contracts to align incentives (Mislin et al., 2011). Balancing economic and relational outcomes is essential, as the process of negotiating can result

in relationship conflict (Hart & Schweitzer, 2020). This relationship conflict subsequently impacts post-agreement motivation, performance, and productivity (Hart & Schweitzer, 2020).

Between-Episode

Different Partner, Different Task

When engaging in another negotiation episode with a different partner and on a different task, the primary concern is spillover effects from the prior episode. For instance, Becker and Curhan (2018) found that high subjective value from the first negotiation increased feelings of pride and ultimately harmed economic performance in the second negotiation. This is because the benefits of subjective value are primarily relational, yet when working with a different partner on a different task, negotiators do not have the opportunity to capitalize on the enhanced relationship. Thus, there is strong reason to substantively address spillover effects. Even incidental emotions (which are short-term by definition), can have long-term impacts when a behavioral precedent is created (Andrade & Ariely, 2009). Frequently, past actions are used as a starting point for decision-making. Meaning, when an earlier decision was influenced by a fleeting emotion, it can still have an enduring impact (Andrade & Ariely, 2009).

While such spillover effects are likely, researchers have addressed them in different ways. Some argue spillover effects are unavoidable, to the extent they developed a unique research design to control for them (e.g., the unacquainted twins round robin research design; (Elfenbein et al., 2018). Others control for spillover effects across multiple episodes statistically (e.g., utilizing random intercepts in multilevel modeling; Mason et al., 2018). While yet others observe no evidence of spillover effects when switching to a different partner and a different task (van Kleef & De Dreu, 2010). Future research in this area could identify why and when such spillover effects are likely to occur.

Same Partner, Different Task

While tactics can have effects on subsequent stages, some tactics may also have effects on subsequent episodes. For instance, Ames and Wazlawek (2014) observed when a counterpart exaggerates their offense at a request (i.e., strategic umbrage) in a previous episode, this can lead the negotiator to believe their counterpart perceived them as too assertive. When in reality the counterpart perceived their behavior as appropriate (i.e., line crossing illusion). This limited selfawareness prompts the negotiator to use a subsequent, but unrelated, negotiation with the counterpart as an opportunity to make reparations. These reparation efforts involved appeasing the offended party by quickly agreeing to offers and resulted in less value created (Ames & Wazlawek, 2014). This decrease in value creation means both the strategic umbrage tactic and reparation efforts backfired.

In contrast to this delayed effect, some tactics appear to have a more sustained effect. Specifically, negotiators continued to make concessions to a counterpart who displayed anger in a previous episode due to increased perceptions of toughness (van Kleef & De Dreu, 2010). While this tactic appeared to maintain its efficacy while face-to-face, it also decreased the negotiators desire for future interaction with the counterpart (van Kleef & De Dreu, 2010) and could lead to private retaliation (Wang et al., 2010). Indeed, subjective value was a better predictor than economic value at predicting desire for future interaction in real world contexts (Curhan et al., 2006).

Prioritizing subjective value and maintaining positive relationships with counterparts is important, as negotiators may need to work together in the future. Even if future negotiation plans do not yet exist, it is important to avoid "burning bridges" and the costs of persuading negotiators to return to the bargaining table despite a negative shared history (Kteily et al., 2013).

One limitation of the negotiation literature is an abundance of focus on tactics to manage economic outcomes, with some attention to relational side-effects. However, there is not much on relational tactics to help manage relational outcomes and examinations of their economic side-effects. Theory on team processes differentiates interpersonal and task processes (Marks et al., 2001). Yet, negotiation researchers continue to neglect interpersonal processes despite identifying the importance of the outcomes they produce.

Different Partner, Same Task

Individuals frequently find themselves negotiating with a different counterpart during the same task. One reason is because the past negotiation episode—and perhaps the one with the preferred partner-resulted in an impasse. Negotiators who made the first offer in an episode that ended in an impasse experienced more regret, which resulted in fewer agreements, lower subjective outcomes, and greater cognitive depletion in subsequent episodes (Conlon et al., 2012). A second reason is because a better opportunity presented itself. Campagna and colleagues (2016) observed negotiators whose counterparts feigned anger in a prior episode reported lower subjective value (i.e., trust) and quickly reneged on their agreement after receiving an unexpected alternative offer. A third reason is due to developing a BATNA. Indeed, having invested effort in a BATNA in a prior episode had qualitatively different effects than the mere presence or absence of a BATNA which required no investment (Malhotra & Gino, 2011). Specifically, negotiators who invested in a BATNA developed a greater sense of entitlement and higher aspirations, leading to more opportunistic behavior (Malhotra & Gino, 2011). This has important implications for future research on BATNAs, as participants in lab research are typically presented with an investment free BATNA rather than negotiating to obtain it.

This highlights an important assumption in the negotiation literature: a given negotiation episode is an end in and of itself. However, a negotiation episode may be a means to an end. Examining non-agreement motives in negotiations, Kang and colleagues (2020, p. 1) argue the purpose of a negotiation episode could range from "stalling for time, gaining information, or blocking a competitor from reaching an agreement." Meaning, episodes are not equally important relative to one another, where negotiators may need to "lose a battle" to "win the war". This suggests the presence a macro-strategy across episodes (as opposed to the micro-strategy across stages discussed earlier). This notion is not limited to multiple episodes focused on different agreements but could also include multiple episodes focused on the same agreement. For example, a complex negotiation may require multiple episodes. Part of a strategy could include changing negotiators with different temperaments (e.g., "good cop, bad cop") to either disrupt the momentum of the counterpart or to otherwise gain the upper hand. Future theory is needed to develop the notion of a multi-episodic negotiation strategy.

Same Partner, Same Task

Whether because the scope of the negotiation is so large that it cannot be completed in a single episode or parties determine during the implementing stage that another episode is necessary, the same task can require multiple negotiations with the same person. Negotiating with same person on the same task can present certain advantages and challenges. Indeed, the notion of rivalry in negotiations relies on a history of past competition with an identifiable opponent. This shared history implied in rivalry can lead to systematically different behavior, such as increased unethical behavior (Kilduff et al., 2016). Molm and colleagues (2012) examined how the effect of relationship histories and relationship contexts affected the

development of relational capital. In general, they found that low-power negotiators are more sensitive to both context and history.

Despite the prevalence and importance of repeated negotiations with the same person and task, this area remains one of the most understudied areas in the open system framework of negotiations. Future research could examine the factors in an implementing stage that trigger another round of negotiations. Indeed, unexpected external challenges can arise or interdependent efforts to actualize the negotiated agreement can breakdown due to internal management shortfalls. Further, many important negotiations are complicated and unfold over multiple episodes, ranging from the conventional to the extreme. For example, 150 organizations participated in the negotiation of the ISO 26000, an international and normative standard for corporate social responsibility (Helms et al., 2012). Each organization was encouraged to bring 6 experts from specific areas to serve on 13 different committees. After coding proposed changes and voting decisions from multiple drafts, Helms and colleagues (2012) found that the negotiation frames of representatives affected their persuasiveness over time and ultimately inter-organizational settlement. While this negotiation is an extreme example, it illustrates both the importance of considering how desired outcomes are achieved over the course of multiple negotiation episodes as well as how negotiations can involve multiple people and unfold across multiple levels.

Level

Divisions of Levels

Within-Person

One important way that change occurs within negotiators is through learning. Kray and Haselhuhn (2007) observed that the extent individuals learned from negotiation trainings was
contingent on implicit negotiation beliefs about whether negotiating ability was malleable or fixed. Specifically, individuals with malleable beliefs displayed greater growth over multiple negotiation episodes and had higher long-term performance. Research on negotiation training has also found that individuals were able to transfer an acquired skill to a novel task (Moran & Ritov, 2007) as well as that training had both short- and longer-term effects (i.e., one month; Zerres et al., 2013). Interestingly, when examining training effects across dyads, integrative negotiation training demonstrated was more effective for some roles (i.e., sellers) than others (i.e., buyers; Zerres et al., 2013). This suggests the potential for integrative negotiations to display disjunctive task features, where the amount of value created is a function of the most effective integrative negotiator (Steiner, 1972). Beyond training, another way to learn is through reflecting on the past and generating counterfactuals. Additive counterfactuals ("if only I had") were more effective at creating and claiming value in subsequent negotiations than subtractive counterfactuals ("if only I hadn't"; Kray et al., 2009). Further, individuals with malleable implicit negotiation beliefs generated more upward counterfactuals (how things could have been better) after negotiating, leading to more value created in subsequent episodes (Wong et al., 2012).

Another way change occurs within negotiators is through adaptation. Flynn and Ames Flynn and Ames (2006) observed that females who were high self-monitors were more successful at adapting to the level of assertiveness of their counterpart compared to females low in self-monitoring, enabling high self-monitors to claim more value. However, males did not receive the same benefit from self-monitoring (Flynn & Ames, 2006). While the best approach in some circumstances is to adapt, in other circumstances the best approach is to persist. Negotiators who adopted a choice mindset perceived a greater zone of potential agreement, which resulted in increased persistence and negotiation outcomes (Ma et al., 2019). Another

factor that affects persistence in negotiations is personality-situation fit. Specifically, negotiators high (low) in agreeableness engaged in integrative (distributive) negotiations displayed greater persistence, positive affect, and physiological arousal throughout the negotiation (Dimotakis et al., 2012).

Between-Person: Dyads

In dyadic processes, it is not just the behavior but the interpretation that matters. One factor in negotiators interpreting behavior is considering the counterparts point of view. Gilin and colleagues (2013) found evidence for a task-social competency fit, where empathy was more effective in relational tasks, while perspective taking was more effective in cognitive tasks. These different approaches are attuned to different signals which can affect expectations. This can occur to the extent that taking the counterpart's perspective can result in more suspicion and selfish behavior by the negotiator (Epley et al., 2006). Particularly when the motives for counterpart behavior are ambiguous, suspicious negotiators are more likely to attribute motives to the counterpart behavior (Sinaceur, 2010). Such social perceptions based on ambiguous information are not always accurate. Indeed, negotiators often have inaccurate assessments of how their own behavior is interpreted by their counterpart. Not only is it difficult to deduce what another is thinking, but the strategic displays of emotion, typical of mixed-motive contexts, compounds the difficulty (Ames & Wazlawek, 2014). Nonetheless, these views about others impact negotiation interactions, perhaps even more than personally held views. For instance, pessimistic expectations about their counterpart's ethical views were better predictors of engaging in dishonesty than the negotiator's ethical views (Mason et al., 2018). Further, the counterpart's past integrative behavior was a better predictor of the negotiator's present integrative behavior than the negotiator's past integrative behavior (Sullivan et al., 2006).

Not only do interpretations of counterparts' behavior affect negotiators' responses, but counterparts' interpretations affect the efficacy of those responses. For example, only when a negotiator's angry response was perceived as appropriate did it lead to the counterpart making more concessions (van Kleef & Côté, 2007). When the negotiator anger was perceived as inappropriate, this actually had the opposite effect with the counterpart demanding more concessions. The interpretation of an emotion can also change depending on the focus of the anger. Offer focused anger led the counterpart to infer higher limits, resulting in higher counterpart concessions (Lelieveld et al., 2011). In contrast, person focused disappointment led to counterpart guilt, resulting in higher counterpart concessions (Lelieveld et al., 2011). The strategic use of emotion can also elicit different interpretations. Through contagion, early negotiator positive affect can increase counterpart positive affect, which can serve as a buffer against later negotiator anger (Filipowicz et al., 2011). However, strategic emotions can also elicit defensive responses from the counterpart. Specifically, feigned negotiator anger resulted in genuine counterpart anger and decreased trust (Campagna et al., 2016). Trust is an important factor in the efficacy of certain tactics. For instance, negotiator disappointment only led to more concessions when the counterpart trusted them. This increases the premium on maintaining and repairing trust in negotiations. When trust is violated, a promise to change behavior can speed up the process (Schweitzer et al., 2006), however the effectiveness of an apology was contingent on the interpretation, as prosocial counterparts cooperated following an apology while proself counterparts competed (van Kleef & De Dreu, 2010).

While these directional interactions across the dyad (i.e., the effect of one person on the other), there is also value considering the dyadic interactions more generally. By combining a round robin design with the social relations model, Elfenbein and colleagues (2018) were able

partition the amount of variance in negotiation outcomes among unacquainted sets of twins attributable to the negotiator, counterpart, and the dyadic interaction between the two. For economic outcomes, 24.8% was attributable to the dyad, with much less attributable to the negotiator (9.2%) and counterpart (9.2%). The opposite was found for subjective value, where 26.5% was attributable to the negotiator, with much less attributable to the counterpart (4.8%) and dyad (12.77%). These findings have important implications for the composition of traits in a dyad. While most negotiation research on dyadic composition focuses on the match-mismatch of the same traits (e.g., female-female, female-male, male-male), there is also potential across different traits (e.g., Machiavellian-need for affiliation).

Dyadic composition also extends to psychological states. For example, Sinaceur (2010) found that suspicious-trusting dyads created more value than either suspicious-suspicious or trusting-trusting dyads due to increased information exchange. This suggests the benefits of a trait or tactic are potentially contingent on the composition of the dyad. Indeed, mental simulation of a strong alternative (in lieu of an actual BATNA) led to higher aspiration points, first offers, and value claimed (Schaerer et al., 2018). However, the benefits of this imaginary BATNA were neutralized if the counterpart utilized the same tactic. This means in some instances differences across the dyad are desirable, while in other instances having high levels across the dyad are desirable. For instance, the effectiveness of cultural intelligence on predicting integrative sequences of behavior in mixed-culture dyads was determined by the lower-scoring member (Imai & Gelfand, 2010). These sequences, while perhaps conjunctive in nature (Steiner, 1972), involved coding transcripts to examine reciprocal tactics (distributive-distributive) and complementary tactics (distributive-integrative) across exchanges. Other researchers have used

type of coding to capture dyadic communication interactions in negotiations generally (Kern et al., 2020) as well as across cultures (Giebels & Taylor, 2009).

Importantly, while much of the research on culture in negotiations "treats demographic variables as proxies for cultural orientation and culture's influence on negotiators' behaviors as stable and static," there is a growing alternative approach which "treats culture as a series of situational cues that stimulate or constrain culturally conventional cognition and behaviors" (L. Liu et al., 2012, p. 292). This dynamic constructivism holds that cultural influences are contingent on individual and dyadic factors. For example, the mental models in intracultural dyads tended to converge to a greater degree than intercultural dyads, however this was contingent on the negotiators' individual motives. Specifically, epistemic motives (i.e., need for closure) inhibited while social motives (i.e., concern for face) facilitated the convergence of mental models in intercultural dyads (L. Liu et al., 2012). Beyond individual motives, other research has examined dyad composition. W. Liu and colleagues (2012) found that relationallyfocused cultures only displayed pro-social behavior when negotiating with an in-group member and when held accountable. Structural factors, like accountability and hierarchy, also play a role in cultural expression in negotiations. While vertical-individualist, horizontal-individualist, and horizontal-collectivist cultures followed an individually rational approach (i.e., maximized individual outcomes) when high in power, vertical-collectivist cultures followed a collectively rational approach (i.e., maximized group outcomes by personally taking fewer resources) when high in power (Kopelman, 2009). Not only does the negotiators' power matter, but so does the counterparts' power. Specifically, vertical-collectivist negotiators adopted a more competitive approach with a high-power, vertical-individualist counterpart, but adopted a more cooperative approach with a high-power, horizontal-collectivist counterpart (Kopelman et al., 2016). Thus,

vertical-collectivist negotiators will adapt their strategy to match their counterpart, but only when the counterpart is high in power.

While a considerable amount of negotiation research views the effects of culture as socially and contextually contingent, this is notably less so regarding the effects of gender. There are exceptions, however. For instance, Kray and Haselhuhn (2012), found that men in general take a more pragmatic perspective about ethics in negotiations, leading to greater unethical behavior. However, this was contingent on the individual beliefs of the negotiator, with fixed beliefs leading to more unethical negotiation behavior for men than malleable beliefs. Beyond individual beliefs, other research examined contextual factors. While women had consistently high relational capital, women created more economic capital in egalitarian contexts than hierarchical (Curhan et al., 2008). In contrast, men had high economic capital and low relational capital in hierarchical contexts yet had high relational capital in egalitarian contexts. Future research on gender in negotiations could adopt a more dynamic constructionist approach, like the research on culture, and examine in greater depth the socially (i.e., dyadic influences) and contextually contingent effects (Bowles et al., 2022).

Between-Person: Networks

While negotiation researchers often focus on a single dyad in isolation, there are numerous situations where several dyadic interactions organized in networks are important to consider. One area networks are important to consider in studying negotiations is regarding reputations. While reputations have their origins in history of behavior, there is a considerable amount of social interpretation involved. This may explain why the relationship between past behavior and reputation is often tenuous (Anderson & Shirako, 2008), particularly when an individual is less well known (i.e., is less central in a network). This suggests reputations, beyond

behavior, are also comprised of first and secondhand information that are compiled via network processes. Firsthand information, such as through personal experience with or direct observation of a counterpart, can affect negotiators' strategy. For example, observing a recording of a counterpart expressing ambivalent emotions (i.e., tension or conflict between experiencing two emotional states simultaneously) during a different episode led to anticipating the counterpart would act submissively and increased negotiator intention to dominate the counterpart (Rothman, 2011). In contrast, secondhand information also can affect negotiators' strategy. Specifically, negotiators anticipated more guilt when considering lying to and also lied less to a counterpart with an honest reputation compared to a counterpart with a friendly reputation (SimanTov-Nachlieli et al., 2020). However, the benefits of a positive reputation backfired when evidence contradicted the reputation. Thus, it is important to understand both how reputations are formed and maintained across various sources.

A second area networks are important to consider in studying negotiations is regarding representatives. This is because representatives are either a third party or are agents for a diverse constituency. Meaning, representatives are unlikely to be equally socially connected to every individual involved. For instance, when representatives are group members they can range from prototypical (i.e., reflect the common interests of the in-group) to peripheral (i.e., while interests still primarily aligned with the constituents, some similarities with the out-group). Indeed, van Kleef and colleagues (2013) found that peripheral representatives demonstrated higher information-processing motivation, recalled more information, were more attuned to social-information via counterpart emotion, and created more value than prototypical representatives. However, this only occurred when the procedures held representatives accountable to constituents (van Kleef et al., 2013). Further, constituents have different preferences for

representatives depending on the objectives of the negotiation. Peripheral representatives are preferred when economic capital is the priority, perhaps due to perceptions that they would make effective boundary spanners, while prototypical representatives are preferred when relational capital is the priority (Teixeira et al., 2011). Diversity of preferences also matter, even when the representative is an uninvested, third party. Specifically, regarding what tactics constituents want a representative to use, there must be a consensus among constituents for the representative to use cooperative tactics. In contrast, a minority of constituents wanting competitive tactics is sufficient to influence the representative's use of competitive tactics (Steinel et al., 2009). These effects of constituent composition had an effect independent of the representative's personal social motives (i.e., cooperative or competitive).

al., 2011). Perspective taking amplified these differences for between proself and prosocial negotiators.

Networks are especially relevant in negotiations any time there are multiple individuals involved and more than a single agreement is possible. This contrasts with team negotiations, where a single agreement is a decision that reflects the collective will of the team. Interestingly, despite calls to consider negotiations as part of networks (Gelfand et al., 2012), no social network analytic techniques were used to study negotiations in management journals where individuals were nodes. L. Liu and colleagues (2012), however, did use social network techniques to operationalize mental models with ideas as the nodes. The only study in the reviewed articles that used social network techniques was in a sociology journal (Molm et al., 2012). This is not surprising given this field is where social network analysis traces its roots. Despite this lack of apparent statistical familiarity, network theorizing is simply an extension of existing dyadic theorizing to involve multiple individuals. Importantly, network theory is not purely structural (e.g., embeddedness, centrality, boundary spanners, etc.), but includes how people change because of the network and how the network changes because of the people (Griffin & Hemsley, 2023). There is a considerable amount of potential in re-examining conventional negotiation domains through a network lens. For example, one negotiations agreement is another negotiations alternative, suggesting a network conceptualization might prove effective for studying BATNA development. Indeed, the very notion of a BATNA implies there are more parties involved than the two at the bargaining table.

Within-Team

Negotiation scholars recognize that "dyads are qualitatively different from groups... Studying only dyads, therefore, could produce misleading information about how those

phenomena operate in groups" (Moreland, 2010, p. 258). Indeed, Kern and colleagues (2020) observed teams held weaker fixed pie perceptions, used more integrative strategic behavior, and engaged in more complex communication patterns compared to dyads. Specifically, dyads tend to engage in simple reciprocity (e.g., offer-counteroffer), where sequences of team communication evident from intensive video coding changed both in terms of orientation (i.e., reciprocal versus complementary) and function (i.e., creating versus claiming). This more complicated strategy enabled teams to achieve optimal economic outcomes (Kern et al., 2020). Another example of how teams differ from dyads involves power and self-construal. Powerful, interdependent dyads made more generous offers, while powerful, interdependent teams made less generous offers (Howard et al., 2007). While some dyadic findings differ from team findings, other findings are consistent. For example, groups are still susceptible to anchoring bias when cooperatively motivated (de Wilde et al., 2018), however this bias is mitigated when groups are held accountable or when they are competitively motivated.

Part of the reason teams operate differently than dyads is the added complexity of intragroup interactions. For example, the diversity in terms of social motive composition can affect negotiation strategies. Prosocial negotiators adjusted their use of integrative and distributive strategies to match the composition of the group, however proself negotiators did not adjust based on the social context (Weingart et al., 2007). These differences in team composition can result in subgroups (Bezrukova et al., 2012; Lau & Murnighan, 1998). While conceptually related to coalitions, subgroups are distinct due to the requirement that a single decision must reflect the collective and subgroups are not capable of striking out on their own. To arrive at a single decision, hierarchical and consensus decision-making are alternative solutions with their own benefits and liabilities. For instance, in the presence of subgroups, hierarchal decision-

making enables the majority to bypass the minority, while consensus decision-making enables the minority to block decisions. However, both of these liabilities were observed only when the obstructing group had proself motivation, while neither of these liabilities were observed with prosocial motivation (Ten Velden et al., 2007). Further, both in the lab and in the field, hierarchy hindered value creation within teams while consensus facilitated value creation within teams (Van Bunderen et al., 2018)

This research highlights that it is not the presence of differences between members, but how teams manage these differences that matter. Indeed, this is in large part why team researchers, in contrast to negotiation researchers, have dedicated less effort to examine team size (e.g., two versus *n* members) and more on ideal ways to maximize process gains and minimize process losses. This includes numerous team processes and emergent states that facilitate the conversion of team inputs into team outputs (Marks et al., 2001). While there is a considerable amount of research on team processes and emergent states (DeChurch et al., 2013), there remains only limited research on such constructs in negotiations. One exception in the reviewed articles examined iterative feedback between two emergent states, shared cognition and group identification, which both increased integrative gains (Swaab et al., 2007). However, considerably more research is needed in this area.

Between-Team

As discussed earlier, the planning stage for between-team negotiations frequently involves within-team bargaining due to diversity in team preferences. Importantly, this withinteam bargaining preparatory for between-team bargaining is qualitatively different from conventional within-team bargaining. Van Bunderen and colleagues (2018) found evidence of this in both lab and field settings. Specifically, hierarchical structures led to intra-team power

struggles while negotiating a team strategy whereas consensus structures did not. However, this difference was only observed in the presence of inter-team conflict, when team members expected the strategy they were developing would directly affect between-team competition (Van Bunderen et al., 2018). Thus, what is true for standalone within-team negotiations does not generalize to within-team negotiations as part of the between-team planning stage—let alone the actual between-team bargaining stage. This underscores that what is true for standalone teams is unlikely to hold in the between-team system context—even when the teams have yet to interact.

The closest representation of between-team bargaining in the reviewed literature was conducted by Halevy (2008). This study criticized the team negotiation literature for assuming teams had uniform interests and examined the effects of within-team conflict on the negotiations between two four-person teams. Teams composed of members with dissimilar payout structures performed worse than teams with similar payout structures (Halevy, 2008). Consistent with the open system paradigm, this study captured larger teams and addressed diversity in interests among members. However, the simplicity of and lack of specialization in the task suggest this team will operate more akin to a standalone team than a true multiteam system. This being said, the descriptive finding of the study, that ununified teams will underperform unified teams at the bargaining table, is likely to generalize to multiteam systems. Yet, to generate prescriptive findings would require examining how true multiteam systems manage diversity of interests among members.

Importantly, there is evidence organizations engage in meaningful negotiations best conceptualized as multiteam systems. In the aforementioned ISO 26000 inter-organizational negotiations, organizations were requested to bring six representatives with expertise in at least one of seven different areas to serve on different committees (Helms et al., 2012). Again, while

this is an extreme example that is not truly a multiteam system, it does demonstrate that specialization and divisions of labor are ways that organizations manage complex negotiations. Not only are the structures different in more complex systems, but the inputs may differ as well. For instance, high-stakes, complicated negotiations are unlikely to be conducted by entry level managers. Rather, more senior leadership will oversee the negotiations. However, Hildreth and Anderson (2016) observed in field data that teams composed of high-power leaders failed to accomplish goals compared to teams composed of low-power leaders. Meaning, despite being peers (i.e., power has a low standard deviation), teams with high average amount of power underperformed teams with low average power. This was due to status conflict, decreased focus on the task, and less effective information sharing. However, high power teams were more creative and persisted longer on difficult tasks (Hildreth & Anderson, 2016). This underscores the importance of understanding how to manage and lead teams of negotiators.

Cross-Level Effects

Entrainment Between Levels of the System

Top-down effects within a system refer to the effect of a higher level of the system on a lower level of the system. For example, the effect of decision-making structures (Van Bunderen et al., 2018) and accountability systems (de Wilde et al., 2018) on the social motive composition of the team or how the team interacts (Ten Velden et al., 2007). Bottom-up effects within a system refers to how lower-level inputs combine to form higher-level outputs. For instance, the social motive composition of a team affecting the strategy a team will use (Weingart et al., 2007) or the power composition of a team contributing to dysfunctional team processes (Hildreth & Anderson, 2016). Beyond how inputs affect throughputs, bottom-up effects also include how throughputs affect outputs. For example, team processes can lead to emergent states, such as

subgroup conflict negatively affecting team identification (Halevy, 2008) or text-based communication leading to emotional contagion in virtual teams (Cheshin et al., 2011). Recursive cycles between emergent states and subsequent team processes are also possible (Cronin & Bezrukova, 2019; Marks et al., 2001).

Beyond top-down and bottom-up effects, entrainment between levels also has important implications for research on cross-level effects. As discussed earlier, the planning stage for a between-team negotiation will frequently include a within-team bargaining stage (Van Bunderen et al., 2018). However, entrainment also has important implications for appointing representatives, as the goals (Teixeira et al., 2011) and diversity of perspectives (Steinel et al., 2009) of the constituency will affect the type of representative appointed and their bargaining behavior. For both between-team and representative negotiations, how differences are managed prior to the between-party bargaining is essential. This highlights the importance of leadership, in helping to unify a party during the between-party planning stage as well as managing information flow during the between-party bargaining. Future research could also examine lower-level phenomenon that happen during team planning that can affect team bargaining. For example, dyads may independently engage in negotiation episodes to secure the support of another member on a given position prior to the entire team bargaining. Indeed, many coalitions, subgroups, and team outcomes may be influenced by dyadic processes that occur before the collective bargaining stage begins.

Recursion Between the System and Context

While entrainment between levels of the system is an area for future research, so is recursion between the system and the context it is embedded in. When Bendersky and McGinn (2010) examined open system phenomenological assumptions in the negotiations literature, they

identified external effects as an important element of an open system negotiation paradigm. They described external effects as occurring when the negotiation affects "larger organizational issues outside the negotiation itself" (Bendersky & McGinn, 2010, p. 786). This identifies a bottom-up effect of the negotiation system on the embedding context. However, open systems are open in the sense that "the constancy of environmental inputs cannot be assumed but must continually be the subject of investigation" (Katz & Kahn, 1978, p. 3). In this sense, a more complete open system negotiation paradigm also addresses top-down effects of the context—both as inputs as well as boundary conditions. Further, there is potential for recursion: where outputs of the system affect the context, where in turn the context serves again as input of the system (Ilgen et al., 2005).

Research has examined bottom-up effects of negotiations on industry standards (Helms et al., 2012), organizational commitment (Hornung et al., 2008), as well as compensation satisfaction and job satisfaction (Curhan et al., 2009). Just as the interactions of negotiators can have a bottom-up effect on the context the negotiation is embedded in (e.g., industry standards, organizational culture; Schneider, 1987), this context can have top-down effects on future negotiations (Curhan et al., 2008). Among the most frequently studied top-down effects involve gender stereotypes and culture. For example, stereotypic inferences from facial features predicted negotiation selection. Specifically, negotiators preferred feminine faces in either a male or female counterpart, but masculine faces when selecting either a male or female agent (Gladstone & O'Connor, 2014). Further, stereotypic assumptions that females are more easily misled due to perceived lower competence led to in increased likelihood of females becoming targets of deception. (Kray et al., 2014). Culture also had an effect on negotiator responses to persuasion tactics over the course of hostage negotiations (Giebels & Taylor, 2009). Such

sociological top-down effects are important in an open system negotiation paradigm. However, a dynamic constructionist perspective that examines how bottom-up processes both interact with these top-down effects is a future direction with considerable potential (L. Liu et al., 2012), particularly involving gender and negotiations. Other top-down effects include the influence of the geo-political context on negotiations (Giner-Sorolla & Maitner, 2013; Kteily et al., 2013; Liberman et al., 2010). For example, dehumanization of the counterpart increased the likelihood of exacting retributive justice (e.g., punishment) as opposed to restorative justice (e.g., resolution via negotiation; Leidner et al., 2013).

However, the existing literature on recursion between the system and context is limited as it does not address the task context. As an exception, Brooks and Schweitzer (2011) introduced a continuous shrinking-pie task, where the time it took to arrive at an agreement (in units of offercounteroffer rounds) directly impacted the total amount of resources negotiators could divide. In this sense, there was a direct impact of the negotiation on the broader context and visa versa. Future research could expand other tasks to incorporate this type of logic. For example, the Shark Harvesters and Resource Conservation task (SHARC; Wade-Benzoni et al., 1996) examines negotiations between commercial and recreational fishing organizations about the collective over-harvesting of coastal sharks poised to harm the industry. The SHARC task is frequently used in negotiation research (Epley et al., 2006; Kopelman, 2009; Kopelman et al., 2016). Conventionally run, this task involves two parts, with the first involving negotiations about how the organizations need to adjust their fishing practices and the second involving organizations choosing how much to harvest in the future. Future research could examine multiple episodes of the SHARC task, where the amount each organization harvested directly affects the amount available for the industry to harvest in the next round. This type of research

would greatly advance open system negotiation research on recursion between the system and the embedding task context.

Conclusion

This systematic literature review uses the open system negotiation framework to organize and evaluate existing findings. This approach takes stock of what is known as well as identifies deficiencies in the knowledge base and promising avenues for future research. A central argument to the open system negotiation framework is that findings derived from studying a cross-section of dyadic bargaining (i.e., closed system) cannot substitute for research dedicated to unpacking how negotiations unfold across time and levels (i.e., open system). Closed-system research cannot substitute for open-system research because there is no guarantee that findings will hold in the open-system contexts where real world negotiations frequently transpire. These areas where findings are unlikely to hold are promising opportunities to bridge the practitionerresearcher divide as well as promising avenues for future research.

Clearly, as the open system negotiation framework can encompass nearly 100 articles with ample room for more, the entire scope of the framework cannot be addressed by a single empirical study. Rather than informing a single empirical study, this framework is intended to provide a unique lens to reexamine well established areas as well as provide prescriptive directions on the areas least understood in the negotiation literature. Of the least understood areas according to this systematic review, two areas are particularly promising for an initial test of the open system framework. The first area is in the Time dimension: between-episode recursion involving the same people engaged in the same task. The second area is in the Level dimension: recursion between the context and the system.

Between-episode recursion and recursion between the context and the system are particularly promising for an initial test of the open system framework for at least two reasons. The first reason is that they frequently occur in real world contexts yet are infrequently studied (e.g., only 1% of the research over fifteen years in top negotiation outlets addressed negotiations involving the same people negotiation the same task over multiple episodes). The second, and more important, reason is that studying them is a modest departure from the conventional paradigm that can result in profoundly different predictions from the prevailing wisdom. Multiepisodic negotiations can take the form of repeated bargaining tasks involving the same dyads, while recursion between the context and system can take the form of the contextual inputs changing from episode to episode. For example, the context of the multi-episodic negotiations is the performance of the joint venture is declining requiring additional bargaining. Yet in such a situation, prescribed practices supported by conventional wisdom may not hold.

In the following section I will empirically examine one of the most robust and widely prescribed practices: utilize integrative strategies to optimize outcomes for both parties. While traditional closed system research has examined "one shot" negotiations in a static context, I will examine multi-episodic negotiations in a dynamic context. As discussed later, this study addresses more than two areas of the framework, however these two are the most significant changes. These changes reflect a modest departure in terms of research design yet yield an opposite prediction from the incumbent consensus: integrative strategies will underperform distributive strategies in optimizing joint outcomes. The objective of this modest departure is to demonstrate that small changes to how negotiation research is conducted can have a great impact on novel developments in the science of negotiation. Fulfilling this objective would justify the greater effort for future work to take greater departures from the incumbent paradigm (e.g.,

between-team negotiations, networks of negotiators). In essence, while the systematic review demonstrated how the proposed framework can organize and evaluate existing research, this initial test will examine the efficacy of the framework in guiding future research.

WORKING TOGETHER TO OUR COLLECTIVE DEMISE

Traditionally, researchers end their concern once the negotiators reach an agreement. Yet, negotiators must implement these agreements to secure desired outcomes (Bottom et al., 2006). Unfortunately, how negotiators effectively secure desired outcomes is not well understood. In part, this is because implementing agreements is rarely straightforward in the modern workplace. For example, unexpected market shifts can change priorities reducing the utility of previous agreements. Alternatively, agreements might require greater enforcement than originally expected (Mislin et al., 2011), reducing the potency of previous agreements. For these and other reasons, securing outcomes is rarely straightforward and negotiators must often return to the bargaining table to recalibrate (Jang et al., 2018). This suggests that multiple negotiation episodes—involving the same task and the same partner—are often required to secure desired outcomes. Such multi-episodic negotiations have important strategic implications for negotiators.

The strategies recommended by existing research focus on the role of agreements and relational capital. Integrative strategies are the primary means negotiators achieve Pareto optimal agreements through trade-offs. Identifying optimal trade-offs requires negotiators to exchange information and cooperate. This cooperation can facilitate the development of relational capital. Relational capital is especially relevant in instances where negotiators can leverage it, such as in repeated negotiations with the same person (Becker & Curhan, 2018; Curhan et al., 2010) or in contexts where it is instrumental to economic outcomes (Hart & Schweitzer, 2022). Relational capital might also enable negotiators to adapt to unforeseen challenges that arise during the implementing stage. For example, research has shown that cohesion and trust increase adaptive performance for teams in dynamic contexts (Langfred, 2007). Thus, existing research would

suggest integrative strategies will help achieve desired outcomes in multi-episodic negotiations with the same partner on the same task.

However, multi-episodic negotiations unfold over time and even research on single negotiation episodes suggests that what is true at one time in a negotiation is not always true at another. For instance, first offers in the bargaining stage have a disproportionate effect on value claimed relative to subsequent offers (Loschelder et al., 2016). Further, first offers that occur later in the bargaining stage lead to greater value creation than earlier first offers (Sinaceur, Maddux, et al., 2013). This occurs, not just within stages, but also between stages. For instance, tactics that are effective at eliciting concessions in the bargaining stage can backfire during the implementing stage (Wang et al., 2012). While this research demonstrates history matters within an episode, this is especially the case with multiple episodes. Specifically, the strategies used in one episode may have unintended consequences on subsequent episodes (Conlon et al., 2012).

Indeed, strategic recommendations based on findings from single negotiation episodes (i.e., beneficial effects of integrative strategies and relational capital) may have the opposite effect depending on how negotiators adapt to contextual inputs across multiple episodes. Contextual inputs continually influence open systems (Bendersky & McGinn, 2010), such that they are "continually in a state of flux" (Katz & Kahn, 1978, p. 3). One important contextual input is the progress towards translating an agreement into desired outcomes. Despite an agreement's initial promise, some negotiation agreements and relationships do not justify continued investment of resources as they are unlikely to yield desired outcomes (Sleesman et al., 2018). When a relationship is unlikely to yield desired outcomes due to a contextual change, a negotiator ought to adapt. However, utilizing integrative strategies in past episodes to develop relational capital can also lead to overevaluations of its economic relevance (Hart & Schweitzer,

2022). Having sunk more resources to develop relational capital, negotiators who utilize integrative strategies are more hesitant to abandon the relationship and more likely to escalate commitment than those who rely on distributive strategies. This tendency to escalate, ironically, can occur even when both parties have alternative offers with more promising outcomes than the existing relationship. Meaning, while integrative strategies can lead to higher joint gains and optimal *agreements*, they can also lead to lower adaptability and suboptimal *outcomes* for both parties.

This study reflects the first empirical examination of implementing stage challenges that necessitate a return to the bargaining table while unpacking the effects of previous negotiation episodes. In doing so, this study makes at least three contributions to the practice and science of negotiations. First, the introduced task represents an empirical advancement for the open system negotiation paradigm as well as a unique multi-episodic tool for negotiator training initiatives. Second, this study integrates research on negotiation, escalation of commitment, and Relational Attribution Theory (Eberly et al., 2011). Specifically, each type of causal attribution (i.e., internal, external, and relational) uniquely affects negotiator behavior through subjective perceptions of the economic relevance of relational capital. Further, the argument is presented that escalation of commitment decision-making bias is comparable to the multi-episodic negotiation agreement bias. Finally, this study illustrates that what is true at a cross-section of a negotiation may not be true in the long-term. Indeed, the efficacy of a strategy is not purely based on the extent it facilitates optimal agreements, but also by the extent it facilitates adaptability and optimal outcomes. These findings reinforce the call to negotiation researchers to reexamine conventional wisdom through an open system lens.

Hypothesis Development

Open Systems

The open system paradigm possesses greater potential to expand the negotiation literature than the incumbent closed system paradigm. While the entrenched closed system paradigm holds that researchers can satisfactorily examine components of the system in isolation and that the system is independent from the context, the open system paradigm holds that researchers often need to examine interactions between components of the system as well as between the system and the embedding context (Bendersky & McGinn, 2010). The closed system paradigm undergirds the dominant study of one-shot, cross-sectional studies of bargaining dyads—which researchers have attributed to exacerbating the research-practitioner divide (Hüffmeier et al., 2011), the researcher-researcher divide (Bendersky & McGinn, 2010), as well as inhibiting the development of a general theory of negotiations (Jang et al., 2018).

In contrast, the open system paradigm expands theoretical and empirical horizons to include planning and implementing stages, dynamics within and between episodes, as well as how the context interacts with the negotiation process. In addition to these under examined areas, it provides a novel lens through which to reexamine conventional wisdom and research areas. Thus, the open system paradigm is unique in its ability to facilitate research in new areas and examine old areas from new angles. Several new areas and new angles informed by the open system paradigm are particularly relevant given the present research question regarding the potential for integrative strategies to lower adaptability and suboptimal outcomes for both parties. These new areas and new angles align across two dimensions: time and levels.

Figure 11

Theoretical Model of the Effect of Negotiation Strategy on Escalation of Commitment



Time

Several areas of the time dimension of the open system framework are relevant to the present research question. The first area pertains to the transitions between stages. Specifically, the negotiation strategy adopted during the planning stage will affect perceptions of relational capital developed during the bargaining stage ultimately affecting escalation of commitment during the implementing stage. This between stage focus on strategy departs from the within stage focus of typical research and accounts for the role of time in strategy related relationships. Thus, the relationships between variables of the theorized model reflects the between-stage transitions put forth in the open system framework (see Figure 11).

The second area pertains to recursion between episodes. Specifically, the context of the study involves repeated bargaining episodes involving the same partners engaged in the same task. This focus on the same task differs from existing research on multiple negotiation episodes, which only distinguishes between episodes based on the consistency of the partner: repeated (i.e., same partner across episodes; Curhan et al., 2010) and sequential (i.e., different partner across episodes; Becker & Curhan, 2018). While addressing the consistency of the partner across of the partner across episodes that the present relationship is a function of prior negotiations, the consistency of the task acknowledges additional unique challenges.

One unique challenge of multiple negotiation episodes in the same task are the circumstances that necessitate a return to the bargaining table. While parties might return to the bargaining table for myriad circumstances, the circumstances perhaps most critical to understand are those that present a threat to securing desired outcomes. When threats to securing desired outcomes drive the return to the bargaining table, this suggests that (a) parties have made some degree of progress towards securing the desired outcomes since the previous episode and (b)

there is some factor negatively affecting the prospect of translating the agreement into the desired outcomes.

Whenever there is a possibility of failing to secure the desired outcomes in multi-episodic negotiations, there is a possibility of escalation of commitment. Escalation of commitment refers to the tendency of decision-makers to maintain or increase their investment of resources after receiving feedback that the endeavor is unlikely to yield desired outcomes (Sleesman et al., 2012; Sleesman et al., 2018). To achieve desired outcomes, persistence is often necessary and even revered. However, ceasing further investment in a failing endeavor is often necessary to optimize desired outcomes. Regarding negotiation outcomes, these decisions to persist or not are made during the implementing stage.

Existing research on the implementing stage has criticized closed system negotiation research for equating agreements—a promise of desired outcomes—with actually securing those outcomes (Bottom et al., 2006; Mislin et al., 2011). However, even this research treats implementing as a singular event that often occurs all at once. Yet in many real-world contexts implementing involves multiple decisions that unfold across time. This means factors that occurred in a prior stage or episode might affect the extent that escalation occurs later. Of particular importance to escalation of commitment in multi-episodic negotiations is the role of negotiation strategy in securing desired outcomes. Negotiation strategy affects both how negotiators interact with one another over time as well as with the circumstances that arise over the course of a multi-episodic negotiation.

In summary, the Time dimension of the open system framework is relevant to the present research question in two primary ways: between-stage transitions as well as between-episode recursion involving the same partner and same task (see Figures 2 and 3). Between-stage

transitions are highlighted in the relationships between variables of the theorized model (i.e., integrative and distributive strategies, relational capital and its economic relevance, as well as escalation of commitment). Between-episode recursion is highlighted in the context of the phenomenon where individuals return to the bargaining table due to threats to achieve desired outcomes. In the presence of threats to desired outcomes, escalation of commitment becomes a real possibility and negotiation strategies that affect escalation are of consequence. Further, past negotiation strategy, relational capital, and the attributions negotiators make about these threats will affect how negotiators adapt to threats. How negotiators adapt to threats will in turn affect the probability of escalation of commitment.

Level

Beyond the Time dimension, several areas of the Level dimension of the open system framework are relevant to the present research question. The first area is within-person. The nature of the research question focuses on how earlier strategic decisions a negotiator makes (i.e., negotiation strategy) affects subsequent decisions the negotiator makes (i.e., escalation of commitment). This is reflected in the multiple opportunities for the same individual to escalate commitment after each episode. Each episode occurs at different points on the timeline of the task specified by the original contract (10%, 50%, and 90%). These within-person aspects of the design are explained in more detail in the methods section.

The second area is the between-person factors in negotiating dyads, particularly those that arise when managing a partnership that is unlikely to yield desired outcomes and when escalation of commitment is a possibility. The extent negotiators will escalate commitment to a failing partnership is due to their strategy to guide interactions with their partner and is contingent on their causal attributions for the failure (Tomlinson & Mayer, 2009). Relational

Attribution Theory (Eberly et al., 2011, 2017) unpacks dyadic attributions into rater effects (i.e., internal attribution), target effects (i.e., external attribution), and dyad effects (i.e., relational attribution). How negotiators attribute across the dyad the blame for a failure will affect the extent they will escalate commitment. For example, a negotiator may react differently if they believe the other party is wholly to blame (i.e., external attribution) compared to if the blame is shared between parties (i.e., relational attribution). Thus, negotiation strategy and locus of causality across the dyad regarding failure are important between-person factors given the current research question.

The third area involves the recursion between context and the system. Hart and Schweitzer (2022) argue a key characterization of negotiation contexts is the economic relevance of relational capital, where the extent negotiators can secure economic outcomes is contingent on the strength of the negotiator's relationship after an agreement. However, there are at least two limitations in how this contextual feature is studied. First, all examinations of this negotiation context treat the economic relevance of relational capital as a stable context characteristic, implying a closed system paradigm. In contrast, an open system paradigm suggests contextual inputs can change over time requiring negotiators to adapt in how they manage the system. Second, all examinations of this negotiation context and the subjective perceptions of the context by negotiators. However, Hart and Schweitzer (2022, p. 2) expressly recognize that "perceptions... may diverge from the objective reality."

This study addresses these limitations by examining recursion between the context and the system in multi-episodic negotiations. Specifically, the first limitation is addressed as the economic relevance of relational capital changes over time as the venture continues to fail. This

failure requires negotiators to adapt their perceptions of economic relevance. However, it is possible that negotiators strategy in previous episodes will affect the extent their perceptions of the economic relevance of relational capital are accurate. This variance in accuracy addresses the second limitation by specifically examining the misalignment between subjective perceptions and the objective context as well as the consequences of this misalignment. One substantial consequence of this misalignment is escalation of commitment to a venture that cannot yield desired outcomes. As securing desired outcomes is the ultimate objective of a negotiation strategy, understanding the effects of negotiation strategy in dynamic contexts is crucial to the study of negotiations.

In summary, the open system framework identifies important new areas and new angles relevant to the present research question. Among the relevant areas are between-stage transitions, between-episode recursion, within-person effects, between-person effects, as well as recursion between the context and the system (see Figures 4 and 5). Among the new angles this framework suggests are refinements to the conceptualization of the economic relevance of relational capital as well as the potential for distributive strategies to outperform integrative strategies in optimizing desired outcomes. In the following sections, testable hypotheses rooted in the open system framework are developed beginning with negotiation strategies.

Negotiation Strategies

To effectively adapt to contextual changes and challenges that arise in the implementing stage, negotiators can rely on different strategies. Negotiators utilize these strategies to regulate goal-directed behavior (e.g., tactics) and guide information processing throughout a negotiation to facilitate goal achievement (e.g., secure optimal agreements and outcomes). The two general types of strategies, integrative (i.e., creating value) and distributive (i.e., claiming value;

Weingart et al., 1990), vary in their relational orientation. Integrative strategies are more otheroriented and cooperative, while distributive strategies are more self-oriented and competitive.

The relational orientations of integrative and distributive strategies are orthogonal. Virtually every textbook on organizational behavior contains some variant of Pruitt and Rubin's (1986) seminal dual concern model. While labels vary, there are always two axes: selforientation and other-orientation. High levels of self- and other-orientation is a collaborating style, high self- and low other-orientation is a competing style, moderate self- and otherorientation is a compromising style, low self- and high other-orientation is an accommodating style, and low self- and other-orientation is an avoiding style. Further, De Dreu (2006, p. 1245) has argued extensively that self- and other-orientation are "orthogonal and unipolar." Finally, negotiation scholars recognize that negotiators can and should rely on both integrative and distributive strategies: it is wise to expand the pie before cutting it if the goal is to get the biggest slice (Sinaceur, Maddux, et al., 2013). Thus, the relational orientations of integrative and distributive strategies are orthogonal.

These differences in relational orientation between strategies lead to differences in the amount of relational capital negotiators develop as well as the perceived economic relevance of that relational capital. How these strategies affect relational capital is more behavioral, while how they affect the perceived economic relevance of that relational capital is more cognitive. Specifically, these strategies affect relational capital through their effect on regulating behavior, while the strategies affect perceived economic relevance through their effect on information processing. The following sections elaborate on these differences.

Relational Capital – Regulating Behavior

Social Interdependence Theory argues that (a) the structure of goals determines how individuals will behave towards one another and (b) the types of behaviors will in turn determine the outcomes (Deutsch, 1949; Johnson & Johnson, 2005). Negotiation researchers similarly describe how (a) the interactions of the parties' interests and priorities determine the outcome potential while (b) the interaction of the parties' strategies determine the outcomes (Brett & Thompson, 2016). Thus, negotiators utilize strategies to regulate their behavior to pursue their construal of their goal hierarchy.

In typical negotiation goal hierarchies, securing desired economic outcomes is the higherorder goal and a lower-order, instrumental goal is developing relational capital (Hart & Schweitzer, 2022). The extent negotiators develop relational capital is in part due to the relational orientation of their preferred strategies. That is, different strategies align with different behaviors that vary in the extent they are conducive to the development of relational capital. Generally, negotiators develop relational capital more readily through behaviors that align with other-oriented, integrative strategies than through those that align with self-oriented, distributive strategies (Elfenbein et al., 2022).

Negotiators will develop more relational capital when they utilize integrative strategies. Integrative strategies frequently include behaviors that establish predictability and identification (Lewicki & Stevenson, 1997). Predictability, an important element in knowledge-based trust, is often the result of asking questions and exchanging information about preferences (Shapiro et al., 1992). Such information exchange is central to integrative strategies as it is required to discover potential tradeoffs between differentially valued issues (Kern et al., 2020; Weingart et al., 1999). Identification, an important element in identification-based trust, is often the result of appreciating the desires of others and creating joint solutions (Kramer, 1992). Such joint solutions are the end goal of integrative strategies and signal mutual concern between parties (Weingart et al., 1990). These signals can invite reciprocation, beginning "virtuous cycles" and develop trust (Druckman & Olekalns, 2013; Olekalns & Smith, 2005). Indeed, trust is positively correlated with integrative behaviors and negatively correlated with distributive behaviors (Kong et al., 2014).

Negotiators will develop less relational capital when they utilize distributive strategies. Distributive strategies frequently include behaviors that increase value claimed yet diminish social-psychological outcomes of the negotiation (Curhan et al., 2006). For example, Elfenbein and colleagues (2022) coded numerous negotiation behaviors that aligned with distributive strategies and found that they harmed the social-psychological outcomes in negotiation relationships. Specifically, communication behaviors (e.g., providing reasons for own offers, reactions to other's offers), procedural behaviors (e.g., referring to fairness), competitive behaviors (e.g., referring to your own status as a desirable partner, referring to competitors, referring to alternative offers), and language use (e.g., talkativeness, negations, possessive words) all were positively correlated with claiming value, but negatively correlated with socialpsychological outcomes (Elfenbein et al., 2022). Further, the competitive focus of distributive strategies can lead to behaviors focused on achieving relative superiority, such as unethical behavior (Pierce et al., 2013). Naturally, negotiator behavior focused on establishing relative superiority can decrease liking by the counterpart (Blascovich et al., 2001) and develop less relational capital.

Economic Relevance – Information Processing

The Motivated Information Processing Model argues that relational orientations bias the information negotiators attend to, encode, and retrieve (De Dreu et al., 2008). This model suggests that the relational orientations of different strategies will contribute to differences in how negotiators process information. Among the important information negotiators need to process are contextual cues, such as the economic relevance of relational capital (Hart & Schweitzer, 2022). As discussed earlier, the economic relevance of relational capital directly affects how negotiators can secure desired outcomes and is a defining feature of the negotiation context. While the negotiation context is an objective feature, negotiators develop perceptions of the context that are more subjective (Hart & Schweitzer, 2022). These subjective perceptions do not necessarily align with the objective context. The extent the subjective and objective align is in large part due to how negotiators process information about the context. Thus, how negotiators perceive the negotiation context is in part due to the relational orientations of their preferred strategies. Generally, negotiators who prefer other-oriented, integrative strategies will perceive higher economic relevance of relational capital than negotiators who prefer self-oriented, distributive strategies.

Negotiators will perceive greater economic relevance of relational capital when they utilize integrative strategies. As integrative strategies primarily rely on securing desired outcomes through creating value, relational capital plays an instrumental role in pursuing economic goals. Because relational capital is instrumental, negotiators utilizing integrative strategies are more likely to attend to, encode, and retrieve information relevant to relational capital. Indeed, other-oriented individuals recall more cooperative information than self-oriented individuals (De Dreu et al., 2006).

In contrast, negotiators will perceive less economic relevance of relational capital when they utilize distributive strategies. As distributive strategies primarily rely on securing desired outcomes through claiming value, relational capital will appear less instrumental in pursuing economic goals. Because relational capital is less instrumental, negotiators utilizing distributive strategies are more likely to attend to, encode, and retrieve information relevant to competition or establishing relative superiority. For example, self-oriented individuals are more likely to succumb to a fixed-pie bias and have more difficulty identifying optimal tradeoffs (Bazerman & Neale, 1983; Chambers & De Dreu, 2014). Indeed, identifying optimal tradeoffs requires a certain degree of trust and information exchange, however the inherent risk of exploitation from such exchanges are more salient to self-oriented individuals (Lax & Sebenius, 1987). This does not suggest, however, that distributive strategies lead negotiators to attend to less information, but rather shifts the motivated focus of cognitive resources. This motivated focus is evident in that individuals generated more original competition tactics when adopting a conflict mindset than when adopting a cooperation mindset (De Dreu et al., 2008). Thus, self-oriented individuals will attend to information that advances their own goals, while other-oriented individuals will attend to information that advances relational goals in multi-episodic negotiations.

Hypothesis 1: Integrative strategy is positively related to relational capital. Hypothesis 2: Integrative strategy is positively related to perceptions of economic relevance of relational capital.

Hypothesis 3: Distributive strategy is negatively related to relational capital. Hypothesis 4: Distributive strategy is negatively related to perceptions of economic relevance of relational capital.

Escalation of Commitment

Central to understanding multi-episodic negotiations are the circumstances surrounding the return to the bargaining table. While circumstances vary, one of the most critical of circumstances is when an agreement may fail to materialize into the desired outcomes. Potential failure will require negotiators to adapt, however there are numerous maladaptive tendencies involving failure. One such maladaptation is escalation of commitment, where decision-makers maintain or increase their investment of resources despite evidence of failure (Sleesman et al., 2012; Sleesman et al., 2018). Another maladaptation is an agreement bias, where negotiators pursue an agreement that is inferior to an alternative (Cohen et al., 2014). In essence, agreement bias in multi-episodic negotiations is a direct manifestation of escalation of commitment.

In addition to potential failure to result in desired outcomes, a second critical circumstance in multi-episodic negotiations is the past. Past interactions between parties in open systems affect subsequent interactions (Ilgen et al., 2005). Relevant interactions given the present research question include negotiation strategies and relational capital. Negotiation strategies that yield short-term gains and long-term losses or that are not robust against failure are not desirable in multi-episodic negotiations, particularly when the nature of the task involves risk or unpredictability. As discussed in the previous section, negotiation strategies affect the development of relational capital and its economic salience. Relational capital is often conceptualized as contributing to cohesion and adaptability (Langfred, 2007). However, while such cohesion might lead to more cooperative solutions inside the partnership, it also might increase reluctance to consider solutions outside the partnership. This suggests that relational capital might have a greater effect on optimal agreements than on optimal outcomes in critical circumstances.

The following sections consider the effect of negotiation strategies and relational capital on escalation of commitment. The escalation of commitment literature has identified there are important social and psychological determinants of escalation (Sleesman et al., 2012). Social determinants are germane to the accumulated relational capital, while psychological determinants are germane to the perceived economic relevance of relational capital. This suggests negotiation strategies will have indirect effects on escalation of commitment via relational capital and its perceived economic relevance.

Relational Capital – Social Determinants

Relational capital in multi-episodic negotiations can serve as a social determinant of escalation of commitment in two ways: cohesion and experience with the partner. Generally, social determinants refer to how the involvement of others affects the decision to escalate commitment and is perhaps the least studied determinant of escalation (Sleesman et al., 2012). Specifically, relational capital in negotiations can serve as a cohesive force. Indeed, more cohesive groups are more likely to escalate commitment than less cohesive groups (Hogg & Terry, 2000). Further, individuals who feel gratitude towards an involved party have higher levels of relational concerns and lower levels of personal concerns, which in turn leads to escalation of commitment (Kong & Belkin, 2019).

Beyond cohesion, relational capital in negotiations often develops after experience with the partner, which can serve as a social determinant of escalation (Bragger et al., 2003). As discussed earlier, an important part of developing relational capital is predictability of the partner (Lewicki & Stevenson, 1997). This predictability is often the result of experience with a partner (Shapiro et al., 1992). This experience with an existing partner can help negotiators feel more confident in staying the course (Judge et al., 1998). This confidence with the familiar is often
more appealing to the unfamiliar, even when a partnership is not going well. Indeed, decisionmakers may resonate with the sentiment: "Better the devil you know than the devil you don't." Thus, relational capital can serve as a social determinant of escalation by providing greater cohesion and experience with the partner.

Economic Relevance – Psychological Determinants

In contrast, the economic relevance of relational capital in multi-episodic negotiations can serve as a psychological determinant of escalation of commitment in two ways: selfjustification and goal substitution. Generally, psychological determinants refer to how information processing affects the decision to escalate commitment and is perhaps the most established determinant of escalation (Sleesman et al., 2012). Specifically, when relational capital appears economically relevant then the pressure for self-justification is higher (Kahneman & Tversky, 1979). The pressure to justify the original investment of resources results in further investment of resources in the hope of a turnaround (Arkes & Blumer, 1985). Optimism about a turnaround is elevated when economic relevance of relational capital is high, as the resources sunk into the task as well as developing relational capital are highly salient. When economic relevance of relational capital is low, then the resources sunk into relational capital will receive less of a premium during information processing and self-justification processes.

Beyond self-justification, the economic relevance of relational capital can also increase the likelihood of goal substitution. Traditionally, goal substitution in the escalation literature has referred to the phenomenon where the lower-order goal of completing the venture supersedes the higher-order goal of achieving desired outcomes (Conlon & Garland, 1993). However, goal substitution effects extend to whenever an instrumental, lower-order goal supersedes a higherorder goal in the hierarchy. In multi-episodic negotiations, this can include when the lower-order

goal of maintaining the relationship supersedes the higher-order goal of optimizing economic outcomes. Because of the premium relational capital receives during information processing when it is economically relevant, the probability of goal substitution effects is more likely to occur compared to when relational capital is perceived as less economically relevant. The more economically relevant relational capital is perceived, the more instrumental it is perceived. Indeed, decision-makers may resonate with the sentiment: "Better that the band stays together than how the band stays together." Thus, economic relevance of relational capital can serve as a psychological determinant of escalation by increased self-justification and goal substitution effects.

Negotiation Strategies

Given their effects on relational capital and its economic relevance, negotiation strategies can also have an indirect effect on escalation of commitment. Generally, integrative strategies will increase the probability of escalation of commitment. Specifically, integrative strategies will help regulate behavior that increases perceptions of predictability and identity, facilitating the development of relational capital. This higher level of relational capital will lead to greater cohesion and experience in cooperating with a partner, providing a social determinant for escalation of commitment.

Further, integrative strategies will increase the salience of relational information, increasing perceptions of the economic relevance of relational capital. This increased perception of economic relevance will lead to greater self-justification and goal substitution effects, providing a psychological determinant for the escalation of commitment. These psychological determinants are especially likely with integrative negotiation strategies. Where negotiators who use integrative strategies invest more resources into developing relational capital, perceived sunk

costs will appear greater and increase self-justification effects. Finally, where negotiators who use integrative strategies place a premium on processing relational information, substituting a relational goal in place of a higher-order goal is more likely.

Beyond integrative strategies, distributive strategies will generally decrease the probability of escalation of commitment. Specifically, distributive strategies channel resources into competitive behavior and achieving relative superiority, which is not conducive to the development of relational capital. This lower level of relational capital will decrease cohesion and experience in cooperating with the partner, diminishing social determinants for escalation of commitment.

Further, distributive strategies will increase the salience of information providing a competitive advantage, decreasing perceptions of the economic relevance of relational capital. This decreased perception of economic relevance will lead to less self-justification and goal substitution effects, diminishing psychological determinants for the escalation of commitment. Where negotiators who use distributive strategies invest less resources into developing relational capital, there is less of a need to self-justify. Further, where negotiators who use distributive strategies are less likely to place a premium on processing relational information, substituting a relational goal in place of economic goals is less likely. Indeed, if goal substitution were to occur, it would likely place the goal of demonstrating relative superiority over economic outcomes. In this way, negotiators could construe ending the relationship as a way to elevate the self, diminish the other party, or split the negative effects equally between parties.

Hypothesis 5: Relational capital is positively related to escalation of commitment. Hypothesis 6: Perceptions of economic relevance of relational capital are positively related to escalation of commitment. *Hypothesis 7a: Integrative negotiation strategy has a positive indirect effect on escalation of commitment via relational capital.*

Hypothesis 7b: Integrative negotiation strategy has a positive indirect effect on escalation of commitment via economic relevance of relational capital. Hypothesis 8a: Distributive strategy has a negative indirect effect on escalation of commitment via relational capital.

Hypothesis 8*b*: *Distributive strategy has a negative indirect effect on escalation of commitment via economic relevance of relational capital.*

Causal Attributions and Cognitive Biases

The extent negotiation strategies contribute to escalation of commitment in multiepisodic negotiations is contingent on negotiators causal attributions regarding the failure (Tomlinson & Mayer, 2009). The cause of a past failure defines viable solutions that negotiators can use in future efforts to redress the failure. These future efforts directly affect whether negotiators will receive optimal outcomes through their efforts to address the cause of the failure. However, the cause of a failure is often ambiguous in complex ventures, allowing for different possible causal attributions that each elicit different responses to a failing venture.

Not only do causal attributions affect the pursuit of economic goals following a threat, but causal attributions also affect the pursuit of relational goals following a threat. Indeed, theories of trust repair have identified locus of causality as an essential dimension in working towards relational goals (Kim et al., 2009; Tomlinson & Mayer, 2009). Specifically, individuals set and regulate the pursuit of relational goals. Individuals monitor the extent the relationship meets individual needs and progress towards relational goals (van der Werff et al., 2019). Following a threat to meeting these needs or realizing these goals, individuals will update their trust based on the types of causal attributions they make (Tomlinson & Mayer, 2009; Weiner, 1985). The types of causal attributions are used to gauge both the types of solutions as well as the degree of effort to invest. Thus, the manner and extent individuals pursue economic and relational goals is contingent on the type of attributions they make.

Relational Attribution Theory (Eberly et al., 2011, 2017) holds three different types of causal attributions are possible: internal, external, and relational. As discussed earlier, these three attributions would hold, respectively, the negotiator, counterpart, and dyad are responsible. These three different loci of causality predict how decision-makers will act to change following a failure event. Specifically, negotiators are more likely to attempt change themselves after making an internal attribution, negotiators are more likely to attempt to change their partners if they make an external attribution, and negotiators are more likely to attempt to change the relationship if they make a relational attribution. The following sections outline how the different attributions either exacerbate or ameliorate the indirect effects of negotiation strategy on escalation of commitment (see Figure 11).

Internal Attributions

When negotiators make an internal attribution for performance failures in a joint venture, the perception is that the negotiator is responsible for the failure (Eberly et al., 2011). Generally, this responsibility for the failure negatively affects the development and maintenance of relational capital with the counterpart *decreasing* the extent negotiator strategies will lead to escalation of commitment. Specifically, a negotiator's integrative strategy is less likely to help develop relational capital due counterpart perceptions of decreased predictability. Counterpart perceptions of predictability are weakened when confronted with a trust violation where the negotiator is responsible for the failure as it is inconsistent with the history of cooperative

behavior and the future is more ambiguous. Similarly, a negotiator's distributive strategy is more likely to harm the development of relational capital due to counterpart perceptions of decreased identification. Counterpart perceptions of identification are further weakened when a trust violation is combined with a history of competitive behaviors (Tomlinson et al., 2004). This combination would suggest to the counterpart that the negotiator is more concerned about personal interests than the counterpart's interests, presenting challenges in developing and maintaining relational capital.

These challenges related to relational capital decrease the social determinants of escalation of commitment. Specifically, a failure attributable to the negotiator will decrease the cohesion within the partnership similar to trust violations. Trust violations frequently diminish the relationship, despite repair efforts or a history of trustworthy behavior, such as utilizing integrative strategies (i.e., the "Humpty Dumpty" problem; Lewicki et al., 1998). Further, a history of distributive strategies reinforces the diminishing effects of a trust violation on cohesion. This diminished cohesion will decrease the probability negotiators will escalate commitment. Thus, internal attributions will decrease the extent negotiation strategies will result in escalation of commitment.

In contrast to relational capital, generally, internal attributions for a performance failure positively affect perceptions of economic relevance *increasing* the extent negotiation strategies will lead to escalation of commitment. Specifically, a failure attributable to the negotiator will increase the salience of relational capital. The salience increases because the negotiator's failure negatively affected the economic outcomes of the partnership. To redress their impact on the economic outcomes of the partnership, negotiators are motivated to afford greater attention to the information about the counterpart's needs when utilizing integrative strategies (De Dreu et al.,

2006). When utilizing distributive strategies, negotiators will also perceive the relationship as more salient following an internal attribution for the failure. However, rather than to redress their impact, the increased salience is due to the negotiator's heightened concern that the counterpart will use the harm caused to the economic outcomes of the partnership as grounds to extract concessions (Zhang & Han, 2007).

This heightened perception of the economic relevance of relational capital increases the psychological determinants of escalation of commitment. Specifically, a negotiator's integrative strategy will increase the probability of goal substitution when the negotiator is responsible for jeopardizing joint outcomes. Because the negotiator is responsible for jeopardizing joint outcomes and has prioritized creating joint value, it will appear a strategic necessity to maintain the relationship to make restitution (Ames & Wazlawek, 2014). This heightened priority of maintaining the relationship and making restitution will increase the probability of escalating commitment. Similarly, a negotiator's distributive strategy will increase self-justification when the negotiator is responsible for jeopardizing joint outcomes and has prioritized claiming value, it will appear a strategic necessity to repair their reputation and to save face (Kolb & Williams, 2001). This heightened priority of repairing their reputation and saving face will increase the probability of escalating of secalating commitment.

In summary, when negotiators make an internal attribution for performance failures in a joint venture, the maintenance of relational capital is harmed while the economic relevance of relational capital is heightened. The decreased predictability following an internal attribution for failure ameliorates the effect of integrative strategies on relational capital and decreases cohesion despite a cooperative history, decreasing escalation. Further the decreased identification

following an internal attribution for failure augments the destructive effects of distributive strategies on relational capital and decreases cohesion by reinforcing a competitive history, decreasing escalation. In contrast, the increased salience following an internal attribution for failure augments the effect integrative strategies on perceptions of economic relevance and increases goal substitution effects, increasing escalation. Further, the increased salience when using distributive strategies is due to a heightened concern of the failure being used to extract concessions and increases self-justification effects, increasing escalation. Thus:

Hypothesis 9a: Internal attributions moderates the relationship between integrative strategies and escalation of commitment via relational capital, such that the relationship is less positive.

Hypothesis 9b: Internal attributions moderates the relationship between integrative strategies and escalation of commitment via economic relevance of relational capital, such that the relationship is more positive.

Hypothesis 10a: Internal attributions moderates the relationship between distributive strategies and escalation of commitment via relational capital, such that the relationship is more negative.

Hypothesis 10b: Internal attributions moderates the relationship between distributive strategies and escalation of commitment via economic relevance of relational capital, such that the relationship is less negative.

External Attributions

When negotiators make an external attribution for performance failures in a joint venture, the perception is that the counterpart is responsible for the failure (Eberly et al., 2011). Generally, external attributions facilitate the development and maintenance of relational capital with the counterpart *increasing* the extent negotiator strategies will lead to escalation of commitment. Specifically, a negotiator's integrative strategy is more likely to help develop relational capital due to counterpart perceptions of increased identification. Counterpart perceptions of identification are strengthened as counterparts are likely to interpret cooperative behavior from the negotiator as benevolent following a counterpart failure (Mayer et al., 1995). Similarly, a negotiator's distributive strategy is less likely to harm the development of relational capital due to counterpart perceptions of increased predictability. Counterpart predictions of predictability are strengthened as the negotiator demanding concessions as a form of reparations is perceived as more appropriate (van Kleef & Côté, 2007). Because reparations are perceived as more appropriate, external attributions provide a buffer against the typical deleterious effects of competitive behavior on relational capital development. Thus, it is easier to develop relational capital with the counterpart through both negotiation strategies, which increases the cohesion in the partnership and ultimately escalation of commitment.

In contrast to relational capital, generally, external attributions for a performance failure negatively affect perceptions of economic relevance *decreasing* the extent negotiation strategies will lead to escalation of commitment. Specifically, a failure attributable to the counterpart will decrease the salience of relational capital. The salience decreases because the counterpart's failure signals that the counterpart is threatening rather than facilitating desired outcomes, making relational capital appear less instrumental. These diminished perceptions of instrumentality are especially the case when negotiators utilize distributive strategies as threats to economic outcomes are especially salient. This diminished perception of the economic relevance of relational capital decreases the psychological determinants of escalation of commitment. Specifically, a failure attributable to the counterpart will decrease self-justification processes.

Self-justification decreases because the responsibility of the counterpart for the failure provides a viable excuse (Holland et al., 2002). This viable excuse diminishes the need to justify past investments and will decrease the probability of escalating commitment.

In summary, when negotiators make an external attribution for performance failures in a joint venture, the ease of maintaining relational capital is heightened while the economic relevance of that relational capital is diminished. Thus:

Hypothesis 11a: External attributions moderates the relationship between integrative strategies and escalation of commitment via relational capital, such that the relationship is more positive.

Hypothesis 11b: External attributions moderates the relationship between integrative strategies and escalation of commitment via economic relevance of relational capital), such that the relationship is less positive.

Hypothesis 12a: External attributions moderates the relationship between distributive strategies and escalation of commitment via relational, such that the relationship is less negative.

Hypothesis 12b: External attributions moderates the relationship between distributive strategies and escalation of commitment via economic relevance of relational capital, such that the relationship is more negative.

Relational Attributions

When negotiators make a relational attribution for performance failures in a joint venture, the perception is the interaction between parties is responsible for the failure (Eberly et al., 2011). Generally, this shared responsibility for the failure positively affects the development and maintenance of relational capital with the counterpart *increasing* the extent negotiator strategies will lead to escalation of commitment. Specifically, a negotiator's integrative strategy is more likely to help develop relational capital due to counterpart perceptions of increased identification. Counterpart perceptions of identification are strengthened because relational attributions for a failure suggest relational work is the solution (Eberly et al., 2011). This relational work combined with a history of cooperative behavior would facilitate the development of relational capital. Similarly, a negotiator's distributive strategy is less likely to harm the development of relational capital due to increased identification. Counterpart perceptions of identification are strengthened because relational attributions help create a "shared fate" mentality (Tyler & Blader, 2001). This "shared fate" mentality implies that parties will address the failure through combining their resources. These additional resources decrease the chance the failure is construed as a threat and increases the chance it is construed as a challenge (To et al., 2020). Challenge states are associated with greater liking compared to threat states in competitive contexts (Blascovich et al., 2001). This means that relational attributions provide a buffer against the negative relational impact of competitive behavior associated with distributive strategies.

Similar to relational capital, generally, relational attributions for a performance failure positively affect perceptions of economic relevance *increasing* the extent negotiation strategies will lead to escalation of commitment. Specifically, a failure attributed to the interactions between parties will increase the salience of relational capital. The salience increases because relational attributions suggest the solution for a failure is relational work (Eberly et al., 2011). This emphasis on relational work increases the instrumentality of relational goals as well as the motivation to attend to relational information (De Dreu et al., 2006; Eberly et al., 2011). Together, this increased attention to relational goals and information increases the probability of

goal substitution, where strengthening the relationship becomes priority over pursuing the best economic outcomes for both parties (Thompson et al., 1996).

In summary, when negotiators make a relational attribution for performance failures in a joint venture, both the efforts to maintain relational capital and the perceived economic relevance of that relational capital are heightened. Thus:

Hypothesis 13a: Relational attributions moderates the relationship between integrative strategies and escalation of commitment via relational capital, such that the relationship is more positive.

Hypothesis 13b: Relational attributions moderates the relationship between integrative strategies and escalation of commitment via economic relevance of relational capital, such that the relationship is more positive.

Hypothesis 14a: Relational attributions moderates the relationship between distributive strategies and escalation of commitment via relational capital, such that the relationship is less negative.

Hypothesis 14b: Relational attributions moderates the relationship between distributive strategies and escalation of commitment via economic relevance of relational capital, such that the relationship is less negative.

Methods

Task Design

Overview of the Multi-Episodic Task

Due to the multi-episodic nature of the theory and the fact that no multi-episodic negotiation task exists, conducting this study required the development of a novel task. This novel task adapts the payout structure from the existing single-episode "Team Retreat" negotiation task and combines it with multiple interviews from film industry experts to create the first multi-episodic negotiation task: the "Starfall" negotiation.

The "Starfall" negotiation occurs in the context of the film industry where a film studio (Silverwood Studios) and visual effects company (LightBender Labs) have entered a contract regarding the visual effects work of a film trilogy (*The Starfall Chronicles*). Because the precise nature of visual effects work is not entirely predictable, the contract includes provisions for change orders when a film requires work beyond the scope of the original contract. Participants negotiate these change orders as representatives (VFX Producers) of the two companies.

Participants meet with their counterparts to fulfill their responsibilities across three negotiation episodes. Each episode reflects a different level of completion for the first film in the trilogy (*Starfall: Origins*): early (10%), middle (50%) and late (90%). As the level of completion progresses, the performance of the venture decreases (the film gets further over budget and behind schedule). Specifically, performance is high in the early episode (a theatrical release is projected to net \$40 Million), but declines substantially by the middle episode (projected to net - \$6 Million), and continues the same downward trajectory in the late episode (projected to net - \$52 Million). Thus, the task encompasses a multi-episodic negotiation with the same partner on the same task where the performance of the venture changes over the course of the episodes.

The Negotiation Structure of Each Episode

Within each episode, negotiators engage in the planning stage as they review their briefing packet. The briefing packet includes updates on the status of the film (where the film stands in terms of budget and schedule) as well as the details about the upcoming change order negotiation. These details include the number of issues as well as the payout sheet. The payout sheets change from episode to episode in terms of the names of issues and values on the payout

sheet. However, the number of issues and the cumulative score on the payout sheet remains comparable. These changes prevent a redundant negotiation experience for participants while simultaneously maintaining comparability across episodes.

To illustrate, each episode has three issues about either money, time, or the scope of work. The first change order is about pre-visualization (pre-vis) shots, with one issue about the price per pre-vis shot (money), the deadline for pre-vis shots (time), and the number of pre-vis shots (work). The second change order is about scenes added to the script by the director, with one issue about the price per visual effects shot (money), the extent work on the shots will begin before picture lock (time), and the number of elements the visual effects company is responsible for (work). The third change order is about reshoots of the film's ending, with one issue about the price per visual effects shot (money), the turnaround time for the effect shots (time), and the extent shots are considered revisions to already paid shots or new shots yet to be paid for (work).

The payout structure was adapted from the "Team Retreat" negotiation. Specifically, the "Team Retreat" negotiation has two integrative issues and one distributive issue. However, whether money, time, or work was the distributive issue depends on the episode. Money was the distributive issue for the first change order, time was the distributive issue for the second change order, and work was the distributive issue for the third change order. Thus, the three negotiations were essentially identical under the hood (the middle terms across all issues summed to 18,000 points for each episode) but in a way that was not obvious to the participants.

The Recommendation Structure in Each Episode

After the planning and bargaining stages, participants also make five recommendations to executives about the implementing stage. The first recommendation is whether their company should 1) go with the change order they just negotiated or 2) to go with their BATNA. Across all

episodes, both companies had BATNAs of equal strength with the strength increasing each episode. This means that the zone of potential agreement shifts from positive to negative over the course of three episodes.

The second recommendation is about implementing the change order. Across all episodes, there were three options: 1) a high probability of success option that would strengthen the relationship but result in going over budget, 2) a medium probability of success option that would neither help nor hurt the relationship but would stay on budget, or 3) a low probability of success option that would harm the relationship but would result in making money on the venture. However, the probability of success decreases across the episodes. Specifically, in the first episode the high is a 115% success rate, the medium is 95%, and the low is 75%. In the second episode the high is a 95% success rate, the medium is 65%, and the low is 50%.

The third recommendation is about investing resources in the first film in the trilogy. Across all episodes, there were three options: 1) theatrical release, 2) streaming release, and 3) cancel the release. However, the projected profits shifted from favoring a theatrical release to cancelling the release across the episodes. Specifically, in the first episode theatrical would net \$40 Million, streaming would net \$19 Million, and cancelling would net -\$1 Million. In the second episode theatrical would net -\$6 Million, streaming would net -\$1 Million, and cancelling would net \$4 Million. In the third episode theatrical would net -\$52 Million, streaming would net -\$21 Million. In the third episode theatrical would net \$10 Million.

The fourth recommendation is about investing resources in the original trilogy (*The Starfall Chronicles*) or a spinoff streaming series of a previous adaptation (*The Aftermath Adventures*). Across all episodes, there were three options: 1) complete the entire trilogy, 2)

complete only the first film and invest the remaining money in the spinoff series, and 3) cancel the entire trilogy and invest the money in the spinoff series. However, the projected success of the trilogy decreases across the episodes. Specifically, in the first episode the risk of the original trilogy failing is 12% higher than the adaptation series, but the original trilogy is projected to yield 139% higher revenue. In the second episode the risk of the original trilogy failing is 42% higher than the adaptation series, but the original trilogy failing is 42% higher than the adaptation series, but the original trilogy is now projected to yield 79% higher revenue. In the third episode the risk of the original trilogy failing is 72% higher than the adaptation series, but the original trilogy is now projected to yield 19% higher revenue.

The fifth recommendation is about, if the executives decide to continue with the trilogy, the extent the visual effects company should be involved. Across all episodes there were three options: 1) the visual effects company is involved in the entire trilogy, 2) the visual effects company is involved for only the first film, and 3) the visual effects company should cease involvement in the entire trilogy immediately. Participants were told to base this recommendation on their experience working with the other company.

Research Design

General Structure of Episodes

During the first episode only, participants began the session by watching a 2.5-minute video introducing them to the task context

(https://mediaspace.msu.edu/media/Starfall+Negotiation+-+Business+Bulletin/1_che3448h). This included information about each of the companies as well as details about the movie trilogy. After this, they watched a 2-minute video outlining the basic structure of each episode (https://mediaspace.msu.edu/media/Starfall+Negotiation+- <u>+Onboarding+Information/1_t8ltqd49</u>). Thus, each participant received identical training for the study reducing potential trainer effects.

Each of the three episodes followed the same basic structure. First, participants had 10 minutes to individually review their briefing materials. Second, participants individually completed a 5-minute survey about the planning stage. Third, participants had 20 minutes to negotiate three issues as a dyad. Fourth, participants individually completed a 5-minute survey about the bargaining stage. Fifth, participants had 15 minutes to individually complete five recommendations about the implementing stage. Thus, each episode comprised about one hour.

The three negotiation episodes occurred over the course of three weeks, with one episode per week. Each episode was the same day and time (e.g., Tuesdays at 5:30 P.M.) to enhance comparability across episodes. The intent of separating episodes over actual elapsed time (three one-hour sessions over three weeks) as opposed to purely simulating time (one three-hour session) was to reinforce the experience of a longer-term negotiation relationship. Further, there is some evidence that negotiators behave differently when negotiations occur in immediate succession compared to when negotiations are separated over time (Henderson et al., 2006).

The Compensation and Manipulations

To reduce attrition, the ideal compensation package was determined via exit interviews as part of the pilot study. The pilot study comprised more than 200 participants and nearly 50 interviews were conducted. The resulting compensation package was as follows: participants would receive (1) pizza at the conclusion of each session they attended, (2) a personalized feedback report about their negotiation performance and style only if they completed all three sessions, (3) a \$10 gift card only if they completed all three sessions, and (4) a bonus gift card depending on their performance only if they completed all three sessions. Finally, some

participants were offered extra credit to participate in the study by their instructors, which they would receive only if they completed all three sessions.

The bonus gift card was used to reinforce the negotiation strategy manipulation. Specifically, participants were told that—as representatives of their company—they needed to follow the directive of executives in how they should approach the negotiation. To incentivize adhering to this directive, participants were told their bonus was contingent on the extent they were able to follow the directive. Those in the integrative condition received instructions about prioritizing creating value, while those in the distributive condition received instructions about prioritizing claiming value (see Appendix A). There were three performance categories: 1st-50th percentiles received no bonus (combined \$10 gift card), 51st-90th percentiles received a \$5 bonus (combined \$15 gift card), and 91st-100th percentiles received a \$20 bonus (combined \$30 gift card). Participants were reminded of this bonus structure during each session. The intent of this bonus was to minimize attrition, incentivize task engagement, and reinforce the manipulation.

In addition to the negotiation strategy manipulations, there were also causal attribution manipulations. Specifically, during the second and third episodes when performance was declining, participants received information in their briefing packets about the cause of the failure. Both representatives in each dyad were told the same information regarding the cause of failure: either the studio was at fault, the visual effects company was at fault, or both companies shared the fault (see Appendix B). When only one company was at fault, both an internal and external attribution were present in the dyad. For example, when the studio was at fault, this was an internal attribution for the studio representative but an external attribution for the visual effects representative. When both companies shared the fault, this was a relational attribution for both companies shared the fault, this was a relational attribution for the studio representative but an external attribution for the visual effects representatives in the dyad.

Between the two negotiation strategy manipulations (integrative vs. distributive) and the three causal attribution manipulations (internal vs. external vs. relational), there are six total conditions. Participants' conditions, roles, partners, and stations were randomly assigned via an automated spreadsheet. In the first episode, participants were only assigned to either an integrative or distributive condition, as failure is introduced in the second episode. In the second episode, participants were randomly assigned to causal attribution conditions as well. When attrition occurred, the spreadsheet automatically paired participants whose partners were not present. The parameters of the spreadsheet logic were 1) to minimize the number of people who changed conditions and then 2) to minimize the number of people who changed roles. Within these parameters, all re-assignments were random.

Sample

Participants were students and local community members recruited through various means (e.g., face-to-face classroom visits, emails from instructors, emails from the registrar's office to a stratified random sample of enrolled students, a posting in a community research pool, and word of mouth). Participants were required to attend three face-to-face sessions on the university campus. Participants averaged 22.23 years of age ($\sigma = 7.38$) and approximately 51.96% identified as female (46.98% male). In terms of education, most were pursuing a bachelor's degree (83.27%), however some had only completed high school (4.27%) and others had more than a bachelors (12.46%).

A total of 391 participants attended the first session. There were 44 participants that dropped out of the study after the first session and 13 that dropped out after the second session, meaning 347 participants completed the study (88.74% overall attrition rate). Due to this attrition, there were several participants that changed partners. Specifically, there were 42

participants that changed partners at the beginning of the second session and 17 participants that changed partners at the beginning of the third session. These numbers of partner changes are not identical to the number of dropouts due to the involvement of triads as well as one participant that changed sessions. Because the research question centers on multi-episodic negotiations where the same partners work together in dyads on the same task, all dyads that changed partners and all triads were omitted from the analyses. This decreased the sample to 278.

To ensure data quality, participants were also omitted based on manipulation attention check and survey attention check responses. Specifically, those that missed either the negotiation strategy or attribution manipulation attention checks had their responses omitted for that time point only (i.e., case wise deletion). For example, the data from those that incorrectly identified the cause of failure after reading the briefing packet were not included in the analyses. Additionally, there were three attention checks in the survey. Participants that failed all three attention checks in the surveys had their responses omitted for that time point only (i.e., case wise deletion). This left 258 responses for the first time point, 236 for the second, and 237 for the third for an average sample of 243.67 (87.65% of responses retained). All analyses were conducted on this final data.

Measures

All variables were captured at all three episodes, however different constructs were measured at different points during the episodes. Specifically, integrative and distributive strategies (i.e., the independent variables) were measured during the pre-negotiation survey of each episode. Measuring the strategy during the planning stage reflects the intentions and relational orientation of the negotiators. Perceptions of relational capital and the economic relevance of relational capital (i.e., the mediators) were measured during the post-negotiation

survey of each episode. Measuring relational capital and its economic relevance in the bargaining stage reflects the subjective value and perceptions. Finally, escalation of commitment was measured during the recommendation portion of each episode. Measuring escalation of commitment (i.e., the dependent variable) at this point reflects the degree of investment the negotiators intend to make during the implementing stage.

Negotiation Strategy

To capture integrative and distributive negotiation strategies, I used adapted items from De Dreu and Nauta (2009). Participants provided self-reports about the extent the following describes their integrative strategy: "In the upcoming negotiation, I am concerned about the needs and interests of my counterpart," "In the upcoming negotiation, the goals and aspirations of my counterpart are important to me," "In the upcoming negotiation, I consider the wishes and desires of my counterpart to be relevant." Participants also provided self-reports about the extent the following describes their distributive strategy: "In the upcoming negotiation I am concerned about my own needs and interests," "In the upcoming negotiation, my personal goals and aspirations are important to me," and "In the upcoming negotiation, I consider my own wishes and desires to be most relevant." Coefficient alphas for integrative and distributive strategies in the first session were .79 and .72, respectively, .88 and .77 in the second session, and .88 and .80 in the third session.

To capture distributive behavior for the manipulation check, I used an adapted version of Robinson and colleagues (2000) traditional competitive bargaining measure. Participants reported on the three items about the behavior of their counterpart after completing the negotiation: "They made an opening demand that is far greater than what they really hoped to settle for," "They conveyed a false impression that they were unwilling to settle, thereby putting

pressure on me to concede," and "They made an opening demand so high/low that it seriously undermined my ability to negotiate a satisfactory settlement." Similarly, to capture integrative behavior, participants reported on three items about the behavior of their counterpart after completing the negotiation: "They asked questions about my priorities among the different issues," "They asked questions about which issues were the most and least important to me," and "They offered trades across issues, where each party gave on a less important issue but received on a more important issue." Coefficient alphas for integrative and distributive behavior in the first session were .77 and .76, respectively, .80 and .78 in the second session, and .81 and .77 in the third session.

Relational Capital

To capture relational capital, I used an adapted version of trust (Mayer & Davis, 1999). Participants reported on the relational capital with their counterpart (i.e., an other-report) with three items: "Our company's needs and desires are very important to the other company," "The other company really looks out for what is important to our company," and "The other company will go out of its way to help our company." Each item is rated on a 5-point Likert-type scale with anchors of 1 ("strongly disagree") and 5 ("strongly agree"). Coefficient alpha was .83, .87, and .91 across the three sessions.

Economic Relevance

I used an adapted version of the measure Hart and Schweitzer (2022) used when introducing this construct. Specifically, the following three items: "I need to have a good relationship with my counterpart to get the best deal terms for myself," "My relationship with my counterpart is necessary to get the deal terms that are important to me," and "By the end of the negotiation, I need to make sure my counterpart likes me to get good deal terms." Participants

self-reported the importance of each item rated on a 5-point Likert-type scale with anchors of 1 ("Not at all") and 5 ("Extremely"). Coefficient alpha was .74, .79, and .84 across the three sessions.

Escalation of Commitment

Escalation of commitment most often refers to further investment of resources to a failing venture (Sleesman et al., 2018). Of the five recommendations about investing resources in the venture, arguably the most indicative measure of escalating commitment was the third recommendation about completing the first film in the trilogy. Of the three options for this recommendation, the originally planned theatrical release is the most indicative of escalation of commitment as no loss mitigating efforts are included (i.e., offset expenses by reducing marketing and release expenses through streaming or tapping production insurance to recoup expenses). Therefore, I used a dichotomous measure with the theatrical release coded as a "1" and the streaming and canceling options coded as a "0."

Causal Attributions

I used an adapted version of the measure Eberly and colleagues (2017) used when introducing the construct as a manipulation check. Specifically, participants self-reported on two items for internal attributions: "The performance change reflects an aspect of the organization you represent" and "The performance change was because of something inside of the organization you represent." Two additional items measured external attributions: "The performance change reflects an aspect outside your organization" and "The performance change was because of something outside your organization." Finally, two items measured relational attributions: "The performance change reflects an aspect of the relationship your organization has with the other organization" and "The performance change was because of your

organization's relationship with the other organization." Coefficient alphas for internal, external, and relational attributions were, respectively, .76, .81, and .80 in the second session and .79, .81, and .78 in the third session.

Analytic Strategy

To test the different elements of mediation in Hypotheses 1-8, the ideal modeling approach with the longitudinal data is arguably the autoregressive longitudinal mediation model, also known as a cross-lagged panel model (Cole & Maxwell, 2003). The autoregressive longitudinal mediation model specifies autoregressions across measurement occasions (e.g., X₁ \rightarrow X₂ \rightarrow X₃) and specifies lagged mediation effects (i.e., X₁ \rightarrow M₂ \rightarrow Y₃). Additionally, this approach empirically models two key assumptions of mediation: stationarity (predictive paths from occasion to occasion are of the same magnitude) and equilibrium (variances and covariances among measured constructs are consistent over time; Cole & Maxwell, 2003).

To test the moderating effects in Hypotheses 9-14, I used multiple-group modeling (Grimm, Ram & Estabrook, 2017). Multiple-group modeling estimates a separate model for each category of the moderator simultaneously (i.e., three models at the same time, one for each attribution condition). This approach allows for a more holistic model compared to more piece-meal approaches (e.g., running the model on three separate sub-samples) and allows for more nuanced comparisons than is possible with traditional variable-based approaches (e.g., the index of moderated mediation; Hayes, 2015). This is particularly advantageous with complex models and experimental designs, such as in this study.

For example, multiple-group modeling can freely estimate different parameters of the model between experimental conditions while constraining others to equality across experimental conditions. This allows for more precision and parsimony in aligning the

theoretical and statistical models. Specifically, I constrained the autoregressions and covariances to equality for all conditions to reflect the stationarity and equilibrium assumptions of mediation respectively. To further address the stationarity assumption while also accounting for moderating effects, I constrained the cross-lagged coefficients to equality within each model (i.e., X1 \rightarrow M2 = X2 \rightarrow M3) but freely estimated the coefficient between models (i.e., the coefficient for X1 \rightarrow M2 was different for the Internal, External, and Relational conditions). Together, this approach explicitly models the assumptions of mediation while also testing the hypothesized moderated mediation effects.

Beyond testing the hypotheses, there are two main challenges to obtaining accurate estimates given the nature of the data and model. First, because the model is at the individual level, yet the negotiations occurred in dyads, there is consequential non-independence in the data that inflates type-I error rates. To account for this non-independence, I clustered standard errors by dyad. This is ideal as clustering standard errors is less likely to experience convergence issues with complex models compared to other methods for addressing non-independence (e.g., specifying a random effect for the dyad).

Second, because the dependent variable is categorical there are several challenges in model estimation. To overcome these challenges, I utilized theta parametrization (as opposed to delta) and weighted least square mean and variance adjusted estimation (as opposed to full information maximum likelihood estimation). The theta parameterization is necessary to estimate between-group hypotheses. This is because theta parameterization allows for the residual variances of factor indicators to be treated as parameters, otherwise the delta parameters are derived in such a way that they are constrained to equality across groups. Further, because weighted least square mean and variance adjusted estimation doesn't assume normally

Figure 12

Mediation Notation of the Effect of Negotiation Strategy on Escalation of Commitment



Note. a = A Path, b = B Path, c = Direct Effect, c' = Indirect Effect, w = Moderating Effect, c'1 = Indirect effect of Integrative Strategies on Escalation of Commitment via Relational Capital, c'2 = Indirect effect of Integrative Strategies on Escalation of Commitment via Economic Relevance, c'3 = Indirecteffect of Distributive Strategies on Escalation of Commitment via Relational Capital, c'4 = Indirect effect of Distributive Strategies on Escalation of Commitment via Economic Relevance, w1 = Moderating effect of Internal Attributions on the Indirect effect of Integrative Strategies on Escalation of Commitment, w2 = Moderating effect of Internal Attributions on the Indirect effect of Distributive Strategies on Escalation of effect of External Attributions on the Indirect effect of Integrative Strategies on Escalation of Commitment, w3 = Moderatingeffect of External Attributions on the Indirect effect of Integrative Strategies on Escalation of Commitment, w4 = Moderating effect of External Attributions on the Indirect effect of Distributive Strategies on Escalation of Commitment, w5 = Moderating effect of Relational Attributions on the Indirect effect of Integrative Strategies on Escalation of Commitment, w6 = Moderating effect of Relational Attributions on the Indirect effect of Distributive Strategies on

Figure 13

Autoregressive Longitudinal Mediation Model of Negotiation Strategy on Escalation of Commitment



Indirect Effect of Integrative Strategies on Escalation via Relational Capital: b = .05, p = .694, [-.03, .02] Indirect Effect of Distributive Strategies on Escalation via Relational Capital: b = .00, p = .709, [-.02, .03] Indirect Effect of Integrative Strategies on Escalation via Economic Relevance: b = .04, p = .135, [-.10, .01] Indirect Effect of Distributive Strategies on Escalation via Economic Relevance: b = .01, p = .373, [-.01, .04]

Note. n = 278. Cross-lagged effects, autoregressions, variances, and covariances omitted from figure to enhance readability.

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Descriptive .	Statistics and	Correl	ations f	for	Main	Anal	vsis
1							/

	N	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Time 1																	
1. Integrative Strategy	257	4.02	.79	_													
2. Distributive Strategy	257	4.39	.64	.01	-												
3. Relational Capital	257	3.63	.88	.10	09	—											
4. Economic Relevance	257	4.30	.65	.39*	03	.06	-										
5. Escalation	255	.80	.40	08	.06	05	04	_									
Time 2																	
6. Integrative Strategy	235	4.04	.84	.51*	.00	.24*	.16*	.08	—								
7. Distributive Strategy	235	4.32	.69	14	.41*	.00	.05	$.18^{*}$	10	_							
8. Relational Capital	235	3.58	.92	.09	01	$.56^{*}$	01	09	.25*	07	—						
9. Economic Relevance	235	4.27	.66	.34*	10	.06	.55*	02	$.30^{*}$.00	.06	_					
10. Escalation	235	.59	.49	$.14^{*}$	03	03	11	.21*	.12	06	02	07	_				
Time 3																	
11. Integrative Strategy	237	3.92	.83	.45*	09	$.16^{*}$.19*	.04	$.58^{*}$	07	$.20^{*}$.33*	.10	_			
12. Distributive Strategy	237	4.33	.67	13	.39*	03	.03	.03	12	.46*	.01	03	15*	12	—		
13. Relational Capital	237	3.67	.99	.12	01	$.56^{*}$	01	08	.25*	08	.65*	01	.01	.25* -	01	_	
14. Economic Relevance	237	4.10	.77	.31*	09	.05	$.48^{*}$	04	.24*	.02	.07	.65*	05	.41*	.06	.08	_
15. Escalation	236	.52	.50	.08	.02	08	06	.12	.07	.01	03	05	.38*	.06 ·	10	.03	.08

Note. The sample size across time points is due to the number of participants omitted due to failing attention checks changing across time points. The sample size difference for Escalation is some responses were not successfully recorded.

* *p* < .05.

distributed variables, it provides advantages to modeling categorical data while also accounting for missing data (Little & Rubin, 2019). It is important to note that with this estimation, probit regressions are estimated rather than logit regression. All analyses are conducted in Mplus 8 (Muthén & Muthén, 1998-2018).

Results

Manipulation Checks and Descriptive Statistics

To check the manipulations, I performed chi-square difference tests of independence on integrative and distributive behavior as well as causal attributions at each time point. Participants in the integrative condition engaged in more integrative behavior in the first ($\chi^2(12) = 28.57$, p = .005), second ($\chi^2(9) = 37.37$, p = .000), and third sessions ($\chi^2(9) = 34.28$, p = .000). Participants in the distributive condition engaged in more distributive behavior in the first ($\chi^2(12) = 38.07$, p = .000), second ($\chi^2(12) = 48.74$, p = .000), and third sessions ($\chi^2(12) = 49.35$, p = .000). Participants in the internal condition had significantly higher internal attributions in the second ($\chi^2(8) = 105.90$, p = .000) and third sessions ($\chi^2(8) = 105.80$, p = .000). Participants in the external condition had significantly higher external attributions in the second ($\chi^2(8) = 103.09$, p = .000) and third sessions ($\chi^2(8) = 34.10$, p = .000) and third sessions ($\chi^2(8) = 34.10$, p = .000) and third sessions ($\chi^2(8) = 34.10$, p = .000) and third sessions ($\chi^2(8) = 34.10$, p = .000) and third sessions ($\chi^2(8) = 34.10$, p = .000) and third sessions ($\chi^2(8) = 34.10$, p = .000) and third sessions ($\chi^2(8) = 34.10$, p = .000) and third sessions ($\chi^2(8) = 34.10$, p = .000) and third sessions ($\chi^2(8) = 34.10$, p = .000) and third sessions ($\chi^2(8) = 34.10$, p = .000) and third sessions ($\chi^2(8) = 34.10$, p = .000) and third sessions ($\chi^2(8) = 34.00$, p = .000) and third sessions ($\chi^2(8) = 34.10$, p = .000) and third sessions ($\chi^2(8) = 34.00$, p = .000) and third sessions ($\chi^2(8) = 34.10$, p = .000) and third sessions ($\chi^2(8) = 78.00$, p = .000).

I performed additional chi-square difference tests of independence to ensure the manipulations for one condition did not affect another. For example, during the second session, participants in the distributive condition were significantly less likely to engage in integrative behavior ($\chi^2(9) = 37.37$, p = .000), while participants did not significantly differ in integrative behavior if they were in the internal ($\chi^2(9) = 8.60$, p = .475), external ($\chi^2(9) = 10.62$, p = .302), or

relational conditions ($\chi^2(9) = 10.55$, p = .308). The same pattern was observed for all time points and conditions. For sake of space, the other 44 comparisons are available upon request. Thus, there is compelling evidence that the manipulations worked as desired.

The theoretical model with mediation notation is reported in Figure 12 and the final model with parameter estimates is reported in Figure 13. Note that, for sake of figure readability, only the hypothesis relevant parameters are reported (i.e., autoregressions, variances, co-variances, and non-mediation cross-lags were estimated but omitted from the figure). Due to equality constraints discussed in the analytic strategy, the autoregressive estimates were the same for all parameters (b = .64, p = .000), the covariance estimates between constructs at the same time point were the same for all parameters (b = .02, p = .022), and the non-mediation cross-lags were the same same estimates as the reported mediation cross-lags (i.e., the effect of the IV₁ on MED₂ is the same as the effect of IV₂ on MED₃). The variances for all variables were positive and significant.

Descriptive statistics and correlations are reported in Table 1. Some patterns from the correlation matrix, beyond the clear autoregressive effects, involve the general relationships with escalation of commitment as well as the relationship of integrative strategy with the proposed mediators across time. Regarding escalation, unfortunately no predictors were significantly correlated with escalation at T3. However, integrative strategy at T1 was positively correlated with escalation at T2 (Input_t \rightarrow Output_{t+1}), consistent with Hypothesis 7. Interestingly, escalation at T1 was positively correlated with distributive strategy at T2, but escalation at T2 was negatively correlated with distributive strategy at T3 (Output_t \rightarrow Input_{t+1}). While not formalized in a hypothesis, this is consistent with the recursion between outputs and inputs across episodes theorized in Figure 5.

Another general pattern was the clear connection between integrative strategy and the proposed mediators: relational capital and economic relevance. Nearly all of the within-episode correlations involving these variables were significant (Intput_t \rightarrow Output_t). Further, the relationships between integrative strategy at T1 and economic relevance were significant at both T2 and T3 (Input_t \rightarrow Output_{t+1}), consistent with Hypothesis 2. Inversely, relational capital and economic relevance at both T1 and T2 were significantly related with integrative strategies at T2 and T3 respectively (Output_t \rightarrow Input_{t+1}). This suggests that the past relationship and its perceived instrumentality affected future strategy, again consistent with the theorized recursion in Figure 5.

Main Effects

Hypotheses 1-8 were tested using an autoregressive longitudinal mediation model without multiple-group effects. Hypothesis 1 predicts that integrative strategy is positively related to relational capital. The results support this hypothesis (b = .14, p = .038). Hypothesis 2 predicts that integrative strategy is positively related to perceptions of economic relevance of relational capital. The results also support this hypothesis (b = .26, p = .000). Hypothesis 3 predicts that distributive strategy is negatively related to relational capital. The results do not support this hypothesis (b = .13, p = .099). Hypothesis 4 predicts that distributive strategy is negatively related to relational capital. The results do not support this hypothesis (b = -.07, p = .201). Hypothesis 5 predicts that relational capital is positively related to escalation of commitment. The results do not support this hypothesis (b = .03, p = .661). Hypothesis 6 predicts that perceptions of economic relevance of relational capital are positively related to escalation of commitment. The results do not support this hypothesis (b = .103, p = .661). Hypothesis 6 predicts that perceptions of economic relevance of relational capital are positively related to escalation of commitment. The results do not support this hypothesis (b = .103, p = .661). Hypothesis 6 predicts that perceptions of economic relevance of relational capital are positively related to escalation of commitment. The results do not support this hypothesis (b = .16, p = .128). Together, two of the six main effect hypotheses were supported.

Figure 14

Multiple-Group Model of Negotiation Strategy on Escalation of Commitment in the Internal Attribution Condition



Indirect Effect of Integrative Strategies on Escalation via Relational Capital: b = .01, p = .788, [-.06, .05] Indirect Effect of Distributive Strategies on Escalation via Relational Capital: b = .02, p = .715, [-.07, .15] Indirect Effect of Integrative Strategies on Escalation via Economic Relevance: b = .05, p = .416, [-.17, .07] Indirect Effect of Distributive Strategies on Escalation via Economic Relevance: b = .01, p = .817, [-.09, .11]

Note. n = 94. Cross-lagged effects, autoregressions, variances, and covariances omitted from figure to enhance readability.

Table 2

Descriptive Statistics and Correlations – Internal Attribution Condition Only

N	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
84	3.98	.75	_													
84	4.46	.54	16	_												
84	3.64	.87	.32*	07	—											
84	4.37	.57	.35*	18	.08	_										
83	.80	.41	.00	.15	.02	03	_									
76	4.13	.78	.45*	15	.16	.10	.14	—								
76	4.46	.51	18	$.38^{*}$.08	02	.15	20	-							
76	3.54	.93	$.27^{*}$	04	.54*	.09	.00	.23	.08	—						
76	4.33	.57	$.46^{*}$	15	08	.63*	05	.24	05	.04	-					
76	.55	.50	.07	.19	03	08	.22	.00	.17	.06	12	_				
79	3.88	.78	$.40^{*}$	14	.02	.20	.05	.42*	10	.23	.33*	.03	_			
79	4.35	.52	17	.33*	.00	13	.07	02	.29*	.10	09	.07	06	_		
79	3.51	.99	.19	03	.51*	08	.13	.15	04	.73*	15	.07	.07	.03	—	
79	4.22	.73	$.47^{*}$	11	04	.62*	.00	.17	03	.14	$.71^{*}$	01	.36*	.15	03	-
79	.43	.50	17	02	18	16	.18	.07	01	11	11	.29*	05	01	.03	01
	N 84 84 84 83 76 76 76 76 76 76 76 76 76 79 79 79 79 79 79	N Mean 84 3.98 84 4.46 84 3.64 84 4.37 83 .80 76 4.13 76 4.46 76 3.54 76 4.33 76 .55 79 3.88 79 4.35 79 3.51 79 .43	N Mean SD 84 3.98 .75 84 4.46 .54 84 3.64 .87 84 3.64 .87 84 3.64 .87 84 3.64 .87 84 4.37 .57 83 .80 .41 76 4.13 .78 76 4.54 .93 76 4.33 .57 76 .55 .50 79 3.88 .78 79 4.35 .52 79 3.51 .99 79 4.22 .73 79 .43 .50	N Mean SD 1 84 3.98 $.75$ - 84 4.46 $.54$ 16 84 3.64 $.87$ $.32^*$ 84 3.64 $.87$ $.32^*$ 84 4.37 $.57$ $.35^*$ 83 $.80$ $.41$ $.00$ 76 4.13 $.78$ $.45^*$ 76 4.33 $.57$ $.46^*$ 76 3.54 $.93$ $.27^*$ 76 4.33 $.57$ $.46^*$ 76 $.55$ $.50$ $.07$ 79 3.88 $.78$ $.40^*$ 79 4.35 $.52$ $.17$ 79 3.51 $.99$ $.19$ 79 $.43$ $.50$ $.17$	N Mean SD 1 2 84 3.98 $.75$ - 84 4.46 $.54$ 16 - 84 3.64 $.87$ $.32^*$ 07 84 3.64 $.87$ $.32^*$ 07 84 4.37 $.57$ $.35^*$ 18 83 $.80$ $.41$ $.00$ $.15$ 76 4.13 $.78$ $.45^*$ 15 76 4.46 $.51$ 18 $.38^*$ 76 3.54 $.93$ $.27^*$ 04 76 4.33 $.57$ $.46^*$ 15 76 $.55$ $.50$ $.07$ $.19$ 79 3.88 $.78$ $.40^*$ $.14$ 79 3.51 $.99$ $.19$ $.03$ 79 4.22 $.73$ $.47^*$ $.11$ 79 $.43$	N Mean SD 1 2 3 84 3.98 $.75$ - - 84 4.46 $.54$ 16 - - 84 3.64 $.87$ $.32^*$ 07 - 84 4.364 $.87$ $.32^*$ 07 - 84 4.37 $.57$ $.35^*$ 18 $.08$ 83 $.80$ $.41$ $.00$ $.15$ $.02$ 76 4.13 $.78$ $.45^*$ 15 $.16$ 76 4.46 $.51$ 18 $.38^*$ $.08$ 76 3.54 $.93$ $.27^*$ $.04$ $.54^*$ 76 4.33 $.57$ $.46^*$ 15 08 76 $.55$ $.50$ $.07$ $.19$ 03 79 3.88 $.78$ $.40^*$ 14 $.02$ 79 4.35 $.52$ 17 $.33^*$ $.00$	N Mean SD 1 2 3 4 84 3.98 $.75$ - -	N Mean SD 1 2 3 4 5 84 3.98 .75 -	N Mean SD 1 2 3 4 5 6 84 3.98 .75 -	N Mean SD 1 2 3 4 5 6 7 84 3.98 .75 -	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$					

Note. The sample size across time points is due to the number of participants omitted due to failing attention checks changing across time points. The sample size difference for Escalation is some responses were not successfully recorded.

* *p* < .05.

Indirect Effects

Hypothesis 7a predicts that integrative negotiation strategy has a positive indirect effect on escalation of commitment via relational capital. The results do not support this hypothesis (b= -.05, p = .694). Hypothesis 7b predicts that integrative negotiation strategy has a positive indirect effect on escalation of commitment via economic relevance of relational capital. The results do not support this hypothesis (b = .00, p = .709). Hypothesis 8a predicts that distributive strategy has a negative indirect effect on escalation of commitment via relational capital. The results do not support this hypothesis (b = -.04, p = .135). Hypothesis 8b predicts that distributive strategy has a negative indirect effect on escalation of commitment via relational capital. The results do not support this hypothesis (b = -.04, p = .135). Hypothesis 8b predicts that distributive strategy has a negative indirect effect on escalation of commitment via economic relevance of relational capital. The results do not support this hypothesis (b = .01, p = .373). Together, zero of the four indirect effect hypotheses were supported.

Moderated Mediation – Multiple-Group Modeling

Hypotheses 9-14 were tested using a multiple-group autoregressive longitudinal mediation model, with three models for each of the attribution conditions (see Figures 14-16 for path models for each condition).

Internal Attributions

Parameter estimates are reported in Figure 14 and descriptive statistics in Table 2. Hypothesis 9a predicts that internal attributions moderates the relationship between integrative strategies and escalation of commitment via relational capital, such that the relationship is less positive. The results do not support this hypothesis (b = -.01, p = .788). Hypothesis 9b predicts that internal attributions moderates the relationship between integrative strategies and escalation of commitment via relationship between integrative strategies and escalation of commitment via economic relevance of relational capital, such that the relationship is more positive. The results do not support this hypothesis (b = .02, p = .715). Hypothesis 10a predicts

Figure 15

Multiple-Group Model of Negotiation Strategy on Escalation of Commitment in the External Attribution Condition



Indirect Effect of Integrative Strategies on Escalation via Relational Capital: b = .03, p = .694, [-.13, .02] Indirect Effect of Distributive Strategies on Escalation via Relational Capital: b = .00, p = .709, [-.07, .07] Indirect Effect of Integrative Strategies on Escalation via Economic Relevance: b = .07, p = .135, [-.26, .01] Indirect Effect of Distributive Strategies on Escalation via Economic Relevance: b = .02, p = .373, [-.09, .15]

Note. n = 95. Cross-lagged effects, autoregressions, variances, and covariances omitted from figure to enhance readability.

Table 3

Descriptive Statistics and Correlations – External Attribution Condition Only

N	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
91	4.07	.85	_													
91	4.40	.64	.26*	_												
91	3.80	.83	12	09	-											
91	4.32	.71	$.28^{*}$.12	.01	-										
90	.83	.37	11	.04	.01	02	—									
77	3.94	.91	$.54^{*}$.04	.32*	.05	.00	—								
77	4.40	.64	02	.31*	.14	.15	.02	04	_							
77	3.60	.90	08	.10	.45*	20	.00	$.38^{*}$.00	_						
77	4.13	.71	.23	05	.22	.44*	02	.25*	12	.07	—					
77	.60	.49	$.30^{*}$.04	07	18	.11	.15	25*	11	12	—				
80	3.83	.97	.36*	.00	.26*	.05	.02	.71*	.01	.26*	.23	.08	_			
80	4.41	.67	08	.25*	.22	.26*	.03	09	$.48^{*}$.15	11	15	04	-		
80	3.78	.93	.05	.02	$.47^{*}$	01	15	$.40^{*}$.02	.53*	.08	03	.45*	.20	_	
80	3.98	.88	.21	.07	.16	$.37^{*}$	13	.24	.06	.04	$.67^{*}$	08	.38*	.00	.24	—
79	.54	.50	.22	.01	12	07	11	01	05	24*	14	.30*	08	16	13	.06
	N 91 91 91 90 77 77 77 77 77 77 80 80 80 80 80 80	N Mean 91 4.07 91 4.40 91 3.80 91 4.32 90 .83 77 3.94 77 4.40 77 3.60 77 4.13 77 .60 80 3.83 80 4.41 80 3.98 79 .54	N Mean SD 91 4.07 .85 91 4.40 .64 91 3.80 .83 91 4.32 .71 90 .83 .37 77 3.94 .91 77 3.60 .90 77 4.40 .64 77 3.60 .90 77 4.13 .71 77 .60 .49 80 3.83 .97 80 3.83 .97 80 3.78 .93 80 3.98 .88 79 .54 .50	N Mean SD 1 91 4.07 .85 - 91 4.40 .64 .26* 91 3.80 .83 12 91 4.32 .71 .28* 90 .83 .37 11 77 3.94 .91 .54* 77 4.40 .64 02 77 3.60 .90 08 77 4.13 .71 .23 77 .60 .49 .30* 80 3.83 .97 .36* 80 3.78 .93 .05 80 3.98 .88 .21 79 .54 .50 .22	N Mean SD 1 2 91 4.07 $.85$ - - 91 4.40 $.64$ $.26^*$ - 91 3.80 $.83$ 12 09 91 4.32 $.71$ $.28^*$ $.12$ 90 $.83$ $.37$ 11 $.04$ 77 3.94 $.91$ $.54^*$ $.04$ 77 3.94 $.91$ $.54^*$ $.04$ 77 3.60 $.90$ 08 $.10$ 77 3.60 $.90$ 08 $.10$ 77 4.13 $.71$ $.23$ 05 77 $.60$ $.49$ $.30^*$ $.04$ 80 3.83 $.97$ $.36^*$ $.00$ 80 3.83 $.97$ $.36^*$ $.00$ 80 3.78 $.93$ $.05$ $.02$ 80 3.98	N Mean SD 1 2 3 91 4.07 $.85$ - - 91 4.40 $.64$ $.26^*$ - 91 3.80 $.83$ 12 09 - 91 3.80 $.83$ 12 09 - 91 4.32 $.71$ $.28^*$ $.12$ $.01$ 90 $.83$ $.37$ 11 $.04$ $.01$ 77 3.94 $.91$ $.54^*$ $.04$ $.32^*$ 77 4.40 $.64$ 02 $.31^*$ $.14$ 77 3.60 $.90$ 08 $.10$ $.45^*$ 77 4.13 $.71$ $.23$ 05 $.22$ 77 $.60$ $.49$ $.30^*$ $.04$ 07 80 3.83 $.97$ $.36^*$ $.00$ $.26^*$ 80 3.78 $.93$ $.05$ $.02$ $.47^*$ <t< td=""><td>NMeanSD123491$4.07$$.85$-91$4.40$$.64$$.26^*$-91$3.80$$.83$$12$$09$-91$4.32$$.71$$.28^*$$.12$$.01-90.83$$.37$$11$$.04$$.01$$02$77$3.94$$.91$$.54^*$$.04$$.32^*$$.05$77$4.40$$.64$$02$$.31^*$$.14$$.15$77$3.60$$.90$$08$$.10$$.45^*$$20$77$4.13$$.71$$.23$$05$$.22$$.44^*77.60$$.49$$.30^*$$.04$$07$$18$80$3.83$$.97$$.36^*$$.00$$.26^*$$.05$$80$$4.41$$.67$$08$$.25^*$$.22$$.26^*$$80$$3.78$$.93$$.05$$.02$$.47^*$$01$$80$$3.98$$.88$$.21$$.07$$.16$$.37^*$$79$$.54$$.50$$.22$$.01$$12$$07$</td><td>$\begin{array}{c ccccccccccccccccccccccccccccccccccc$</td><td>N Mean SD 1 2 3 4 5 6 91 4.07 $.85$ - - - 91 4.40 $.64$ $.26^*$ - - 91 3.80 $.83$ 12 09 - - 91 4.32 $.71$ $.28^*$ $.12$ $.01$ - - 90 $.83$ $.37$ 11 $.04$ $.01$ 02 - - 77 3.94 $.91$ $.54^*$ $.04$ $.32^*$ $.05$ $.00$ - 77 4.40 $.64$ 02 $.31^*$ $.14$ $.15$ $.02$ 04 77 3.60 $.90$ 08 $.10$ $.45^*$ 20 $.00$ $.38^*$ 77 4.13 $.71$ $.23$ 05 $.22$ $.44^*$ 02 $.25^*$ 77 $.60$ $.49$ $.30^*$ $.04$ $-$</td><td>N Mean SD 1 2 3 4 5 6 7 91 4.07 .85 - <t< td=""><td>N Mean SD 1 2 3 4 5 6 7 8 91 4.07 $.85$ - - - - 91 4.40 $.64$ $.26^*$ - - - 91 3.80 $.83$ 12 09 - - - - - - 91 4.32 $.71$ $.28^*$ $.12$ $.01$ -</td><td>N Mean SD 1 2 3 4 5 6 7 8 9 91 4.07 $.85$ -</td><td>N Mean SD 1 2 3 4 5 6 7 8 9 10 91 4.07 $.85$ -</td></t<><td>$\begin{array}{c ccccccccccccccccccccccccccccccccccc$</td><td>$\begin{array}{c ccccccccccccccccccccccccccccccccccc$</td><td>$\begin{array}{cccccccccccccccccccccccccccccccccccc$</td></td></t<>	NMeanSD123491 4.07 $.85$ -91 4.40 $.64$ $.26^*$ -91 3.80 $.83$ 12 09 -91 4.32 $.71$ $.28^*$ $.12$ $.01$ -90 $.83$ $.37$ 11 $.04$ $.01$ 02 77 3.94 $.91$ $.54^*$ $.04$ $.32^*$ $.05$ 77 4.40 $.64$ 02 $.31^*$ $.14$ $.15$ 77 3.60 $.90$ 08 $.10$ $.45^*$ 20 77 4.13 $.71$ $.23$ 05 $.22$ $.44^*$ 77 $.60$ $.49$ $.30^*$ $.04$ 07 18 80 3.83 $.97$ $.36^*$ $.00$ $.26^*$ $.05$ 80 4.41 $.67$ 08 $.25^*$ $.22$ $.26^*$ 80 3.78 $.93$ $.05$ $.02$ $.47^*$ 01 80 3.98 $.88$ $.21$ $.07$ $.16$ $.37^*$ 79 $.54$ $.50$ $.22$ $.01$ 12 07	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	N Mean SD 1 2 3 4 5 6 91 4.07 $.85$ - - - 91 4.40 $.64$ $.26^*$ - - 91 3.80 $.83$ 12 09 - - 91 4.32 $.71$ $.28^*$ $.12$ $.01$ - - 90 $.83$ $.37$ 11 $.04$ $.01$ 02 - - 77 3.94 $.91$ $.54^*$ $.04$ $.32^*$ $.05$ $.00$ - 77 4.40 $.64$ 02 $.31^*$ $.14$ $.15$ $.02$ 04 77 3.60 $.90$ 08 $.10$ $.45^*$ 20 $.00$ $.38^*$ 77 4.13 $.71$ $.23$ 05 $.22$ $.44^*$ 02 $.25^*$ 77 $.60$ $.49$ $.30^*$ $.04$ $-$	N Mean SD 1 2 3 4 5 6 7 91 4.07 .85 - <t< td=""><td>N Mean SD 1 2 3 4 5 6 7 8 91 4.07 $.85$ - - - - 91 4.40 $.64$ $.26^*$ - - - 91 3.80 $.83$ 12 09 - - - - - - 91 4.32 $.71$ $.28^*$ $.12$ $.01$ -</td><td>N Mean SD 1 2 3 4 5 6 7 8 9 91 4.07 $.85$ -</td><td>N Mean SD 1 2 3 4 5 6 7 8 9 10 91 4.07 $.85$ -</td></t<> <td>$\begin{array}{c ccccccccccccccccccccccccccccccccccc$</td> <td>$\begin{array}{c ccccccccccccccccccccccccccccccccccc$</td> <td>$\begin{array}{cccccccccccccccccccccccccccccccccccc$</td>	N Mean SD 1 2 3 4 5 6 7 8 91 4.07 $.85$ - - - - 91 4.40 $.64$ $.26^*$ - - - 91 3.80 $.83$ 12 09 - - - - - - 91 4.32 $.71$ $.28^*$ $.12$ $.01$ - -	N Mean SD 1 2 3 4 5 6 7 8 9 91 4.07 $.85$ - -	N Mean SD 1 2 3 4 5 6 7 8 9 10 91 4.07 $.85$ - -	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

Note. The sample size across time points is due to the number of participants omitted due to failing attention checks changing across time points. The sample size difference for Escalation is some responses were not successfully recorded.

* *p* < .05.
that internal attributions moderates the relationship between distributive strategies and escalation of commitment via relational capital, such that the relationship is more negative. The results do not support this hypothesis (b = -.05, p = .416). Hypothesis 10b predicts that internal attributions moderates the relationship between distributive strategies and escalation of commitment via economic relevance of relational capital, such that the relationship is less negative. The results do not support this hypothesis (b = .01, p = .817). Together, zero of the four moderated mediation effects involving internal attributions were supported.

External Attributions

Parameter estimates are reported in Figure 15 and descriptive statistics in Table 3. Hypothesis 11a predicts that external attributions moderates the relationship between integrative strategies and escalation of commitment via relational capital, such that the relationship is more positive. The results do not support this hypothesis (b = -.03, p = .439). Hypothesis 11b predicts that external attributions moderates the relationship between integrative strategies and escalation of commitment via economic relevance of relational capital), such that the relationship is less positive. The results do not support this hypothesis (b = .00, p = .629). Hypothesis 12a predicts that external attributions moderates the relationship between distributive strategies and escalation of commitment via relational, such that the relationship is less negative. The results do not support this hypothesis 12b predicts that external attributions moderates the relationship is less negative. The results do not support this hypothesis 12b predicts that external attributions moderates the relationship is less negative. The results do not support this hypothesis 12b predicts that external attributions moderates the relationship is less negative. The results do not support this hypothesis (b = .07, p = .349). Hypothesis 12b predicts that external attributions moderates the relationship between distributive strategies and escalation of commitment via economic relevance of relational capital, such that the relationship is more negative. The results do not support this hypothesis (b = .02, p = .959). Together, zero of the four moderated mediation effects involving external attributions were supported.

Multiple-Group Model of Negotiation Strategy on Escalation of Commitment in the Relational Attribution Condition



Indirect Effect of Integrative Strategies on Escalation via Relational Capital: b = .01, p = .643, [-.04, .09] Indirect Effect of Distributive Strategies on Escalation via Relational Capital: b = .01, p = .689, [-.11, .03] Indirect Effect of Integrative Strategies on Escalation via Economic Relevance: b = .01, p = .825, [-.10, .15] Indirect Effect of Distributive Strategies on Escalation via Economic Relevance: b = .00, p = .903, [-.05, .04]

Note. n = 89. Cross-lagged effects, autoregressions, variances, and covariances omitted from figure to enhance readability.

Table 4

Descriptive Statistics and Correlations – Relational Attribution Condition Only

								•								
N	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
82	3.99	.77	_													
82	4.30	.74	10	—												
82	3.46	.91	.12	10	_											
82	4.20	.66	$.54^{*}$	11	.11	_										
82	.77	.42	11	.01	17	08	-									
82	4.05	.80	.55*	.03	$.28^{*}$.31*	.12	-								
82	4.13	.84	23	.45*	18	04	.26*	12	-							
82	3.61	.94	.10	06	$.68^{*}$.10	21	.16	18	_						
82	4.33	.66	.39*	15	.07	.65*	.01	.36*	.14	.08	_					
82	.62	.49	.04	20	.02	04	$.30^{*}$.19	02	03	01	_				
78	4.06	.71	.66*	12	.23	.43*	.10	.61*	06	.12	$.48^{*}$.18	-			
78	4.24	.78	15	$.48^{*}$	26*	06	02	17	.49*	12	.10	29*	21	-		
78	3.70	.99	.13	.03	$.67^{*}$.09	18	.29*	13	$.68^{*}$.08	02	.24*	15	-	
78	4.12	.55	$.30^{*}$	28*	.07	.51*	.02	.27*	.04	.06	$.55^{*}$	06	$.56^{*}$.10	.10	-
78	.59	.50	.16	.07	.05	.04	$.28^{*}$.19	.10	.19	.10	.54*	.34*	11	.13	.24*
	N 82 82 82 82 82 82 82 82 82 82 82 82 78 78 78 78 78 78	N Mean 82 3.99 82 4.30 82 3.46 82 3.46 82 3.46 82 4.20 82 .77 82 4.05 82 4.05 82 4.13 82 .62 78 4.06 78 4.24 78 3.70 78 4.12 78 .59	N Mean SD 82 3.99 .77 82 4.30 .74 82 3.46 .91 82 4.20 .66 82 .77 .42 82 4.05 .80 82 4.13 .84 82 3.61 .94 82 .62 .49 78 4.06 .71 78 4.24 .78 78 3.70 .99 78 4.12 .55 78 .59 .50	N Mean SD 1 82 3.99 $.77$ - 82 4.30 $.74$ 10 82 3.46 $.91$ $.12$ 82 3.46 $.91$ $.12$ 82 4.20 $.66$ $.54^*$ 82 $.77$ $.42$ $.11$ 82 4.05 $.80$ $.55^*$ 82 4.05 $.80$ $.55^*$ 82 4.13 $.84$ 23 82 3.61 $.94$ $.10$ 82 $.62$ $.49$ $.04$ 78 4.06 $.71$ $.66^*$ 78 4.24 $.78$ $.15$ 78 3.70 $.99$ $.13$ 78 4.12 $.55$ $.30^*$ 78 $.59$ $.50$ $.16$	N Mean SD 1 2 82 3.99 $.77$ - - 82 4.30 $.74$ 10 - 82 3.46 $.91$ $.12$ 10 82 3.46 $.91$ $.12$ 10 82 4.20 $.66$ $.54^*$ 11 82 4.20 $.66$ $.54^*$ 11 82 4.05 $.80$ $.55^*$ $.03$ 82 4.05 $.80$ $.55^*$ $.03$ 82 4.05 $.80$ $.55^*$ $.03$ 82 4.05 $.80$ $.55^*$ $.03$ 82 $.61$ $.94$ $.10$ 06 82 $.62$ $.49$ $.04$ 20 78 4.06 $.71$ $.66^*$ 12 78 4.24 $.78$ 15 $.48^*$ 78	N Mean SD 1 2 3 82 3.99 $.77$ - - 82 4.30 $.74$ $.10$ - 82 3.46 $.91$ $.12$ 10 - 82 3.46 $.91$ $.12$ 10 - 82 3.46 $.91$ $.12$ 10 - 82 4.20 $.66$ $.54^*$ 11 $.11$ 82 $.77$ $.42$ $.11$ $.01$ 17 82 4.05 $.80$ $.55^*$ $.03$ $.28^*$ 82 4.13 $.84$ 23 $.45^*$ 18 82 3.61 $.94$ $.10$ 06 $.68^*$ 82 $.62$ $.49$ $.04$ 20 $.02$ 78 4.06 $.71$ $.66^*$ 12 $.23$ 78 4.24 $.78$ $.15$ <t< td=""><td>N Mean SD 1 2 3 4 82 3.99 $.77$ -</td><td>N Mean SD 1 2 3 4 5 82 3.99 $.77$ -</td><td>N Mean SD 1 2 3 4 5 6 82 3.99 $.77$ -</td><td>N Mean SD 1 2 3 4 5 6 7 82 3.99 $.77$ -</td><td>N Mean SD 1 2 3 4 5 6 7 8 82 3.99 $.77$ -</td><td>N Mean SD 1 2 3 4 5 6 7 8 9 82 3.99 $.77$ -</td><td>$\begin{array}{c ccccccccccccccccccccccccccccccccccc$</td><td>$\begin{array}{c ccccccccccccccccccccccccccccccccccc$</td><td>$\begin{array}{c ccccccccccccccccccccccccccccccccccc$</td><td>$\begin{array}{c ccccccccccccccccccccccccccccccccccc$</td></t<>	N Mean SD 1 2 3 4 82 3.99 $.77$ - -	N Mean SD 1 2 3 4 5 82 3.99 $.77$ - -	N Mean SD 1 2 3 4 5 6 82 3.99 $.77$ - -	N Mean SD 1 2 3 4 5 6 7 82 3.99 $.77$ - -	N Mean SD 1 2 3 4 5 6 7 8 82 3.99 $.77$ - -	N Mean SD 1 2 3 4 5 6 7 8 9 82 3.99 $.77$ - -	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

Note. The sample size across time points is due to the number of participants omitted due to failing attention checks changing across time points. The sample size difference for Escalation is some responses were not successfully recorded.

* *p* < .05.

Relational Attributions

Parameter estimates are reported in Figure 16 and descriptive statistics in Table 4. Hypothesis 13a predicts that relational attributions moderates the relationship between integrative strategies and escalation of commitment via relational capital, such that the relationship is more positive. The results do not support this hypothesis (b = .01, p = .643). Hypothesis 13b predicts that relational attributions moderates the relationship between integrative strategies and escalation of commitment via economic relevance of relational capital, such that the relationship is more positive. The results do not support this hypothesis (b = -.01, p = .689). Hypothesis 14a predicts that relational attributions moderates the relationship between distributive strategies and escalation of commitment via relational capital, such that the relationship is less negative. The results do not support this hypothesis (b = .01, p = .825). Hypothesis 14b predicts that relational attributions moderates the relationship between distributive strategies and escalation of commitment via economic relevance of relational capital, such that the relationship is less negative. The results do not support this hypothesis (b = -.00, p = .903). Together, zero of the four moderated mediation effects involving relational attributions were supported. Thus, only two of the twenty-two hypotheses were supported with this model.

Supplemental Analysis

Potential Contributors

The Model

There are three potential contributors to these disappointing results that alternative analyses can address: the model, measurement, and manipulation. The multiple-group autoregressive mediation model was very complex, underpowered, and had several strict assumptions. For instance, each of the five variables in the model were measured at three timepoints, resulting in ten endogenous and five exogenous variables in each of the internal, external, and relational models. In total, 110 parameters were estimated in this complex model with a sample size of 278. Further, the multiple-group approach simultaneously analyzed three sub-samples, which substantially diminished statistical power due to utilizing only a third of the total sample for each model. Finally, stationarity and equilibrium—while important elements to mediation theory—are strict assumptions that are rarely empirically observed or even represented analytically. Indeed, Hayes (2022, p. 18) addresses that the realities of data collection and analysis often necessitate a departure from ideal mathematics to more realistic models when he noted:

"The inferences that we make about cause are not products of the mathematics underneath the modeling process. Rather, the inferences we make are products of our mind.... To be sure, we can and should hold ourselves to a high standard. We should strive to design rigorous studies that allow us to make causal inferences with clarity when possible... But we won't always be able to do so.... We should not let [limitations constrain our efforts] to understand what our data might be telling us about the processes we are studying."

Thus, empirical models that do not perfectly represent mediation theory are still serviceable in general theory testing. In this spirit, rather than a multiple-group autoregressive longitudinal mediation model, I utilized a serial longitudinal mediation model with the index of moderated mediation (Hayes, 2015). Serial longitudinal mediation does not require the same numerous autoregressive and covariance parameters, greatly simplifying the model due to the decreased number of variables in the model (i.e., only one time point per variable is represented rather than all three). To decrease the number of estimated parameters further, rather than two independent variables, I used a single independent variable. Specifically, I used a dichotomous indicator of negotiation strategy, where "0" represented the distributive condition and "1" represented the integrative condition. The final step I took to simplify the model, rather than testing both mediators simultaneously, was to test the two mediators in separate models.

Together, these changes resulted in two models that are less complex, have higher power, and have more relaxed assumptions than the previous model.

The Measurement

Beyond the model, measurement is an additional potential contributor to the disappointing results of the previous model. Specifically, the timing and source of the mediator measurement. Because the mediators were measured during the prior episode (i.e., 2nd), this decreased the effect size relative to the mediator measured in the same episode as the escalation decision (i.e., 3rd). Using the mediators measured in the same episode still allows for a longitudinal test of mediation, as the independent variable is the experimental condition assigned during the first episode, the mediators are related to the bargaining stage of the third episode, and the dependent variable is a separate task during the implementing stage of the third episode.

In addition to the timing of the measures is the source of the measurement. Using the partner-reported relational capital implies a more complex, dyadic process (i.e., the focal negotiator's strategy affects their partner's perceptions, which in turn affects the decisions of the focal negotiator). This complex process is less direct and, as a result, one would expect the effect size to be weaker than a more direct and simple process (i.e., the focal negotiator's strategy affects their partner, which in turn affects their own decisions). Thus, by using measures that are less diluted by temporal or social distance, there is an increased chance of detecting an effect.

The Manipulation

Beyond measurement, the manipulation is an additional potential contributor to the disappointing results of the previous model. The causal attribution manipulation was not nearly as effective as the negotiation strategy manipulation that was reinforced by the participants

bonus compensation. Further, the participants were exposed to the causal attribution manipulation at the very beginning of the session while the escalation of commitment decisions were made at the very end of the session—separated by planning for and engaging in a 20minute negotiation and two 5-minute surveys. Future studies with the task could increase the strength of the causal attribution manipulation as well as reinforce the manipulation by reminding participants of the cause of failure before asking them to make recommendations. This less-than-effective manipulation was further disadvantaged due to the dyadic nature of the manipulation (e.g., when it was the studio's fault, it was an internal attribution for one member of the dyad and an external attribution for the other member of the dyad). It is possible that accounting for the dyadic non-independence in the data washed out the effects of an already lessthan-effective manipulation.

By changing the categorization of the moderator to reflect the dyadic condition rather than the individual condition, it might be possible to bypass any artificial diminishing effect. To attempt this, I changed the moderator from three categories at the individual level (i.e., internal, external, relational) to two categories at the dyadic level: asymmetric/unshared blame (formerly internal and external) and symmetric/shared blame (formerly relational). Because this categorization aligns with the dyad, this could potentially decrease any artificial diminishing due to the dyadic effect. Importantly, while this approach does not allow for differentiating between internal and external attributions (Hypotheses 9a-12b), it still allows for testing the core of the moderation question: when the relationship between the two parties is the cause of the problem, does this increase the positive indirect effect of integrative strategies on escalation of commitment?

Descriptive Statistics and Correlations for Supplemental Analysis									
	N	Mean	SD	1	2	3			
Relational Capital Model									
1. Integrative Strategy (T1)	237	.50	.50	_					
2. Causal Attribution (T2)	237	.33	.47	01	_				
3. Relational Capital (T3)	237	3.65	1.02	.25*	.06	_			
4. Escalation (T3)	236	.52	.50	.01	.10	$.15^{*}$			
Economic Relevance Model									
1. Integrative Strategy (T1)	237	.50	.50	_					
2. Causal Attribution (T2)	237	.33	.47	01	_				
3. Economic Relevance (T3)	237	4.10	.77	$.18^{*}$.02	_			
4. Escalation (T3)	236	.52	.50	.01	.10	.08			

 Table 5

 Descriptive Statistics and Correlations for Supplemental Analysis

Note. The sample size difference for Escalation is due to some responses were not successfully recorded.

* *p* < .05.

Serial Longitudinal Mediation Model of Indirect Effect of Integrative Strategy on Escalation of Commitment



Indirect Effect: *b* = .10, *p* = .050, [.01, .21]

Note. n = 237.

Serial Longitudinal Mediation Model of Conditional Indirect Effect of Integrative Strategy on Escalation of Commitment



Conditional Indirect Effect: b = .16, p = .048, [.07, .45]

Note. n = 237.

Chart of the Index of Moderated Mediation in the Serial Longitudinal Mediation Model Conditional on Causal Attributions





Results of the Serial Longitudinal Mediation Model

After combining the changes to the model, measurement, and manipulation outlined above, I re-examined the research questions. Similar to the autoregressive longitudinal mediation model, I tested the hypotheses direct and indirect effects in separate models (see Figures 17 and 20) from the conditional indirect effect models (see Figures 18 and 21). As the different mediators were also addressed in different models, I will outline in the text the results that pertain to each mediator separately rather than in hypothesis order for sake of clarity. The full results for both models are reported in the figures and descriptive statistics are in Table 5.

Relational Capital

Negotiators utilizing integrative strategies reported higher levels of relational capital than negotiators utilizing distributive strategies (b = .50, p = .000), supporting Hypotheses 1 and 3. In turn, negotiators who reported higher levels of relational capital after negotiating were more likely to escalate commitment to the failing venture (b = .20, p = .027), supporting Hypothesis 5. Further, there was a significant indirect effect of negotiation strategy on escalation of commitment via relational capital, such that negotiators utilizing integrative strategies were more likely to escalate commitment to the failing venture than negotiators utilizing distributive strategies (b = .10, p = .050). These results support Hypotheses 7a and 8a. Finally, this indirect effect was conditional on the how the cause of failure was distributed within the dyad. Specifically, the positive indirect effect of integrative strategy on escalation of commitment via relational capital was more positive when both negotiators were equally to blame for the failure compared to when one negotiator was disproportionately to blame (b = .20, p = .047; see Figure 19). These results are consistent with Hypotheses 13a and 14a. Together, all seven hypotheses were supported.

Serial Longitudinal Mediation Model of Indirect Effect of Integrative Strategy on Escalation of Commitment



Indirect Effect: *b* = .04, *p* = .290, [-.02, .11]

Note. n = 237.

Serial Longitudinal Mediation Model of Conditional Indirect Effect of Integrative Strategy on Escalation of Commitment



Conditional Indirect Effect: b = .08, p = .231, [-.02, .24]

Note. n = 237.

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	Correlation Matrix	Autoregressive Longitudinal Mediation Model	Serial Longitudinal Mediation Model
Hypothesis 1	Х	Х	Х
Hypothesis 2	Х	Х	Х
Hypothesis 3			Х
Hypothesis 4			Х
Hypothesis 5			Х
Hypothesis 6			
Hypothesis 7a	Х		Х
Hypothesis 7b	Х		
Hypothesis 8a			Х
Hypothesis 8b			
Hypothesis 9a			U
Hypothesis 9b			U
Hypothesis 10a			U
Hypothesis 10b			U
Hypothesis 11a			U
Hypothesis 11b			U
Hypothesis 12a			U
Hypothesis 12b	Х		U
Hypothesis 13a	Х		Х
Hypothesis 13b	Х		
Hypothesis 14a			Х
Hypothesis 14b			

Table 6Hypothesis Support Overview by Model02

Note. X = Supported. U = Untestable with model. The correlation matrix is not viewed as a formal test of the hypotheses and is included for comparison purposes only.

Economic Relevance

Negotiators utilizing integrative strategies perceived relational capital to be more economically relevant than negotiators utilizing distributive strategies (b = .26, p = .006), supporting Hypotheses 2 and 4. However, negotiators who perceived a higher degree of economic relevance were not more likely to escalate commitment to the failing venture (b = .14, p = .213), failing to support Hypothesis 6. Further, there was not a significant indirect effect of negotiation strategy on escalation of commitment via inflated perceptions of economic relevance (b = .04, p = .290), failing to support Hypotheses 7b and 8b. Finally, there was not a significant conditional indirect effect of integrative strategy on escalation of commitment via economic relevance (b = .08, p = .231). These results were not consistent with Hypotheses 13b and 14b. Together, two of the seven hypotheses were supported.

Overall, the results from the simplified serial longitudinal mediation model are encouraging. With the exception of differentiating the hypothesized ranking of causal attributions on escalation of commitment (i.e., external < internal < relational), there was general support for all the proposed hypotheses involving relational capital. In addition to the support, this supplemental analysis reveals that the process was more parsimonious than proposed. Specifically, the economic relevance of relational capital was not significantly related to escalation of commitment. Together, this suggests that the more parsimonious model (2 x 2 design, 4 variables, and 4 hypotheses) addresses the research question as well as balances Type I and Type II error rates significantly better than the more complex model (2 x 3 design, 6 variables, and 14 hypotheses; see Table 6).

Alternative Model Specifications

As part of model robustness tests, it is worth considering alternative model specifications to rule out alternative explanations. The independent variable in the model has focused on negotiation strategy (i.e., integrative vs. distributive). However, it is also possible that conflict management strategy (i.e., cooperative, competitive, accommodating, avoidant) could be an alternative explanation for the findings. This can be tested through an interaction term involving prosocial and proself motivation (De Dreu & Nauta, 2009), such that high in prosocial and high in proself motivation is indicative of a cooperative strategy, low in prosocial and high in proself motivation is indicative of a competitive strategy, etc.

The moderator variable in the model operationalized relational capital as the benevolence facet of trust. However, it is possible that the other facets of trust (i.e., ability and integrity) could serve as an alternative explanation of the findings. This can be tested by running the same model, but with the different measures of trust to determine the comparability of the findings.

Finally, the dependent variable in the model focused on escalation of commitment, where a theatrical and streaming releases were considered escalation and cancelling the release was considered de-escalation. However, it is possible that the streaming release option problematizes the interpretation of the original model. This can be tested in several ways. The first way is to omit all participants from the analysis that chose the streaming option via listwise deletion. A second includes omitting those responses that chose the streaming option via pairwise deletion and using full information maximum likelihood estimation to account for missing data. A third way is modifying the coding of the dichotomous variable such that a theatrical release is considered escalation while streaming and cancelling releases are considered de-escalation. The fourth way includes treating the escalation variable as continuous rather than categorical. This is justifiable as the difference between the theatrical and streaming is \$31 Million and the difference between the streaming and cancelling is also \$31 Million. Meaning, there are equal intervals in terms of projected revenue.

Alternate Independent Variable

Relational Capital. The interaction between proself and prosocial motivation was not related to relational capital (b = .20, p = .155), failing to support Hypotheses 1 and 3. In turn, negotiators who reported higher levels of relational capital after negotiating were more likely to escalate commitment to the failing venture (b = .21, p = .029), supporting Hypothesis 5. Further, there was not a significant indirect effect of negotiation strategy on escalation of commitment via relational capital (b = .04, p = .278). These results fail to support Hypotheses 7a and 8a. Finally, there was not a significant conditional indirect effect of integrative strategy on escalation of commitment via relational capital (b = .09, p = .778; see Figure 19). These results failed to support Hypotheses 13a and 14a. Together, one out of seven hypotheses were supported.

Economic Relevance. The interaction between proself and prosocial motivation was not related to perceptions of economic relevance (b = .03, p = .793), failing to support Hypotheses 2 and 4. However, negotiators who perceived a higher degree of economic relevance were not more likely to escalate commitment to the failing venture (b = .14, p = .237), failing to support Hypothesis 6. Further, there was not a significant indirect effect of negotiation strategy on escalation of commitment via inflated perceptions of economic relevance (b = .00, p = .843), failing to support Hypotheses 7b and 8b. Finally, there was not a significant conditional indirect effect of integrative strategy on escalation of commitment via economic relevance (b = .04, p = .536). These results were not consistent with Hypotheses 13b and 14b. Together, zero of the

seven hypotheses were supported. Thus, we can reject conflict management strategies as an alternative model to the negotiation strategy model.

Alternate Mediator Variable

Ability. Negotiators utilizing integrative strategies did not report significantly higher levels of trust in the ability of their counterpart compared to negotiators utilizing distributive strategies (b = .17, p = .110), failing to support Hypotheses 1 and 3. In turn, negotiators who reported higher levels of trust in the ability of their counterpart after negotiating were not more likely to escalate commitment to the failing venture (b = .17, p = .118), failing to support Hypothesis 5. Further, there was not a significant indirect effect of negotiation strategy on escalation of commitment via the ability facet of trust (b = .03, p = .259). These results fail support Hypotheses 7a and 8a. Finally, although there was a significant effect of the interaction of ability and symmetrical attributions on escalation of commitment (b = .65, p = .031), there was not a significant conditional indirect effect of integrative strategy on escalation of commitment via the ability facet of trust (b = .05, p = .528). Together, zero of the seven hypotheses were supported with this model.

Integrity. Negotiators utilizing integrative strategies reported significantly higher levels of trust in the integrity of their counterpart compared to negotiators utilizing distributive strategies (b = .22, p = .046), supporting Hypotheses 1 and 3. In turn, negotiators who reported higher levels of trust in the integrity of their counterpart after negotiating were not more likely to escalate commitment to the failing venture (b = .17, p = .151), failing to support Hypothesis 5. Further, there was not a significant indirect effect of negotiation strategy on escalation of commitment via the integrity facet of trust (b = .04, p = .260). These results fail support Hypotheses 7a and 8a. Finally, there was not a significant conditional indirect effect of

integrative strategy on escalation of commitment via the integrity facet of trust (b = .06, p = .267). Together, two of the seven hypotheses were supported with this model. Thus, the benevolence facet of trust was the best operationalization of relational capital relative to the other facets of trust.

Alternate Dependent Variable

Listwise Deletion. Negotiators utilizing integrative strategies reported higher levels of relational capital than negotiators utilizing distributive strategies (b = .39, p = .020), supporting Hypotheses 1 and 3. In turn, negotiators who reported higher levels of relational capital after negotiating were more likely to escalate commitment to the failing venture (b = .11, p = .416), failing to support Hypothesis 5. Further, there was not a significant indirect effect of negotiation strategy on escalation of commitment via relational capital (b = .04, p = .479). These results fail to support Hypotheses 7a and 8a. Finally, this indirect effect was conditional on the how the cause of failure was distributed within the dyad. Specifically, the positive indirect effect of integrative strategy on escalation of commitment via relational capital was more positive when both negotiators were equally to blame for the failure compared to when one negotiator was disproportionately to blame (b = .15, p = .614; similar interpretation as Figure 19). These results are consistent with Hypotheses 13a and 14a. Together, two of the seven hypotheses were supported.

Negotiators utilizing integrative strategies perceived relational capital to be more economically relevant than negotiators utilizing distributive strategies (b = .33, p = .005), supporting Hypotheses 2 and 4. However, negotiators who perceived a higher degree of economic relevance were not more likely to escalate commitment to the failing venture (b = .05, p = .808), failing to support Hypothesis 6. Further, there was not a significant indirect effect of

negotiation strategy on escalation of commitment via inflated perceptions of economic relevance (b = .02, p = .819), failing to support Hypotheses 7b and 8b. Finally, there was not a significant conditional indirect effect of integrative strategy on escalation of commitment via economic relevance (b = .07, p = .848). These results were not consistent with Hypotheses 13b and 14b. Together, two of the seven hypotheses were supported.

These results suggest that the streaming release responses are important to the overall model as it does impact the results in a meaningful way. However, it is unclear from these results alone if either the full data or severely truncated data results in a more accurate depiction of the observed pattern of behavior. To determine this will require triangulating these results with other approaches.

Pairwise Deletion. Negotiators utilizing integrative strategies reported higher levels of relational capital than negotiators utilizing distributive strategies (b = .50, p = .000), supporting Hypotheses 1 and 3. In turn, negotiators who reported higher levels of relational capital after negotiating were more likely to escalate commitment to the failing venture (b = .20, p = .027), failing to support Hypothesis 5. Further, there was not a significant indirect effect of negotiation strategy on escalation of commitment via relational capital (b = .10, p = .05). These results fail to support Hypotheses 7a and 8a. Finally, this indirect effect was conditional on the how the cause of failure was distributed within the dyad. Specifically, the positive indirect effect of integrative strategy on escalation of commitment via relational capital was more positive when both negotiators were equally to blame for the failure compared to when one negotiator was disproportionately to blame (b = .20, p = .047; similar interpretation as Figure 19). These results are consistent with Hypotheses 13a and 14a. Together, all seven of the hypotheses were supported.

Negotiators utilizing integrative strategies perceived relational capital to be more economically relevant than negotiators utilizing distributive strategies (b = .26, p = .006), supporting Hypotheses 2 and 4. However, negotiators who perceived a higher degree of economic relevance were not more likely to escalate commitment to the failing venture (b = .14, p = .213), failing to support Hypothesis 6. Further, there was not a significant indirect effect of negotiation strategy on escalation of commitment via inflated perceptions of economic relevance (b = .04, p = .290), failing to support Hypotheses 7b and 8b. Finally, there was not a significant conditional indirect effect of integrative strategy on escalation of commitment via economic relevance (b = .08, p = .231). These results were not consistent with Hypotheses 13b and 14b. Together, two of the seven hypotheses were supported.

These results are notably similar to the analysis on the full data set, thus bolstering support for the original interpretation and suggesting that truncating the data by listwise deletion was not effective at maintaining the integrity of the data. However, full information maximum likelihood estimation assumes that the data is missing at random, which is a weak assumption in this case. Thus, additional approaches are worth considering.

Alternative Dichotomous Coding. Negotiators utilizing integrative strategies reported higher levels of relational capital than negotiators utilizing distributive strategies (b = .50, p =.000), supporting Hypotheses 1 and 3. In turn, negotiators who reported higher levels of relational capital after negotiating were not more likely to escalate commitment to the failing venture (b = -.03, p = .804), failing to support Hypothesis 5. Further, there was not a significant indirect effect of negotiation strategy on escalation of commitment via relational capital (b = -.02, p = .813). These results fail to support Hypotheses 7a and 8a. Finally, there was not a significant conditional indirect effect of integrative strategy on escalation of commitment via relational capital (b = -.09, p = .340). These results are consistent with Hypotheses 13a and 14a. Together, only two of the seven hypotheses were supported.

Negotiators utilizing integrative strategies perceived relational capital to be more economically relevant than negotiators utilizing distributive strategies (b = .26, p = .006), supporting Hypotheses 2 and 4. However, negotiators who perceived a higher degree of economic relevance were not more likely to escalate commitment to the failing venture (b = .01, p = .978), failing to support Hypothesis 6. Further, there was not a significant indirect effect of negotiation strategy on escalation of commitment via inflated perceptions of economic relevance (b = .00, p = .979), failing to support Hypotheses 7b and 8b. Finally, there was not a significant conditional indirect effect of integrative strategy on escalation of commitment via economic relevance (b = ..40, p = .10). These results were not consistent with Hypotheses 13b and 14b. Together, two of the seven hypotheses were supported.

These results, again, indicate that the streaming release responses are important to the overall model as it does impact the results in a meaningful way. Specifically, these results are similar to the results from the listwise deletion. However, the marginal indirect effect does suggest that there is merit to the full data analysis. Therefore, it is unclear from these results alone the best use of the data or the best operationalization.

Continuous Variable. Negotiators utilizing integrative strategies reported higher levels of relational capital than negotiators utilizing distributive strategies (b = .50, p = .000), supporting Hypotheses 1 and 3. In turn, negotiators who reported higher levels of relational capital after negotiating were more likely to escalate commitment to the failing venture (b = .09, p = .069), failing to support Hypothesis 5. Further, there was not a significant indirect effect of negotiation strategy on escalation of commitment via relational capital (b = .04, p = .108). These

results fail to support Hypotheses 7a and 8a. Finally, this indirect effect was conditional on the how the cause of failure was distributed within the dyad. Specifically, the positive indirect effect of integrative strategy on escalation of commitment via relational capital was more positive when both negotiators were equally to blame for the failure compared to when one negotiator was disproportionately to blame (b = .12, p = .031; similar interpretation as Figure 19). These results are consistent with Hypotheses 13a and 14a. Together, two of the seven hypotheses were supported.

Negotiators utilizing integrative strategies perceived relational capital to be more economically relevant than negotiators utilizing distributive strategies (b = .26, p = .006), supporting Hypotheses 2 and 4. However, negotiators who perceived a higher degree of economic relevance were not more likely to escalate commitment to the failing venture (b = .05, p = .408), failing to support Hypothesis 6. Further, there was not a significant indirect effect of negotiation strategy on escalation of commitment via inflated perceptions of economic relevance (b = .01, p = .465), failing to support Hypotheses 7b and 8b. Finally, there was not a significant conditional indirect effect of integrative strategy on escalation of commitment via economic relevance (b = .07, p = .153). These results were not consistent with Hypotheses 13b and 14b. Together, two of the seven hypotheses were supported.

These results are largely consistent with the full data and pairwise deletion data. This is because these three approaches handle the streaming release option differently than the listwise and alternative dichotomous coding approaches. The latter two are quite extreme in handling the streaming release option—either by removing those participants entirely from the analysis or by enforcing an artificial dichotomy. Given that pairwise deletion is generally preferred of listwise deletion as the maximum amount of data is retained to increase the accuracy of estimates, this

lends credibility to the original categorical coding. Further, given that the results were comparable between the continuous and original categorical coding is further evidence this is the appropriate coding. Given the pattern of results from these five tests, treating the streaming release decision as de-escalation does not reflect the observed data. This is consistent with the participant experience, where a theatrical and streaming release are more likely to be seen as distinct from cancelling the release entirely. Thus, the results of these tests eliminate the streaming release coding as an alternative explanation for these findings.

Discussion

Contributions

This dissertation makes several noteworthy contributions to both theory and practice. The contributions to theory include unpacking the interplay between negotiation strategy and outcomes, demonstrating that integrative strategies can underperform distributive strategies in achieving optimal negotiation outcomes, the value of reexamining conventional wisdom through an open system lens, and a systematic review that identifies important areas ripe for future research. The contributions to practice include the far-reaching implications of strategy choice, informing efforts to avoid decision-making biases in negotiations, best practices for exits during the implementing stage, and a novel negotiation task for training purposes. These contributions are outlined in the sections below.

Theoretical Contributions

Previous research has presumed that the path to an optimal negotiation agreement is the same path to an optimal negotiation outcome. However, this study demonstrates that the strategy used to achieve an optimal agreement in a prior episode can result in a suboptimal outcome. This suggests that the connection between negotiation strategy and outcomes is not as straightforward as previously supposed. This is because negotiation is a multi-stage and multi-episodic process involving transition and recursion. Transition and recursion, as evidenced in this study, can significantly impact the efficacy of employed strategies. This insight is critical to developing more nuanced theory of the intricate interplay between negotiation strategy and outcomes.

This is perhaps most evident in this study when considering the findings involving integrative strategy. Previous research has established that integrative strategies result in creating and claiming more value in negotiated agreements. Yet the evidence presented here suggests integrative strategies can have unintended side-effects on negotiation outcomes. Specifically, the same relational capital that facilitates value creation also increases the likelihood of escalating commitment to a failing joint venture. Integrative strategies were especially detrimental when negotiators shared responsibility for the challenges between them and their desired outcomes. Thus, integrative strategies underperformed distributive strategies in achieving joint optimal outcomes in multi-episodic negotiations. This is in stark contrast to the predictions made by existing theory based on evidence from cross-sectional bargaining.

It is worth noting that integrative strategies largely remained effective at achieving optimal agreements relative to distributive strategies in this study, as indicated by a chi-square difference test of independence in the first ($\chi^2(15) = 25.94$, p = .039), second, ($\chi^2(17) = 34.43$, p = .007), and third sessions ($\chi^2(17) = 26.39$, p = .068). While still effective at achieving optimal *agreements* during the bargaining stage, integrative strategies were less effective at achieving optimal *outcomes* due to the increased propensity to escalate commitment during the implementing stage. This is akin to past research on emotional displays, which found that displaying anger resulted in receiving better agreements during the bargaining stage, but worse *outcomes* due to retribution from the counterpart during the implementing stage (Becker &

Curhan, 2018). Indeed, this reinforces the call to examine negotiation outcomes—not just assuming negotiation agreements are equated to negotiation outcomes (Mislin et al., 2011).

This evidence, that a robust finding from cross-sectional bargaining research can have unintended negative consequences on negotiation outcomes, underscores the importance of the open system framework. This study marks the first empirical examination of a multi-episodic negotiation involving the same partners working together on the same task. As such, it was a relatively modest departure from traditional negotiation research in terms of design (i.e., three episodes instead of one). However, even a modest departure towards the open system framework was able to yield a substantive theoretical contribution. These findings reinforce the call to negotiation researchers to reexamine conventional wisdom through an open system lens as well as probe new areas of inquiry beyond the scope of traditional negotiation research.

A main contribution of this dissertation involves the systematic review and the proposed theoretical framework the review is based upon. Beyond synthesizing existing findings, the systematic review identifies numerous areas of the open system framework that are considerably understudied yet hold considerable potential to advance the scientific literature on negotiation. These include transition and recursion in the negotiation process, entrainment of negotiation stages across different levels of social structures, reconceptualizing existing constructs to reflect the implied network (e.g., BATNA development, representatives, multiple simultaneous agreements, etc.), and between-team negotiations to name a few. These more robust departures from traditional negotiation research to the open system framework hold the potential for even greater contributions to the negotiation literature. By clearly defining different areas of open system research, the proposed framework stands to aid efforts to bridge the researcher-researcher and researcher-practitioner divides (Bendersky & McGinn, 2010; Hüffmeier et al., 2011; Jang et al., 2018).

Practical Contributions

In addition to theoretical contributions, this dissertation also has important practical implications. The empirical findings presented here from multi-episodic negotiations emphasize the importance for practitioners to both monitor and adapt to contextual factors. Especially in contexts that are less predictable or involve risk, negotiators need to both recognize that the context can change and utilize strategies that enable future adaptability. Negotiators must therefore carefully consider the immediate benefits of their chosen strategy as well as the long-term implications on relationship dynamics and decision-making biases.

Further, practitioners need to recognize that their negotiation strategy tints how they perceive different situations, which can bias their decision-making and lead to escalation of commitment. Escalation of commitment is a costly and prevalent cognitive bias that is always a possibility when there is a potential for failure. There are efforts that negotiators can take to mitigate escalation of commitment. One way is to separate the negotiator of the initial bargaining agreement from the person who evaluates the implementing progress and decides whether to continue pursuing the agreement (Sleesman et al., 2016). This decoupling of the initial and subsequent decisions can diminish some of the psychological determinants of escalation (e.g., responsibility for the initial decision, ego threat, time investment). A second way is to commit to clear rules for de-escalating before working to implement a negotiated agreement (Sleesman et al., 2016). These rules provide a clear 'ejection' point once the project dips below a certain 'altitude' that are made well in advance of a potentially tense situation involving failure. Indeed, such rules could potentially be written into contracts to aid in monitoring the implementing

stage. Contracts remain an important and understudied areas of negotiations (Bottom et al., 2006; Mislin et al., 2011).

Even when clear exit rules are in place and when an implementing stage is the best way to obtain desired outcomes, negotiators still need to manage the relationship. It is important for practitioners to recognize that an implementing stage exit by one party carries certain implications for the other party. A messy exit could damage a relationship that otherwise could prove instrumental in the future. In general, it is wise to avoid burning bridges as you never know when you might need to cross them. Best practices for a clean exit would likely include transparent communication regarding the decision, professionalism in dealing with any obligations, as well as efforts to rebuild trust after the exit.

Another practical contribution of this dissertation involves the negotiation task. The "Starfall" negotiation task is the first multi-episodic negotiation task involving the same project. That means this task can be used in training initiatives and classrooms to help negotiators understand the importance of strategic adaptability, relationship management, and thinking of negotiations as a holistic process instead of isolated stages or episodes. This task can be adapted to provide negotiators opportunities for practice and feedback across a wide variety of circumstances (e.g., unshared interpretations of past failure, unexpected success due primarily to one party). Together, this task can provide practitioners with practice examples to participate in, analyze, discuss, and learn from. The "Starfall" negotiation task is also an effective research tool. The three related and comparable negotiation tasks allow researchers to probe best practices involving negotiations on the same project, but with either the same or different partners. This means that this task can help facilitate the accumulation of research in understudied areas of the open system framework. Because practitioners operate in these understudied areas, this task can

help accumulate evidence-based best practices that are essential to bridge the researcherpractitioner divide.

Limitations

Despite these contributions, like all studies, there are limitations. First, this study did not present as strong of a case as desired for studying multi-episodic negotiations separated over time. On the one hand, the proposed open system framework predicts that the effect of a past negotiation episode will decrease over time. This decrease over time makes it more difficult to detect between-episode effects relative to within-episode effects. While this does not diminish the importance of studying multi-episodic negotiations, it does highlight a challenge to studying multi-episodic negotiations in a laboratory context. Future research could shorten the time between simulated episodes to better examine between-episode effects (i.e., one three-hour session rather than three one-hour sessions over three weeks). On the other hand, the simulated nature of the shared task could be a conservative test of the theory. Participants in the study naturally had lower incentives than practitioners to maintain long-term relationships as well as less to lose if the project failed. In this sense, the observed support for the theory both highlights the need and augments the call for more multi-episodic negotiation research.

A second limitation was the inability to empirically tease apart the internal and external attribution conditions in the supplemental analysis. The inability to distinguish between these established constructs does limit the ability of this study the full breadth of Relational Attribution Theory. However, the results do support the assertion that relational attributions should be studied as a distinct and separate attribution relative to the more established internal and external attributions—a key premise of the theory.

A third limitation is that this study examines locus of causality and assumes both parties share the same interpretation of history. However, the locus of control might also impact how negotiators make sense of a failure event (Tomlinson & Mayer, 2009) and negotiators may disagree on the interpretation of their shared history. A future study, using the same task and holding the locus of causality constant, could examine the locus of control (high vs. low) as well as interpretation of history (agree vs. disagree). This might be an important way to distinguish between internal and external attributions. Such a study could expand upon the limitations of the existing study and further unpack the between-person, dyadic processes of managing multiepisodic negotiations with the same partner on the same task.

Fourth, this study examines how a dynamic context affects the process to achieve desired outcomes. Specifically, it primarily considered top-down effects where contextual changes required adaptation during the negotiation processes. However, the open system framework also recognizes bottom-up effects where the negotiation processes cause contextual changes. In this study, the contextual changes were manipulated as part of the design. This means the performance failures were not directly caused by negotiator decisions nor did negotiator decisions impact the recovery in any way as is suggested by bottom-up effects. Examining recursion between bottom-up effects (i.e., system on context) and top-down effects (i.e., context on system) would better align with the open system framework. The open system framework, then, would suggest future research. To accomplish this, future research could adapt an existing task, such as the SHARC task (Wade-Benzoni et al., 1996). The SHARC task examines a group of four parties that meet regarding concerns about excessive shark harvesting. Traditionally, this task only includes a single round. However, over-fishing after one episode could impact the number of fish available for harvesting during the next episode. By making the number of fish

available in the second round a direct result of the fishing decisions made in the first round, researchers could examine best practices for managing recursion between the system and the context. Such an effort would also expand the number of empirical tasks capable of addressing open system principles.

Future Directions

Beyond addressing the limitations of this initial empirical examination, the open system framework also identifies other areas for future research. Among the most promising areas include establishing best practices for staffing negotiation teams, reconciling within-team differences during the planning stage, and the role of leadership during between-team bargaining.

First, research on best practices for staffing negotiation teams could help resolve mixed findings in the literature on whether solo negotiators outperform teams of negotiators (Cohen & Thompson, 2011; Hüffmeier et al., 2019). Specifically, most of the research on negotiation teams traditionally scale up dyadic tasks (e.g., assign four people to a two-person task). Such arrangements, according to the open system framework, likely suffer from overstaffing, where the demands of the task are not commensurate with the number of personnel. This means the findings in favor of solo negotiators might be due to systematic overstaffing in traditional research designs. To test this, a future study could create a twelve-person between-team negotiation task and compare the relative performance of a two-person (i.e., dyad), six-person (i.e., standalone team), and twelve-person (i.e., multiteam system). This study could potentially resolve mixed findings, inform best practices for staffing negotiation teams, and expand the number of empirical tasks capable of addressing open system negotiation principles.

Second, research on best practices for reconciling within-team differences during the planning stage could help address the problem that teams with mixed-preferences underperform

united teams (Halevy, 2008). In contrast to this prior descriptive research, a future study could examine the role of leadership in reconciling within-team differences during the planning stage. Specifically, leaders must create a shared vision despite different team members having different and, at times, competing priorities. This study would likely need to unpack the network processes that lead to the formation of a shared mental model (L. Liu et al., 2012). Achieving a shared mental model is a hallmark of a united team, a successful planning stage, and effective leadership.

Third, after examining the role of leadership during the planning stage of between-team negotiations, future research could address the role of leadership during the bargaining stage of between-team negotiations. In between-team bargaining, bargaining competency is necessary but insufficient—negotiators also need leadership and teamwork competencies to optimize performance. However, there are unique bargaining and leadership challenges in between-team negotiations. One important challenge includes managing the larger size and greater specialization of roles. Examining how effective at managing this size and specialization is an important priority for studying different leadership structures. Possible leadership structures could include when the lead negotiator has all decision-making authority to accept the final agreement as well as when decision-making authority is shared among all team members through voting procedures (Boothby et al., 2022; Wellman, 2017). In addition to understanding the role of leadership, future research in this area should distinguish how leadership in teams engaged in cognitive conflict (i.e., traditional decision-making) differ from leadership in teams engaged in mixed-motive conflict (i.e., negotiations; McGrath, 1984).

In summary, there are many promising avenues of future research regarding the open system negotiation framework that stands to advance the negotiation literature. Indeed, as

Boothby and colleagues (2022, p. 20) have stated, "team negotiation can be radically different from solo negotiation.... However, we know surprisingly little about how negotiation operates in these contexts, and there are significant opportunities to make an impact in this area." Overall, the initial empirical study presented here, the two additional studies identified in the limitations section, as well as the three additional studies listed in the future directions section outline six total studies. Of the six studies, three are multi-episodic studies (i.e., locus of causality, locus of control, and recursion between the process and context over multiple episodes) and three are multilevel (2-person vs. 12-person, between-team planning, between-team bargaining). These six studies illustrate the fruitful domain of the open system negotiation framework and also identify the pipeline of studies that will directly result from this dissertation.

CONCLUSION

Collectively, this dissertation has important implications for the art and science of negotiation. First, the theoretical framework is precise and prescriptive about what constitutes open system research on negotiations. This clarifies directions researchers can take to bridge the practitioner-researcher divide, researcher-researcher divide, and strengthen the science. Second, the systematic review leverages the proposed theoretical framework to organize and critically evaluate the recent literature. This provides a new perspective on what is already known as well as identify compelling future directions to develop a robust, open-system literature on negotiations. Third, the empirical portion demonstrates how this theoretical framework enables scholars to generate novel contributions by examining conventional wisdom in a new light. This highlights the importance of open system theorizing in generating evidence-based prescriptions for students and practitioners.

Not only does the open system negotiation framework suggest conventional wisdom can fail to hold across Time, but conventional wisdom can also fail to hold across Levels. Negotiation researchers are beginning to recognize that best practices for dyads are not always best practices for standalone teams (Kern et al., 2020; Moreland, 2010). Yet, the open system negotiation framework takes this further, citing evidence that best practices for standalone teams are not always best practices for multiteam systems (Davison et al., 2012; Marks et al., 2005). This suggest that the 'handbook' on best practices for negotiation needs to be vastly expanded and, in many places, perhaps re-written. To this end, this dissertation calls for a moratorium on cross-sectional dyadic bargaining research. This call is accompanied with a challenge to change embedded phenomenological assumptions, which requires the development of new theory and tasks to facilitate the empirical research of open system negotiations. As open system

negotiations research becomes more prevalent in the organizational sciences, this research will change how negotiations are both taught and practiced as well as better prepare negotiators to navigate the dynamic contexts and complex problems frequently confronted in organizations.
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APPENDIX A: NEGOTIATION STRATEGY MANIPULATION

Integrative Strategy

Your top two priorities are 1) to make sure the visual effects are delivered on-budget and on-time as well as 2) to maintain the long-term relationship with Silverwood Studios (LightBender Labs). Both are important. As the representative of the LightBender Labs (Silverwood Studios) executives in this Change Order negotiation, it is important for you to follow their directive on how you should negotiate.

Specifically, your constituents want you to focus on identifying trade-offs between the two companies and ensuring the long-term relationship with Silverwood Studios (LightBender Labs).

To do this, <u>before you begin</u> discussing terms, LightBender Labs (Silverwood Studios) wants you to do three things: 1) shake hands with the Silverwood Studios (LightBender Labs) representative, 2) build rapport with the other representative by getting to know each other better for a few minutes (e.g., major, where you went to high school, etc.), and 3) ask/answer questions about which issues are the most and least important to each company.

Further, <u>after you begin</u> discussing terms, LightBender Labs (Silverwood Studios) wants you to make trade-offs across issues so that everyone in the relationship gets what matters most to them. To illustrate this directive, consider the following story. Jack and Jill are planning dinner and a movie. Jack wants pizza and an action movie while Jill wants burgers and a comedy movie. Instead of one person getting everything they wanted, they decide to make trade-offs to make sure both were as happy as possible given their opposing preferences. Jack has strong preferences about the dinner, but only weak preferences about the movie. Jill has strong preferences about the movie, but only weak preferences about the dinner. They thought the best trade for the relationship was to have pizza (i.e., Jack's strong preference and Jill's weak preference) and go to a comedy movie (i.e., Jill's strong preference and Jack's weak preference).

LightBender Labs (Silverwood Stuidos) believes this approach to the negotiation will do more for the long-term relationship than simply splitting the difference. To further incentivize you to follow this directive, the size of your bonus depends on how well you make these trade-offs.

100% - 91% = \$30 **90% - 51% =** \$15 **50% - 1% =** \$10

Distributive Strategy

Your top two priorities are 1) to make sure the visual effects are delivered on-budget and on-time as well as 2) to maintain the long-term relationship with Silverwood Studios (LightBender Labs). Both are important. As the representative of the LightBender Labs (Silverwood Studios) executives in this Change Order negotiation, it is important for you to follow their directive on how you should negotiate.

Specifically, your constituents want you to focus on securing the best deal possible for LightBender Labs and ensuring the visual effects are created on-budget and on-time.

To do this, LightBender Labs (Silverwood Studios) wants you to do three things as you discuss terms for specific issues: 1) ask for much better terms than you think you will actually get, 2) focus on the best-case terms for LightBender Labs (Silverwood Studios) regardless of what Silverwood Studios (LightBender Labs) wants, and 3) only make concessions when absolutely necessary.

Further, LightBender Labs (Silverwood Studios) wants you to only share information when absolutely necessary. If you share too much, then that gives Silverwood Studios (LightBender Labs) the opportunity to take advantage of you. You should still provide your reasoning for why you think specific terms are ideal and voice your reactions to offers they make, but follow the saying "keep your cards close to your vest."

LightBender Labs (Silverwood Studios) believes this approach to the negotiation will ensure the profitability of the company. To further incentivize you to follow this directive, <u>the size of your</u> <u>bonus depends on how effective you are getting the best deal for your company.</u>

100% - 91% = \$30 **90% - 51% =** \$15 **50% - 1% =** \$10

APPENDIX B: CAUSAL ATTRIBUTION MANIPULATION

Silverwood Studios Cause of Failure

These manipulations were used in the internal condition for the Silverwood Studios representative and the external condition for the LightBender Labs representative. The different roles saw the same manipulation, but different reinforcements based on their respective role.

Second Session

The cause of the problem is that Silverwood Studios has repeatedly failed to send the footage to LightBender Labs on time. The footage wasn't sent because Silverwood Studios crew incorrectly used the "Animotion AI" technology and needed extensive re-shoots to solve the issues. These reshoots meant there were delays in passing along the footage. Without the footage, LightBender Labs could not start working on the visual effects shots. Without the finished shots, the film got far behind schedule. Beyond the schedule, this also caused both Silverwood Studios and LightBender Labs to go over-budget. Silverwood Studios went over-budget because the re-shoots were not in the original budget and LightBender Labs went over-budget because booked visual effects artists must be paid whether there are shots for them to work on or not. Due to the magnitude of these issues, there are concerns about the release and profitability of the film.

Third Session

The cause of the problem is that Silverwood Studios, when editing together the film, decided they wanted to change the script or needed a different performance causing numerous reshoots. These reshoots were often part of sequences with completed visual effect shots. Because the shots were completed, these reshoots meant LightBender Labs had to redo the visual effects shots with the new footage. This put the visual effects far behind schedule and caused both Silverwood Studios and LightBender Labs to go over-budget. Due to the magnitude of these issues, there are serious concerns about the release and profitability of the film.

Reinforcement

Silverwood Studios Representative: *As you are the representative of Silverwood Studios, <u>this</u> <u>makes you responsible for this problem</u> in the upcoming Change Order negotiation. Both you and your counterpart were told this by the executives.*

LightBender Labs Representative: As your counterpart is the representative of Silverwood Studios, <u>this makes your counterpart responsible for this problem</u> in the upcoming Change Order Negotiation. Both you and your counterpart were told this by the executives.

LightBender Labs Cause of Failure

These manipulations were used in the internal condition for the LightBender Labs representative and external condition for the Silverwood Studios representative. The different roles saw the same manipulation, but different reinforcements based on their respective role.

Second Session

The cause of the problem is that LightBender Labs has repeatedly failed to deliver the finished visual effects shots on time. The shots weren't on time because LightBender Labs incorrectly incorporated the "Animotion AI" technology into their workflow and the shots needed to be revised extensively to solve the issues. These revisions meant there were delays in passing along the finished shots. Without the finished shots, the film got far behind schedule. Beyond the schedule, this also caused both LightBender Labs and Silverwood Studios to go over-budget. LightBender Labs went over-budget because they had to pay their artists for the increased time to finish the shots despite making the same amount of money for each shot. Silverwood Studios went over-budget because they had booked artists (e.g., sound effect artists, foley artists, color grading artists, etc.) to begin work based on the assumption the shots would be completed. In some instances, this meant artists had to try and start their work without the shots. For example, sound effect artists had to make a 'running start,' where they put in sound effects despite not seeing the actual effects. This meant Silverwood Studios had to pay artists again to further refine or redo their work once the shot was delivered. Due to the magnitude of these issues, there are concerns about the release and profitability of the film.

Third Session

The cause of the problem is that extensive reshoots were necessary due to problematic recommendations made by LightBender Labs. LightBender Labs told Silverwood Studios they would be able to use the "Animotion AI" technology to create photorealistic visual effects if certain elements were filmed a specific way. Silverwood Studios filmed all these elements as requested. However, once LightBender Labs began working on the effects shots, they realized their recommendations were incorrect and that some key elements needed to be filmed differently for the effects to work. This meant that, to get the visual effects Silverwood Studios needed, reshoots of several key scenes were required. This put the visual effects production far behind schedule and caused both Silverwood Studios and LightBender Labs to go over-budget. Due to the magnitude of these issues, there are concerns about the release and profitability of the film.

Reinforcement

LightBender Labs Representative: *As you are the representative of LightBender Labs, <u>this makes</u> <u>you responsible for this problem</u> in the upcoming Change Order negotiation. Both you and your counterpart were told this by the executives.*

Silverwood Studios Representative: *As your counterpart is the representative of LightBender Labs, this makes your counterpart responsible for this problem in the upcoming Change Order Negotiation. Both you and your counterpart were told this by the executives.*

Relational Cause of Failure

These manipulations were used in the relational condition for both the LightBender Labs and Silverwood Studios representative. Both roles saw the same reinforcement after reading the manipulation.

Second Session

The cause of the problem is that Silverwood Studios and LightBender Labs have different preferences about when to begin working on a visual effect shot that uses the "Animotion AI" technology to stay on schedule. Specifically, Silverwood Studios prefers immediately beginning a shot once it is filmed, as they believe this is the best way to stay on schedule because you can get a 'running start' on shots. LightBender Labs prefers waiting to begin a shot until after it is locked in the edit, as they believe this is the best way to stay on schedule because you don't waste time working on a shot that never makes it into the movie. This difference in preference about handling the workflow, compounded by the unique challenges of pioneering "Animotion AI" in an effects heavy film, has contributed to both LightBender Labs and Silverwood Studios to go over budget and get behind schedule. Due to the magnitude of these issues, there are concerns about the release and profitability of the film.

Third Session

The cause of the problem is that Silverwood Studios and LightBender Labs have communicated ineffectively with each other, leading to reshoots and redoing visual effects shots. Reshooting scenes, for example, was required due to a lack of coordination regarding what needed to be filmed for complex shots. Redoing visual effects shots, for example, was required due to vague feedback about what needed to be changed or why certain decisions were made. Further, the two companies were not transparent about when they knew they would miss deadlines for the delivery of footage or of a completed shot, affecting the logistics of the other company. Collectively, these communication issues pushed the visual effects far behind schedule and caused both Silverwood Studios and LightBender Labs to go over-budget. Due to the magnitude of these issues, there are concerns about the release and profitability of the film.

Reinforcement

Executives from both companies agree that no one company is solely responsible for the schedule and budget problems the film is facing. Rather, the responsibility for how the companies have interacted in the past is shared by both. As you and your counterpart are the representatives of Silverwood Studios and LightBender Labs, this makes you both equally responsible for this problem in the upcoming Change Order negotiation. Both you and your counterpart were told this by the executives.