The nature, consequences, and management of emotions in interfirm paradoxical relationships – A conceptual framework

TATBEEQ RAZA-ULLAH
Umeå School of Business, Statistics and Economics Umeå University
Phone: +46 90 786 5287
Email: tatbeeq.raza@umu.se

MARIA BENGTSSON
Umeå School of Business, Statistics and Economics Umeå University
Phone: +46 90 786 6161
Email: maria.bengtsson@umu.se

DEVI R. GNYAWALI
Department of Management Pamplin College of Business, Virginia Tech Blacksburg,
Phone: (540) 231-5021
Email: devi@vt.edu

We develop a theory of emotions in interfirm paradoxical relationships with a focus on coopetition and emotional ambivalence. We suggest that appraisals of paradoxical coopetition situations lead to the arousal of multiple, oppositely valenced emotions of various intensities, combinations of which correspond to different states of emotional ambivalence. We explicate how emotional ambivalence, through managers' appraisal and emotional contagion processes becomes collective and how it impacts coopetition performance. We further theorize how the negative effect of ambivalence on performance could be minimized and the positive effect could be amplified through emotional capability. Our theory provides a nuanced understanding of the complex nature of emotions, and how they arise, manifest, and impact outcomes in interfirm paradoxical relationships.

Key words: emotional ambivalence, emotional capability, coopetition, paradox

Introduction

Emotion has become a key topic in management research (Elfenbein, 2007), as it has the potential to explain the underlying psychological conditions that strongly influence behaviors and outcomes (Douglas et al., 2008; Staw et al., 1994). Emotions are often short-lived, yet their effects are long-lasting, intense, and challenging (Ashkanasy & Daus, 2002). Emotions "can significantly influence the quality of thinking and behavior which, in turn, affects performance in organizational settings" (Huy, 2011, p. 1388). Thus far, the literature has largely focused on single, discrete, and consistent emotions triggered by work events taking place within the confines of a single firm (Ashkanasy & Daus, 2002; Brief & Weiss, 2002). Recently, scholars have suggested that emotions arising in interfirm contexts such as strategic alliances may be mixed and more challenging, and therefore have called for studying emotions and their implications in such settings (Bengtsson & Raza-Ullah, 2017; Huy, 2012).

Interfirm contexts are more complex as they blur the boundaries between two or more firms and lack hierarchy and control that a single firm enjoys. Moreover, the parties involved often hold conflicting economic interests, strategic orientations, operational routines, and organizational cultures (Park & Ungson, 2001), which are difficult to reconcile. The inherent paradoxical demands like simultaneous value creation and appropriation further add complexity. Recent work has specifically noted that conflicting goals and paradoxical pursuits are likely to trigger multiple, complex, and inconsistent emotions (Ashforth et al., 2014; Rothman & Melwani, 2016) that manifest in emotional ambivalence (Fong, 2006; Pratt & Doucet, 2000) which, in turn, could have potent effects on strategic outcomes. Yet, our theoretical understanding of the nature and implication of such emotional manifestations in interfirm paradoxical relationships is limited. Accordingly, we ask: (a) how do emotions arise and manifest in the form of emotional ambivalence in interfirm paradoxical relationships? And (b) how does emotional ambivalence matter to performance in such contexts?

We focus on the interfirm relationship of coopetition—"simultaneous competition and cooperation among firms with value creation intent" (Gnyawali & Charleton, 2018, p. 2512)—because coopetition is one of the most salient interfirm paradoxes (Gnyawali et al., 2016; Raza-Ullah et al., 2014) and highly emotion-laden. We take the perspective of the focal firm and draw on the affective events theory (AET; Weiss & Cropanzano, 1996) and similarity-intensity model (SIM; Thompson et al., 1995) to develop our theory of emotions in coopetition. AET provides a solid conceptual basis to link paradoxical contexts to various types of emotions. We use this theory to explicate how appraisals of coopetition events trigger multiple conflicting emotions—both positive and negative (e.g., anger, joy, fear, hope, ecstasy, misery). Building on the SIM model, we illustrate how intense (i.e., strong in opposition) and similar (i.e., alike in opposition) positive and negative emotions arise and manifest in different states of emotional ambivalence in coopetition. We further illustrate how different states of emotional ambivalence cause specific behavioral responses at a collective level, and how firms can leverage the positive energy while controlling the negative implications of emotional ambivalence.

Our theory integrating emotion and coopetition contributes to both streams of literature. In terms of contributing to the emotion literature, we introduce the novel context of interfirm paradoxical relationships and explicate how the experience, expression, and implication of emotional ambivalence in this context are unique and highly consequential. By doing so, we also respond to calls to explore emotions in distinct strategic contexts (Huy, 2012) and to unearth sources of ambivalence (Pratt & Doucet, 2000). Second, we address the puzzle of why or how emotional ambivalence leads to both functional and dysfunctional behavioral outcomes (Pratt & Pradies, 2012). Our theory unpacks different states of ambivalence and provides a powerful explanation of why very high and low ambivalent states inhibit while moderate ambivalence enhances coopetition performance. By underscoring the implications of emotional ambivalence on performance outcomes, we provide a nuanced understanding of working with collective emotional ambivalence. Third, we develop the construct of emotional capability that helps in mitigating the negative effects of extreme ambivalent states, thereby generating positive coopetition performance.

Regarding contributions to the coopetition literature, we first uncover the very critical yet underexplored mechanism—emotional ambivalence—that explains the differential impacts of coopetition on performance. We unpack specific strategic responses of managers to each ambivalence state, which lead to either improved or declined coopetition performance. Second, we provide critical insights into the emotional dimension of 'tension', which is a key issue in the coopetition literature (Bengtsson et al., 2016; Fernandez & Chiambaretto, 2016; Le Roy & Czakon, 2016). Specifically, we suggest that the degree of emotional torn-ness relates to the intensity of tension. Third, we complement the existing management approaches by offering novel insights into how emotional capability is instrumental in managing the emotional complexity in coopetition. As coopetition relationships continue to proliferate, our theory provides a much-needed emotional perspective in furthering our understanding of such intricate interfirm contexts.

1. State of the art: discrete emotions and emotional ambivalence in interfirm paradoxical relationships

Interfirm relationships such as coopetition have become ubiquitous despite their paradoxical nature and unique challenges. Several factors such as technological and innovation challenges and opportunities, access to relevant resources and capabilities, and firm's own aspirations for rapid growth and development drive firms to increasingly participate in coopetition (Bengtsson & Raza-Ullah, 2016; Bouncken et al., 2015; Gast et al., 2015; Gnyawali & Park, 2009). Coopetition is a unique type of interfirm relationship. In contrast to traditional relationships where firms either cooperate or compete with each other, coopetition "emphasize[s] both cooperative and competitive dimensions of a relationship" simultaneously (Bengtsson & Kock, 2000, p. 412). The simultaneous contradictory demands stemming from competition and cooperation and inherently conflicting logics of such engagements make coopetition paradoxical (Raza-Ullah et al., 2014; Stadtler & Van Wassenhove, 2016). Contradictory demands include value creation versus value appropriation (Brandenburger & Nalebuff, 1996), knowledge exchange versus knowledge protection (Yang et al., 2014), and private value versus common benefits (Khanna et al., 1998). Managers engaged in coopetition find themselves torn not only because they have to deal with such multiple simultaneous competing demands but also because of the need to work together with a competitor that might have a hidden agenda. With such contradictory demands and conflicting engagements, managers confront a reality that is emotionally charged and challenging.

Empirical research in other settings suggest that working with situations that involve contradictory conditions and paradoxical tension (Smith, 2014) stems emotional ambivalence—a blend of simultaneously positive and negative emotions (Fong, 2006; Pratt & Doucet, 2000)—experiencing which managers may feel torn, conflicted, muddled, and divided (Aaker et al., 2008; Oceja & Carrera, 2009). While emotional ambivalence is viewed as an important topic in emotion research, it has received scant scholarly attention (Fong, 2006; Plambeck & Weber, 2009). Further, although the current research suggests that ambivalence can be both beneficial and harmful for behavioral and strategic outcomes (Argyris, 1993; Fong, 2006; Harrist, 2006; Plambeck & Weber, 2009; Rees et al., 2013; Rothman et al., 2017), it informs little about the underlying whys and wherefores of such a dual role.

Although the interfirm literature on coopetition has extensively focused on tensions (Bengtsson et al., 2016; Fernandez & Chiambaretto, 2016; Le Roy & Czakon, 2016), the prevailing perspectives on tensions are predominantly rational and cognitive. Emotions have rarely received attention. This may be because emotions are generally considered as antithesis of rationality (Ashforth & Humphrey, 1995), wastage of time (Elfenbein, 2007), and ones that redirect attentional focus to themselves from the task (Beal et al., 2005), thereby posing negative long-run consequences for firms (Mumby & Putnam, 1992). Accordingly, in an effort to bring rationality, firms tend to discount and suppress emotions, thereby deeming them irrelevant in professional contexts (Vince & Broussine, 1996). However, precisely due to these reasons, it is critical to understand how the debilitating effects of emotions can be controlled and how their potential (if any) can be leveraged.

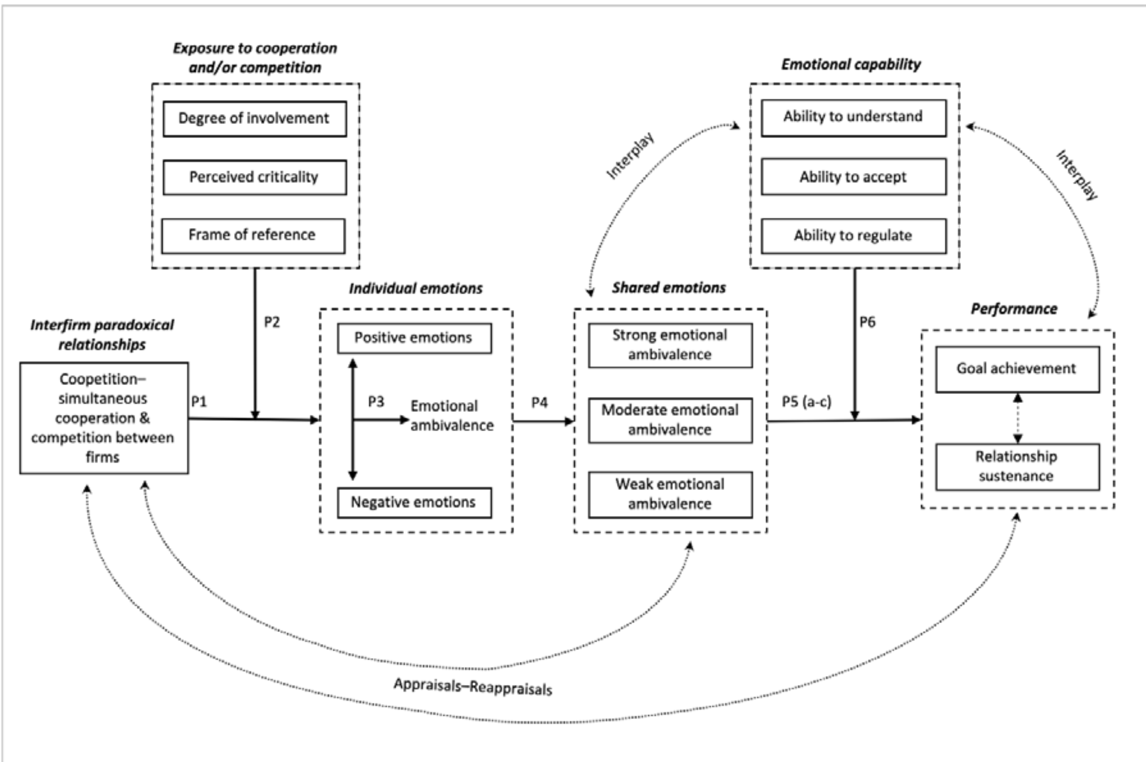
Limited amount of research that exists on emotions in interfirm contexts has mostly focused on single, consistent emotions such as anger (Vidal, 2014). It is only recently that the coopetition literature has begun to explore the potential links between paradoxical tension and ambivalent emotions (Bengtsson & Raza-Ullah, 2017). For example, Raza-Ullah et al. (2014) suggest how coopetition paradox can elicit tension at multiple levels and call for managing this tension. Specifically, they emphasize that in order “to manage tension, we first need to understand what it is” (p. 197), which in turn requires an adequate understanding of emotional ambivalence in such contexts. Raza-Ullah (2020) further provides empirical evidence that paradoxical tension, indeed, relates positively with emotional ambivalence. However, a systematic analysis of how emotions become ambivalent and collective in coopetition, when they help versus hurt performance outcomes, and how to maximize their positive potential is lacking.

2. Conceptual model and propositions

We build on the theoretical underpinnings of affective events theory (AET; Weiss & Cropanzano, 1996) and similarity-intensity model (SIM; Thompson et al., 1995) to develop our theory. AET postulates that the appraisal of discrete events in the work environment triggers discrete emotions—positive or negative—that in turn impact job performance. AET has been applied to events happening inside the organization (e.g., Fitness, 2000; Gaddis et al., 2004) as well outside the organization (Ashton-James & Ashkanasy, 2008; Muller et al., 2014). While AET generally considers discrete positive or negative emotions, it can also be used to study emotional ambivalence (Stratton, 2005). The SIM model is one of the most widely used approach to study emotional ambivalence. It suggests that ambivalence consists of two key dimensions: similarity of the opposite emotions and intensity of such emotions. The similarity dimension refers to “the extent to which opposing reactions to (e.g., emotions about) a particular issue are similar in the amounts of opposing views that they elicit” and the intensity dimension is about “the degree to which reactions are extreme” (Fong, 2006, p. 1021). Thus, SIM is based on the core idea of how alike the opposing reactions are and how strong they are (Thompson et al., 1995). We apply SIM to exemplify different combinations of similar/dissimilar and intense/weak emotions lead to different states of emotional ambivalence.

We develop our conceptual model (Figure 1) below and define and describe the key constructs, articulate the relationships between them, and offer a few formal propositions.

Figure 1. A conceptual model of emotions in interfirm paradoxical relationships



2.1. *Coopetition paradox as a source of emotions in interfirm relationships*

In general, managers tend to evaluate cooperation positively as it potentially creates value for their firm and evaluate competition negatively as it could lead to opportunistic behavior and competitive attack by the other firm (Faems et al., 2010). Consider the coopetition relationship formed in 2004 between two fierce competitors, Sony and Samsung through their joint venture, as documented by Gnyawali and Park (2011), as an example. Over time, many different cooperative moves took place between the two firms such as signing of the agreement for the production of 7th generation LCD panels, cross-licensing of patents, capacity expansion of the factory, and so on. Moves like these are likely to help realize common benefits or cocreate superior value (Khanna et al., 1998; Luo, 2007). AET, under such conditions would suggest that the appraisal of obtained benefits or the promising consequences of cooperation would likely elicit positive emotions like happiness, ecstasy, and content for the focal firm's managers. The patent licensing agreement between Microsoft and Asus illustrates the emergence of positive emotions due the potential benefits of the deal, as pointed out by an Asus's manager, "This agreement will give us both a greater ability to innovate for our customers." (Microsoft news Center, 2015). Similarly, De Rond and Bouchikhi (2004, p. 62) demonstrate in an in-depth case study of major biotech alliances that managers were happy with the ongoing cooperative interactions: "I smiled. As long as the collaboration was developing, it was a good thing, from my point of view".

As coopetition also entails strong competition, such relationship would also trigger negative feelings. Sony and Samsung competed fiercely in the flat screen TV market during the same time: Sony introduced its Bravia LCD TV using the panels produced by the joint venture a few months ahead of Samsung, but Samsung introduced its Bordeaux model LCD TV within a few months. Samsung also responded quickly on the launch of Sony's 11" OLED TV by showing its 31" OLED TV at the consumers electronics show. In addition, Samsung started its own LCD panel factory, which directly competed with the joint venture. In general, appraisal of such competitive moves or events in which firms intensively fight to win from the coopetition partner would likely trigger negative emotions. Private gains achieved either at the expense of the focal firm, or through opportunistic behavior such as efforts to mislead or confuse the focal firm will likely generate negative emotions of anger, sadness, disappointment, and even hatred. Notice also that Asus became angry when Microsoft launched its new surface book laptop in Asus's core market. One senior manager of Asus said, "I think we are going to have a serious talk about that." (Weinberger, 2015).

It is important to note that cooperation can also lead to negative and competition to positive emotions. For instance, when the focal firm fails to produce the desired common benefits through cooperation and ends with suboptimal results, cooperation could lead to the arousal of negative emotions such as guilt, shame, and anger. Because such cooperative activities are with a fierce competitor, feelings of unease, distrust, and discomfort would be present as well. On the contrary, competition pushes firms to pursue excellence in products and technologies (Gnyawali & Charleton, 2018) and provides opportunities to learn and acquire new knowledge from the partner (Hamel et al., 1989) and therefore could evoke positive emotions. Furthermore, as simultaneous pursuit of both competition and cooperation and creation of a dynamic balance (syncretism) between the two would help generate syncretic rents (Lado et al., 1997), managers viewing the simultaneity as an opportunity for value creation would likely have positive emotions from coopetition.

Unlike intra-firm events such as unfair treatment and interaction with coworkers and supervisors (Fitness, 2000; Gaddis et al., 2004) that do not engage a second firm, coopetition involves two distinct entities (with the power to make own strategic decisions) that engage with each other with different strategic goals and economic interest and the interactions are therefore very complicated (Morris & Hergert, 1987). For instance, Sony's interest to cooperate with Samsung was partly to overcome its weakness in LCD technology and partly to outcompete its rival Sharp, whereas Samsung's intent was to learn from Sony's expertise on TV making so that it could turn its expertise on LCD panels to develop LCD TV (Gnyawali & Park, 2011). Positive feelings arose for both firms because despite different interests both firms were likely to achieve their goals. At the same time, managers of both firms were afraid and worried of one firm exploiting the other to in order to win (Gnyawali & Park, 2011). Anti-Korea slurs and accusations that Sony was a “traitor” appearing on the Japanese chat boards at that time (Dvorak & Ramstad, 2006) further contributed to negative emotions.

In short, coopetition stands as a unique and versatile source of multiple and conflicting emotions such that “each positive emotion results from an evaluation of a particular type of benefit, and each negative emotion results from an evaluation of a particular type of harm” (Smith et al., 1993, p. 916). We therefore propose the following.

> *Proposition 1: Interfirm coopetition situations are likely to trigger multiple emotions of opposite valence.*

2.2. Exposure to coopetition shapes the intensity of the arousal of emotions

A particular event, in the first place, is unlikely to evoke the same intensity of arousal to all managers (Huy, 1999). AET suggests that predispositions of managers play a vital role in setting the stage “to have more or less intense bouts of emotion” (Weiss & Cropanzano, 1996, p. 37). In the context of coopetition, the exposure of managers to coopetition will determine the level of intensity of emotions arising from coopetition events. We define coopetition exposure as the degree of managers’ prior involvement in competition and cooperation, their frame of reference based on previous experiences, and their perception of the criticality of coopetition for the firm. Because of different positions and responsibilities, some managers are directly and fully involved in both cooperation and competition while others are engaged more with cooperation and less with competition activities, and vice versa. Some managers would have experienced gains from coopetition while others would have experienced losses, and these differences are likely to shape their expectations of gains and losses from a new coopetition event.

We argue that managers' exposure shapes the relationship between coopetition and the resultant discrete emotions for several reasons. First, managers directly dealing with cooperative activities with remarkable success would have an intense arousal of positive emotions with higher levels of intrinsic motivation. However, it may also generate more negative intense emotional reactions when they fail. Moreover, managers dealing with competitive threats, greater opportunism, and hidden agenda of a partner would have an intense arousal of negative emotions from a competitive move. For example, studies have demonstrated that managers become very furious and angry when they believe that a partner has behaved opportunistically (for example, "Yes, but they stole from us and we hate them") (De Rond & Bouchikhi, 2004, p. 26). Furthermore, few managers are highly involved in both cooperation and competition activities and consequently feel a mix of both intense positive emotions and intense negative emotions. For example, in a case study, Bengtsson and Johansson (2014) found that senior managers felt high tension as they were pulled between cooperation and competition activities while engineers barely felt any tension as they were more involved in the cooperation part of the relationship. Therefore, the intensity of arousal will vary depending on how much the managers are involved in cooperation and/or competition activities.

Second, the arousal will be intense for managers who perceive coopetition as critically important for the firm and therefore would be highly committed to achieving the goals of coopetition. Managers viewing coopetition as real and critical (Frijda, 1988) or with a vivid imagery (Muller et al., 2014) will tend to align their own goals to those of their firm's coopetition goals. That is, coopetition failure (success) will be seen as their own failure (success), which will likely trigger visceral responses because "the intensity of the emotion is directly correlated with the importance or desirability of the goal" (Weiss & Cropanzano, 1996, p. 32). The reason can be that managers may tend to think how a particular coopetition relationship will affect their own career. Will it provide opportunities not previously possible? Certainly, the impact of coopetition on the future of manager's own career will have at least the same influence on his/her emotions as the impact of coopetition on his/her organization's future. Thus, the more critical coopetition is for managers, the more their desirability to achieve coopetition goals will be. A successful achievement would therefore lead to experiencing intense positive emotions while a failure would make managers extremely angry and to "blame themselves for not being able to influence" (Vince, 2006, p. 352) the consequences in their own favor.

Third, the perception of criticality of coopetition would also depend on the managers' comparison of gains achieved through the current event versus some frame of reference (e.g., Frijda, 1988). Here the frame of reference refers to a manager's experience or knowledge about some worse or better-off state of affairs before the particular coopetition event. It could be a previous coopetition event with the same firm or with a different firm that significantly benefited (or harmed) the focal firm in relation to the current coopetition event. The greater the difference between the appraisal of current coopetition event and the reference event, the more intense the arousal of emotions will be. Furthermore, repeated exposure to the trigger event can evoke intense emotions involving high physiological arousal (Douglas et al., 2008).

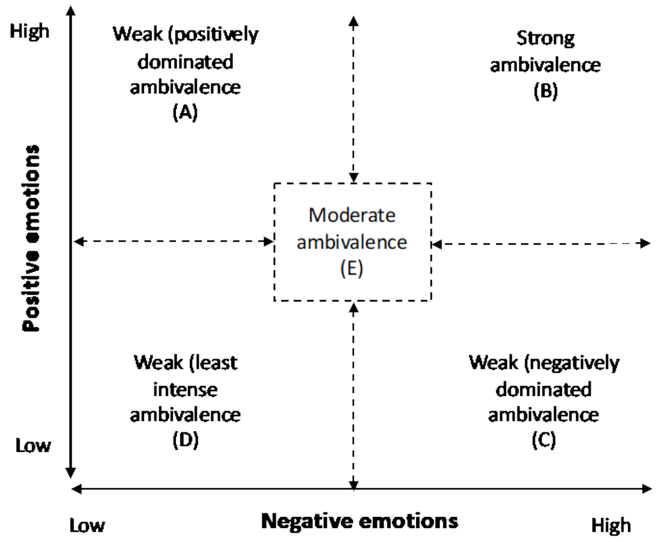
For instance, a recurring exposure to the partner firm's opportunistic behaviors will "intensify negative emotions as the emotional excitation from earlier interactions with the target is transferred to the current interaction" (Douglas et al., 2008, p. 436). By consolidating these arguments, we propose that coopetition exposure is likely to determine the degree of intensity of emotional arousal from coopetition.

> *Proposition 2: The greater (lower) the manager's exposure to coopetition, the more (less) intense the arousal of the corresponding positive and negative emotions will be.*

2.3. The nature of emotions in interfirm coopetition relationships: States of emotional ambivalence

A granular look on the multiple emotions triggered by coopetition may reveal a negative correlation between them such that several "emotions [could be] separated by roughly 180°" (Larsen et al., 2001, p. 684). Research based on SIM suggests that although they may be diametrically opposites, positive and negative emotions can simultaneously exist (Fong & Tiedens, 2002; Thompson et al., 1995). The interplay between positive and negative emotions in coopetition creates tension, as managers feel torn between contradicting demands and conflicting emotions. As noted above, such an emotional state is called emotional ambivalence (Fong, 2006; Pratt & Doucet, 2000) and indicates the degree of torn-ness between the conflicting impulses (Newby-Clark et al., 2002; Priester & Petty, 2001). Emotional ambivalence characterizes the nature of emotions in coopetition relationships, and such ambivalence can be strong, moderate, and weak. We explicate different states of emotional ambivalence that managers experience while working with competing demands in coopetition, using the lens of SIM (illustrated in Figure 2).

Figure 2. Different states of emotional ambivalence



Emotional ambivalence is a function of both the similarity and the intensity dimensions (Thompson et al., 1995) of positive and negative emotions as indicated by the two axes ranging from low to high in Figure 2. Strong ambivalence (box B) involves seemingly similar emotions—that is, both positive and negative emotions are apparently alike in opposition—and are extremely intense at the same time. Managers experiencing strong ambivalence are likely to feel extremely pulled apart between conflicting emotions. Moderate ambivalence (box E) involves seemingly similar and reasonably intense positive and negative emotions. The degree of torn-ness remains rather at a medium level. Weak ambivalence involves the experience of either seemingly similar emotions but with very low intensity (box D) or negative emotions are greatly felt than their counterparts or vice versa (boxes A & C). At the former level, the managers are not torn between opposing emotions, as the intensity level is too low. At the latter level, conflicting emotions are not alike in opposition and thus one largely dominates the other such that one emotion is intensely felt while the other is weakly felt. A greater experience of one-valenced emotions than the counter-valenced emotions decreases the degree of torn-ness (Priester & Petty, 1996; Thompson et al., 1995). It is important to note that in weak states of emotional ambivalence (quadrants

I, II, & III), both positive and negative emotions are felt, albeit with different levels of similarity and intensity.[1]

Referring back to our earlier logic for strong emotional ambivalence (box B), it usually arises when coopetition paradox is strong—that is, a situation when two partners intensely cooperate with each other, for instance through large mutual investments or other commitments, but at the same time fiercely compete with each other. Managers who are heavily involved in both cooperation and competition feel similar and intense positive emotions (often arising from the potential success and goal accomplishment of a coopetition relationship) and negative emotions (often arising from the fear that the coopetition relationship would lead to opportunistic behavior by the partner and potential loss of knowledge) simultaneously. Thus, the interplay between these intense and similar conflicting emotions that develop when managers attend to contradicting demands (for example sharing knowledge with the partner, but at the same time protecting core knowledge from leakage), cause strong emotional ambivalence for managers.

> *Proposition 3: The more (less) the similar and intense opposite emotions triggered by coopetition are, the stronger (weaker) the state of emotional ambivalence experienced by managers.*

2.4. Ambivalence gets shared and becomes collective

Implicit in our arguments above is that emotional ambivalence is fundamentally felt at an individual level. However, most key managers who are directly involved in coopetition relationships are likely to feel similar emotions, and different emotions tend to converge due to their similarity of experiences and on-going interactions. We suggest that emotional ambivalence gets shared and becomes collective for at least

[1] We thank one anonymous reviewer for this comment.

two different reasons in coopetition. First, as managers share the same vantage point—a similar or shared view that develops because individuals experience the same situation or event (Elfenbein, 2014)—the ambivalence felt will also be shared among managers. This happens because managers are likely to appraise coopetition events similarly and thus experience similar emotions (c.f. Rothman & Melwani, 2016; Smith & Ellsworth, 1985). For example, managers might share confident positive expectations that partner's superior resources and capabilities will help achieve intended goals (giving rise to positive emotions), but at the same time, experience a situation in which the partner has behaved opportunistically (giving rise to negative emotions) (Raza-Ullah & Kostis, 2020). Thus, managers appraising several stimuli from the same vantage point would likely have shared ambivalence.

Second, emotional ambivalence gets shared among key managers through social interactions and unconscious emotional contagion processes (Hatfield et al., 1994). The literature on ambivalence of leaders and followers suggests that they have the potential to establish a shared understanding of the environment via dynamic reciprocal interpersonal relationships. In particular, "they can experience and communicate their conflicting and opposite evaluations with each other leading to leader-follower shared ambivalence" (Guarana & Hernandez, 2015, p. 54). In coopetition, even when some managers may not appraise stimuli from the same vantage point, their emotional ambivalence gets shared via verbal or non-verbal expressions such as automatic facial expressions, body language, speech patterns, and vocal tones, which in turn are mimicked by fellow managers (Barsade, 2002). Emotions are thus contagious. For example, when we talk to someone who is depressed it may make us feel depressed as well, and if we talk to someone who is self-confident and buoyant, we also feel good about ourselves (Hatfield et al., 1994).

Studies have also shown that individuals can interpret expressions of being torn or conflicted as expressions of ambivalence and can reliably differentiate ambivalent expressions from expressions of univalent emotions like sadness or happiness (Rothman, 2011). Moreover, adults not only display complex emotions on face more than single emotions but can also recognize mixed emotions on face, often more accurately than they can recognize single emotions (see e.g. Rothman & Wiesenfeld, 2007). Schneider et al. (2013) further demonstrate that individuals who are experiencing ambivalence move from side to side more than those who are not experiencing it. Thus, just as univalent emotions can be experienced, expressed, interpreted, and shared, so can be emotional ambivalence. Summing up, emotional ambivalence, which is initially felt at an individual level (e.g., strong or weak) becomes a collective level feeling through similar appraisals and emotional contagion processes. In fact, recent research has acknowledged that "just as ambivalence at the individual level can be said to be more or less… [strong]… so too can ambivalence at the collective level" (Ashforth et al., 2014, p. 3). Accordingly, we propose the following.

> *Proposition 4: Emotional ambivalence gets shared among coopetition managers through similar appraisals and emotional contagion processes.*

2.5. Performance implications of emotional ambivalence in coopetition

Scholars emphasize that emotions experienced by even a few but influential managers in interfirm strategic contexts are consequential because they affect managerial thinking, behavior, and actions, which in turn, impact organizational outcomes (Huy, 2012). The shared emotional ambivalence among coopetition managers will thus greatly affect their strategic behavior and accordingly performance outcomes (as illustrated in Table 1). We focus on two most common type of performance outcomes from the focal firm's point of view: accomplishment of intended goals and sustenance of the relationship. Goals could include developing a new technology or product or addressing a common competitive challenge. Sustenance of relationship means that the relationship is perceived as beneficial, meets expectations, and therefore will be productively maintained over the desired period of time. These two aspects of performance are closely tied to each other, as one reinforces the other.

Table 1: The different states of emotional ambivalence, their implications for managers, and performance consequences.

Emotional ambivalence	Explanation	Behavioral implications for managers – examples	Performance consequences
Weak ambivalence (Box A)	Positively-dominated ambivalence (little torn-ness). For example, overly trusting the partner with absence or lack of distrust.	Potential competitive threats overlooked Trust without verification No pressure to be alert and proactive Over-embeddedness, Decreased creativity, Group-think	Short-term goals may be accomplished and relationship temporarily sustained, but high risk of potential exploitation by the partner can lead to relationship dissolution.
Weak ambivalence (Box C)	Negatively-dominated ambivalence (little torn-ness). For example, overly suspicious about the partner with absence or lack of trust.	Undervaluation of collaboration benefits, Overvaluation of competitive threats Limited knowledge sharing	Goals may not be accomplished and relationship can dissolve prematurely with increased transaction costs and firms becoming too protective
Weak ambivalence (Box D)	Least ambivalence (very trivial torn-ness). For example, firms not concerned about exploiting full potential of simultaneous cooperation and competition for superior performance.	Potential collaborative opportunities missed Potential competitive threat not forecasted Preference to stay in a comfort zone	A coopetition relationship barely exists and is based on arm-length transactions. Due to potential extra-dyadic leakage risks & missed opportunities, potential benefits forgone.
Strong ambivalence (Box B)	Conflicting emotions are highly intense and similar in magnitude (extreme torn-ness). For example, when the situation demands high trust and high distrust.	Delays in making decisions Paralysis Knowledge leakage Submissiveness Defensive responses	Goals may not be accomplished and relationship dissolves prematurely due to lack of stability and balance in the relationship.
Moderate ambivalence (Box E)	Conflicting emotions are reasonably intense and similar (some level of torn-ness). For	Better/holistic understanding	Goals most likely achieved and relationship sustains over time.

	example, “trust but verify” type of situation.	Consideration of multiple, competing perspectives Balanced decisions Enhanced creativity

We first discuss how different states of weak ambivalence (as illustrated in boxes A, C, & D in Figure 2) may have negative implications for coopetition performance. Box A represents an emotional ambivalence state in which managers are torn between the conflicting impulses to only a small extent, as positive emotions are largely more intense than negative ones. This normally occurs when managers are primarily concerned with the cooperative part of the relationship (e.g., building closer and stronger ties) and less with the competitive interactions (e.g., ignoring that the partner is a current/potential competitor). A high focus on cooperative activities such as co-creating bigger value or solving a common problem would likely trigger cordial and intense positive emotions. However, less concern with the competitive part (e.g., opportunistic steps taken by partner) tends to engender meager negative feelings and emotions. As such, this situation may seem to bring positive outcomes, but it may as well hamper the achievement of desired goals and could even destroy the relationship.

Scholars have indeed suggested that unduly trusting the partner and not distrusting it will likely put the focal firm into a vulnerable position of being exploited by the partner (Lewicki et al., 1998). Consider the Apple-Google example (Raza-Ullah et al., 2014). Before the launch of first iPhone, both firms had developed very strong and cordial ties with each other. Even Google’s CEO sat on Apple’s board, informally termed “Apple-Goo” for a potential merger, and much of the Apple’s app were Google built-ins such as Google search engine, YouTube, and Google maps (Block, 2007). The relationship was mostly characterized by undue trust and overly positive feelings. There seemed to be no mechanism in place to ‘verify trust’. When Android OS was launched, it came as a sheer surprise and disappointment for Apple's CEO, who then believed that it was a stolen product from Apple and Google gave it for free to phone manufacturers (Isaacson, 2011). Ultimately, the relationship became sour and cooperation activities started to decrease. Thus, tipping toward the positive end (e.g., undue trust) and giving less attention to negative side (e.g., lack of distrust), although creates weak ambivalence and less torn-ness, the potential effects on relationships can be devastating. Moreover, research has suggested that one-sided positive view is likely to limit creativity (Fong, 2006), increase group-think (Pouder & John, 1996) and inertia, as managers tend to neglect the contradictory yet interrelated negative views and thus fail to connect all dots to get a complete picture.

On the contrary, negative emotions override the positive ones (box C; weak ambivalence) typically in situations wherein competitive part of the relationship becomes more salient to managers than the cooperative one. Managers tend to judge their partner as too egocentric, having malevolent intentions, or attempting to maximize its interests at their expense. The Apple-Google example further showcases that after the event of Android launch, the relationship turned out to be competition-dominated as the cooperation activities tended to cease. Apple's CEO was so annoyed that he wished to wage a thermonuclear war against Android and its partners (Isaacson, 2011). Very often, performance outcomes are compromised based on decisions made under negatively dominated ambivalence. Lewicki et al. (1998) suggest that managers under similar situations—e.g., with low trust but high distrust—indulge in preemptive behavior as they overly assume harmful motive of partners, and become highly skeptic and watchful with increased level of monitoring. This would in turn increase transaction costs and limit knowledge sharing which is crucial for performance in coopetition relationships. Many interfirm relationships fail because managers tend to focus primarily on the competitive side and negative feelings while discarding the importance and value of cooperation related benefits. For example, the coopetition relationship between Volkswagen and Ford was dissolved prematurely because managers were too wary to share knowledge about marketing and design strategies with each other (Park & Ungson, 2001). The key to achieving successful performance results from coopetition is to strike a balance between cooperation and competition.

In case of weak ambivalence (box D), managers feel very little ambivalence perhaps because firms are only engaged in arm-length transactions and have limited interdependence on each other. Managers may think relatively little about the potential threats since there is no apparent rivalry between firms. However, this can be dangerous. Firms are often connected in a network of interorganizational ties, and there are always risks of knowledge spillover to indirectly connected rivals in the network (Hernandez et al., 2015). Due to such extra-dyadic leakage risks, any negligence or carelessness may harm the competitive advantage of the focal firm. Furthermore, managers may also be not able to see potential opportunities that can be exploited if the collaboration with the partner is strengthened. It is not uncommon to see that firms tend to repeat ties with already partnered firms instead of looking for alternate and better partners (Holloway & Parmigiani, 2016). Weak ambivalence mutes the managerial motivation to look beyond their comfort zone, thereby keeping them away from benefiting from other capable partners. In short, the three states of weak ambivalence are likely to deteriorate performance.

Proposition 5a: Weak emotional ambivalence (i.e., positively-dominated, negatively-dominated, and least intense ambivalence) would likely jeopardize coopetition performance.

Strong ambivalence (box B) that involves a higher degree of torn-ness between conflicting emotions is usually triggered when managers need to attend to both cooperative and competitive demands simultaneously to a greater extent. Strong ambivalence is associated with extreme psychological discomfort (Costarelli & Sanitioso, 2012) such that “an overwhelming degree of ambivalence involves feeling “stuck,” feeling powerless and unable to make decisions and to move on…” (Harrist, 2006, p. 89). Such an emotional state drains much of the cognitive and emotional resources, and as a result, causes delays in decision making (Nohlen et al., 2015 cited in van Harreveld et al., 2015), paralysis (Stratton, 2005), and limited communication (Gnyawali et al., 2016). The excessive cognitive and emotional load hampers managers ability to decide what should be shared and what not to be shared, which further implies that they may leak sensitive knowledge to the partner (Jarvenpaa & Majchrzak, 2016). Managers often express high ambivalence as: “sometimes one can feel a bit schizophrenic, like one is pulled apart. How can we hand this situation?” (Raza-Ullah et al., 2014, p. 195).

Experimental research further suggests that the partner can read such ambivalent state of managers and interpret it as submissiveness or focal firm’s weakness, which in turn would instigate the partner to dominate and exploit focal firm to its own advantage (Rothman, 2011). In addition, whereas submissiveness implies that focal firm is not competent to work with the partner, it also signals to the focal firm that it is not being treated on equal terms. This creates instability in the relationship and the chances of dissolution increase. For example, one major reason behind Suzuki-Volkswagen alliance failure was that Suzuki was considered as an associate in Volkswagen annual report (Mukai et al., 2011) instead of an equally qualified partner.

When both positive and negative emotions are highly activated and salient (Larsen et al., 2001), managers would likely react in a defensive manner by moving away from strong ambivalent state (i.e., high torn-ness and tension) to weaker states. Managers may lean towards either negative or positive pole, whichever is preferred (i.e., allow one favorable emotion to dominate the other in order to reduce the degree of torn-ness). In this way, they tend to escape from the disturbing emotion or the one that does not relate to their norms or understanding (Cote, 2005). In other words, they would likely move to boxes A and C. Alternatively, they may simply avoid both the conflicting emotions and their triggers in order to escape the extreme level of discomfort caused by strong emotional ambivalence (Ashforth et al., 2014)—that is, land in to box D. However, as explained above, weak ambivalence would likely be dysfunctional to performance goals.

> *Proposition 5b: Strong emotional ambivalence would likely jeopardize coopetition performance.*

Finally, emotional ambivalence at a moderate level (box E) builds necessary excitement and pressure to attend to the requirements of both competitive and cooperative demands. It broadens the scope of attention by pushing managers to have a balanced consideration of multiple competing perspectives in complex and challenging contexts of interfirm coopetition relationships. For example, research on social psychology has suggested that emotionally ambivalent individuals are more motivated to seek both negative and positive feedback about a potential job candidate than happy individuals who sought more positive than negative feedback. Moreover, ambivalent individuals were more inclined to seek, reflect on, and embrace alternative perspectives, in comparison to sad or happy individuals (Rees et al., 2013). Emotional ambivalence reminds managers that they are in a challenging situation, wherein multiple and contradictory perspectives need to be considered simultaneously (Fong, 2006). Thus, it compels them to search for more information to better understand and appropriately respond to such a situation. As a result, it leads to increased receptivity to alternative perspectives (Piderit, 2000), enhanced creativity (Fong, 2006), more accuracy in judgements (Rees et al., 2013), and better decision-making (Plambeck & Weber, 2009). These behaviors, in turn, would help maintain the relationships productive and fruitful for performance outcomes.

> *Proposition 5c: Moderate emotional ambivalence would likely enhance coopetition performance.*

2.6. The Role of Emotional Capability

We define emotional capability (EC) as firm's ability to understand, accept, and regulate emotional ambivalence and its effects. EC just like emotional ambivalence is a collective level construct and incorporates the underlying attributes of emotional capability (Huy, 1999) but is different in the sense that it helps to manage ambivalent emotions as compared to discrete emotions. The effects of emotional ambivalence on performance are contingent upon emotional capability such that emotional capability helps bring weak and strong ambivalence to a moderate level, and thus enhances performance.

The ability to understand relates to managers' ability to recognize and analyze the consequences of different levels of ambivalence. More precisely, it enables managers to interpret the meanings that ambivalent emotions at these levels convey regarding the complex issues related to simultaneous cooperation and competition and their implications. With a good understanding, managers can transition from other states to moderate ambivalence state. For instance, weak (dominated) ambivalence would suggest to managers that their one-sided focus might not produce better results, and that the relationship will be more productive if they consider multiple perspectives even when they are contradictory. Similarly, strong ambivalence may send an information signal to managers that they are in an extreme situation (Fong, 2006), for instance dealing with a highly competent partner without which goals can't be met, but partner's behavior is opportunistic at the same time. The ability to understand will enable managers to realize that the risk of high cognitive load beyond their cognitive capacity might make them stuck and thus they need to normalize the intense level of ambivalence to a moderate level in order to achieve the performance goals. Implicit in our argument here is the assumption of the interplay of emotions and cognitions such that "Thinking and feelings are inextricably linked." (Ellsworth & Scherer, 2003, p. 572) and jointly contribute to behaviors (Pessoa, 2008). Therefore, when thoughts generate a variety of positive and negative emotions, emotions in turn impact the appraisal in the future giving rise to new thoughts and understandings (Huy, 2010). In other words, emotions influence cognition (Forgas, 1995) and produce a new cognitive appraisal that would trigger a different (i.e., moderate) level of ambivalence.

The ability to accept refers to the propensity to embrace both positive and negative emotions rather than to either avoid both or tip toward one emotion by downplaying the other. It is especially helpful in the case of strong ambivalence since managers feel extreme levels of torn-ness and tend to decrease the felt discomfort by responding to the paradoxical source (i.e., coopetition events) through escapist or tipping behavioral responses (van Harreveld et al., 2015). Acceptance enables them to confront and work through the tension (Smith & Lewis, 2011), thereby maintaining ambivalence at a moderate level. The ability to accept is similar to Smith and Tushman's (2005) discussion of paradoxical frames, defined as "mental templates in which managers recognize and accept the simultaneous existence of contradictory forces." (p. 526). Managers with such frames would be more effective in examining the contradictory goals of both cooperation and competition and thus in foreseeing the potential positive outcomes through juxtaposition. In this way, managers embrace rather than avoid contradictions (Poole & Van de Ven, 1989; Smith & Lewis, 2011) and associated ambivalence with them, and develop an integrative view of the paradoxical demands and ways of addressing them.

The ability to regulate refers to adjusting and displaying the expression of ambivalence to a moderate level through surface acting (Hochschild, 1983). Surface acting includes an outward display of ambivalent emotions that are actually not felt but are required in a particular situation (Ashforth & Humphrey, 1993; Morris & Feldman, 1996). Regulating emotions has been found useful when organizational members have to deal with critical non-member stakeholders for greater good (e.g., an airhostess bringing a smile on her face even in times when she is tired and angry with a passenger). The ability to regulate becomes particularly relevant in interfirm coopetition relationships because an expression of strong or weak ambivalence may cause dents in the relationship, thereby hindering performance goals (as described in section 3.5). For instance, expression of high ambivalence of the focal firm might lead the coopetition partner to draw negative inferences such as indecisiveness or incompetence of the focal firm (Rothman & Wiesenfeld, 2007), which could demotivate its partner to continue with the relationship and thus increase the chances of break up. Regulating the high (and low) levels of ambivalence to a moderate level by surface acting would send a strong signal to the coopetition partner that the focal firm is skilled and capable enough to create a win-win scenario for both firms, regardless of the pressure created by strong paradoxical demands. Managers' ability to regulate would help maintain a balanced and productive relationship.

In summary, we suggest that higher level of EC is very important in order to limit negative effects of high and low emotional ambivalence on performance. EC leads to more accurate understanding of the situation, accepting the paradoxical conditions, and responding with appropriate expression of emotional ambivalence, thereby generate more beneficial outcomes in the relationship.

> *Proposition 6: Emotional capability moderates the relationship between emotional ambivalence and coopetition performance such that it mitigates the negative effects of weak and strong ambivalence states.*

While our theorizing thus far has implied that emotions change over time, we like to explicitly point out such dynamics here. Dynamism occurs due to the appraisals and re-appraisal of coopetition events and through an interplay between cognition and emotion. As illustrated by dotted lines in Figure 1, we point out three different processes for the dynamism. First, emotional ambivalence states change depending on the varying appraisals of coopetition situations. If the degree of competition or cooperation changes in a coopetition relationship, the balance will accordingly shift toward more, less, or equal dominance of cooperation or competition overtime. That in turn leads to new appraisals, thereby changing the levels of emotional ambivalence. Second, the coopetition relationship might be reappraised both as a result of experienced ambivalence and as a consequence of the performance outcomes of the relationship. If, for example, the emotional ambivalence evoked by coopetition situation, demands, or events is strong, it can be reduced based on an evaluation of the resources available to cope with the situation. Similarly, an ongoing evaluation of the outcomes of the relationship also leads to a reappraisal of the coopetition situation, which in turn causes different states of emotional ambivalence. The interplay between emotional ambivalence and emotional capability discussed in proposition 6 is another aspect of dynamism. When positive performance outcomes are accomplished as noted in proposition 6, the improved performance in turn could shape future events and coopetition balance, and would therefore spur a "virtuous cycle" of improvements in ambivalence and performance.

3. Discussion

While scholars have stressed the need to explore emotions in interfirm strategic contexts (Ashkanasy & Humphrey, 2011; Huy, 2012) as they are rich domains to study emotions (Lewicki et al., 1998), research on this intriguing area is quite limited. Accordingly, we focused on coopetition which is a unique form of interfirm relationship. We theorized that the paradoxical nature of coopetition relationships evokes multiple and complex emotions, which manifest in the form of emotional ambivalence. We integrated insights from the literature on AET and SIM to develop a framework illuminating the nature, sources, and consequences of emotions with a particular focus on emotional ambivalence in coopetition as well as how emotional capability can help modulate emotional ambivalence and its effects. Drawing on the AET, we suggested that managers experience multiple, conflicting emotions when they pursue contradictory yet interrelated demands inherent in coopetition, and the interplay between positive and negative emotions results in various states of emotional ambivalence. Emotional ambivalence gets shared and becomes collective through similar appraisals, social interactions, and emotional contagion processes. We built on the core ideas of SIM to explore how the similarity and intensity of conflicting emotions in coopetition lead to different states of emotional ambivalence. Our theory provides a novel understanding of how moderate ambivalence could improve performance, while the other two extremes would inhibit performance. We advanced the concept of emotional capability and explained how it could help mitigate the negative effects of the extreme forms of emotional ambivalence and enhances coopetition performance.

3.1. Contribution to research on emotion

Our first contribution lies in advancement of the literature on emotion and emotional ambivalence to a new and distinct strategic context of interfirm coopetition. Research on emotion and emotional ambivalence has thus far focused largely on intrafirm contexts, dealing with issues such as emotional experiences of supervisors, coworkers, and subordinates (e.g., Fitness, 2000; Gaddis et al., 2004) and emotional ambivalence in groups, teams, or leader-follower relationships within a single firm (e.g., Rothman & Melwani, 2016; Rothman & Wiesenfeld, 2007). As interfirm strategic contexts involve more than one firm with each having its own interests, goals, and cultures, the emotional experiences, their expressions, and implications are likely to differ and carry greater impact. For example, our framework suggests that under the state of strong emotional ambivalence, managers may not be able to differentiate between sensitive and non-sensitive knowledge. This can result in unintended leakage of sensitive knowledge to a competitor-partner, thus harming the competitive advantage of the focal firm, and eventually leading to a premature dissolution of the relationship (Raza-Ullah & Eriksson, 2017). Moreover, scholars have suggested that low-intensity ambivalence (i.e., weak least intense ambivalence) in organizational setting "(1) is likely to be ignored, (2) has little impact on behavior, and by extension (3) is of relatively little concern to management" (Ashforth et al., 2014, p. 2). However, such assumptions may not hold in interfirm strategic contexts because ignoring weak ambivalence can reduce the ability of affective forecasting (Dane & George, 2014), and the focal firm may lose its competitive edge due to extra-dyadic leakage risks within the network (Hernandez et al., 2015). Our theory further illustrates why in certain situations, managers may need to fake their emotional expressions to the partner firm managers in order to not compromise the long-run performance.

Our second contribution lies in the development of a nuanced understanding of how the performance implications of weak, strong, and moderate states of emotional ambivalence can vary. Although some attempts have been made to explain different responses to ambivalence (Ashforth et al., 2014), little is known about which states of emotional ambivalence cause positive outcomes and which states give rise to negative outcomes. We fill this gap by building on the SIM model and illustrating how each state (with respect to differences in similarity and intensity of oppositely valenced emotions) creates a different degree of torn-ness, which in turn, leads to either positive or negative behavioral responses. By doing so, we also decipher a puzzle in the ambivalence literature regarding the dual effects of ambivalence: both functional (e.g., Fong, 2006; Guarana & Hernandez, 2015; Plambeck & Weber, 2009; Rees et al., 2013) and dysfunctional (Harrist, 2006; Stratton, 2005; van Harreveld et al., 2009). Thus, our theory provides insights on why ambivalence leads to contradictory results. Further, we illuminate how ambivalence becomes collective through social interactions, similar appraisals, and emotional contagion processes in coopetition.

Our third contribution to the emotion literature lies in the development of the construct of emotional capability and the explanation of its unique role in realizing positive gains from extreme forms of emotional ambivalence. The ambivalence literature informs us little about management capabilities. We built on some existing literature on emotional capability (Huy, 2009) and offered new insights on how managing collective ambivalent emotions could help achieve desired performance goals.

3.2. Contribution to research on coopetition

Our main contributions to the coopetition literature are threefold. First, our theoretical framework sheds light on the specific mechanisms that explain why and how coopetition leads to positive or negative performance outcomes. While prior work extensively reports that coopetition is a double-edged sword (e.g., Bouncken & Kraus, 2013; Ritala & Sainio, 2014), it informs us little about why it is so. We addressed this puzzle by foregrounding the critical yet ignored role of emotions and their management in coopetition. We explicated how multiple, simultaneous conflicting emotions—emotional ambivalence—arouse in individuals, become collective, influence strategic behavior, and ultimately affect the performance outcomes in coopetition. More specifically, we suggested that certain states of emotional ambivalence (strong, moderate and three weak states) produce certain types of strategic behaviors and actions, some of which help while others hurt performance. For instance, negatively-dominated weak state of ambivalence would cause strategic responses that tend to undervalue collaborative benefits, overvalue competitive concerns, and limit knowledge sharing with partner, thereby increasing instability in the relationship and eventually diminishing performance. In a positively-dominated weak ambivalence, managers tend to overlook competitive concerns like potential opportunism and overly trust the partner without verification, which increases the risks of potential exploitation by partner, thus resulting in declined performance. In the least weak ambivalence state, managers do not feel the pressure to be proactive in either forecasting and mitigating potential competitive risks or searching for and exploiting potentially beneficial opportunities. Thus, by staying in their comfort zone and overlooking extra-dyadic leakage risks, their firm is likely to gain less than it could. The strong emotional ambivalence is likely to cause delays in decision-making, increase the chances of unintended knowledge leakage, and trigger defensive responses such as avoidance or tipping behavior (i.e., approaching weak states of ambivalence), which would ultimately drag down performance. Finally, it is only the moderate state of ambivalence that stimulates managers to search for more information, consider multiple contradictory perspectives, and make accurate and better decisions, ultimately leading to increased performance.

Our second contribution is the application of emotion lens on tension, the consequential role and management of which in the coopetition context are clearly in the spotlight (e.g., Bengtsson et al., 2016; Fernandez & Chiambaretto, 2016; Le Roy & Czakon, 2016; Tidström, 2014). However, the current literature has mainly approached tension with a rational perspective and ignored the emotional complexity that underlies tension (Raza-Ullah et al., 2014). Understanding the emotional aspect of tension is critical in order to manage tension. The degree of torn-ness between conflicting emotions (i.e., states of emotional ambivalence) relates to the intensity of tension. The more the managers feel pulled apart, the stronger the emotional ambivalence, and the more intense the tension.

Our third contribution lies in providing explanations on how coopetition outcomes could be enhanced by understanding, accepting, and regulating emotions. Previous work has overlooked how complex emotions can be managed in interfirm relationships. Although formal contracts, control mechanisms, and governance structures are important contributors toward coopetition success (Bouncken et al., 2016; Fernandez & Chiambaretto, 2016; Hung & Chang, 2012), they may not be appropriate to manage complex emotions. Our framework complements these approaches by offering insights into how emotional capability is instrumental in managing the detrimental effects of emotional ambivalence on performance.

Emotional capability comprises three critical aspects: understanding the behavioral implications of various states of collective emotional ambivalence, accepting and working through emotional ambivalence rather than avoiding or tipping, and regulating the expressions of ambivalence to a coopetition partner. Firms with emotional capability are more likely to perform better.

3.3. Managerial implications

Our paper clearly underscores the need for managers to consider emotions in managing coopetition so that they could generate positive outcomes from coopetition engagements. Our theory suggests managers to modulate the level of emotional ambivalence and keep ambivalence at a moderate level. It also suggests that senior executives need to explicitly consider the development of necessary organizational routines and processes so that key managers engaged in coopetition are able to understand and manage strong emotional ambivalence and not be crippled by it. In a related manner, our discussion of the moderating role of managers' exposure suggests that senior executives need to involve and expose their key managers in various coopetition activities so that they have an appropriate lens to appraise coopetition events and to manage complex emotions arising from them.

3.4. Limitations and Future Research Directions

We wish to highlight some limitations of our model and a few additional directions for future research. First, while our focus on the focal firm is a clear strength as it allowed us to be fine grained in our theorizing, we did not explicitly incorporate partners' perspective. Future research could examine the perspectives of both the focal firm and its partner(s) and develop a more comprehensive understanding of interfirm emotions by evaluating events and emotions from different points of view.

Partner conditions such as resource strength of the partner, and the interplay between the focal firm's and the partner's appraisal of emotions are likely to have important implications for further understanding the drivers of emotions. Similarly, while firms are managing portfolio of alliances (Wassmer, 2010), we did not explicitly discuss how a firm's portfolio of multiple cooperative, competitive, and coopetitive relationships impacts emotions. We encourage future researchers to build on our foundation and dig into inter-partner and multi-partner issues and how they impact emotions.

Second, we kept the model simple for parsimonious concerns but future research could extend this line of inquiry into the differences between emotions of the same valence, for example sadness, anger, and shame, which can be attributed to several cognitive appraisal patterns predisposed with these emotions (e.g., Podoynitsyna et al., 2012). Research suggests that negative emotions override positive ones and have more long-lasting impact than do positive ones (Frijda, 1988). We have not distinguished the differential or overriding effects of negative emotions, but future research could develop contingencies such as partner conditions and examine the overriding effects of negative emotions and the conditions where negative emotions become very critical.

Third, we also wish to highlight some empirical steps needed to appropriately explore emotions in paradoxical interfirm relationships. The dynamism in our model calls for longitudinal studies. Examination of how events over time shape discrete emotions and emotional ambivalence and how performance outcomes in turn shape future emotions would provide intriguing insights. Future empirical research could also identify various measures for the constructs depicted in the model. In-depth interviews and observations will help to develop a richer understanding of emotions and the dynamism and to develop questions and measurements to empirically test our model.

Since both coopetition paradox and ambivalence have dual elements, great care is needed in developing the measures so that both elements and the duality are captured. As coopetition engagements become even more popular and stakes from such engagements increase, emotions would be more prevalent and need to be examined to enrich our understanding of the nature and implications of coopetition.

4. Conclusion

Our paper developed a theory to understand and explain how emotions arise and manifest in strategic interfirm contexts that are paradoxical in nature. We examined how multiple and conflicting emotions arise in coopetition relationships, how such emotions impact performance, and how negative effects of extreme forms of emotional ambivalence could be mitigated in order to generate superior performance. Our theory suggests that coopetition has a versatile potential to elicit various impactful collective ambivalent emotions and therefore such emotions ought to be managed accordingly. By conceptualizing emotions in a new and unique strategic context (i.e., interfirm coopetition), we take the literature on emotion as well as coopetition to the next level that opens up interesting avenues for future research.

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