Structural networks and dyadic negotiations in tourism destination ecosystems

Ness, Håvard[1]; Aarstad, Jarle[2]; Haugland, Sven Arne[3]
[1]Department of Business, Marketing and Law - University of South-Eastern Norway
[2]Mohn Center for Innovation and Regional Development - Western Norway University of Applied Sciences
[3]Department of Strategy and Management - Norwegian School of Economics

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Håvard Ness*
Department of Business, Marketing and Law
University of South-Eastern Norway
PO Box 164 Sentrum
NO-3502 Hønefoss
Norway
E-mail: Havard.Ness@usn.no
Telephone: +4732117208

Jarle Aarstad
Mohn Centre for Innovation and Regional Development
Faculty of Engineering
Western Norway University of Applied Sciences
PO Box 7030
NO-5020 Bergen
Norway
E-mail: Jarle.Aarstad@hvl.no
Telephone: +4755587926

Sven A. Haugland
Department of Strategy and Management
NHH Norwegian School of Economics
Helleveien 30
NO-5045 Bergen
Norway
E-mail: Sven.Haugland@nhh.no
Telephone: +4755959464

* Corresponding author

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Abstract

Purpose: This study investigates how and to what extent structural network properties affect dyadic negotiation behavior in tourism destination ecosystems. Specifically, we address negotiation behavior in terms of problem-solving and contending, because these two key strategies reflect the integrative and distributive aspects of dyadic interactions.

Design/methodology/approach: The study relies on network data and dyadic survey data from nine mountain tourism destinations in southeastern Norway. The structural network properties we research are triadic closure—the extent to which a dyad has common ties to other actors—and structural equivalence—the similarities in networking patterns that capture firms' competition for similar resources. In addition, we also study a possible effect of relationship duration on negotiation behavior.

Findings: Triadic closure and relationship duration have positive effects on problem-solving, and structural equivalence tends to decrease problem-solving, although the effect is inconsistent; none of these three independent variables were found to affect contending negotiation behavior.

Research limitations/implications: The study shows that a dyad's structural network embeddedness has implications for negotiation behavior. Further research is encouraged to develop this theoretical perspective.

Originality: This study is a pioneering investigation of how structural network properties affect dyadic negotiation behavior in ongoing coproducing relationships in real-world destination ecosystems.

Keywords: problem-solving, contending, network analysis, triadic closure, structural equivalence, relationship duration.

1. Introduction

There have been repeated calls to address the impact of interfirm dyads' direct and indirect network connections on dyadic negotiations, but both conceptual and empirical research have largely ignored such embeddedness (Eklinder-Frick and Åge, 2020; Mouzas, 2016; Scharpf, 1994). Mouzas (2016, p.13), echoed by Eklinder-Frick and Åge (2020), called for research addressing how network-level variables and the "vast connectivity" of a negotiating dyad influence value-creation and -sharing because negotiations in one dyad "will affect other entities even though they are not parties in that negotiation."

A review by Agndal *et al*. (2017) shows that negotiation research has primarily focused on individual negotiation situations and variables related to individual negotiators and organizations. Moreover, the literature is dominated by experimental studies conducted in laboratory and a-relational settings, in which the negotiation contexts have typically been captured in terms of cultural factors. Interfirm variables are primarily related to "prior experience and prior outcomes, knowledge and understanding, perceptions and feelings, power relations and status and negotiating dyad composition" (Agndal *et al.*, 2017, p.490). Research on (conflict and) negotiations in hospitality and tourism shows similar patterns (Ivanov *et al*., 2014; Mwesiumo and Halpern, 2016, 2018).

A salient feature of dyadic negotiations in a real-world business context is that they are situated in interfirm networks. In hospitality and tourism research, this has been related to spatial planning (Almeida *et al*., 2017), community-based tourism (Curcija *et al*., 2019), and relational aspects promoting business cooperation at a destination (Czernek-Marszałek, 2021). As destination firms interact, network structures form (Elvekrok *et al.*, 2022), but the consequences of this structural embeddedness for negotiation behavior are vastly under-investigated (Almeida *et al.*, 2017; Curcija *et al*., 2019; Eklinder-Frick and Åge, 2020; Geiger

et al., 2022). We respond to this research gap by considering destination ecosystems and by addressing how the interfirm networks that embed a dyad affect its negotiation behaviors.

A negotiation is defined as "a process of potentially opportunistic interaction by which two or more parties, with some apparent conflict, seek to do better through jointly decided action than they could otherwise" (Lax and Sebenius, 1986, p.11). This rests on the premise that, in pursuing their goals, the organizations are *interdependent* on other organizations. Interdependency is a core feature of the hospitality industry and tourism destinations because specialized resources and capabilities are distributed among many organizations, and cooperation and coordination among actors are important for the competitiveness of a destination (Fyall *et al*., 2012; Haugland *et al*., 2011). Hospitality and tourism firms participate in complex activity chains that collectively constitute the destination product, and firms need to negotiate agreements and develop role relations to achieve efficient integration (Adner, 2016; Ness *et al*., 2021; Tajeddini *et al*., 2020). However, because actors are also autonomous, they have both common and private goals, and these mixed motives create both tension within integrative value-creation and potential conflict related to distributive value-claiming and resource access (Czakon and Czernek-Marszałek, 2020; Ozmel *et al*., 2017; Thomas, 1976).

In pursuing these two potentially conflicting dimensions, firms typically use two different negotiation strategies: integrative *problem-solving* and distributive *contending* (Pruitt and Carnevale, 1993). Value-creation through integrative problem-solving and distributive value-claiming through contending are intertwined as two dimensions of the same process. Furthermore, negotiation partners' direct and indirect network relationships have been found to affect their power and ability to claim value (Ozmel *et al.*, 2017), and in the tourism context, research has focused on the importance of problem-solving and joint value-

creation while acknowledging the related contentious distributive behaviors (Czernek-Marszałek, 2020; Mwesiumo, 2019).

In this study, we examine dyadic negotiation behavior in a destination ecosystem in a southeastern region of Norway by using data from nine tourism destinations, addressing *how and to what extent the structural properties of the interfirm network affect and predict negotiation behaviors (i.e., problem-solving and contending) in dyadic negotiations*. In so doing, we emphasize two important structural network properties: triadic closure and structural equivalence. Triadic closure refers to the formation of closed triads around a dyad, reflecting that two dyadic actors have ties to the same third actor (Haugland *et al*., 2021). A triad is a fundamental network unit within which they contribute a common, integrated product offering, such as a skiing package involving transport, accommodation, and a ski pass, or the more traditional task of destination marketing (Sheehan *et al.*, 2007).

Structural equivalence refers to whether two firms have connections to the same actors, indicating a similarity of network position (Lorrain and White, 1971). Because the two partners in a dyad will most likely have ties that are *not* shared, structural equivalence is important because it considers both the similarity and dissimilarity of the two partners' network positions. If the two partners share no or only a few alters (third parties shared by a dyad), they will likely be in different parts of the wider network. Thus, structural equivalence accounts for *all* the ties the two partners have in the network. We also consider relationship duration because dyadic negotiations may change over time (Eklinder-Frick and Åge, 2020); research suggests that relational practices can emerge in dyadic and network relationships, with certain modes of interaction developing over time into patterns as negotiated agreements evolve (Ness, 2009).

The current study makes several contributions. First, it links dyadic negotiation behavior to the network context in which the actors are embedded (Eklinder-Frick and Åge,

2020; Mouzas, 2016), and we thus open the black box of how firms' (vast) connectivity in their ecosystems affects dyadic integrative and distributive negotiation behavior. Second, we study negotiation behavior in ongoing dyadic relationships between interdependent coproducing firms, enabling us to capture both the value-creating and value-claiming processes. We deviate from the literature, which often addresses one dimension at the expense of the other (Mwesiumo and Halpern, 2018; Ozmel *et al*., 2017), and we provide a balanced view that contrasts the research on dyadic negotiations that has primarily addressed transactional, a-relational, and zero-sum competitive situations involving winners and losers (Agndal *et al*., 2017; Eklinder-Frick and Åge, 2020). Third, we test our hypotheses in a real-world destination ecosystem. Agndal *et al*. (2017) found that about 60% of the 490 studies in their review, spanning 1995–2015, used students as respondents, and about 60% of the studies were experimental simulations, with only about a third involving real managers. Current research focusing on business-to-business negotiations that involve multiple parties still tends to fall into this tradition of experimental role-plays, such as Geiger *et al.* (2022) and Yu *et al.* (2021). We provide an empirical example of how data on network relationships and negotiation behavior can be collected and analyzed in real-world business networks, and we undertake the uncommon task of providing an example of "alternative methodological approaches" that "may help the field develop in new directions" (Agndal *et al*., 2017, p.495).

2. Theory

2.1 Destination ecosystems

A destination ecosystem represents "a self-adjusting system of interdependent value-creating actors that partake in combining and integrating resources in activities that provide a multitude of composite offerings a tourist can experience and co-create within a shared institutional context" (Ness, 2020, p.28). This interdependency between firms has become

increasingly recognized, and the term "ecosystem" is used to refer to contexts in which diverse stakeholders collectively and through shared activity chains provide a coherent total product (Adner, 2016; Hannah and Eisenhardt, 2018). Although ecosystems lean toward collaborative modes of interaction for reaching integrative agreements and joint value-creation, they also involve competition for shares of that value and for access to resources (Della Corte *et al*., 2021; Marasco *et al*., 2018).

Hospitality and tourism research points to the importance of network ties in destination contexts (Mariani and Baggio, 2020) and their effects on value-creation (Elvekrok *et al*., 2022), and we accordingly address ecosystem network structures. Network perspectives have been used in previous studies to address negotiations, problem-solving, and collaboration in both festival (Adongo and Kim, 2018) and destination (Czernek-Marszałek, 2020) contexts, and these studies have suggested that relationships enhance integrative negotiations. Research has also addressed frameworks for conflict analysis in destination contexts (Almeida *et al*., 2017), conflict management, and "conflict theme" scenarios in community-based tourism (Curcija *et al*., 2019), but the relationship between larger network structures and integrative and distributive negotiation behavior remains unexplored.

2.2 Negotiation strategies in dyadic negotiations

Negotiation research has long been concerned with integrative and distributive negotiations as its two fundamental approaches (Lewicki *et al*., 2015); integrative negotiations consist of value-creation, pie-expansion, or variable-sum situations, in which agreements can be made to decrease or increase joint value, while distributive negotiations comprise value-claiming, pie-sharing, or zero-sum situations and usually involve a single primary issue. In real-world and ongoing business relationships, negotiations usually have both integrative and distributive dimensions, and negotiation processes vary in their potential for value-creation as the parties

engage and interact with different issue structures. As negotiated agreements are reached, value is created and shared, and both dimensions are often addressed simultaneously (Thomas, 1976). Firms tend to pursue both shared and private goals, and potential goal conflicts between the two can give rise to mixed-motive situations, creating tensions between the areas for joint value-creation and the distribution of this value between the actors. Thus, the integrative and distributive dimensions are intertwined and often part of the same process (Lewicki *et al*., 2015).

The negotiation literature has proposed different negotiation strategies to address the above issues (Curcija *et al*., 2019; Pruitt and Carnevale, 1993; Thomas, 1976). The primary integrative strategy is *problem-solving*, which is used when concern for both one's own and one's partner's interests are high; common tactics are information-sharing, trading on issues, changing issue structures, contributing resources, and offering compensation. Conversely, the primary distributive strategy is *contending*, which is used when concerns for one's own interests are high and is at the expense of one's partner's interests; common tactics include positional commitments, persuasive argumentation, time pressure, and threats.

2.3 Triadic closure and structural equivalence

We address the *structural* embeddedness of firms and focus on the existence or otherwise of a relationship (tie) between firms. Two negotiating firms, A and B (i.e., the focused dyad), share a set of relationships with firms *i* and *j* (i.e., alters) and each have a set of relationships in the network that are not shared (Figure 1). Sharing ties with alters (common third parties, here firms *i* and *j*) represents *triadic closure* (AB*i* and AB*j*) around the focal AB dyad (Coleman, 1988; Holland and Leinhardt, 1970). Our motive for studying possible effects of triadic closure on dyadic negotiation behavior is threefold. First, triadic closure favors group interests over individual interests (Krackhardt, 1999); second, it limits individual bargaining

power because withdrawal from the embedded structure isolates those undertaking such a move; and third, conflicts are better managed because third parties can act as mediators (Krackhardt, 1999).

<<< Figure 1 >>>

Structural equivalence indicates the extent to which firms A and B have similar network ties to other firms (Lorrain and White, 1971). Although triadic closure indicates some similarity, structural equivalence further illuminates the network positions of firms A and B *beyond* their common partners *i* and *j*. In Figure 1, common partners *i* and *j* increase the triadic closure and structural equivalence of A and B; firm A also has four other ties not shared with firm B, and firm B has two other ties not shared with firm A. The two firms' (A and B) non-common partners decrease their structural equivalence, and structural equivalence thus captures the network structure beyond the closed triads.

Triadic closure and structural equivalence have previously been considered important structural dimensions affecting network interactions (Gnyawali and Madhavan, 2001; Haugland *et al*., 2021), and we extend this line of reasoning and posit that both triadic closure and structural equivalence will affect the negotiation behavior in firm A's interactions with firm B. Triadic closure reflects the density of shared cooperative relations around a dyad, while structural equivalence reflects the extent to which A and B compete for the same resources in the network. A dyad with a network position characterized by a high degree of triadic closure is more likely to have a cooperative, value-creating focus than a dyad with a network position characterized by a high degree of structural equivalence. In the latter case, competition and value-claiming are likely to be more prominent than in the former.

2.4 Triadic closure and dyadic negotiation behavior

In Figure 1, the dyad of firms A and B is anchored in two closed triads involving *i* and *j*. As the number of dyadic relationships increases, the potential for triadic closure also increases (Holland and Leinhardt, 1971), and with an increasing number of closed triads, the structure becomes more "clustered." Closure is associated with increased fine-grained information-sharing (Coleman, 1988), in which information-sharing is a key tactic in integrative problem-solving negotiation processes; it is associated with reduced opportunism, because of efficient sanctioning of inappropriate behavior (Coleman, 1988), and it can potentially curb contending negotiation behaviors and increase the emphasis on group interests (Krackhardt, 1999). Richer and more varied information shared among the actors is also likely to improve (joint) decision-making and promote problem-solving.

In an experimental study of network effects on negotiation behavior, Money and Allred (2009) found that cliques are particularly important to multiparty negotiation processes because they enable coalition building. They reported that, when a negotiator's perspectives on clique formation (coalition building) were shared with their partners, clique formation had effects on integrative problem-solving approaches. In an exploratory study of intercultural negotiations and social capital, Kumar and Worm (2003, p.265) argued that "interconnections among actors are vital to the negotiation process" because they "amplify the possibilities of value creation by maximizing the number of linkages among actors" and "limit the scope for potential conflict in the value creation process by maximizing the presence of a number of potential intermediaries."

Uzzi (1999), studying middle-market banking and focusing on relationships between firms and their lenders, found that social embeddedness affects the interaction processes because the negotiations in social ties involve joint problem-solving, while this is not the case in arms-length relationships. Moreover, the mediating and arbitrating role of alters promotes

integrative processes over time (Ness and Haugland, 2005), which resonates with Krackhardt (1999), who argued that triadic closure limits the use of individual power because mediation can be used to solve conflicts.

Tourism destination ecosystems are characterized by complementary resources and the sharing of activity structures affecting common interests and negotiation behaviors (Adner, 2016; Ness *et al*., 2021). Being part of the same activity structure can provide firms with shared contextual knowledge about customers, improve their understanding of their roles in the network, and provide competitive offerings. A shared understanding of their interdependence will also likely promote problem-solving behaviors that can realize joint value-creation (Adongo and Kim, 2018; Czernek-Marszałek, 2020; Sheehan *et al*., 2007). Therefore, we hypothesize the following:

> *Hypothesis 1*: As triadic closure around a dyad increases, the dyad increases the use of problem-solving negotiation behavior.

2.5 Structural equivalence and dyadic negotiation behavior

As shown in Figure 1, the AB dyad has common alters *i* and *j*, meaning they have partly similar network ties. However, considering the wider network structure, they also both have ties that are not shared, decreasing that similarity. Gnyawali and Madhavan (2001) suggested that structural equivalence might impact firms' actions in networks; in a destination context, some structural equivalence is expected because firms are interwoven in shared value-creating (and value-sharing) activity chains, which often involve complementary resources and roles (Ness *et al*., 2021). Two firms might be affiliated with the same buyers, suppliers, and other stakeholders in order to provide the destination product, and some of these actors may also be competitors providing similar or substitute services, resulting in contentious interactions.

Furthermore, structural equivalence can be important for negotiation behavior because it reflects the extent to which the two firms compete for the same network resources (Czakon and Czernek-Marszałek, 2020), including through preferences for or discrimination between other stakeholders or simply through limited capacity. We would therefore expect structural equivalence to reduce problem-solving efforts because of competition over limited resources and thus to promote contentious value-appropriation efforts (Almeida *et al*., 2017; Marasco *et al*., 2018). Hence, we propose the following:

> *Hypothesis 2*: As structural equivalence increases between two dyadic partners, the dyad will (a) decrease the use of problem-solving negotiation behavior and (b) increase the use of contending negotiation behavior.

2.6 Relationship duration and dyadic negotiation behavior

Relationship duration relates to stability in social structures, allowing negotiation practices to evolve over time (Burger and Sydow, 2014). A long time-horizon likely promotes an integrative focus and problem-solving negotiation behavior (Heide and Miner, 1992). Relationships often start with arm's-length interactions, in which actors are self-interested and instrumental in claiming value (Ingerson *et al.*, 2015; Uzzi, 1997), but as repeated interactions occur, the actors are likely to become embedded in a larger system of relationships with a more pronounced relational orientation that promotes integrative behaviors and joint value-creation (Ingerson *et al*., 2015; Uzzi, 1997).

Longitudinal research addressing dyadic negotiations suggests that it takes time to establish workable relationships that are value-creating and efficient (Ness and Haugland, 2005), but relationships can also accumulate conflicts over time, leading to dissolution (Arino, 1998; Ness, 2009). The sub-processes related to value-creation and -claiming operate in conjunction with each other, and firms can learn to balance these dimensions (Ness, 2009;

Ness and Haugland, 2005). Furthermore, proximity in a destination ecosystem characterized by shared activity chains should also predict lasting relationships (Adner, 2016), with those relationships perceived as beneficial and value-creating lasting longer than those characterized by distributive negotiation patterns focused on value-claiming. Relationships that survive the early stages and develop into stable interaction patterns should reflect positive outcomes for dyadic partners, and we would expect ties maintained over a long period to reflect an underlying value-creating process that is evaluated by the parties as efficient, equitable, and beneficial. Hence, we hypothesize the following:

> *Hypothesis 3*: As the relationship duration of a dyad increases, the dyad will increase its use of problem-solving negotiation behavior.

<<< Figure 2 >>>

The hypotheses are summarized in Figure 2. As negotiations have both integrative *and* distributive aspects, which involve both problem-solving and contending behaviors, we compare all three independent variables to both of the dependent variables in the analyses. The dashed lines indicate non-hypothesized relationships.

3. Methodology

3.1 Empirical setting and data collection

Tourism actors often have relationships within and beyond their local destinations, so we focus our research question on actors within different tourism destinations in the same region. The actors are also geographically bounded, making it hard to opt out of the local and regional coproducing ecosystems, and they likely create and claim value as they operate within such ecosystems. Our context may therefore trigger tension between cooperation and competition because of limited local and regional resources (Czakon and Czernek-Marszałek, 2020), and

variations within and beyond destinations will likely induce heterogeneity into firms' network structures. Finally, social network research is generally conducted in a bounded empirical context.

For these reasons, we chose a region of nine mountain destinations in southeastern Norway. The destinations vary in size, internal organization, degree of integration between actors, and network structure properties, and they also form a larger regional structure connected by numerous ties. For each destination, we identified all publicly recorded tourism industry–related actors, cross-checking them with destination websites and knowledgeable locals for completeness. In total, 568 organizations were identified; Appendix A (Figure A1) provides an overview of the research process and further details on the methodology.

We then collected network data within and across the destinations. To identify interfirm ties, we contacted the managers registered as the contact persons in the public records of the 568 identified firms by phone and requested them to list the firms they were currently cooperating with and/or the firms they had previously been cooperating with. For some firms, there was no contact person, and only general contact information was provided. Upon contact, the purpose of the data collection was explained in order to identify the informant with the best knowledge about the organization's external relationships. This was done to source relevant and precise information reflecting our theoretical focus (Ketchen *et al*., 2018). The procedure involved complete lists of firms at the contact's destination and questions about the firms outside that destination with which the firm collaborated. We received 202 (35.6%) responses reporting on interorganizational ties, which featured 434 of the initially targeted 568 firms (76.4%) and 116 other firms outside the selected destinations, such as regional and national public agencies, airlines, and ferry lines. A structural relationship exists between two firms if one firm or both firms reported that they collaborated,

which enabled modeling of network data for firms not initially targeted and for non-respondent firms. The final network consisted of 550 firms and 2686 ties.

About a year later, we collected survey data on the dyadic ties. We again approached the 568 firms by phone and requested information about an informant with deep knowledge about the firm's (external) relationships, and 325 firms agreed to participate. Through a web-based questionnaire, the firms were asked to report on one dyadic partner with which they were cooperating. Among the smaller firms, the informant was typically the owner/manager; among the larger, the informant was typically a functional officer whose knowledge aligned with our research focus, which is appropriate in the context of small- and medium-sized firms (Kull *et al*., 2018). 72 usable responses were returned.

Merging the two data sets yielded 48 responses for use in the analyses. The firms in the merged dataset vary in size; about 50% have fewer than ten employees, and the maximum is 150 employees (mean = 19; standard deviation = 33.5). Revenues vary from less than a million to 94 million NOK (mean = 19 million). The relationships are primarily with organizations providing complementary products and services (16) and buyer–supplier relationships (14), but some are also with other firms providing similar products (15) and with competitors (3).

Forty-eight responses represents a small sample, but we should also consider the complexity of the data collection procedures, which involved two different datasets. One strength of the approach is that the structural network data measuring the independent variables were collected a year before the survey data that measured the dependent variables. The approach also strengthens the validity by avoiding common method variance and promotes strong calibration between theory and the empirical data (Lindell and Whitney, 2001; Malhotra *et al*., 2006). Using single respondents with the best knowledge of each

organization's interorganizational relationships is also appropriate and reduces the potential for respondent bias (Montabon *et al.*, 2018).

3.2 Measures

We applied established measures of triadic closure and structural equivalence; relationship duration was identified by counting the years the two firms had been cooperating, and problem-solving and contending were measured with items based on Ganesan (1993). We controlled for differences in degree centrality and absolute differences in degree centrality (Haugland *et al*., 2021). Table 1 contains a complete list of all measures, and Appendix B provides further details on the control variables.

<<< Table 1 >>>

4. Data Analysis and Findings

4.1 The measurement model

Following Ali *et al.* (2018), the measurement model was tested using SmartPLS 3 (version 3.3.7) (Ringle *et al*., 2015). Partial least squares (PLS) is a composite- and variance-based structural equation modeling (SEM) approach that is traditionally associated with common-factor covariance-based approaches (Sarstedt *et al*., 2022). PLS-SEM is appropriate for the current study because we emphasize an explorative and causal-predictive mode, with the aim of developing knowledge in an undertheorized area (Sarstedt *et al*., 2022), and because we have a small sample size (not uncommon in business-to-business studies [Benitez *et al.*, 2020]), slight non-normality, and some single-item network variables that PLS-SEM handles well (Hair *et al*., 2019). The network variables were calculated using UCINET 6 (Borgatti *et al*., 2002).

We assessed the measurement model by evaluating internal consistency reliability, convergent validity, and discriminant validity (Ali *et al*., 2018). Descriptive statistics are shown in Table 2, and correlations are shown in Table 3. Notice that the structural equivalence and relationship duration peaked, the difference in degree and contending (C2) were flat, and the relationship duration was skewed, but the slight non-normality was not severe, and the items were retained because the suggested ideal range for these values varies between +/-1 and +/-2 (Hair *et al*., 2022). Cronbach's alpha and composite reliability should be between 0.70 and 0.95; the values were well above the lower cutoff, and the composite reliability for problem-solving was borderline high (Hair *et al*., 2019). After inspecting the items for conceptual redundancy, we decided to keep them all. The values for internal consistency reliability were acceptable.

<<< Table 2 >>>

<<< Table 3 >>>

We checked the average variance extracted (AVE) to assess convergent validity, and the values were above the suggested minimum value of 0.5; all the outer loadings for individual items also exceeded the suggested 0.708 limit (Hair *et al*., 2019). Finally, discriminant validity was examined using the HTMT ratio (Ali *et al*., 2018)—reported in Table 4—which measures the extent to which each variable is distinct from the others. The HTMT ratio should be lower than 0.85 or 0.90 (see Hair *et al.*, 2019, p.9 for a discussion on these cut-off values), and all ratios were far below these critical values. Taken together, we concluded that the measurement model showed satisfactory reliability and validity.

<<< Table 4>>>

4.2 Testing of hypotheses

The structural model was also tested by SmartPLS 3 (version 3.3.7) (bootstrapping with 5000 resamples). The results are presented in Table 5. The two dependent variables showed satisfactory explained variance, though not high, and the standardized root mean residual SRMR was good and below 0.08 (Henseler *et al*., 2016). The effect sizes were relatively low (Hair *et al.*, 2017). Table 5 (Model 3) shows that Hypotheses 1 and 3 were supported, while Hypothesis 2 was not. Furthermore, the difference in degree centrality as a control variable received borderline support, with a *p*-value of 0.056.

<<< Table 5>>>

We first tested the model with one control variable at a time. Model 1, which only controls for the difference in degree centrality, gave somewhat stronger results in supporting Hypothesis 2a (a negative effect of structural equivalence on problem-solving) and offered a significant value for the difference in degree centrality as a control variable. However, when running Model 2 with absolute values for the difference in degree centrality as a control variable, it becomes non-significant, and we thus find that Model 3, with both control variables, is the most appropriate. In unreported models, we also controlled for firm size by the number of employees and by revenue, but they did not alter any statistical conclusion.

5. Discussion and Conclusions

5.1 Conclusions

In the current study, we have addressed how and to what extent the structural properties in a network affect and predict dyadic negotiation behavior. Overall, we found that structural properties can explain the use of problem-solving negotiation behavior, though they are not related to contending negotiation behavior. The results show that triadic closure and relationship duration are positively related to problem-solving negotiation strategies and that

there is some indication that structural equivalence may be negatively related to problem-solving. We did not find any of the hypothesized variables to be significantly related to contending.

Triadic closure reflects the density of cooperative relationships surrounding a dyad, and the likelihood that dyadic partners will use a problem-solving negotiation strategy increases with the increased density of cooperative relationships. This finding is consistent with Krackhardt (1999), who argued that triad actors reduce their emphasis on individual interests in favor of a larger emphasis on group interests. A clustered structure promoting common interests can facilitate and stimulate actors to use problem-solving as a negotiation strategy, while structural equivalence, which indicates competition between actors, may limit the use of problem-solving. Problem-solving is an integrative strategy, which dyads with common ties seem to emphasize.

Tourism destinations are coproducing contexts in which individual actors contribute to delivering the total destination product (Haugland *et al*., 2011); this may explain why we found no evidence of structural equivalence as an indicator of competition and contending. Firms' interdependency and integrative solutions may foster a cooperative climate that downplays distributive interaction because they likely acknowledge that joint value-creation through problem-solving is more beneficial than contentious value-appropriation. Finding that relationship duration is strongly related to problem-solving negotiation behavior may also indicate an emphasis on joint value-creation through lasting relationships. Because clustered structures and lasting relationships increase joint problem-solving, these seem to be two ways in which destination firms can develop common interests.

Moreover, the positive effect of the control variable—the difference in degree centrality—on problem-solving in Models 1 and 3 may indicate that power asymmetry has a disciplining effect on integrative solutions. This is consistent with Money and Allred's (2009)

finding that emergent power contributes to problem-solving. We used two measures of structural power—difference in degree centrality and absolute difference in degree centrality—and although the former was positively related to problem-solving, the latter was unrelated to either problem-solving or contending. Difference in degree centrality captures which of the dyadic actors has the more prominent position in the network, while absolute difference in degree centrality only captures whether one actor has a more prominent position than the other. The fact that some information is lost when using the absolute difference in degree centrality may explain why only one of the variables was related to problem-solving negotiation behavior. Actors with many direct and indirect ties in a network may therefore use their prominent positions and bargaining power to influence the use of negotiation behavior, and these actors may then take active roles within the destination and may be particularly important for developing integrative solutions.

5.2 Theoretical implications

From a theoretical point of view, the main purpose of the current study was to explore how the network connectivity of negotiation partners affects negotiation behavior, responding specifically to calls in the literature that argue that interfirm negotiations should consider how dyadic embeddedness can influence negotiation behavior (Eklinder-Frick and Åge, 2020; Mouzas, 2016; Scharpf, 1994). The study shows that closed network structures, which reflect how a dyad is anchored within a set of common cooperative relationships, can increase the use of problem-solving negotiation behavior, while structural equivalence, which reflects how actors compete for the same resources, seems to reduce the use of problem-solving. In this way, the present study has filled a gap in the negotiation literature by expanding the scope beyond individual negotiators and organizations (Agndal *et al*., 2017).

Several recent studies within the hospitality and tourism literature have explored how network relations affect firm behavior. Elverok *et al*. (2022), for example, found that network relations benefit firms and contribute to destination development. Similarly, Czernek-Marszałek (2020) showed that network embeddedness has several positive outcomes for cooperation, such as increased flexibility in uncertain situations, resource access, and knowledge acquisition and transfer, while Tajeddini *et al*. (2020) reported that the effect of entrepreneurial orientation on business performance is stronger if it is aligned with strong network ties. Our study expands upon this knowledge by showing that closed network structures contribute to problem-solving negotiation behavior, which is important for a broader understanding of how destination ecosystems with diverse stakeholders collectively deliver a coherent total product (Adner, 2016; Hannah and Eisenhardt, 2018).

Firms operating in destination ecosystems depend on each other and must be committed to long-term cooperation and joint problem-solving. Contentious behavior, in which actors pursue their own goals at the expense of others, is easily detected and can be sanctioned, and we should therefore expect that negotiation behavior characterized by problem-solving is more common than contending. By comparing the average values for the two negotiation strategies, we found that the average value of the four items measuring problem-solving is 4.965, while the average value of the three items measuring contending is 3.100. These values indicate that problem-solving is the dominant negotiation strategy in our context, which is likely promoted by dense and lasting relationships between the destination firms. Such closed network structures have several benefits, such as fine-grained information-sharing and sanctioning unwanted behavior (Coleman, 1988), but closure may also have drawbacks because such structures can make it difficult to access new and novel information, which is important for innovation. Thus, although closure seems to facilitate problem-solving negotiation behavior, which is important for finding integrative solutions leading to value-

creation, over time, these structures may decrease innovative behavior and curb the new value-creation initiatives necessary for staying competitive.

In this research, we studied negotiations in the real-world context of tourism destinations, avoiding the typical experimental designs commonly used in negotiation studies. This is especially important for revealing how negotiation behavior is affected by the negotiation partners' network structures. Variables reflecting structural network properties are difficult to design and manipulate in an experimental context, while our design has enabled us to capture previously unexplored contextual variables, and the combination of network and survey data has allowed for the linking of network characteristics to dyadic negotiation behavior. Such methodological approaches are necessary to explore how actors and structures outside a dyadic relationship can affect negotiations within a dyad.

5.3 Practical implications

Developing competitive tourism ecosystems requires managers to balance company and ecosystem goals. These results show that, as a dyad shares increasing numbers of cooperative relations with the same ecosystem actors, so it is spurred to search for integrative solutions by using problem-solving negotiation behavior. However, companies operating within tourism ecosystems are often small- and medium-sized and may have limited resources and capabilities to search for and establish dyadic cooperation. Thus, destination management organizations can play an important role in facilitating dyadic cooperation within the ecosystem by establishing arenas and meeting places in which companies can discuss and identify possible partners and areas for relationship-building.

Creating durable dyadic relationships can be challenging, and factors both internal and external to such relationships can threaten their stability. Enduring dyadic relationships represent repeated interactions that create joint value on an ongoing basis, in which

integrative solutions and joint benefits are realized; it is thus important to sustain them. Emphasizing problem-solving tactics, such as trading on issues with different priorities, working on issue structures, increasing resources, offering future compensation, and sharing information on underlying interests, can promote cooperation and joint value-creation. To achieve this, the harmonization of relational conflict and the restraint of short-term value-appropriation behaviors can be helpful. Developing ties to common third parties can also be instrumental because they can function to discipline dyadic behavior and can act as moderators in solving conflicts and harmonizing relationships. For example, if a hotel cooperates with a catering firm and both actors have relationships with an activity provider, the activity provider's common relationship can increase stability in the hotel–caterer dyadic relationship, stimulating efforts toward integrative solutions.

5.4 Limitations and future research

The current study has some limitations. Although there was a time lag of one year between the two data collections, we did not track the development of negotiation strategies over time. Developments within a dyadic relationship and within the larger network structure can affect the choice of negotiation strategies, and negotiation behavior may differ between an early-stage dyadic relationship in a newly established tourism destination and a mature relationship in a well-established location. Future studies could use case methodology, selecting cases that represent dyadic relationships at different developmental stages and in destinations that differ in how established and professional they are. This approach could provide more in-depth and richer information about how negotiation behavior is affected by variables internal to the dyadic relationship and within the destination network, along with the interplay of these variables, which will likely provide a more nuanced picture and deeper knowledge of how network embeddedness influences dyadic negotiation behavior.

Another limitation is the small sample size. Nevertheless, the chosen methodological approach was challenging because it combined two separate data collections at the network and dyadic levels, and difficulties in obtaining matching data must be expected. Furthermore, we only have data from one of the partners in each dyad, yet despite these limitations, the study confirms that a dyad's direct and indirect network connections influence the negotiation behavior within the dyad.

Because our study is one of the first to investigate how negotiations are embedded in interfirm networks, its limitations should encourage the development of methodological approaches to mitigate them. Mixed methods may be a promising approach, and Mariani and Baggio (2020) have suggested that future research into networks in hospitality and tourism should combine qualitative and quantitative methods. Future research could also address other network properties, relationship characteristics, negotiation behaviors, and outcomes, and a mixed methods approach could provide a more nuanced and deeper understanding of these.

For a long time, the theoretical understanding of negotiation behavior has been dominated by a focus on individual actors—both people and organizations—as negotiators and on aspects internal to dyads, without considering the wider interorganizational (network) context in which the negotiations are embedded. A deeper understanding of how contextual factors affect negotiations may require new theoretical perspectives and new approaches to negotiation behavior. Future studies should therefore seek theoretical developments that capture such contextual factors.

Appendix A.

<<< Figure A1. >>>

Appendix B.

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Figure 1. The network embeddedness of dyadic negotiations

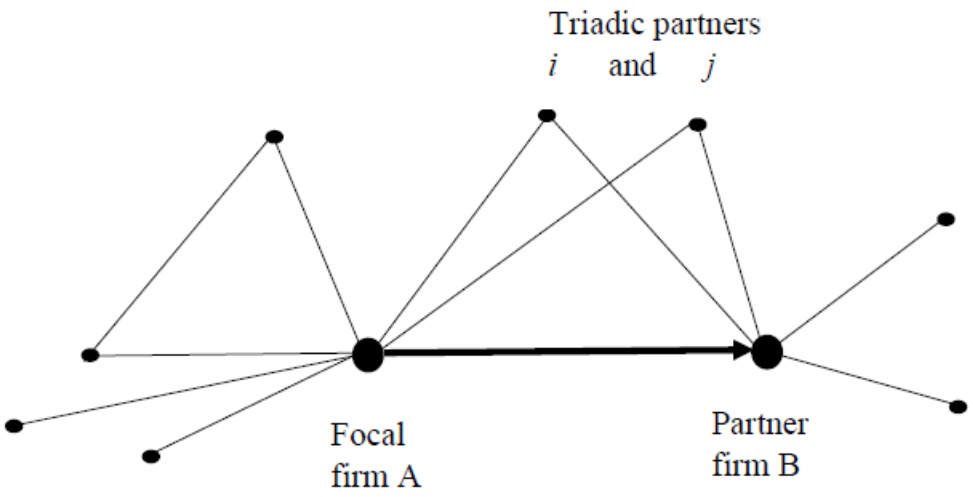


Figure 2. Dyadic network embeddedness and negotiation behavior.

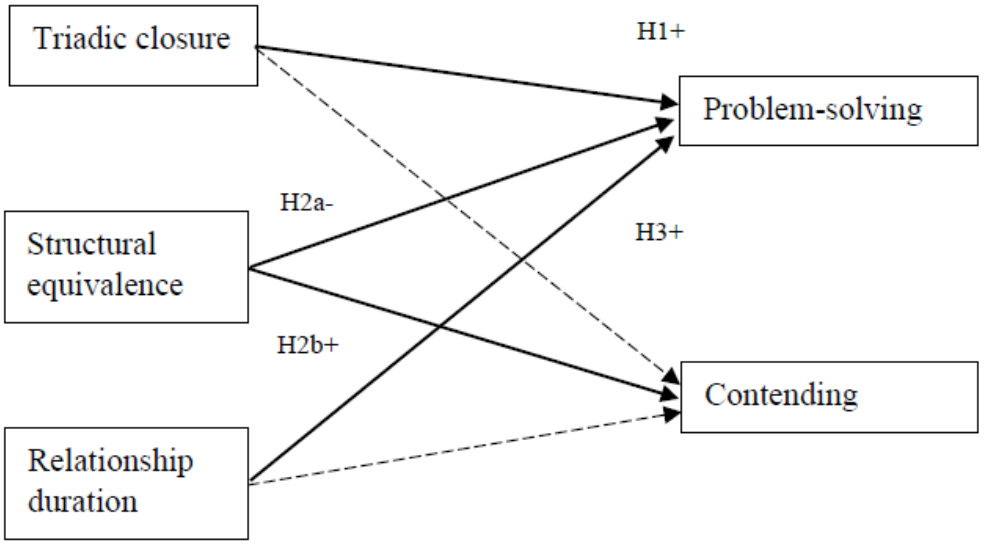


Table 1. Measures

Variable	**Measurement items**	**Reference**
Problem-solving	We prefer to address problems in direct discussions with the partner firm. PS1 We see the parties wishes and demands in context so that we can take care of both parties motives. PS2 We tell our partner about our ideas and ask them for their ideas. PS3 We discuss problems with the partner so that we can find appropriate solutions that safeguard the interests of both parties. PS4	Ganesan (1993)
Contending	We press and make efforts to get our way. C1 During negotiations and discussions, we were committed and try to win our initial positions and goals. C2 We express that we are dissatisfied with the partner firm's behavior. C3	Ganesan (1993)
Triadic closure	The total number of ties to actors in the network shared by both partners in the dyad.	Holland and Leinhardt (1970)
Structural equivalence	The correlation of the two dyadic partners' networking pattern.	Wasserman and Faust (1994)
Relationship duration	The number of years the partners had cooperated.	Ness *et al*. (2021)
Difference in degree centrality	Difference in degree centrality between ego and alter.	Haugland *et al*. (2021)
Absolute difference in degree centrality	Absolute value of the difference in degree centrality between ego and alter.	Haugland *et al*. (2021)

Table 2. Descriptive statistics

Item	Min	Max	Mean	StDev	Kurtosis	Skewness	Loadings	Cronbach's α	Composite reliability	Average variance extracted
ProbSolv 1	1	7	5.31	1.40	0.457	-0.913	0.936	**Problem-**		
ProbSolv 2	1	7	4.69	1.45	-0,124	-0,580	0.831	**solving**		
ProbSolv 3	1	7	4.90	1.64	-0,150	-0,770	0.927	0.929	0.951	0.830
ProbSolv 4	1	7	4.96	1.51	-0,351	-0,598	0.945			
Contend 1	1	7	3.02	1.74	-0,938	0,483	0.865	**Contending**		
Contend 2	1	7	3.40	1.85	-1,149	0,253	0.934	0.870	0.919	0.791
Contend 3	1	6	2.88	1.60	-0,911	0.493	0.868			
TriadClos	0	23	7.94	5.72	0.238	0.902	1	1	1	1
StructEqv	-0.02	0.63	0.38	0.14	1,180	-0,636	1	1	1	1
RelDur	2	48	13.85	10.73	1,053	1,235	1	1	1	1
DiffDegree	-2.13	2.01	-0.03	1.16	-1,150	0.059	1	1	1	1
AbsDiffDegr	0.05	2.13	1.02	0.55	-0,668	0.223	1	1	1	1

Table 3. Correlations

	ProbSolv	Contend	TriadClos	StructEqv	RelDur	DiffDeg
Contend	** 0.412					
TriadClos	0.133	0.208				
StructEqv	-0.093	† 0.226	*** 0.555			
RelDur	** 0.360	0.218	-0.063	0.027		
DiffDegree	† 0.224	0.100	-0.171	-0.051	0.082	
AbsDiffDeg	0.158	-0.067	-0.150	** -0.349	-0.157	0.008

*** p < .001, ** p < 0.01, * p < 0.05, † p < 0.1

Table 4. Heterotrait-Monotrait (HTMT) Ratio (Discriminant validity)

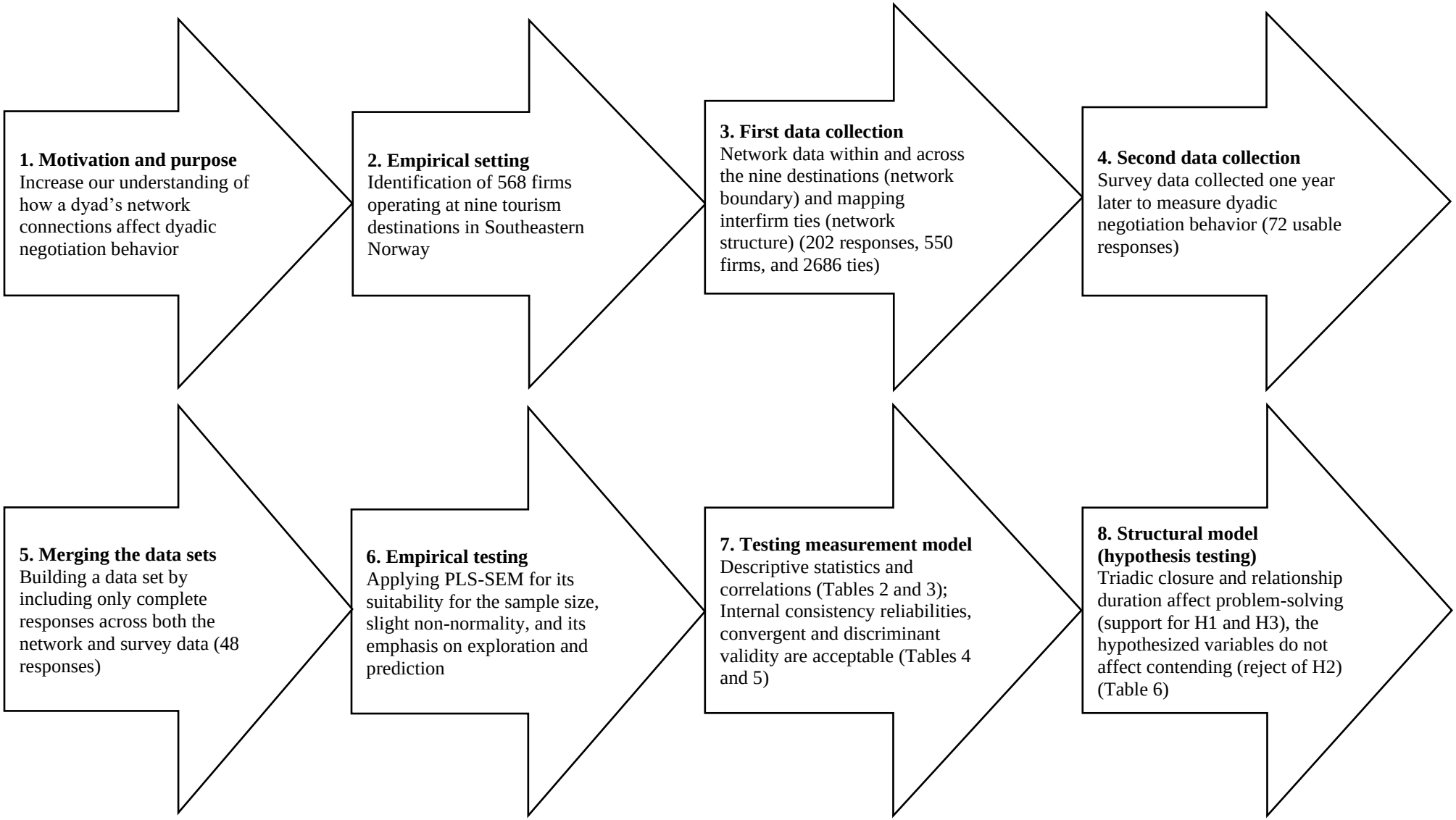
	ProbSolv	Contend	TriadClos	StructEqv	RelDur	DiffDeg
Contend	0.443					
TriadClos	0.144	0.190				
StructEqv	0.094	0.219	0.555			
RelDur	0.352	0.226	0.063	0.027		
DiffDegree	0.230	0.117	0,171	0.051	0.082	
AbsDiffDeg	0.173	0.085	0,150	0.349	0.157	0.008

Table 5. Results of hypothesis testing

	Model 1		**Model 2**		**Model 3**	
	Problem-solving	**Contending**	**Problem-solving**	**Contending**	**Problem-solving**	**Contending**
Triadic Closure	* 0.358	0.169	* 0.300	0.147	*** 0.349**	0.166
	t 2.544	t 0.815	t 2.066	t 0.730	t 2.495	t 0.785
	p 0.011	*p* 0.415	*p* 0.039	*p* 0.466	*p* 0.013	*p* 0.433
	f^2 0.117	f^2 0.022	f^2 0.081	f^2 0.017	f^2 0.115	f^2 0.021
Structural Equivalence	* -0.291	0.134	-0.203	0.155	-0.217	0.149
	t 2.238	t 0.789	t 1.256	t 0.837	t 1.385	t 0.832
	p 0.025	*p* 0.430	*p* 0.209	*p* 0.403	*p* 0.166	*p* 0.406
	f^2 0.079	f^2 0.014	f^2 0.034	f^2 0.017	f^2 0.041	f^2 0.016
Relationship Duration	*** 0.377	0.217	*** 0.420	0.233	***** **0.399**	0.222
	t 3.669	t 1.356	t 4.181	t 1.384	t 3.871	t 1.300
	p 0.000	*p* 0.175	*p* 0.000	*p* 0.166	*p* 0.000	*p* 0.194
	f^2 0.191	f^2 0.053	f^2 0.225	f^2 0.059	f^2 0.217	f^2 0.054
Control variables:						
Difference in Degree	* 0.240	0.115			† **0.238**	0.117
	t 2.017	t 0.773			t 1.913	t 0.760
	p 0.044	*p* 0.440			*p* 0.056	*p* 0.447
	f^2 0.075	f^2 0.015			f^2 0.077	f^2 0.015
Absolute Difference in Degree			0.196	0.034	0.195	0.043
			t 1.291	t 0.230	t 1.324	t 0.298
			p 0.197	*p* 0.818	*p* 0.186	*p* 0.766
			f^2 0.043	f^2 0.001	f^2 0.046	f^2 0.002
Explained variance (R2)	0.266	0.125	0.242	0.117	0.295	0.126
Model fit SRMR	0.061		0.065		0.062	

*** p < .001, ** p < 0.01, * p < 0.05, † p < 0.1; N48; SRMR: Standardized root mean residual; f^2: Effect size.

Appendix A. Figure A1. Research flow chart



Appendix B.
Control Variables

Studying the use of influence strategy in interfirm relationships and its effect on relationship commitment, Gao et al. (2018) control for (structural) interdependence asymmetry ("the difference between the buyer's dependence on the supplier and the supplier's dependence on the buyer"). Ozmel *et al*. (2017) find that network prominence, i.e., having many direct and indirect ties in a network, increases an alliance partner's bargaining power, which positively influences the *ex-ante* contractual value capturing rights vis-à-vis its partner. Moreover, Money and Allred (2009) find that centrality, measured as emergent power, positively contributes to problem-solving. Therefore, we controlled for the difference in degree centrality (A's degree centrality minus B's degree centrality) and absolute difference in degree centrality (the absolute value of A's degree centrality minus B's degree centrality). Degree centrality measures the number of relationships a firm has in the network and can be viewed as a proxy for the firm's power relative to other firms (Freeman, 1979). The degree centrality variable was skewed, and we log-transformed it before calculating the two indicators. We used the difference in degree because this measure is *dyadic* in nature.

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