

The Effect of Task Conflict on Relationship Quality: The Mediating Role of Relational Behavior

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Keywords

task conflict, relational behavior, relationship quality, relational norms, construction project.

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Abstract

Previous studies have paid insufficient attention to how interorganizational task conflict affects relationship quality between parties. On the basis of survey data from the construction industry, this study explores the impact of interorganizational task conflict on relationship quality and the mediating role of relational behavior. The empirical results reveal that task conflict affects relationship quality (including satisfaction, trust, and commitment) negatively. Relational behavior has three dimensions: flexibility, information exchange, and solidarity. Information exchange partially mediates the effect of task conflict on satisfaction, trust, and commitment; solidarity plays a partial mediating role in the impact of task conflict on trust and commitment; and flexibility only mediates the impact of task conflict on satisfaction partially. Relational behavior in accordance with relational norms can partially account for the impact of interorganizational task conflict on relationship quality. This paper also provides practical guidance for construction practitioners.

Introduction

Due to the complexity and uncertainty of construction projects, conflict is unavoidable (Ock & Han, 2003). There are often perceived disagreements in viewpoints and ideas pertaining to the tasks or assignments to be performed between the buyer and the seller, which is considered as *task conflict* (Amason, 1996; Jehn, 1994). Moderate task conflict can promote performance (Chen, Zhang, & Zhang, 2014) and team creativity (De Dreu, 2006; Farh, Lee, & Farh, 2010), whereas excessive task conflict deteriorates performance. However, contradictory views exist about whether task conflict would positively (Wu, Zhao, & Zuo, 2017) or negatively (De Wit, Greer, & Jehn, 2012) affect relationship quality. This inconsistency implies that certain variables play a role in this relationship.

Behavior of parties can bring about conflict, and conflict can also lead to changes in the behavior of both sides, and then affect relationship quality (Leonidou, Samiee, Aykol, & Talias, 2014). Previous studies have focused primarily on conflict-handling behavior, such as choice among the five conflict management styles (Lu & Wang, 2017; Tsai & Chi, 2009), while few studies have paid attention on other behavioral patterns that are not related to conflict. The authors have observed that during a construction project, the buyer or the seller (i.e., the owner or the contractor) may broadly assess the counterparty's behavior (but not restricted to how the counterparty handles conflict) to avoid any one-sided judgment when evaluating

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relationship quality after conflict arises; that is, one side evaluates interorganizational relationship quality based on the overall behavior of the counterparty during the execution of a contract. When buyer–seller task conflict during the project is serious, behavior of one party may deviate from expectations of the counterparty whether it relates to conflict handling or not, which may affect the relationship between the parties. In our view, *relational behavior* plays a pivotal role between task conflict and relationship quality. The authors adopt a holistic perspective and define relational behavior as both direct behaviors of dealing with conflict and other management behavior unrelated to conflict handling. Relational behavior is used to establish, maintain, and preserve a cooperative relationship (Hewett & Bearden, 2001). Whether at the individual or organizational level, scholars have drawn a conclusion that the better the relational behavior is, the better the relationship quality will be (Leuthesser & Kohli, 1995; Ning & Ling, 2013; Sven Ivens, 2004; Zheng, Lu, Le, Li, & Fang, 2017). Hence, it can be inferred that relational behavior may mediate the causality between task conflict and relationship quality. However, to our best knowledge, few studies have empirically verified this point of view from the perspective of the overall project.

In summary, the authors develop a framework (see Figure 1) to examine the effects of interorganizational task conflict and relational behavior on relationship quality between the buyer and the seller in construction projects. The authors first consider how interorganizational task conflict affects the three dimensions of interorganizational relationship quality and the three dimensions of relational behavior during the process of construction projects. The authors further investigate the impact of relational behavior on relationship quality and the mediating role of relational behavior. Taken together, our efforts aim to uncover how relational behavior mediates the causality between task conflict and relationship quality in construction projects.

Theoretical Background and Hypotheses

Task Conflict and Relationship Quality

Interorganizational conflict in construction projects arises from dissatisfaction, or disagreements over decisions, anger, and the negative attitudinal propensities of parties (Pondy, 1967). Conflict was initially

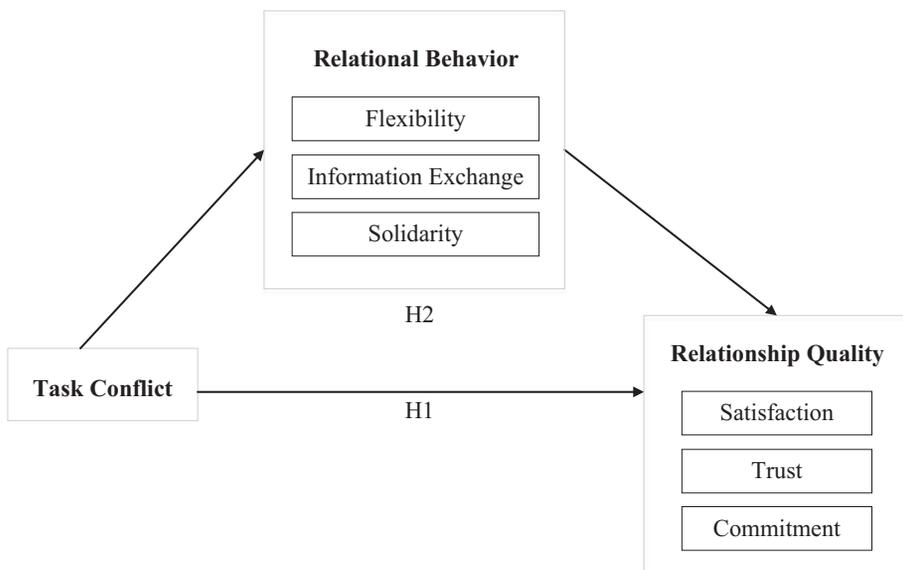


Figure 1. Research framework.

divided into task conflict and relationship conflict (Jehn, 1995). In subsequent studies of conflict, process conflict was isolated from task conflict (Adair, Liang, & Hideg, 2017; Jehn & Mannix, 2001; Thatcher, Jehn, & Zanutto, 2003). People in different cultures may have distinct understandings of relationship conflict or process conflict. For instance, European Americans are as likely as East Asians to perceive that task conflict hampers team performance, but show less conviction that relationship conflict could be similarly detrimental (Sanchez-Burks et al., 2008). This study focuses on task conflict because it is highly correlated with the other two types and is more frequent and devastating in construction projects (Curşeu, Boroş, & Oerlemans, 2012; Simons & Peterson, 2000). Interorganizational task conflict stands for disagreements between the buyer and the seller with regard to how the task needs to be performed. Examples of task conflict include differences related to application of work-related procedures, distribution of resources, and interpretations of work-related facts.

Relationship quality is measured on the basis of an overall assessment of the relationship state (strength and depth; Bove & Johnson, 2001). Dorsch, Swanson, and Kelley (1998) have argued that trust, commitment, and satisfaction constitute three dimensions of relationship quality, which was acknowledged later by other researchers (Chu & Wang, 2012; Huang, Luo, Liu, & Yang, 2016). The authors adopt this taxonomy as well. Trust is the willingness of one party to be vulnerable to actions of the counterparty based on positive expectations regarding the counterparty's motivation and behavior (Mayer, Davis, & Schoorman, 1995). Commitment is the attitude that to what extent the party is willing to invest effort on maintaining the relationship (Jelodar, Yiu, & Wilkinson, 2016; Morgan & Hunt, 1994). Satisfaction is the overall evaluation of goods or services provided by the counterparty (Crosby, Evans, & Cowles, 1990). In construction projects, satisfaction is used to express the owner's overall evaluation of the project, goods, and services provided by the contractor in accordance with the contract, or the contractor's overall assessment of the contractual obligations (such as payment or other services) performed by the owner.

However, there have been discrepant findings on the impact of task conflict on relationship quality. Some studies have concluded that task conflict is negatively correlated with satisfaction (De Wit et al., 2012), whereas other studies have pointed out that task conflict can increase satisfaction and trust (Wu et al., 2017). According to self-verification theory (Swann, Polzer, Seyle, & Ko, 2004), task conflict can be seen as a challenge to one's own perspective and may thus impede the formation of good relationship of both sides. Nonetheless, there are studies which argue that there is no direct correlation between task conflict and satisfaction (Leung, Yu, & Liang, 2014). Others have proposed an inverted U-shaped relationship (Leung, Ng, & Cheung, 2002), demonstrating that a relatively low level of task conflict is conducive to satisfaction while it will be detrimental when exceeding the turning point. Besides, the impact of task conflict on relationship quality is affected by other factors. For instance, conflict management styles can regulate the effect of task conflict on trust, commitment, and satisfaction (Bradford & Weitz, 2009; DeChurch & Marks, 2001).

In construction projects, the cooperation between the owner (buyer) and the contractor (seller) is based on an economic contractual relationship, and task conflict between both sides is likely to incur extra cost. A realistic example is that the buyer would ask the seller to complete a task, while the seller would correspondingly require the buyer to pay for the completed task. However, the buyer is assured that the cost of this task is included in the contract price signed by both parties and should not be paid extra. In the meanwhile, the seller will reluctantly complete or even refuse to carry out the task if the seller cannot get the money that it thought itself deserved. Therefore, task conflict always features substantial conflict of interests, and the outcomes of conflict are often zero-sum. Moreover, the buyer and the seller form a temporary organization to perform the contract with each other. Due to conflict of interests, each party in the temporary organization attaches importance to its own interests, and the relationship between the two parties is vulnerable. The higher the level of task conflict is, the more differences of views and interests between the two sides arise, and it will be more difficult for the two sides to reach a consensus (Jehn & Bendersky, 2003). Furthermore, any type of conflict, including task conflict, interferes with cognitive processes needed to adequately process information and make effective

decisions (Carnevale & Probst, 1998). Hence, task conflict between the buyer and the seller consumes patience and reduces teamwork engagement (Costa, Passos, & Bakker, 2015), which brings down the degree of satisfaction, trust, and expectation of future cooperation (Leonidou, Barnes, & Talias, 2006). Thereby, the first hypothesis is as follows:

Hypothesis 1: Interorganizational task conflict has a negative effect on interorganizational relationship quality (satisfaction, trust, and commitment).

Mediating Effects of Relational Behavior

In construction projects, due to the long-term character of the transaction, uncertainty increases. Thereby, the transaction between the owner and the contractor cannot be based on contract governance completely, which can be made up by relational governance in view of relational exchange theory. Relational governance means interorganizational relationships are governed by social relations and shared relational norms (Zhou & Xu, 2012). As the core of relational exchange theory, relational norms make up for the shortcomings (lack of flexibility and incompleteness) of contracts (Rai, Keil, Hornyak, & Wüllenweber, 2012) to facilitate smooth progress of the transaction (Cavusgil, Deligonul, & Zhang, 2004). Relational norms are common expectations for the behavior of all parties in an interorganizational relationship (Cannon, Achrol, & Gundlach, 2000; Ramirez-Fernandez, Ramirez-Marin, & Munduate, 2018); they are unwritten behavior rules of mutual recognition and restraint to the end of guiding relational behavior of the parties for the common good (Liu, Li, & Zhang, 2010; Tangpong, Hung, & Ro, 2010). However, it is unlikely that relational behavior of the parties will always conform to relational norms throughout a transaction (Jap & Ganesan, 2000).

Taking definitions of relational norms and relational behavior into consideration, studies of relational behavior can adopt the three dimensions of relational norms: flexibility, information exchange, and solidarity (Griffith & Myers, 2005; Heide & John, 1992). These three dimensions have distinct elements and differ in their emphases (Noordewier, John, & Nevin, 1990). Flexibility is whether both parties can respond and adapt as circumstances change, which represents insurance that the relationship will be subject to good-faith modification if a particular practice proves detrimental in the light of changed circumstances (Heide & John, 1992); information exchange means one party provides crucial accurate information to the partner in a proactive and timely manner (Zhang, Cavusgil, & Roath, 2003); solidarity means a party behaves in a manner that maintain the relationship as a whole rather than simply protecting its own interests (Sezen & Yilmaz, 2007). Additionally, one area that merits further research is whether it is possible to distinguish the three dimensions of relational behavior. Although the majority of studies illustrate that these three dimensions have similar meanings, the role of them may be various (Huo, Fu, Zhao, & Zhu, 2016). In consequence, the authors decouple flexibility, information exchange, and solidarity to identify potential differences.

Based on social exchange theory (Blau, 1964) and norm reciprocity theory (Gouldner, 1960), reciprocity is an important prerequisite for the continued emergence of social exchange; namely, exchange is guided by an expectation of return or behavior in kind (Lavelle, Rupp, & Brockner, 2007). In the process of collaboration, both sides need to safeguard their own interests, and interorganizational task conflict is often manifested in the fact that the two sides have inconsistent opinions on the assignment of tasks to be executed, which usually brings about conflict of interests between the two sides. The win-lose situation in which one party's interests is completely opposite to the other party's is a fixed-sum perception (Thompson & Hastie, 1990), which is not likely to lead the parties to act on the basis of reciprocity. Hence, in order to protect self-interest, the parties tend to adopt behaviors that do not meet the common expectations (Aspinwall & Taylor, 1997; Robert & John, 1982): They will not settle incidents flexibly as they usually do (poor flexibility); they are unwilling to share information actively (low level of

information exchange); they no longer actively help each other (poor solidarity). The authors propose the following hypothesis with respect to the above statements:

Hypothesis 2a: Interorganizational task conflict negatively affects relational behavior (flexibility, information exchange, and solidarity) in respect of handling matters.

The parties adhere to relevant norms inasmuch as they can enhance their self-image or reputation. However, people are primarily motivated by self-interest (Krueger, Massey, & DiDonato, 2008). If violations of relational norms are beneficial to one's own side, they will disregard the interests of the counterparty. Given the complexity of transaction, incompleteness of the contract, and environmental uncertainty in construction projects, it is possible that the parties will engage in weak-form opportunistic behavior (Lu, Zhang, & Zhang, 2016). Weak-form opportunistic behavior is self-interested behavior, which is nevertheless in compliance with a contract. It includes the behavior which violates relational norms, and these norms are not specified in a contract but are embedded in the common understanding of the parties (Luo, 2006). One manifestation of weak-form opportunistic behavior is undermining the interests of the counterparty, which leads to declination in trust, hindering the realization of common goals, and negative effect on satisfaction (Benton & Maloni, 2005; Lu, Qian, Chu, & Xu, 2015; Zhou, Zhang, Zhuang, & Zhou, 2015). Strategies such as resource sharing and the equitable allocation of risks are conducive to the establishment and maintenance of mutual trust (Chen & Chen, 2007; Ling, Ong, Ke, Wang, & Zou, 2014). On the basis of common interests, relationships with greater total interdependence exhibit higher level of trust and stronger willing of commitment (Kumar, Scheer, & Steenkamp, 1995). If a party behaves in an opportunistic way, leading to difficulties in reaching an agreement and hindering cooperation (Arranz & Arroyabe, 2012), it is likely to provoke retaliatory behavior, with the counterparty possibly seeking to withdraw, decrease investment in the relationship, or limit its commitment over time (Ashnai, Henneberg, Naudé, & Francescucci, 2015).

Another manifestation of weak-form opportunistic behavior is the undermining of the interests of a third party or the general public in an unethical manner, which may also make the counterparty uncomfortable. For instance, if the seller behaves in this way, the buyer may believe that in future trading activities, the seller will behave unethically again to harm the buyer's interests and that the buyer will find it difficult to get fair treatment from the seller (Aryee, Budhwar, & Chen, 2002). Above situation creates a defensive mentality and decreases the commitment of the partner (Cui Haitao, Raju, & Zhang, 2007; Liu, Huang, Luo, & Zhao, 2012), thereby affecting relationship quality.

The three dimensions of relational behavior affect relationship quality. Flexibility mainly manifests when parties make their own judgments and take their own decisions dealing with unexpected situations. If a party discusses with the other party, behaves flexibly, and responds to the changes or risks arising from unexpected situations, the other party will be assured that this party attaches great importance to cooperation (Macneil, 1986), which can increase satisfaction (Anderson & Sullivan, 1993). Furthermore, the opportunity for future relationships is also strongly determined by the extent of execution in relational norms (Suprpto, Bakker, & Mooi, 2015). Such positive discussions and flexible responses to unexpected events may be seen as a signal that opportunistic behavior is not likely to occur in the future or that the other party is committed to the preservation of the relationship, with the result that confidence and commitment will be increased (Aulakh, Kotabe, & Sahay, 1996).

Information exchange means communicating information actively and validly. The greater the information exchange between the buyer and the seller is, the more able they are to anticipate and respond to each other's needs. Frequent and effective communication helps partners track project progress and reduce self-interest (Lee & Kim, 1999), which enhances project implementation and understanding of each other's intent (Izogo, 2016; Velez, Sanchez, Florez, & Alvarez-Dardet, 2015). However, where one party would like to share information but fears that the information will be maliciously used by the counterparty and, as a result, does not share this information. So poor cooperation, tension, and reduction of relationship quality rise (Ning & Ling, 2014).

Solidarity increases the confidence of a party (e.g., the seller) that the buyer will not make use of shortcomings to damage the seller's interests. The shared expectations of maintaining the relationship and creation of common value stimulate the parties to respect each other (Mathew & Chen, 2013). In addition, solidarity may lead the parties to forgo immediate interests but pursue the benefits in the future (Achrol, 1996). For instance, when the owner fails to make a progress payment, the contractor agrees to postpone the payment until it is possible, and such a concession may make the owner trust the contractor. The process of joint problem-solving and a risk-taking attitude contribute to the sound development of cooperation and a harmonious relationship (Artz & Brush, 2000), which can gradually build trust and facilitate the relationship as a whole. Therefore, by remaining flexible in unexpected situations, sharing information actively, and acting with solidarity among one another, the buyer and the seller can achieve a high relationship quality. The authors propose as follows:

Hypothesis 2b: Relational behavior of handling matters positively affects interorganizational relationship quality (satisfaction, trust, and commitment).

Finally, the authors argue that relational behavior mediates the relationship between task conflict and relationship quality. The motivation of one party to adopt behavior is often influenced by the external factors such as the level of interorganizational task conflict, and the evaluation of the counterparty's behavior can affect perception of the relationship (Cheung, Myers, & Mentzer, 2011). The occurrence of task conflict is accompanied by conflict of interests between the buyer and the seller. The higher the level of task conflict is, the less likely it is for the parties to handle matters flexibly. Behaviors which do not meet the common expectations cannot show the sincerity of solving problems; thus, satisfaction and mutual trust are likely to be reduced. Meanwhile, both sides will not value and cherish this cooperation; thus, commitment to continuous cooperation with each other will be decreased. The information known to each side is asymmetric. The occurrence of task conflict causes one party not to share project information actively, which increases information asymmetry. The counterparty may think that intention of the partner's behavior is self-interest, so relationship quality between the parties will be deteriorated (Oliver, 1990; Ozorhon, Ardit, Dikmen, & Birgonul, 2010). Besides, in the context of high task conflict, if one party does not adopt behaviors which can warm up the relationship between the two parties, or even take actions that are destructive to the maintaining of the relationship, such as opportunistic behaviors, the relationship between both sides will deteriorate and the cooperation may be terminated (Li & Ng, 2002). Thus, task conflict can affect interorganizational relationship quality through relational behavior. Based on the above analysis, H2 is derived as follows:

Hypothesis 2: Relational behavior mediates the effect of task conflict on interorganizational relationship quality.

Methods

Data were gathered by a questionnaire survey investigating the above hypotheses.

Sampling and Data Collection

The proposed hypotheses were empirically tested by data collected from Chinese project professionals of the construction industry, since they were key informants and more knowledgeable about interorganizational exchange relationships. From June to September 2017, questionnaires were distributed either on site or online. First, questionnaires were sent to trainees involved in training programs on project management in universities. These participants are veteran practitioners who engage in project management from a wide range of large contracting enterprises or subsidiaries of group companies in China. With permission of these respondents, the authors distributed and collected the questionnaires on site to

pursue a better respondent rate and more credible responses. Second, the authors distributed and collected questionnaires online for a wider source of respondents, including project management practitioners interviewed by the authors before, and graduates who are working on project management for years in different companies. The authors developed an electronic version of the questionnaire based on “SurveyStar,” an online questionnaire developing and collecting platform. Additionally, a link to the questionnaire on a WeChat website was distributed to the respondents who engaged in project management work severally. Table 1 shows the background information of the respondents and projects.

Ultimately, 226 paper-based questionnaires were distributed on site and 268 electronic questionnaires were sent online. The authors received the response of 180 paper-based questionnaires and 185 electronic questionnaires, with a total response rate of 73.9%. After eliminating records with missing or unmatched data, the authors obtained 291 valid questionnaires, representing an effective response rate of about 58.9%. This response sample size meets the rule of thumb, which requires that the sample size should be at least ten times of the maximum number of paths aiming at any construct (Hair, Sarstedt, Ringle, & Mena, 2012; After dividing variables into dimensions, the maximum number of paths between constructs is 15, so the minimum sample size for this study is $10 \times 15 = 150 < 291$). A larger sample size can reduce content bias of recalling past experience. As Table 1 shows, more than half of the respondents have over five years’ experience and most respondents have professional knowledge as a result of their qualifications, which guarantees the reliability of the data and provides a foundation for the subsequent analysis. Moreover, the diverse distribution of enterprise and project types implies a wide range of sample sources and representativeness of the sample.

Table 1
Descriptive Statistics of the Sample

Characteristics	Number	Percent
Years of working experience		
<3 years	54	18.6
3–5 years	70	24.1
6–8 years	52	17.9
9–11 years	43	14.8
12–14 years	17	5.8
>14 years	55	18.9
Professional qualifications		
Project manager	58	19.9
Project department manager	35	12.0
Professional engineer (e.g., Contract administrator, Technical Engineer, Cost engineer)	144	49.5
Other managerial staff	54	18.6
Enterprise role in the project		
Owner	70	24.1
General contractor	148	50.9
Subcontractor	31	10.7
Design firm/consulting firm	31	10.7
Other enterprise	11	3.8
Project types		
Housing	60	20.6
Road and bridge	46	15.8
Port and waterway	3	1.0
Energy	77	26.5
Municipal engineering	22	7.6
Telecommunication	6	2.1
Industry (e.g., petrochemical industry)	48	16.5
Other project types	29	10.0

Questionnaire Design

The questionnaire was designed on the basis of measurements of previous studies and revised to account for the characteristics of construction projects. Since the respondents were Chinese, the authors translated the items into Chinese using a rotating back-translating process performed by four coders who were not informed about purposes of the study. In the design of the initial questionnaire, the authors interviewed five experts experienced in construction projects to review these items, and further improvements were made to the structure and wording on the basis of their suggestions. Moreover, twelve project managers in the construction industry were asked to participate in a pilot study to ensure the validity of the questionnaire. The questionnaire was eventually refined based on these responses and suggestions.

In order to ensure the accuracy of the respondents' answers, below the headline of questionnaires, the authors used an eye-catching bigger bold font to remind the respondents to recall cooperation experience with a partner in a recently completed project that was personally involved and fill out the questionnaire accordingly. Besides, in the process of distributing questionnaires, the authors reminded the respondents again before they answered questions. Furthermore, to reduce scruples of the respondents, at the beginning of the questionnaires, it was pointed out that "this survey is conducted anonymously, the collected data are only for academic research, and the personal data will be kept strictly confidential."

There were three sections in the questionnaire. The first section asked for background information and posed two questions regarding control variables. A seven-point Likert scale was used in the remaining sections. The second and the third sections were aimed at measuring given items by assessing the degree of agreement (e.g., 1 = *total disagreement*, 7 = *total agreement*). Table 2 presents the measuring items.

Measures

Task Conflict

Some studies use frequency (Lam & Chin, 2004; Rahim, 1983) or severity (Aibinu, Ofori, & Ling, 2008; Andrews & Tjosvold, 1983) to capture the features of conflict. To measure interorganizational task conflict, the authors adopt task conflict intensity, which is an integrated construct to synthesize these two facets of task conflict. Task conflict intensity can be measured by combining frequency and severity of disagreements over tasks (Diekmann & Girard, 1995). Frequency and severity of task conflict were measured through the scale provided by Rahim (1983) and Aibinu et al. (2008). Moreover, to make the scale better fit interorganizational task conflict in construction projects, the authors have made some appropriate modifications. As frequency and severity of task conflict are not variables on the same level, they cannot simply be summed up and averaged. Thus, this study calculated task conflict intensity using the product of frequency of task conflict and severity of task conflict (Habib, 1987). It is worth noting that due to the seven-point Likert scale used, the scores of items which are directly measured are between 1 and 7; thus, the product of frequency and severity of task conflict (i.e., the value of task conflict) will be evaluated from 1 to 49.

Relational Behavior

Scholars have not reached agreement on a measurement scale for relational behavior. However, after literature review, this study determined that many scales were based on the scale of Heide and John (1992) (Lusch & Brown, 1996). Although Heide and John studied relational norms, the actual measurement used was relational behavior. Its item scores can thus reflect deviation of relational behavior from norms. Therefore, this study slightly modified its scale.

Relationship Quality

Many measurement scales for relationship quality have been developed (Dwyer, Schurr, & Oh, 1987; Lages, Lages, & Lages, 2005). To match our interorganizational research context, the items used in this

Table 2
Reliability and Validity Analysis

Constructs and measuring items	SFL
Task conflict (Cronbach's $\alpha = .791$; CR = .796; AVE = 0.508)	
1. Both sides often had differences concerning the contract objectives (cost, schedule, or quality) and changes	0.455
2. Both sides often had differences concerning design or construction plans	0.675
3. These differences between the two sides were serious	0.932
4. These differences had affected the working relationship	0.708
Relational behavior	
Flexibility (Cronbach's $\alpha = .841$; CR = .850; AVE = 0.655)	
1. When some unexpected situation arose, our counterparty could handle it flexibly	0.814
2. When some unexpected situation arose, our counterparty expected to adjust quickly and effectively	0.871
3. When some unexpected situation arose, our counterparty would invite our party to work out a new deal	0.737
Information exchange (Cronbach's $\alpha = .847$; CR = .840; AVE = 0.568)	
1. Our counterparty provided our party with information that might be helpful to them	0.796
2. Our counterparty not only provided information as required by the contract, but also provided our party with additional information	0.708
3. Our counterparty provided proprietary information if it could help our party	0.707
4. Our counterparty kept our party informed about events and changes that might affect us in time	0.798
Solidarity (Cronbach's $\alpha = .761$; CR = .790; AVE = 0.562)	
1. Our counterparty sought to jointly solve the problems that arose with our party	0.813
2. Our counterparty was committed to enhancing the relationship with our party	0.821
3. Our counterparty did not mind that our party owed them favors	0.573
Relationship quality	
Satisfaction (Cronbach's $\alpha = .872$; CR = .879; AVE = 0.597)	
1. Our party does not regret the decision to do business with our counterparty	0.539
2. Our party is very satisfied with the process of cooperation with our counterparty	0.830
3. Our party is very pleased with what our counterparty does for us	0.790
4. Our party enjoys the cooperation with our counterparty very much	0.837
5. Our party will still choose to cooperate with our counterparty again if our party has a chance, because our relationship is handled during cooperation well	0.826
Trust (Cronbach's $\alpha = .890$; CR = .890; AVE = 0.618)	
1. Our counterparty keeps promises it makes to our party	0.786
2. Our counterparty is genuinely concerned that our party succeeds	0.843
3. Our counterparty considers our welfare as well as their own when making important decisions	0.779
4. Our party trusts that our counterparty keeps our best interests in mind	0.730
5. Our counterparty is trustworthy	0.788
Commitment (Cronbach's $\alpha = .859$; CR = .864; AVE = 0.560)	
1. The relationship with our counterparty is something to which our party is very committed	0.673
2. The relationship with our counterparty is very important	0.722
3. The relationship with our counterparty is something our party intends to maintain indefinitely	0.776
4. The relationship with our counterparty is something our party really cares about	0.825
5. The relationship with our counterparty deserves our party's maximum effort to maintain	0.738

paper were derived from the scale used by Ulaga and Eggert (2006). The latter has been widely used to produce reliable and valid results (Čater & Čater, 2010). Hence, the authors referred to items of the scale measuring the three dimensions of relationship quality, with each dimension being measured by five items.

Control Variables

The authors chose two control variables, which may influence results in order to rule out other explanations. The first one is time delay, with two options (1 = the project was delayed; and 2 = the project was

completed on time or early). Time delay is a traditional sign of project performance (Lo, Fung, & Tung, 2006; Meng, 2012), and project participants are concerned about duration. Hence, time delay may be a factor that induces conflict, and failure to complete the project on time can affect behavior and the relationship of the parties (Williams, Ashill, Naumann, & Jackson, 2015). Moreover, the likelihood of continued collaboration would decrease non-cooperative behaviors and reinforce trust (Krasa & Villamil, 2000; Poppo, Zhou, & Ryu, 2008). Consequently, if parties intend to cooperate with each other in the future, they may pay more attention to the relationship and leave the counterparty a good impression. Thus, another control variable is future cooperation plan, with two options (1 = our party considered future cooperation with this partner; and 2 = our party did not consider it).

Analysis and Results

Reliability and Validity Analysis

Since participants responded to the questionnaire items based on their past experiences and attitudes, there was the potential for common method bias. To reduce the effect of such a possible bias, the authors told the respondents at the beginning that there were no right or wrong answers and that they should answer the questions honestly. Moreover, they were told that their answers would remain anonymous and only be used for academic research. Based on the advice of Podsakoff, MacKenzie, Lee, and Podsakoff (2003), this study deployed Harman's one-factor test to verify common method bias using exploratory factor analysis (EFA) in SPSS 22.0. The suitability of the data was first evaluated using the Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity. The KMO value of all items is 0.919, which is over the threshold requirement of 0.5 (Ferguson & Cox, 1993). The low significance of Bartlett's test (which is .000) suggests the adequacy of the data to perform EFA. Results also show that the top factors can explain 70.05% of the total variance, with the largest factor accounting for only 20.87% of total variance. These results suggest that the common method variance is not a significant problem in this study. Cronbach's alpha value of all constructs was examined to assess the internal consistency and the reliability of the scale. As the results show in Table 2, Cronbach's α of all constructs is above .70, indicating the multiple-item scale has sufficient and satisfactory internal consistency and reliability.

Additionally, a confirmatory factor analysis (CFA) in AMOS 22.0 was conducted to test the validity of the scale. With regard to convergent validity, standard factor loading (SFL), construct reliability (CR), and average variance extracted (AVE) were computed. If SFL, CR, and AVE are above 0.5, .6, and 0.5, respectively, convergent validity is good (Fornell & Larcker, 1981). The results in Table 2 show the minimum values of SFL, CR, and AVE were 0.455, .790, and 0.508, respectively. Furthermore, the SFL for other constructs exceeds the 0.5 cut-off, indicating acceptable convergent validity. Moreover, as Table 3 shows, all the square roots of AVE in diagonals are greater than off-diagonal correlations, demonstrating acceptable discriminant validity (Fornell & Larcker, 1981). The results of reliability and validity tests are shown in Tables 2 and 3.

Hypotheses Analysis

Due to the variety of enterprise roles, respondents to the questionnaire can be divided into buyers and sellers. Therefore, before performing regression analysis on the data, it was first checked whether there were pronounced differences in perceptions over task conflict, relational behavior, and relationship quality between buyers and sellers. An independent-samples *t* test was used to test whether two samples were from a whole with the same mean. As the results show in Table 4, in terms of task conflict, the *F* value of "Equal variances assumed" does not reach statistical significance ($F = 0.106, p = .745 > .05$), indicating

Table 3
Means, Standard Deviation, and Pearson's Correlation Coefficient Matrix

	Mean	SD	1	2	3	4	5	6	7	8	9
1. Task conflict	14.80	1.53	.713								
2. Flexibility	5.30	1.20	-.254**	.809							
3. Information exchange	5.08	1.21	-.227**	.732**	.754						
4. Solidarity	5.30	1.19	-.157**	.707**	.736**	.745					
5. Satisfaction	4.94	1.32	-.283**	.451**	.460**	.424**	.773				
6. Trust	4.49	1.42	-.232**	.491**	.534**	.522**	.732**	.786			
7. Commitment	5.44	1.19	-.202**	.401**	.412**	.413**	.702**	.628**	.749		
8. Time delay	1.54	0.50	-.194**	.053	.090	.051	.108	.145*	.053	N/A	
9. Future cooperation plan	1.06	0.24	.039	-.095	-.144*	-.148*	-.299**	-.257**	-.216**	-.019	N/A

Note. * $p < .05$ (two-tailed). ** $p < .01$ (two-tailed). *** $p < .001$ (two-tailed); boldface signifies that the values are greater than the off-diagonal correlations.

that the variance of the two groups of samples is homogeneous. Next, the *t* value ($t = -1.244, p = .215 > .05$) of “Equal variances assumed” represents there is no significant difference between the two groups, so the samples can be mixed for analyses. Similarly, the *F* values of relational behavior and relationship quality are not significant (relational behavior: $F = 0.837, p = .361 > .05$; relationship quality: $F = 3.542, p = .061 > .05$), the *t* values of “Equal variances assumed” are 1.557 ($p = .121$) and .794 ($p = .428$), respectively, and there is no statistically significant difference at a confidence level of 95%. Hence, it can be considered that buyers and sellers agree on the responses of these three variables and that all samples can be used for regression analysis.

By constructing hierarchical regression models, the authors obtained the coefficient of each variable and the significance of each model to verify Hypothesis 1 and Hypothesis 2. Hierarchical regression analysis is a common method for estimating, testing, and probing interactions in empirical studies (Aiken, West, & Reno, 1991; Cohen, Cohen, West, & Aiken, 1983). The variance inflation factors (VIF) values of the independent variable, mediating variable and control variables range from 1.00 to 2.69, which is under 10 (Neter, Kutner, Nachtsheim, & Wasserman, 1996). The indicators show there is no multicollinearity to problematize the analysis results.

Basic Hypothesis Analyses

Three models (Model 1, Model 2, and Model 3) were developed to verify the effects of task conflict on the three dimensions of relationship quality, respectively. For the three models, two control variables were first introduced into Model 1a, Model 2a, and Model 3a. Besides control variables, task conflict was added to Model 1b, Model 2b, and Model 3b. The results of the empirical models are shown in Table 5. As the table indicates, future cooperation plan impacts relationship quality positively, which means it will be beneficial to relationship quality in the project if parties take cooperating again into account. From the results, it can be seen that time delay has a positive effect on satisfaction and trust, whereas it does not affect commitment.

Hierarchical regression analysis was conducted to observe the change of R^2 (ΔR^2) and *F* to assess the fit of the model when adding new variables. Model 1b, Model 2b, and Model 3b in Table 5 reflect the fact that task conflict has a strong negative impact on relationship quality. Task conflict increases the predictive power of Model 1b ($\Delta R^2 = .066, F = 18.994, p = .000$), Model 2b ($\Delta R^2 = .039, F = 13.676, p = .000$), Model 3b ($\Delta R^2 = .035, F = 8.808, p = .001$). Moreover, regression analyses in Model 1b, Model 2b, and Model 3b discern task conflict affects satisfaction ($\beta = -.262, p = .000$), trust ($\beta = -.203, p = .000$), and commitment ($\beta = -.192, p = .001$) negatively. Consequently, H1 is supported.

A test was conducted to determine whether there is an inverted U-shaped relationship between task conflict and relationship quality, or whether task conflict is positively correlated with relationship quality

Table 4
Independent-Samples *t* Test

		Levene’s test for equality of variances		<i>t</i> Test for equality of means	
		<i>F</i>	Sig.	<i>t</i>	Sig. (two-tailed)
Task conflict	Equal variances assumed	0.106	.745	-1.244	.215
	Equal variances not assumed			-1.247	.214
Relational behavior	Equal variances assumed	0.837	.361	1.557	.121
	Equal variances not assumed			1.603	.110
Relationship quality	Equal variances assumed	3.542	.061	0.794	.428
	Equal variances not assumed			0.763	.446

Table 5
Standardized Coefficients of Hierarchical Regression Analyses

Variables	Dependent variables								
	Satisfaction			Trust			Commitment		
	Model 1a	Model 1b	Model 1c	Model 2a	Model 2b	Model 2c	Model 3a	Model 3b	Model 3c
Control variables									
Time delay	.102*	.052	.041	.140**	.101*	.086*	.049	.012	.002
Future cooperation plan	-.297***	-.288***	-.233***	-.254***	-.247***	-.174***	-.215***	-.208***	-.152***
Independent variable									
Task conflict		-.262***	-.164***		-.203***	-.091*		-.192***	-.103*
Mediating variables									
Flexibility			.181**			.117			.129
Information exchange			.176**			.229***			.142*
Solidarity			.107			.229***			.180**
R ²	.100	.166	.328	.086	.125	.377	.049	.084	.238
Adjusted R ²	.093	.157	.314	.079	.116	.364	.042	.075	.222
ΔR ²		.066***	.162***		.039***	.252***		.035***	.154***
F	15.952***	18.994***	23.116***	13.484***	13.676***	28.691***	7.409***	8.808***	14.787***

Note. *Significance level: $p < .1$. **Significance level: $p < .05$. ***Significance level: $p < .001$. ****Significance level: $p < .01$. *****Significance level: $p < .001$.

in an interval of low-level task conflict. In this study, the data were sorted according to task conflict from small to large, with the sample being divided into two parts. The task conflict of one part was lower than that of the other part. Regression analysis was then separately conducted to test the relationship between task conflict and the relationship quality of the two parts. After several attempts to segment, there was no significant positive correlation between any low-level task conflict and relationship quality as well as its three dimensions. Hence, in this study, an inverted U-shaped relationship between task conflict and relationship quality is not confirmed.

Mediating Effects of Relational Behavior

The bootstrapping mediation test methods recommended by Preacher and Hayes (2004) were adopted in this study to test whether relational behavior could be used as a mediating variable. The application of bootstrapped confidence intervals (CIs) can directly address mediation (Zhang, Zhang, Gao, & Ding, 2016). The indirect effect testing syntax developed by Preacher and Hayes was put into the SPSS Processor to obtain CIs. The data were bootstrapped 5,000 times. Regarding the indirect effect of relational behavior, the bias corrected (BC) CIs at the confidence level of 95% [satisfaction: BC CI = (-0.0215, -0.0056), trust: BC CI = (-0.0276, -0.0077), commitment: BC CI = (-0.0195, -0.0052)] exclude zero, indicating that relational behavior plays a significant mediating role in the impact of task conflict on satisfaction, trust, and commitment.

Next, to explore how each dimension of relational behavior plays a role in the mediating effects, the authors applied regression analysis to analyze these effects (Baron & Kenny, 1986). As summarized in Table 6, control variables were first introduced in Model 4a, Model 5a, and Model 6a. Model 4b, Model 5b, and Model 6b demonstrate task conflict negatively influences flexibility ($\beta = -.250, p = .000$), information exchange ($\beta = -.213, p = .000$), and solidarity ($\beta = -.147, p = .013$). Hence, the first step in the mediating effect has been validated, which supports H2a.

To verify H2b, the authors tested correlation between three dimensions of relational behavior and relationship quality. For the three hierarchical regression model models, two control variables were first introduced into Model 7a, Model 8a, and Model 9a. Besides control variables, three dimensions of relational behavior were added to Model 7b, Model 8b, and Model 9b. As Model 7b in Table 7 shows, flexibility ($\beta = .219, p = .006$) and information exchange ($\beta = .194, p = .017$) are positively related to

Table 6
Hierarchical Regression Analyses of Task Conflict on Relational Behavior

Variables	Mediator					
	Flexibility		Information exchange		Solidarity	
	Model 4a	Model 4b	Model 5a	Model 5b	Model 6a	Model 6b
Control variables						
Time delay	.051	.003	.087	.046	.048	.020
Future cooperation plan	-.094	-.086	-.142**	-.135**	-.147**	-.142**
Independent variables						
Task conflict		-.250****		-.213****		-.147**
R ²	.012	.072	.028	.072	.024	.045
Adjusted R ²	.005	.062	.021	.062	.018	.035
ΔR ²		.060****		.043****		.021**
F	1.700	7.405****	4.179**	7.385****	3.594**	4.530***

Note. *Significance level: $p < .1$. **Significance level: $p < .05$. ***Significance level: $p < .01$. ****Significance level: $p < .001$.

Table 7
 Hierarchical Regression Analyses of Relational Behavior on Relationship Quality

Variables	Dependent Variables					
	Satisfaction		Trust		Commitment	
	Model 7a	Model 7b	Model 8a	Model 8b	Model 9a	Model 9b
Control variables						
Time delay	.102*	.070	.140**	.102**	.049	.020
Future cooperation plan	-.297****	-.235****	-.254****	-.175****	-.215****	-.154****
Mediating variables						
Flexibility		.219***		.138*		.153*
Information exchange		.194**		.239***		.153*
Solidarity		.091		.220***		.170**
R ²	.100	.304	.086	.370	.049	.229
Adjusted R ²	.093	.292	.079	.359	.042	.215
ΔR ²		.204****		.284****		.180****
F	15.952****	24.913****	13.484****	33.473****	7.409***	16.885****

Note. *Significance level: $p < .1$. **Significance level: $p < .05$. ***Significance level: $p < .01$. ****Significance level: $p < .001$.

satisfaction, and the impact of solidarity ($\beta = .091, p = .245$) on satisfaction is not significant. Moreover, flexibility ($\beta = .138, p = .065$), information exchange ($\beta = .239, p = .002$), and solidarity ($\beta = .220, p = .003$) impact trust positively. On the basis of Model 9b, flexibility ($\beta = .153, p = .065$), information exchange ($\beta = .153, p = .074$), and solidarity ($\beta = .170, p = .039$) have a positive effect on commitment. Hence, above results partially support H2b.

As for the remaining steps in the testing of mediating effects, the authors tested the mediating role of relational behavior. When relational behavior acts as a mediating variable, on the basis of Model 1c, Model 2c, and Model 3c in the Table 5, the effect of task conflict on trust and commitment slightly declines (trust: $\beta = -.091, p = .067$, commitment: $\beta = -.103, p = .061$), while the impact of task conflict on satisfaction is still strongly significant ($\beta = -.164, p = .002$). In consequence, flexibility ($\beta = .181, p = .021$) and information exchange ($\beta = .176, p = .029$) partially mediate the effect of task conflict on satisfaction; information exchange ($\beta = .229, p = .003$) and solidarity ($\beta = .229, p = .002$) partially mediate the impact of task conflict on trust; and information exchange ($\beta = .142, p = .097$) and solidarity ($\beta = .180, p = .028$) partially mediate the effect of task conflict on commitment. These results partially support H2.

Discussion and Conclusions

Discussion

The confirmations of H1 verify the fact that the higher the task conflict is, the worse the interorganizational relationship quality is. This result is consistent with the conclusions of previous studies (De Dreu & Weingart, 2003; Hinds & Mortensen, 2005). However, the inverted U-shaped relationship between task conflict and relationship quality has not been confirmed. In this study, a small amount of statistical data of low-level task conflict indicates that when task conflict increases from 1 to 1.5, relationship quality increases from 5.98 to 6.43, showing a short-term positive growth trend. With the increase of task conflict, relationship quality gradually decreases. However, the low task conflict interval (1–1.5) is petty, the amount of data are limited, and the growth range of relationship quality is small (5.98–6.43). In

consequence, when the curve is fitted to all the data, the growth range of relationship quality is overwhelmed by the data of the absolute and negative trend, and the rising section of inverted U-shaped curve cannot be fitted. As a result, the positive impact of task conflict on relationship quality is not verified. Another possible reason for not detecting an inverted U-shaped relationship is that when task conflict occurs, the parties may interpret different opinions about the task as negative evaluation of their ability. Therefore, the task-related debate is considered to be a personal attack, and misunderstood as relationship conflict (Yang & Mossholder, 2004), resulting in a completely negative correlation between task conflict and relationship quality.

This study demonstrates that relational behavior partially mediates the causality between task conflict and satisfaction (trust, commitment). In the mediating test, with the empirical evidence supporting H2a, the higher the task conflict of the overall project is, the weaker the consistency is between relational behavior of the parties and relational norms. Specifically, task conflict has an adverse effect on relational behavior, both explicitly and potentially. When task conflict occurs, both sides can change their management behaviors. These behaviors refer to not only direct behaviors of dealing with task conflict (explicitly), but also other management behaviors which are not related to task conflict (potentially). Meanwhile, empirical results of H2b show that negative deviations of relational behavior from relational norms undermine trust (Zaheer & Venkatraman, 1995), satisfaction (Vos, Schiele, & Hüttinger, 2016) and commitment in construction projects. Furthermore, results of H2 explain how task conflict affects relationship quality through relational behavior. However, results of the three dimensions of relational behavior as mediators are not identical to each other.

In the three dimensions of relational behavior, flexibility partially mediates the effect of task conflict on satisfaction. Along with the occurrence of task conflict, behaviors of the parties will not be in line with common expectations, which impairs satisfaction. Conversely, if one party can handle unexpected events flexibly after task conflict occurs, the flexible behavior gives the counterparty a good impression and effectively alleviates the tension caused by task conflict. According to this study, the mediating effects of flexibility in the relationship between task conflict and trust (commitment) are not proved. The reason for such results may be that although one party's flexible behaviors in dealing with accidents are conducive to problem-solving, these behaviors are not necessarily beneficial to the counterparty. Moderate flexibility may reinforce the trust (commitment) of both parties, but when one party holds the view that the counterparty is excessively flexible in the sense that they do not follow the rules, a decline in trust (commitment) is brought about. Simultaneously, the reason why one party is motivated to make a commitment to the counterparty is that cooperation may bring economic benefits or a rise in reputation to them as a prerequisite for continued cooperation, but flexibility does not have such a precondition.

Information exchange is the second dimension of relational behavior. It partially mediates the relationship between task conflict and satisfaction (trust, commitment). From the results, compared with the other two dimensions of relational behavior, information exchange is the most critical factor in the impact of task conflict on relationship quality. Information about construction projects between project participants is asymmetric. After task conflict occurring, if the two parties actively share project information, information asymmetry can be reduced, helping to achieve project objectives, and producing reciprocal results (Chung, Singh, & Lee, 2000). Thus, compared to relationship quality at the moment of the task conflict' occurrence, a partner's satisfaction (Cheung et al., 2011) and mutual trust (Oliver, 1990) can be strengthened, and expectations of continued cooperation with the other party would be enhanced, since the level of commitment has relatively improved (Ozorhon et al., 2010).

Solidarity is the third dimension of relational behavior. It partially mediates the adverse impact of task conflict on trust (commitment). By adopting active behaviors toward maintaining the relationship between the parties, the adverse impact of task conflict on trust (commitment) can be reduced. In construction projects, when the level of task conflict rises, if one party's behavior is based on the motivation to maintain the relationship, the counterparty will feel the goodwill of the other party, and therefore value their cooperation more; thus, the expectation of continued cooperation can be increased. The

parties therefore trust each other more, and the level of commitment is relatively higher than it was before the task conflict (Johnson, Korsgaard, & Sapienza, 2002). The mediating effect of solidarity in the causality between task conflict and satisfaction is not supported. Although task conflict significantly affects solidarity, it does not verify the correlation between solidarity and satisfaction. This result may be related to the Chinese cultural background. Chinese culture stresses harmony and behaviors, which support maintaining a good relationship, are taken for granted. Even in the event of a serious conflict, the two sides still make an effort to avoid further damage to the relationship. The Chinese are very concerned about “face.” But the behaviors maintaining the relationship may only result in superficial rather than real harmony (“parties remain friendly in appearance but estrange at heart”), which may explain the non-verification of the correlation between interorganizational solidarity and satisfaction.

Conclusions and Implications

On the basis of empirical evidence from the Chinese construction industry, this study focuses on the impact of interorganizational task conflict and relational behavior on relationship quality. The higher the task conflict is, the poorer the relationship quality between the two parties will be. The authors extend this line of inquiry by suggesting that relational behavior plays a partially mediating role in the negative causality between task conflict and relationship quality. Task conflict between the buyer and the seller can cause the deviation of relational behavior from relational norms. From the perspective of the three dimensions which constitute relational behavior, flexibility and information exchange have positive impacts on satisfaction. Information exchange and solidarity help to establish and maintain trust and partially mediate the effect of task conflict on trust. Information exchange and solidarity can also partially account for the causality between interorganizational task conflict on commitment.

Theoretical Contributions

First, existing studies have focused more on intragroup task conflict in the individual level (Adair et al., 2017; Solansky, Singh, & Huang, 2014). In other words, prior studies have not paid enough attention to interorganizational conflict (Lumineau, Eckerd, & Handley, 2015), and even less attention has been paid to how interorganizational task conflict affects relational behavior in projects. Studies of conflict have been focusing on selection of appropriate management styles for conflict. But when the level of overall task conflict in the project is high, relational behavior will deviate from relational norms, including the behavior of managements in settling conflicts and with respect to other matters unrelated to conflicts. From the perspective of relational governance, this study shows that relational behavior is an important determinant of relationship quality and partially account for the impact of interorganizational task conflict. Therefore, it is necessary to integrate relational behavior into research on task conflict. This paper investigates the impact path from task conflict to relational behavior to relationship quality and opens up the black box for the relationship between task conflict and relationship quality. Second, this study relies on relational exchange theory as an explanatory mechanism, and also clarifies how the three dimensions of relational behavior (flexibility, information exchange, and solidarity) affect the three dimensions of relationship quality (trust, commitment, and satisfaction), and what kind of relational behavior is more critical to relationship quality. It is necessary to separate the three dimensions of relational behavior, since the way they are mixed is not conducive to discovering which aspect play a real role in reinforcing interorganizational relationship quality. Third, the data of this study come from the construction industry in China; these results broaden the application of relational exchange theory in conflict management and relational governance between organizations in the context of Chinese culture.

Managerial Implications

In project management, conflict is inevitable. Since the effective domain of the positive impact of task conflict on relationship quality is petty, the impact of task conflict on relationship quality is usually negative. But the authors believe that there are conditions under which task conflict's negative effects can be diminished, if understood and handled correctly. In this study, relational behavior is considered as a condition that can reduce the negative impact of task conflict. Task conflict first affects behaviors in respect of handling conflict and other project management behaviors, and then affects interorganizational relationship quality. These behaviors include information exchange, flexible behaviors to deal with emergencies and solidary behaviors that jointly solve problems to enhance the relationship between the two parties. The positive performance of the parties in these behaviors, especially behaviors of information exchange, can significantly reduce the negative impact of task conflict on relationship quality. Cooperation, where the level of information exchange between the two sides is high, enhances satisfaction, trust, and commitment, thereby weakening the negative impact of task conflict on relationship quality. While solidarity influences trust and commitment, behaviors in respect of flexible handling of emergencies only positively affect satisfaction.

Limitations and Future Research

Firstly, it is possible that relational behavior of both parties deviates from common expectations. One limitation of this study is that one-sided data, with no paired data, were collected. Despite the difficulty of collecting corresponding data sets from pairs of parties, future studies should consider this explorative route. Secondly, prior collaboration may relate to relational behavior and relationship quality, since prior interactions foster cooperative behavior (Wang, Chen, Fu, & Zhang, 2017). Researchers could explore how prior collaboration influences relational governance in the context of conflict through nuanced studies. Lastly, the survey subjects in this study are mainly project managers from Chinese construction projects. Cultures and institutional environments may impact the effectiveness of relational governance, and cross-cultural comparative studies might be conducted in future research.

References

- Achrol, R. S. (1996). Changes in the theory of interorganizational relations in marketing: Toward a network paradigm. *Journal of the Academy of Marketing Science*, 25(1), 56–71. <https://doi.org/10.1177/0092070397251006>
- Adair, W. L., Liang, L. H., & Hideg, I. (2017). Buffering against the detrimental effects of demographic faultlines: The curious case of intragroup conflict in small work groups. *Negotiation and Conflict Management Research*, 10(1), 28–45. <https://doi.org/10.1111/ncmr.12087>
- Aibinu, A. A., Ofori, G., & Ling, F. Y. Y. (2008). Explaining cooperative behavior in building and civil engineering projects' claims process: Interactive effects of outcome favorability and procedural fairness. *Journal of Construction Engineering and Management*, 134, 681–691. [https://doi.org/10.1061/\(ASCE\)0733-9364\(2008\)134:9\(681\)](https://doi.org/10.1061/(ASCE)0733-9364(2008)134:9(681))
- Aiken, L. S., West, S. G., & Reno, R. R. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: SAGE Publications.
- Amason, A. C. (1996). Distinguishing the effects of functional and dysfunctional conflict on strategic decision making: Resolving a paradox for top management teams. *Academy of Management Journal*, 39(1), 123–148. <https://doi.org/10.5465/256633>
- Anderson, E. W., & Sullivan, M. W. (1993). The antecedents and consequences of customer satisfaction for firms. *Marketing Science*, 12(2), 125–143. <https://doi.org/10.1287/mksc.12.2.125>
- Andrews, I. R., & Tjosvold, D. (1983). Conflict management under different levels of conflict intensity. *Journal of Occupational Behaviour*, 4(3), 223–228.

- Arranz, N., & Arroyabe, J. C. F. D. (2012). Effect of formal contracts, relational norms and trust on performance of joint research and development projects. *British Journal of Management*, *23*, 575–588. <https://doi.org/10.1111/j.1467-8551.2011.00791.x>
- Artz, K. W., & Brush, T. H. (2000). Asset specificity, uncertainty and relational norms: An examination of coordination costs in collaborative strategic alliances. *Journal of Economic Behavior and Organization*, *41*, 337–362. [https://doi.org/10.1016/S0167-2681\(99\)00080-3](https://doi.org/10.1016/S0167-2681(99)00080-3)
- Aryee, S., Budhwar, P. S., & Chen, Z. X. (2002). Trust as a mediator of the relationship between organizational justice and work outcomes: Test of a social exchange model. *Journal of Organizational Behaviour*, *23*(3), 267–285. [https://doi.org/10.1002/\(ISSN\)1099-1379](https://doi.org/10.1002/(ISSN)1099-1379)
- Ashnai, B., Henneberg, S. C., Naudé, P., & Francescucci, A. (2015). Inter-personal and inter-organizational trust in business relationships: An attitude-behavior-outcome model. *Industrial Marketing Management*, *52*, 128–139. <https://doi.org/10.1016/j.indmarman.2015.05.020>
- Aspinwall, L. G., & Taylor, S. E. (1997). A stitch in time: Self-regulation and proactive coping. *Psychological Bulletin*, *121*, 417–436. <https://doi.org/10.1037/0033-2909.121.3.417>
- Aulakh, P. S., Kotabe, M., & Sahay, A. (1996). Trust and performance in cross-border marketing partnerships: A behavioral approach. *Journal of International Business Studies*, *27*, 1005–1032. <https://doi.org/10.1057/palgrave.jibs.8490161>
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173–1182. <https://doi.org/10.1037/0022-3514.51.6.1173>
- Benton, W. C., & Maloni, M. (2005). The influence of power driven buyer/seller relationships on supply chain satisfaction. *Journal of Operations Management*, *23*(1), 1–22. <https://doi.org/10.1016/j.jom.2004.09.002>
- Blau, P. M. (1964). *Exchange and power in social life*. New York, NY: John Wiley.
- Bove, L. L., & Johnson, L. W. (2001). Customer relationships with service personnel: Do we measure closeness, quality or strength? *Journal of Business Research*, *54*(3), 189–197. [https://doi.org/10.1016/S0148-2963\(00\)00122-3](https://doi.org/10.1016/S0148-2963(00)00122-3)
- Bradford, K. D., & Weitz, B. A. (2009). Salespersons' management of conflict in buyer-seller relationships. *Journal of Personal Selling and Sales Management*, *29*(1), 25–42. <https://doi.org/10.2753/PSS0885-3134290102>
- Cannon, J. P., Achrol, R. S., & Gundlach, G. T. (2000). Contracts, norms, and plural form governance. *Journal of the Academy of Marketing Science*, *28*(2), 180–194. <https://doi.org/10.1177/0092070300282001>
- Carnevale, P. J., & Probst, T. M. (1998). Social values and social conflict in creative problem solving and categorization. *Journal of Personality and Social Psychology*, *74*, 1300–1309. <https://doi.org/10.1037/0022-3514.74.5.1300>
- Čater, T., & Čater, B. (2010). Product and relationship quality influence on customer commitment and loyalty in B2B manufacturing relationships. *Industrial Marketing Management*, *39*, 1321–1333. <https://doi.org/10.1016/j.indmarman.2010.02.006>
- Cavusgil, S. T., Deligonul, S., & Zhang, C. (2004). Curbing foreign distributor opportunism: An examination of trust, contracts, and the legal environment in international channel relationships. *Journal of International Marketing*, *12*(2), 7–27. <https://doi.org/10.1509/jimk.12.2.7.32902>
- Chen, W. T., & Chen, T. T. (2007). Critical success factors for construction partnering in Taiwan. *International Journal of Project Management*, *25*, 475–484. <https://doi.org/10.1016/j.ijproman.2006.12.003>
- Chen, Y. Q., Zhang, Y. B., & Zhang, S. J. (2014). Impacts of different types of owner-contractor conflict on cost performance in construction projects. *Journal of Construction Engineering and Management*, *140*, 04014017. [https://doi.org/10.1061/\(ASCE\)CO.1943-7862.0000852](https://doi.org/10.1061/(ASCE)CO.1943-7862.0000852)
- Cheung, M. S., Myers, M. B., & Mentzer, J. T. (2011). The value of relational learning in global buyer-supplier exchanges: A dyadic perspective and test of the pie-sharing premise. *Strategic Management Journal*, *32*, 1061–1082. <https://doi.org/10.1002/smj.926>
- Chu, Z., & Wang, Q. (2012). Drivers of relationship quality in logistics outsourcing in China. *Journal of Supply Chain Management*, *48*(3), 78–96. <https://doi.org/10.1111/j.1745-493X.2011.03259.x>
- Chung, S., Singh, H., & Lee, K. (2000). Complementarity, status similarity and social capital as drivers of alliance formation. *Strategic Management Journal*, *21*(1), 1–22. [https://doi.org/10.1002/\(ISSN\)1097-0266](https://doi.org/10.1002/(ISSN)1097-0266)

- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (1983). *Applied multiple regression for the behavioral sciences*. Hillsdale, NJ: Laurence Erlbaum.
- Costa, P. L., Passos, A. M., & Bakker, A. B. (2015). Direct and contextual influence of team conflict on team resources, team work engagement, and team performance. *Negotiation and Conflict Management Research*, 8(4), 211–227. <https://doi.org/10.1111/ncmr.12061>
- Crosby, L. A., Evans, K. R., & Cowles, D. (1990). Relationship quality in services selling: An interpersonal influence perspective. *Journal of Marketing*, 54(3), 68–81. <https://doi.org/10.1177/002224299005400306>
- Cui Haitao, T., Raju, J. S., & Zhang, Z. J. (2007). Fairness and channel coordination. *Management Science*, 53, 1303–1314. <https://doi.org/10.1287/mnsc.1060.0697>
- Curşeu, P. L., Boroş, S., & Oerlemans, L. A. (2012). Task and relationship conflict in short-term and long-term groups: The critical role of emotion regulation. *International Journal of Conflict Management*, 23(1), 97–107. <https://doi.org/10.1108/10444061211199331>
- De Dreu, C. K. (2006). When too little or too much hurts: Evidence for a curvilinear relationship between task conflict and innovation in teams. *Journal of Management*, 32(1), 83–107. <https://doi.org/10.1177/0149206305277795>
- De Dreu, C. K., & Weingart, L. R. (2003). Task versus relationship conflict, team performance, and team member satisfaction: A meta-analysis. *Journal of Applied Psychology*, 88, 741–749. <https://doi.org/10.1037/0021-9010.88.4.741>
- De Wit, F. R., Greer, L. L., & Jehn, K. A. (2012). The paradox of intragroup conflict: A meta-analysis. *Journal of Applied Psychology*, 97, 360–390. <https://doi.org/10.1037/a0024844>
- DeChurch, L. A., & Marks, M. A. (2001). Maximizing the benefits of task conflict: The role of conflict management. *International Journal of Conflict Management*, 12(1), 4–22. <https://doi.org/10.1108/eb022847>
- Diekmann, J. E., & Girard, M. J. (1995). Are contract disputes predictable? *Journal of Construction Engineering and Management*, 121, 355–363. [https://doi.org/10.1061/\(ASCE\)0733-9364\(1995\)121:4\(355\)](https://doi.org/10.1061/(ASCE)0733-9364(1995)121:4(355))
- Dorsch, M. J., Swanson, S. R., & Kelley, S. W. (1998). The role of relationship quality in the stratification of vendors as perceived by customers. *Journal of the Academy of Marketing Science*, 26(2), 128–142. <https://doi.org/10.1177/0092070398262004>
- Dwyer, F. R., Schurr, P. H., & Oh, S. (1987). Developing buyer-seller relationships. *Journal of Marketing*, 51(2), 11–27. <https://doi.org/10.1177/002224298705100202>
- Farh, J. L., Lee, C., & Farh, C. I. (2010). Task conflict and team creativity: A question of how much and when. *Journal of Applied Psychology*, 95, 1173–1180. <https://doi.org/10.1037/a0020015>
- Ferguson, E., & Cox, T. (1993). Exploratory factor analysis: A users' guide. *International Journal of Selection and Assessment*, 1(2), 84–94. <https://doi.org/10.1111/j.1468-2389.1993.tb00092.x>
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, 18, 382–388. <https://doi.org/10.1177/002224378101800313>
- Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review*, 25(2), 161–178. <https://doi.org/10.2307/2092623>
- Griffith, D. A., & Myers, M. B. (2005). The performance implications of strategic fit of relational norm governance strategies in global supply chain relationships. *Journal of International Business Studies*, 36(3), 254–269. <https://doi.org/10.1057/palgrave.jibs.8400131>
- Habib, G. M. (1987). Measures of manifest conflict in international joint ventures. *Academy of Management Journal*, 30, 808–816. <https://doi.org/10.5465/256162>
- Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*, 40, 414–433. <https://doi.org/10.1007/s11747-011-0261-6>
- Heide, J. B., & John, G. (1992). Do norms matter in marketing relationships? *Journal of Marketing*, 56(2), 32–44. <https://doi.org/10.1177/002224299205600203>

- Hewett, K., & Bearden, W. O. (2001). Dependence, trust, and relational behavior on the part of foreign subsidiary marketing operations: Implications for managing global marketing operations. *Journal of Marketing*, 65(4), 51–66. <https://doi.org/10.1509/jmkg.65.4.51.18380>
- Hinds, P. J., & Mortensen, M. (2005). Understanding conflict in geographically distributed teams: The moderating effects of shared identity, shared context, and spontaneous communication. *Organization Science*, 16(3), 290–307. <https://doi.org/10.1287/orsc.1050.0122>
- Huang, Y., Luo, Y., Liu, Y., & Yang, Q. (2016). An investigation of interpersonal ties in interorganizational exchanges in emerging markets: A boundary-spanning perspective. *Journal of Management*, 42, 1557–1587. <https://doi.org/10.1177/0149206313511115>
- Huo, B., Fu, D., Zhao, X., & Zhu, J. (2016). Curbing opportunism in logistics outsourcing relationships: The role of relational norms and contract. *International Journal of Production Economics*, 182, 293–303. <https://doi.org/10.1016/j.ijpe.2016.07.005>
- Izogo, E. E. (2016). Should relationship quality be measured as a disaggregated or a composite construct? *Management Research Review*, 39(1), 115–131. <https://doi.org/10.1108/MRR-10-2014-0232>
- Jap, S. D., & Ganesan, S. (2000). Control mechanisms and the relationship life cycle: Implications for safeguarding specific investments and developing commitment. *Journal of Marketing Research*, 37(2), 227–245. <https://doi.org/10.1509/jmkr.37.2.227.18735>
- Jehn, K. A. (1994). Enhancing effectiveness: An investigation of advantages and disadvantages of value-based intragroup conflict. *International Journal of Conflict Management*, 5(3), 223–238. <https://doi.org/10.1108/eb022744>
- Jehn, K. A. (1995). A multimethod examination of the benefits and detriments of intragroup conflict. *Administrative Science Quarterly*, 40(2), 256–282. <https://doi.org/10.2307/2393638>
- Jehn, K. A., & Bendersky, C. (2003). Intragroup conflict in organizations: A contingency perspective on the conflict-outcome relationship. *Research in Organizational Behavior*, 25, 187–242. [https://doi.org/10.1016/S0191-3085\(03\)25005-X](https://doi.org/10.1016/S0191-3085(03)25005-X)
- Jehn, K. A., & Mannix, E. A. (2001). The dynamic nature of conflict: A longitudinal study of intragroup conflict and group performance. *Academy of Management Journal*, 44(2), 238–251. <https://doi.org/10.5465/3069453>
- Jelodar, M. B., Yiu, T. W., & Wilkinson, S. (2016). Relationship-quality judgment model for construction project procurement: A conjoint measurement. *Journal of Construction Engineering and Management*, 142, 04016012. [https://doi.org/10.1061/\(ASCE\)CO.1943-7862.0001104](https://doi.org/10.1061/(ASCE)CO.1943-7862.0001104)
- Johnson, J. P., Korsgaard, M. A., & Sapienza, H. J. (2002). Perceived fairness, decision control, and commitment in international joint venture management teams. *Strategic Management Journal*, 23, 1141–1160. <https://doi.org/10.1002/smj.277>
- Krasa, S., & Villamil, A. P. (2000). Optimal contracts when enforcement is a decision variable. *Econometrica*, 68(1), 119–134. <https://doi.org/10.1111/1468-0262.00095>
- Krueger, J. I., Massey, A. L., & DiDonato, T. E. (2008). A matter of trust: From social preferences to the strategic adherence to social norms. *Negotiation and Conflict Management Research*, 1(1), 31–52. <https://doi.org/10.1111/j.1750-4716.2007.00003.x>
- Kumar, N., Scheer, L. K., & Steenkamp, J. B. E. (1995). The effects of perceived interdependence on dealer attitudes. *Journal of Marketing Research*, 32, 348–356. <https://doi.org/10.1177/002224379503200309>
- Lages, C., Lages, C. R., & Lages, L. F. (2005). The RELQUAL scale: A measure of relationship quality in export market ventures. *Journal of Business Research*, 58, 1040–1048. <https://doi.org/10.1016/j.jbusres.2004.03.001>
- Lam, P. K., & Chin, K. S. (2004). Project factors influencing conflict intensity and handling styles in collaborative NPD. *Creativity and Innovation Management*, 13(1), 52–62. <https://doi.org/10.1111/j.1467-8691.2004.00293.x>
- Lavelle, J. J., Rupp, D. E., & Brockner, J. (2007). Taking a multifoci approach to the study of justice, social exchange, and citizenship behavior: The target similarity model. *Journal of Management*, 33, 841–866. <https://doi.org/10.1177/0149206307307635>
- Lee, J. N., & Kim, Y. G. (1999). Effect of partnership quality on IS outsourcing success: Conceptual framework and empirical validation. *Journal of Management Information Systems*, 15(4), 29–61. <https://doi.org/10.1080/07421222.1999.11518221>

- Leonidou, L. C., Barnes, B. R., & Talias, M. A. (2006). Exporter-importer relationship quality: The inhibiting role of uncertainty, distance, and conflict. *Industrial Marketing Management*, 35, 576–588. <https://doi.org/10.1016/j.indmarman.2005.06.012>
- Leonidou, L. C., Samiee, S., Aykol, B., & Talias, M. A. (2014). Antecedents and outcomes of exporter-importer relationship quality: Synthesis, meta-analysis, and directions for further research. *Journal of International Marketing*, 22(2), 21–46. <https://doi.org/10.1509/jim.13.0129>
- Leung, M., Ng, S. T., & Cheung, S. O. (2002). Improving satisfaction through conflict stimulation and resolution in value management in construction projects. *Journal of Management in Engineering*, 18(2), 68–75. [https://doi.org/10.1061/\(ASCE\)0742-597X\(2002\)18:2\(68\)](https://doi.org/10.1061/(ASCE)0742-597X(2002)18:2(68))
- Leung, M. Y., Yu, J., & Liang, Q. (2014). Analysis of the relationships between value management techniques, conflict management, and workshop satisfaction of construction participants. *Journal of Management in Engineering*, 30, 04014004. [https://doi.org/10.1061/\(ASCE\)ME.1943-5479.0000208](https://doi.org/10.1061/(ASCE)ME.1943-5479.0000208)
- Leuthesser, L., & Kohli, A. K. (1995). Relational behavior in business markets: Implications for relationship management. *Journal of Business Research*, 34(3), 221–233. [https://doi.org/10.1016/0148-2963\(95\)00006-E](https://doi.org/10.1016/0148-2963(95)00006-E)
- Li, L., & Ng, P. (2002). Dynamics of export channel relationships in high-velocity environments. *Industrial Marketing Management*, 31, 505–514. [https://doi.org/10.1016/S0019-8501\(01\)00205-X](https://doi.org/10.1016/S0019-8501(01)00205-X)
- Ling, F. Y. Y., Ong, S. Y., Ke, Y., Wang, S., & Zou, P. (2014). Drivers and barriers to adopting relational contracting practices in public projects: Comparative study of Beijing and Sydney. *International Journal of Project Management*, 32(2), 275–285. <https://doi.org/10.1016/j.ijproman.2013.04.008>
- Liu, Y., Huang, Y., Luo, Y., & Zhao, Y. (2012). How does justice matter in achieving buyer-supplier relationship performance? *Journal of Operations Management*, 30, 355–367. <https://doi.org/10.1016/j.jom.2012.03.003>
- Liu, Y., Li, Y., & Zhang, L. (2010). Control mechanisms across a buyer-supplier relationship quality matrix. *Journal of Business Research*, 63(1), 3–12. <https://doi.org/10.1016/j.jbusres.2009.01.005>
- Lo, T. Y., Fung, I. W., & Tung, K. C. (2006). Construction delays in Hong Kong civil engineering projects. *Journal of Construction Engineering and Management*, 132, 636–649. [https://doi.org/10.1061/\(ASCE\)0733-9364\(2006\)132:6\(636\)](https://doi.org/10.1061/(ASCE)0733-9364(2006)132:6(636))
- Lu, P., Qian, L., Chu, Z., & Xu, X. (2015). Role of opportunism and trust in construction projects: Empirical evidence from China. *Journal of Management in Engineering*, 32, 05015007. [https://doi.org/10.1061/\(ASCE\)ME.1943-5479.0000401](https://doi.org/10.1061/(ASCE)ME.1943-5479.0000401)
- Lu, W., & Wang, J. (2017). The influence of conflict management styles on relationship quality: The moderating effect of the level of task conflict. *International Journal of Project Management*, 35, 1483–1494. <https://doi.org/10.1016/j.ijproman.2017.08.012>
- Lu, W., Zhang, L., & Zhang, L. (2016). Effect of contract completeness on contractors' opportunistic behavior and the moderating role of interdependence. *Journal of Construction Engineering and Management*, 142, 04016004. [https://doi.org/10.1061/\(ASCE\)CO.1943-7862.0001110](https://doi.org/10.1061/(ASCE)CO.1943-7862.0001110)
- Lumineau, F., Eckerd, S., & Handley, S. (2015). Inter-organizational conflicts: Research overview, challenges, and opportunities. *Journal of Strategic Contracting and Negotiation*, 1(1), 42–64. <https://doi.org/10.1177/2055563614568493>
- Luo, Y. (2006). Opportunism in inter-firm exchanges in emerging markets. *Management and Organization Review*, 2(1), 121–147. <https://doi.org/10.1111/j.1740-8784.2006.00032.x>
- Lusch, R. F., & Brown, J. R. (1996). Interdependency, contracting, and relational behavior in marketing channels. *Journal of Marketing*, 60(4), 19–38. <https://doi.org/10.2307/1251899>
- Macneil, R. W. (1986). Contract in China: Law, practice, and dispute resolution. *Stanford Law Review*, 38, 303–397. <https://doi.org/10.2307/1228698>
- Mathew, S. K., & Chen, Y. (2013). Achieving offshore software development success: An empirical analysis of risk mitigation through relational norms. *The Journal of Strategic Information Systems*, 22(4), 298–314. <https://doi.org/10.1016/j.jsis.2013.03.001>
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20, 709–734. <https://doi.org/10.5465/amr.1995.9508080335>
- Meng, X. (2012). The effect of relationship management on project performance in construction. *International Journal of Project Management*, 30(2), 188–198. <https://doi.org/10.1016/j.ijproman.2011.04.002>

- Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58(3), 20–38. <https://doi.org/10.1177/002224299405800302>
- Neter, J., Kutner, M. H., Nachtsheim, C. J., & Wasserman, W. (1996). *Applied linear statistical models*. Chicago, IL: Irwin.
- Ning, Y., & Ling, F. Y. Y. (2013). Reducing hindrances to adoption of relational behaviors in public construction projects. *Journal of Construction Engineering and Management*, 139, 04013017. [https://doi.org/10.1061/\(ASCE\)CO.1943-7862.0000745](https://doi.org/10.1061/(ASCE)CO.1943-7862.0000745)
- Ning, Y., & Ling, F. Y. Y. (2014). Boosting public construction project outcomes through relational transactions. *Journal of Construction Engineering and Management*, 140(1), 46–52. [https://doi.org/10.1061/\(ASCE\)CO.1943-7862.0000780](https://doi.org/10.1061/(ASCE)CO.1943-7862.0000780)
- Noordewier, T. G., John, G., & Nevin, J. R. (1990). Performance outcomes of purchasing arrangements in industrial buyer-vendor relationships. *Journal of Marketing*, 54(4), 80–93. <https://doi.org/10.1177/002224299005400407>
- Ock, J. H., & Han, S. H. (2003). Lessons learned from rigid conflict resolution in an organization: Construction conflict case study. *Journal of Management in Engineering*, 19(2), 83–89. [https://doi.org/10.1061/\(ASCE\)0742-597X\(2003\)19:2\(83\)](https://doi.org/10.1061/(ASCE)0742-597X(2003)19:2(83))
- Oliver, C. (1990). Determinants of interorganizational relationships: Integration and future directions. *Academy of Management Review*, 15(2), 241–265. <https://doi.org/10.5465/amr.1990.4308156>
- Ozorhon, B., Arditi, D., Dikmen, I., & Birgonul, M. T. (2010). Performance of international joint ventures in construction. *Journal of Management in Engineering*, 26(4), 209–222. [https://doi.org/10.1061/\(ASCE\)ME.1943-5479.0000022](https://doi.org/10.1061/(ASCE)ME.1943-5479.0000022)
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Pondy, L. R. (1967). Organizational conflict: Concepts and models. *Administrative Science Quarterly*, 12(2), 296–320. <https://doi.org/10.2307/2391553>
- Poppo, L., Zhou, K. Z., & Ryu, S. (2008). Alternative origins to interorganizational trust: An interdependence perspective on the shadow of the past and the shadow of the future. *Organization Science*, 19(1), 39–55. <https://doi.org/10.1287/orsc.1070.0281>
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, 36, 717–731. <https://doi.org/10.3758/BF03206553>
- Rahim, M. A. (1983). Measurement of organizational conflict. *The Journal of General Psychology*, 109(2), 189–199. <https://doi.org/10.1080/00221309.1983.10736085>
- Rai, A., Keil, M., Hornyak, R., & Wüllenweber, K. (2012). Hybrid relational-contractual governance for business process outsourcing. *Journal of Management Information Systems*, 29(2), 213–256. <https://doi.org/10.2753/MIS0742-1222290208>
- Ramirez-Fernandez, J., Ramirez-Marin, J. Y., & Munduate, L. (2018). Selling to strangers, buying from friends: Effect of communal and exchange norms on expectations in negotiation. *Negotiation and Conflict Management Research*, 1, 208–211. <https://doi.org/10.1111/ncmr.12141>
- Robert, D., & John, R. (1982). Store atmosphere: An environmental psychology approach. *Journal of Retailing*, 58(1), 34–57.
- Sanchez-Burks, J., Neuman, E. J., Ybarra, O., Kopelman, S., Park, H., & Goh, K. (2008). Folk wisdom about the effects of relationship conflict. *Negotiation and Conflict Management Research*, 1(1), 53–76. <https://doi.org/10.1111/j.1750-4716.2007.00004.x>
- Sezen, B., & Yilmaz, C. (2007). Relative effects of dependence and trust on flexibility, information exchange, and solidarity in marketing channels. *Journal of Business & Industrial Marketing*, 22(1), 41–51. <https://doi.org/10.1108/08858620710722815>
- Simons, T. L., & Peterson, R. S. (2000). Task conflict and relationship conflict in top management teams: The pivotal role of intragroup trust. *Journal of Applied Psychology*, 85(1), 102–111. <https://doi.org/10.1037/0021-9010.85.1.102>

- Solansky, S. T., Singh, B., & Huang, S. (2014). Individual perceptions of task conflict and relationship conflict. *Negotiation and Conflict Management Research*, 7(2), 83–98. <https://doi.org/10.1111/ncmr.12027>
- Suprpto, M., Bakker, H. L., & Mooi, H. G. (2015). Relational factors in owner–contractor collaboration: The mediating role of teamworking. *International Journal of Project Management*, 33, 1347–1363. <https://doi.org/10.1016/j.ijproman.2015.03.015>
- Sven Ivens, B. (2004). How relevant are different forms of relational behavior? An empirical test based on Macneil's exchange framework. *Journal of Business & Industrial Marketing*, 19, 300–309. <https://doi.org/10.1108/08858620410549929>
- Swann, W. B., Jr, Polzer, J. T., Seyle, D. C., & Ko, S. J. (2004). Finding value in diversity: Verification of personal and social self-views in diverse groups. *Academy of Management Review*, 29(1), 9–27. <https://doi.org/10.5465/amr.2004.11851702>
- Tangpong, C., Hung, K. T., & Ro, Y. K. (2010). The interaction effect of relational norms and agent cooperativeness on opportunism in buyer-supplier relationships. *Journal of Operations Management*, 28, 398–414. <https://doi.org/10.1016/j.jom.2009.12.001>
- Thatcher, S. M., Jehn, K. A., & Zanutto, E. (2003). Cracks in diversity research: The effects of diversity faultlines on conflict and performance. *Group Decision and Negotiation*, 12(3), 217–241. <https://doi.org/10.1023/A:1023325406946>
- Thompson, L., & Hastie, R. (1990). Social perception in negotiation. *Organizational Behavior & Human Decision Processes*, 47(1), 98–123. [https://doi.org/10.1016/0749-5978\(90\)90048-E](https://doi.org/10.1016/0749-5978(90)90048-E)
- Tsai, J. S., & Chi, C. S. (2009). Influences of Chinese cultural orientations and conflict management styles on construction dispute resolving strategies. *Journal of Construction Engineering and Management*, 135, 955–964. [https://doi.org/10.1061/\(ASCE\)0733-9364\(2009\)135:10\(955\)](https://doi.org/10.1061/(ASCE)0733-9364(2009)135:10(955))
- Uлага, W., & Eggert, A. (2006). Relationship value and relationship quality: Broadening the nomological network of business-to-business relationships. *European Journal of Marketing*, 40, 311–327. <https://doi.org/10.1108/03090560610648075>
- Velez, M. L., Sanchez, J. M., Florez, R., & Alvarez-Dardet, C. (2015). How control system information characteristics affect exporter–intermediary relationship quality. *International Business Review*, 24, 812–824. <https://doi.org/10.1016/j.ibusrev.2015.02.008>
- Vos, F. G., Schiele, H., & Hüttinger, L. (2016). Supplier satisfaction: Explanation and out-of-sample prediction. *Journal of Business Research*, 69, 4613–4623. <https://doi.org/10.1016/j.jbusres.2016.04.013>
- Wang, Y., Chen, Y., Fu, Y., & Zhang, W. (2017). Do prior interactions breed cooperation in construction projects? The mediating role of contracts. *International Journal of Project Management*, 35, 633–646. <https://doi.org/10.1016/j.ijproman.2017.02.019>
- Williams, P., Ashill, N. J., Naumann, E., & Jackson, E. (2015). Relationship quality and satisfaction: Customer-perceived success factors for on-time projects. *International Journal of Project Management*, 33, 1836–1850. <https://doi.org/10.1016/j.ijproman.2015.07.009>
- Wu, G., Zhao, X., & Zuo, J. (2017). Relationship between project's added value and the trust–conflict interaction among project teams. *Journal of Management in Engineering*, 33, 04017011. [https://doi.org/10.1061/\(ASCE\)ME.1943-5479.0000525](https://doi.org/10.1061/(ASCE)ME.1943-5479.0000525)
- Yang, J., & Mossholder, K. W. (2004). Decoupling task and relationship conflict: The role of intragroup emotional processing. *Journal of Organizational Behavior*, 25, 589–605. [https://doi.org/10.1002/\(ISSN\)1099-1379](https://doi.org/10.1002/(ISSN)1099-1379)
- Zaheer, A., & Venkatraman, N. (1995). Relational governance as an interorganizational strategy: An empirical test of the role of trust in economic exchange. *Strategic Management Journal*, 16, 373–392. [https://doi.org/10.1002/\(ISSN\)1097-0266](https://doi.org/10.1002/(ISSN)1097-0266)
- Zhang, C., Cavusgil, S. T., & Roath, A. S. (2003). Manufacturer governance of foreign distributor relationships: Do relational norms enhance competitiveness in the export market? *Journal of International Business Studies*, 34, 550–566. <https://doi.org/10.1057/palgrave.jibs.8400051>
- Zhang, S., Zhang, S., Gao, Y., & Ding, X. (2016). Contractual governance: Effects of risk allocation on contractors' cooperative behavior in construction projects. *Journal of Construction Engineering and Management*, 142, 04016005. [https://doi.org/10.1061/\(ASCE\)CO.1943-7862.0001111](https://doi.org/10.1061/(ASCE)CO.1943-7862.0001111)

- Zheng, X., Lu, Y., Le, Y., Li, Y., & Fang, J. (2017). Formation of interorganizational relational behavior in megaprojects: Perspective of the extended theory of planned behavior. *Journal of Management in Engineering*, 34(1), 04017052. [https://doi.org/10.1061/\(ASCE\)ME.1943-5479.0000560](https://doi.org/10.1061/(ASCE)ME.1943-5479.0000560)
- Zhou, K. Z., & Xu, D. (2012). How foreign firms curtail local supplier opportunism in China: Detailed contracts, centralized control, and relational governance. *Journal of International Business Studies*, 43, 677–692. <https://doi.org/10.1057/jibs.2012.7>
- Zhou, Y., Zhang, X., Zhuang, G., & Zhou, N. (2015). Relational norms and collaborative activities: Roles in reducing opportunism in marketing channels. *Industrial Marketing Management*, 46, 147–159. <https://doi.org/10.1016/j.indmarman.2015.01.014>

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