

Surviving trust from conflict in the construction industry: an interaction between conflict handling behaviors, behavioral outcomes, conflict and trust

Yousong Wang and Fangfang Liu
*School of Civil Engineering and Transportation,
South China University of Technology, Guangzhou, China*

Yangbing Zhang
*Department of School of Civil Engineering and Transportation,
South China University of Technology, Guangzhou, China, and*

Enqin Gong
*School of Civil Engineering and Transportation,
South China University of Technology, Guangzhou, China*

Abstract

Purpose – This paper aims to reveal the role of conflict management in the process of trust development. Specifically, this study investigates how the salience of conflict varies with different conflict-handling behaviors and behavioral outcomes and how the variation of the salience of conflict influences the trust development between contracting parties.

Design/methodology/approach – A questionnaire survey was undertaken to collect data from 310 experienced project practitioners. Hierarchical regression analysis and bootstrapping with a structural equation model were mainly used to test the hypotheses.

Findings – This paper finds that the relational degree of conflict handling behaviors can influence the salience of conflict and furthermore to influence trust between contracting parties, with this relationship mediated by the behavioral outcomes; however, all these relationships are contingent on the stage where relational conflict handling behaviors are adopted and the specific type of outcomes the behaviors result in.

Practical implications – This study provides some specific directions for the practitioners to conduct relational conflict handling behaviors and generate positive outcomes to keep trust developing between contracting parties in conflictual situations.

Originality/value – This study contributes to the knowledge of inter-organizational trust development as well as conflict management, by investigating the relationship between conflict and trust in a direction, which is less examined and revealing the process of conflict management, where the conflict handling behaviors influence behavioral outcomes to further manage conflict, in trust development.

Keywords Behavioral outcomes, Trust, Construction industry, Conflict, Relational behaviors

Paper type Research paper



1. Introduction

Trust provides lubrication for individuals, groups and organizations to reduce conflict (Tjosvold *et al.*, 2016) and make close cooperation possible (Chua *et al.*, 2012). In the

construction industry, where conflict is common and inevitable, trust is proved to facilitate team-building (Lu *et al.*, 2015b) and improve project performance (Rezvani *et al.*, 2018). As such, the development of trust relations has become an important concern for contracting parties in the construction industry.

However, evidence has shown that conflict can influence trust development in a subversive way before the trust level is accumulated to be high enough to promote integrative conflict resolution. A major conflict midway, which is common in construction projects, can often lead to the breakdown of trust (Lau and Rowlinson, 2011), following which it is even more difficult to build trust again (Ceric, 2016). Nevertheless, the negative impact of conflict on trust is not so concrete. Sometimes, conflict's impact on trust is insignificant (Grimmelikhuijsen and Porumbescu, 2017). At other times, a conflictual situation can even help heighten one's trustworthiness when he/she adopted friendly behaviors (Ayoko and Pekerti, 2008). The controversial evidence on conflict's impact on trust requires more studies to clarify their relationship and the underlying mechanism.

Current trust studies in the construction industry have identified many trust antecedents and explored the trust development process between contracting parties. For example, the contracting parties' characteristics such as capability, benevolence and integrity have been identified as critical factors that influence their trustworthiness (Ding and Ng, 2010), while prior ties between the contracting parties will also influence the evaluation of trustworthiness (Chen *et al.*, 2018). The existence of a contract often demonstrates initial low trust or even distrust between contracting parties (Cheung *et al.*, 2014), however, a complete and clear contract will help give the parties confidence to develop trust in the following interactions (Jiang *et al.*, 2016). Immediate trust can evolve into deeper relational trust through face-to-face interaction (Girmscheid and Brockmann, 2010), while different behaviors contribute to a different perception of trust (Kadefors, 2004). However, in these studies, conflict's impact on trust is controversial: Lau and Rowlinson (2011) found it negative, while Girmscheid and Brockmann (2010) demonstrated it as insignificant. Ceric (2016) pointed out that the impact of conflict on trust is contingent on the severity of the conflict and the way it is handled and trust researchers outside the construction industry also supported the contribution of friendly behaviors to trust development in a conflictual context (Korsgaard *et al.*, 2002; Tomlinson *et al.*, 2020). However, the role of conflict in this process is not investigated in these studies.

Literature in construction conflict management also leaves the impact of conflict on trust as a gap. Current studies mainly concern about:

- how conflict influences project performance (Chen *et al.*, 2014);
- what causes conflict (Jaffar *et al.*, 2011) and how it evolves (Mahato and Ogunlana, 2011); and
- how to use different conflict-handling strategies (Tang *et al.*, 2020) or dispute resolutions (Feng and Xie, 2019) to make use of the functional conflicts and reduce the dysfunctional impacts (Liu and Zhai, 2011).

In some of these studies, trust has appeared as a factor that influences project performance together with conflict; however, it is either treated as a factor to interact with conflict (Gao *et al.*, 2019) or as a factor to facilitate integrative conflict handling behaviors (Zhang *et al.*, 2016) and to reduce conflict (Wu *et al.*, 2017). Few studies have purposely examined whether and how conflict and conflict handling behaviors may influence trust. One exception is Ayoko and Pekerti (2008), who examined how conflict types and the conflict level influence trust. They found that task conflict influences trust positively, while relationship and

process conflict influence trust negatively; conflict density mediates above relationships, while open communication moderates the relationship between conflict density and trust. Seldom have other studies examined the role of conflict and conflict handling behaviors, as well as their interaction, in the process of trust development. This makes effective conflict management strategies for surviving trust unidentified.

In summary, trust can benefit conflict management between contracting parties. However, initial trust between contracting parties is often in a form of cognitive trust and in a low level (Girmscheid and Brockmann, 2010), which needs to be accumulated with contracting parties' face-to-face interaction. Before the accumulated trust has a chance to benefit the conflict management, the trust development process may be interrupted by a major conflict which turns the relationship into a conflictual one (Ceric, 2016). Current literature in both fields of trust development and conflict management has left the role of conflict and conflict management in the trust development process vague. As such, this study aims to fill in this gap by investigating how conflict-handling behaviors reduce conflict's negative impact or facilitate conflict's positive on trust. The results and findings are supposed to not only add knowledge to the trust development and conflict management field but also to provide support for the practitioners to survive trust from conflict in the construction industry.

2. Social exchange perspective

A theory from the social exchange perspective, which is the theory of reciprocity developed by Molm and her collaborators based on a series of experiments (Molm *et al.*, 2007a), has been used as a guide to building the research model for this study. Social exchange theorists see all the social behaviors as exchange (Homans, 1958) and explain how different relational elements in social relations such as integration (Blau, 1960), power (Emerson, 1972), affect (Lawler, 2001), commitment (Lawler *et al.*, 2009) and solidarity (Molm *et al.*, 2007a), are formed during the interactions in different exchange network (Yamagishi *et al.*, 1988) or with different exchange behaviors (Molm, 2010) and exchange outcomes (Hegtvedt *et al.*, 1993). Trust, as one indicator of solidarity, has been studied in Molm's theoretical model, showing how different behaviors in the interaction influence the development of trust through the attribution process (Molm *et al.*, 2007a). The conflict has been included as one important element in the attribution process of trust development and is influenced by the exchange behaviors in Molm's model (Deutsch, 2000; Molm *et al.*, 2003). As such, the theory of reciprocity provides a helpful framework for investigating the relationship between conflict, conflict handling behaviors and trust. Besides, two other major constructs in social exchange theories, which are the exchange network and exchange outcome, have also been included in Molm's studies, due to their importance for the development of social relations (Molm, 1990). In this study where the exchange happens in dyadic interaction between contracting parties, the exchange network is not necessary to be considered. However, the behavioral outcomes, which may influence conflict, thus, influence trust (Molm *et al.*, 2006), should be considered in the investigation of the relationship among conflict handling behaviors, conflict and trust.

Therefore, to investigate the role of conflict and conflict handling behaviors in the process of trust development between contracting parties, this study proposes the following three scientific questions based on the theory of reciprocity from the social exchange perspective:

- Q1. How do contracting parties' conflict handling behaviors alter the salience of conflict between contracting parties?
- Q2. How does the salience of conflict influence trust between contracting parties?

Q3. Do the behavioral outcomes mediate the impact the conflict-handling behavior makes on the salience of conflict between the contracting parties?

3. Hypotheses development

3.1 Conflict and conflict handling behaviors

Conflicts, as the perceived incompatibility between actors (Rahim, 2002), are usually classified into task conflict and relationship conflict in the construction industry (Chen *et al.*, 2014). They are manifested as the disagreement on the construction method and the blame for the other party's working attitude (Leung *et al.*, 2005). There is still another type of conflict, which is less mentioned in studies in the construction industry but is inherent in the exchange relationships between contracting parties. That is the conflict of interest, which concerns the difference in goals and interests between the parties (Rubin *et al.*, 1994). The conflict between the contracting parties evolves through their interactions (Mahato and Ogunlana, 2011). As shown in Figure 1, task conflict lingered for a long time will make anxiety between the parties and result in a relationship conflict, which will contribute to more disagreements on jobs to escalate the task conflict (Chen *et al.*, 2014). Both task conflict and relationship conflict will highlight the incompatibility of interest between contracting parties (Fellows and Liu, 2010).

As shown in Figure 1, it is traditionally believed that reaching an agreement is the key to prevent the escalation of the conflict (Fisher *et al.*, 2011). However, social exchange researchers have found that some behaviors themselves will be helpful to the mute conflict before conflict resolution comes out. According to Molm and her colleagues (Molm *et al.*, 2003; Molm *et al.*, 2006), if one party behaves based on relational norms rather than the pre-negotiated agreement, the other party can easily frame the situation as a mutually dependent situation rather than a fixed-pie situation. This feeling of mutual dependence will make the competitive element in their exchange relationship less salient.

In the construction industry, when facing an unexpected change, the contractor may carry out a change before the formal change order is issued, which is against the contractual regulation. In turn, the owner may reciprocate this favor by issuing the formal change order as soon as possible after the contractor notifies them of these claims. In such an interaction, the parties will be more impressed by the cooperative element in their relationship rather than the competitive element, with the conflict muted between them. Even if the owner does not reciprocate this favor, such behaviors will be perceived as less intentional and adversarial. The salience of conflict will not be as high as in the comparable situation with behaviors following the contractual agreement (Molm *et al.*, 2003; Molm *et al.*, 2006).

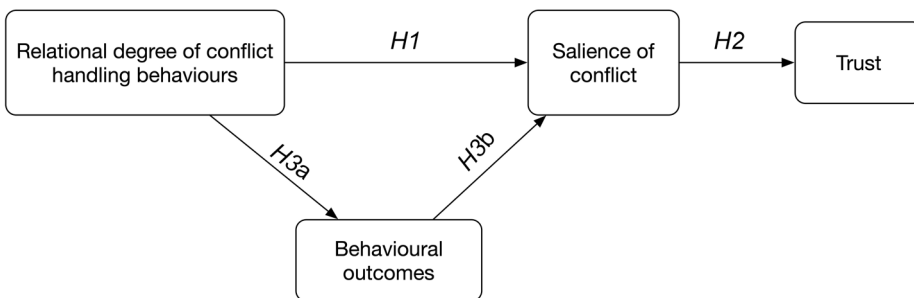


Figure 1. The interaction between the three types of conflict

As such, based on Molm's theory of reciprocity, the conflict handling behaviors in this paper are evaluated from the relational degree of them, which reflects the extent to which the conflict handling behaviors are based on relational norms rather than contractual agreements. According to the above discussion, a hypothesis about the relationship between the relational degree of conflict handling behaviors and the salience of conflict between contracting parties has been proposed as follows:

- H1.* The relational degree of conflict handling behaviors adopted by a contracting party is negatively related to the salience of conflict perceived by the other party.

3.2 Conflict and trust

Trust is a "psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another" (Rousseau *et al.*, 1998). Even though the trust between contracting parties is inter-organizational trust, it means that individuals within one contracting party trust the other contracting party of which other individuals are its members (Gad and Shane, 2014). As such, the attribution theory from the social-psychological perspective is the most commonly used theory for trust studies, which is also incorporated into Molm's theory of reciprocity.

According to the attribution theory, the salience of a factor makes it more likely to be perceived as causal (Taylor and Fiske, 1978) and only when dispositional attribution rather than situational attribution is triggered will the attribution process lead to trust development (Malhotra and Murnighan, 2002). As such, a salient conflict between the contracting parties will make the relationship and the contracting parties a more noticeable internal *locus* of attribution to trigger the dispositional attribution (Molm *et al.*, 2006). Besides, self-serving bias in the attribution determines that one will usually make attribution in a way to make his/herself feel better (Weber *et al.*, 2004). As such, the more opposed two parties' interests are perceived to be, the more likely will one perceive the other's behavior as dispositionally caused and assign negative traits and untrustworthy motives to the other (Hegtvædt *et al.*, 1993). Moreover, the salient conflict will harm trust by arousing negative emotion (Jehn and Bendersky, 2003) and dissatisfaction (De Dreu and Weingart, 2003). These negative emotional reactions, rather than cognitive processes, lead to effective bias in the attribution process to make the judgment of trustworthiness more negative (Deutsch, 2000; Molm *et al.*, 2006).

Based on the above discussion, the hypothesis about the relationship between conflict and trust is proposed as follows:

- H2.* The salience of conflict between contracting parties is negatively related to the contracting parties' trust in the partner.

3.3 Mediating effect of the behavioral outcomes

Relational behaviors are often believed to contribute to positive outcomes, especially in conflictual situations where uncertainty requires flexibility (Lu *et al.*, 2015a). However, if the relational behaviors fail to lead to satisfying outcomes, the positive impact of relational conflict handling behaviors on muting conflict may be greatly decreased. It is because that the relational conflict handling behaviors help mute the conflict of interest mainly due to its capability to frame a cooperative situation between the contracting parties, however, the

initial perception of a cooperative relationship will be teared up with negative conflict resolution outcomes (Molm *et al.*, 2003; Molm *et al.*, 2006). As such, the muted conflict of interest can be aroused again. Furthermore, according to the expectancy disconfirmation theory, an unfavorable behavioral outcome after the partner's relational conflict handling behaviors may make the conflict more severe due to the contrast between the positive expectation and the negative reality (Grimmelikhuijsen and Porumbescu, 2017). Hence, if relational conflict handling behaviors cannot lead to a positive outcome, both parties may feel more about their competition rather than the cooperation. Therefore, the positive impact of relational conflict handling behaviors on the salience of conflict is deemed to be mediated, at least partially mediated by the behavioral outcome:

H3. Behavioral outcomes positively mediate the relationship between the relational degree of conflict handling behaviors and the salience of conflict between contracting parties.

Evidence in the construction industry indicates a positive impact of relational behaviors on behavioral outcomes such as construction performance (Ling *et al.*, 2014) and claim resolution (Yuan and Ma, 2012). According to the social exchange theory, relational behaviors follow relational norms such as favor-doing, reciprocity, commitment, solidarity, participation in decision-making, problem-solving through open communication. These norms will enhance the contracting parties' extra contribution to the conflict solving process (Benitez-Ávila *et al.*, 2018). Such extra contribution leads to better information sharing and facilitates innovation in teamwork (Son and Rojas, 2010), and therefore will contribute to high performance (Chiocchio *et al.*, 2011), especially in the situation where cooperation is important for accomplishing construction work or reaching a conflict resolution (Jehn and Bendersky, 2003). Therefore, it is proposed that the relationship between relational conflict handling behaviors and behavioral outcomes is positive:

H3a. The relational degree of conflict handling behaviors adopted by a contracting party is positively related to the behavioral outcomes.

Theories on distributive justice support the importance of behavioral outcomes on influencing conflict (Deutsch, 2000). Distributive justice refers to how people evaluate the fairness of the reward distributions that result from exchanges or allocations. In other words, distributive justice results from the comparison between the behavioral outcome with the justice expectation that actors bring to the relation from past experience or social norms (Molm *et al.*, 2006). Therefore, negative outcomes will lead to perceptions of distributive injustice. According to Deutsch (2000), injustice is a source of conflict escalation. When contracting parties feel what they get from the outcome in a conflict situation is different from what they expected, they will make a judgment that the other party has a different criterion of the exchange or distribution. As such, not only is the original conflict unsolved but a new conflict concerning the incompatibility of criteria also emerges to enhance the level of conflict between the contracting parties. As such, a negative relationship between the behavioral outcomes and the salience of conflict is hypothesized as follows:

H3b. The behavioral outcomes are positively related to the salience of conflict between contracting parties.

In summary, a theoretical framework of this study is developed as shown in [Figure 2](#).

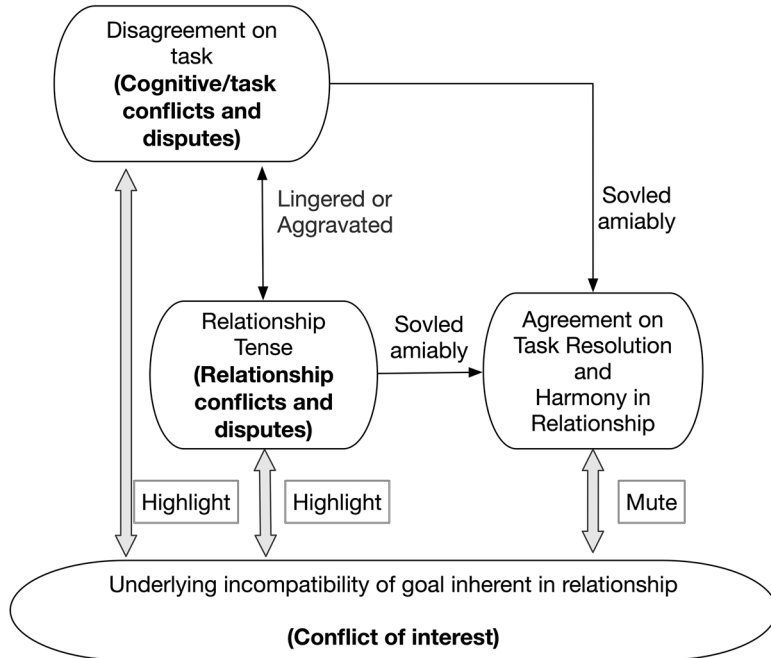


Figure 2.
The theoretical
framework of this
study

4. Methodology

4.1 Research design

A questionnaire survey was adopted in this study. A claim situation, which is a typical conflictual situation in the construction industry, is chosen as the context, to control for the variance caused by conflictual situations. The claim situation starts when a change or unexpected situation occurs entitling one party to claim against the other and ends when a resolution is reached or the claim is hanged up. Respondents were asked to recall an impressive experience in dealing with a construction claim. Based on this experience, they were asked to answer questions about the:

- the relational degree of conflict handling behaviors adopted by the other party during the claim situation,
- the respondent's perception about the salience of conflict between the contracting parties during the claim situation,
- the behavioral outcomes of the claim,
- the respondents' trust toward the other party after the claim and
- the background information of the respondents and the claims.

Target respondents were construction project team participants who had dealt with at least one claim. There is a question about the respondents' experience of dealing with construction claims at the beginning of the questionnaire to scan for the qualified respondents. To maximize the similarity of participants' personal value orientation and mental schema, which are greatly influenced by national and organizational culture

(Brett and Mitchell, 2019), only Chinese respondents working for Chinese companies were accessed.

It is hard to know about the size and composition of the population, which involves all the practitioners who have dealt with a construction claim. As such, it is impossible to use a probability sampling method. Besides, according to the research purpose of this study, which relates to testing hypotheses regarding how certain behaviors influence contracting parties' psychological state, it is unnecessary to use probability sampling (Leary, 2011). Therefore, a nonprobability sample, which is a purposive sample, is used for this study. Purposive sampling was considered to be appropriate because the respondents were chosen not randomly but based on their appropriateness and willingness to participate in the study (Wu *et al.*, 2018).

Experienced professionals were engaged in the Master of Engineering Management Program and in the Project Management training classes held by Tianjin University, who are mainly project managers and business/contract managers. They have been approached for both the pilot study and the main study. A verbal face-to-face conversation with the respondents was first conducted to introduce the questionnaire survey briefly. Then, the questionnaire survey was administered using a mobile phone App named WeChat that provided web links so that the respondents could answer the questionnaire directly through their mobile phone. Besides, some more questionnaires were distributed outside the class through WeChat after a personal telephone-conversation or text-conversation.

In the pilot study, 5 respondents were first interviewed to evaluate the clarity and appropriateness of the items one by one when answering the questionnaire. After the first revision, 101 respondents answered the revised questionnaire, with the data proceed with Cronbach's alpha Analysis and Factor Analysis to pre-test the reliability and validity of the scales. Some items that did not survive the reliability and validity of the scales were deleted, including one item in the scale of trust, i.e. "The other party is altruistic and he/she will sacrifice his/her benefit for my sake" and two items in the scale of conflict, i.e. "We had a common goal and shared the objective of effectively and efficiently solving the changes and unexpected situations" and "There was 'we' feeling between my party and the other party. We shared a common vision." The items in the final version of the questionnaire were described in Table 2 in the section *measures*.

The main questionnaire survey took approximately 10 min for each participant to complete. A total of 328 (out of 500) questionnaires were collected in the main survey. The high response rate mainly because of the great interest of the respondents in this topic: Because the questionnaire survey was conducted in MEM courses and PM training classes for experienced professionals in the construction industry, most of the respondents were aware of the importance of trust and the harm of conflict on trust development. There was a practical need for them to find out a way to survive trust from conflict. As such, most of them were willing to conduct this survey and expressed their willingness to accept further interviews if necessary. Besides, a valuable book on contract management was given to the respondent who completed the questionnaire survey as a reward. The questionnaire survey was administered by WeChat App, which required the respondents to answer all the questions before submission. Therefore, 100% of questionnaires were fully completed and 94.5% (310/328) were usable. All the background information is presented in Table 1.

4.2 Measures

Measurements were developed based on previous literature and adapted following the pilot study. Final questions and scales are given in Table 2.

Table 1.
Demographic
information of the
respondents

Variable	Sub-groups	Proportion	(%)	Cumulative (%)
Beginning time of the claim situation	Within 3 months	23	7.4	7.4
	3 months to 1 year ago	83	26.8	34.2
	1 to 2 years ago	63	20.3	54.5
	More than 2 years ago	141	45.5	100.0
	Total	310	100.0	
Contracting party's role	Owner (including consultant)	20	6.5	6.5
	Main contractor	290	93.5	100.0
	Total	310	100.0	
Possible membership	Same parent company	36	11.6	11.6
	Different parent company	274	88.4	100.0
	Total	310	100.0	
Respondent's professional role	Project/vice project manager	60	19.4	19.4
	Project sector/vice sector manager	41	13.2	32.6
	Contractual or business personnel	111	35.8	68.4
	Other	98	31.6	100.0
	Total	310	100.0	
Respondent's working experience	Less than 3 years	35	11.3	11.3
	3 to 6 years	75	24.2	35.5
	6 to 9 years	58	18.7	54.2
	More than 9 years	142	45.8	100.0
	Total	310	100.0	

Trust – Trust is “a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another” (Rousseau *et al.*, 1998). The instrument is mainly adapted from Chow *et al.* (2014) and Pinto *et al.* (2009), as shown in Table 2. These items were all measured using seven-point Likert scales that ranged in value from 1, strongly disagree, to 7, strongly agree.

Relational degree of conflict handling behaviors – The relational degree of conflict handling behaviors reflects the extent to which the overall conflict handling behaviors are out of the contractual enforcement but follow the relational norms. Conflict handling behaviors during a claim situation usually occur in two stages (Chappell, 2011): In the first stage where contracting parties deal with the unexpected issues that cause the claim and in the second stage where both parties negotiate or introduce a third party to reach a claim resolution. The second stage is closely linked to the first stage: The materials used in the negotiation stage are collected and prepared materials in the first stage (Kululanga *et al.*, 2001).

Behaviors in the first stage are called general conflict handling behaviors, the relational degree of which is reflected by the extent to which the relational behaviors are adopted to solve the unexpected issues as shown in Table 2 (Ling and Tran, 2012; Tai *et al.*, 2016; Jiang *et al.*, 2016; Laan *et al.*, 2011a). All the items were measured using seven-point Likert scales ranging in value from 1 (strongly disagree) to 7 (strongly agree). Conflict handling behavior adopted in the second stage is directly used to reach a claim resolution (Kululanga *et al.*, 2001), and therefore is called the direct conflict-handling behavior. The relational degree of direct conflict handling behaviors was measured by the exact method adopted by the contracting parties to solve the claim (Martin and Thompson, 2011), as shown in Table 2. Arbitration or litigation presented the lowest relational degree while oral promise about future reciprocation presents the highest relational degree, based on their difference in formalness (Buscaglia and Stephan, 2005) and legal enforceability (Gad *et al.*, 2016).

Construct	Measurement
Trust	<p>Please indicate your degree of agreement toward the following statements (1-strongly disagree, 4-neutral, 7-strongly agree):</p> <p>T1. The other party can meet the requirements of the project in technology and management</p> <p>T2. The other party is competent and they will use their skills and knowledge to complete the task</p> <p>T3. The other party is discreet in that they will follow through with the contract specification and institutional arrangements</p> <p>T4. The other party is reliable and will fulfill the obligations without the need for frequent reminders</p> <p>T5. The other party will keep their word throughout the life of the project</p> <p>T6. The other party will be fair throughout the life of the project</p> <p>T7. The other party is honest and they will tell us what has gone wrong in the project and proactively rectify their mistakes or may even make reasonable compensation to us for their own faults</p> <p>T8. The other party will not exploit us to maximize profits</p> <p>T9. The other party will offer assistance and support to us when we need help</p> <p>Adapted from Chow et al. (2014) and Pinto et al. (2009)</p>
Relational degree of conflict handling behaviors	<p>(General conflict-handling behavior) Please indicate your degree of agreement toward the following statements (1-strongly disagree, 4-neutral, 7-strongly agree)</p> <p>R1. The other party solved problems flexibly without referring to contract</p> <p>R2. The other party sacrificed some of their interest in the claim</p> <p>R3. The other party provided help when we faced a problem</p> <p>R4. The other party shared their information with us in a timely and honest manner</p> <p>R5. The other party did their best to complete their work rather than to meet the lowest requirements of the contract</p> <p>R6. The other party reciprocated when we provided help</p> <p>R8. When we made sacrifices for the project, the other party made similar sacrifices</p> <p>The other party kept their promises even though they were not enforceable</p> <p>Adapted from Tai et al. (2016), Jiang et al. (2016), Ling and Tran (2012) and Laan et al. (2011a)</p>
Behavioral outcomes	<p>(Direct conflict-handling behavior)</p> <p>Please select the method used to solve the claim</p> <ol style="list-style-type: none"> 1. Arbitration or litigation 2. DAB, mediation or conciliation 3. Reissue change order or sign a supplementary agreement 4. Oral promise about future reciprocation <p>Adapted from Martin and Thompson (2011)</p> <p>(Project performance relating to the claim)</p> <p>Please indicate your degree of agreement toward the statement that “the claim had been well solved with the minimum negative influence on the project” (1-strongly disagree, 4-neutral, 7-strongly agree)</p> <p>(Result of the claim)</p> <p>Had the claim been solved when you last time involved in that project?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>

(continued)

Table 2.
Constructs and
measurements

Construct	Measurement
Saliency of conflict	Equality of claim resolution 1. Please indicate the additional money that the contractor got at the end compared to that they required (1 – Much less than they required, 7 – Much more than they required. If the contractor had not claimed for additional payment, please skip) 2. Please indicate the additional time that the contractor got at the end compared to the time they require (1 – Much less than they required, 7 – Much more than they required. If the contractor had not claimed for additional time, please skip) Please indicate your degree of agreement toward the following statements (1-strongly disagree, 4-neutral, 7-strongly agree) C1. The relationship between my party and the other party was harmonious in attaining the overall project goal C2. Our relationship with the other party can be best described as tense C3. The other party was cooperative and did not attempt to attribute blame in dealing with the changes and unexpected situations Adapted from Rahim (1983)

Table 2.

Behavioral outcomes – The outcome of construction work is often referred to as the project performance ([Ling et al., 2014](#)), the outcome of a conflict negotiation often concerns whether a result or an agreement has been reached ([Yuan and Ma, 2012](#)) and the outcome of exchange is often considered with its equality of the exchange ([Molm et al., 2006](#)). In a claim situation, the conflict handling behaviors relate to both the construction work and the business negotiation in the exchange between the contracting parties. As such, the behavioral outcomes during a claim situation are measured from the following three aspects, i.e. the project performance relating to the claim, the result of claim resolution (solved or not) and the equality of claim resolution.

The project performance relating to the claim refers to the cost, time and quality of the project influenced by the claim, measured with one item using a seven-point Likert scale as shown in [Table 2](#). The result of the claim refers to the final status of the claim as resolved or not, measured with a yes/no option for the respondents to choose from. Equality of outcome (EO), which refers to the difference between the give and the take, as measured by the comparison of the additional money or time the contractor got (the owner paid) at the end, compared to what they claimed (1 = far less than required, 7 = much more than required). When the respondent belongs to the owner, the score was reversed. When the claim involved both money and time (EOM and EOT), $EO = (EOM + EOT) / 2$; when the claim involved either time or money, EO equaled the score of the available one (EOM or EOT). When the claim was unresolved or resolved without compensation of money or time, $EO = 1$.

Saliency of conflict – Conflict studied in this paper involves all three types of conflict including the task conflict, relationship conflict and interest conflict. [Rahim's \(1983\)](#) conflict scale, which has been adapted by [Chen et al. \(2014\)](#) to measure conflict in construction projects, has contributed a lot to the instrument development in this study. All the items were measured using seven-point Likert scales that ranged in value from 1, strongly disagree, to 7, strongly agree.

Control variables – Five variables measuring the pre-existing relationships between contracting parties were incorporated as control variables, due to their significant correlations with trust. They are:

- (1) the similarity of their working styles (Jin and Ling, 2005),
- (2) the familiarity of their working styles (Laan *et al.*, 2011b);
- (3) the closeness of their relationship (Cheung *et al.*, 2014);
- (4) the possibility of future cooperation between them (Ling and Tran, 2012); and
- (5) the formal organizational arrangement that regulates the formal relationship (Lau and Rowlinson, 2011).

Besides, the size of the claim was also included as a control variable, for the consequence of a conflict will influence the conflict handling process, the outcomes, as well as the perceptions during the process (Lumineau *et al.*, 2015). Considering the relevance of respondents' backgrounds and their answers, the background variables were also statistically controlled in the hypotheses test as control variables after a stepwise regression analysis for selection (Bono and McNamara, 2011).

5. Data analysis and results

5.1 Reliability and validity test

Using the data collected from the 310 respondents, we ran a confirmatory factor analysis (CFA) to assess the reflective measures' reliability and validity. The fit statistics of the three-factor measurement model are deemed satisfactory ($\chi^2/df = 546.887/167 = 3.275$, goodness-of-fit index (GFI) = 0.842, comparative fit index (CFI) = 0.922, incremental fit index (IFI) = 0.922, normed fit index (NFI) = 0.892 and root mean square error of approximation (RMSEA) = 0.086) (Hair *et al.*, 2006). Average variance extracted (AVE) and composite reliability (CR) were calculated to test the convergent validity and construct reliability; AVE squared root was calculated to test the discriminant validity. Cronbach's alpha coefficient was conducted to justify the reliability of the scales. The results are summarized in Table 3.

All the scales meet the criteria of good reliability and validity, with AVE higher than 0.5, CR higher than 0.7, Cronbach's alpha coefficient higher than 0.8 and AVE Squared Root higher than the factor's correlations with other factors (Table 4) (Hair *et al.*, 2006). Hence, all the scales have passed the reliability and validity test and can be used for hypotheses tests.

5.2 Hypotheses test

Data were analyzed using correlation analysis and hierarchical multiple regression. Mediation effects are examined with the Baron and Kenny (BK) method (Baron and Kenny, 1986) and verified with bootstrapping technique (Creedon and Hayes, 2015). Before the hypotheses test, the possibility of common method variance was examined using Harman's one-factor test (Podsakoff *et al.*, 2003), with the result satisfying the required threshold ($42.26\% < 50\%$).

The result of the correlation analysis in Table 4 shows that the relational degree of general conflict-handling behavior positively relates to the salience of conflict and trust. All three indicators of relational outcomes positively correlate to both the relational degree of general conflict handling behaviors and the salience of conflict. Such correlations show preliminary support to *H1*, *H2* and *H3* (including both *H3a* and *H3b*). However, the relational degree of direct conflict-handling behavior does not relate to any variables of the behavioral outcomes, the salience of conflict or trust, implying that the relational conflict

Constructs	Items	Factor loading	Standardized coefficients	Cronbach's alpha	CR	AVE	AVE ROOT
Trust	T1	0.637	0.560	0.896	0.90	0.50	0.71
	T2	0.662	0.573				
	T3	0.767	0.725				
	T4	0.722	0.704				
	T5	0.849	0.852				
	T6	0.858	0.869				
	T7	0.775	0.736				
	T8	0.668	0.607				
	T9	0.704	0.656				
Relational degree of conflict handling behaviors	R1	0.889	0.867	0.964	0.96	0.77	0.88
	R2	0.871	0.846				
	R3	0.923	0.915				
	R4	0.889	0.874				
	R5	0.888	0.871				
	R6	0.921	0.914				
	R7	0.887	0.870				
	R8	0.897	0.882				
Conflict	C1	0.874	0.864	0.801	0.81	0.59	0.77
	C2	0.888	0.831				
	C3	0.772	0.571				

Table 3.
Results of the reliability and validity analysis

Note: All the items T1 to T9, R1 to R8 and C1 to C3 respond to those in [Table 2](#)

handling behaviors directly used for reaching a conflict resolution is incapable to influence the salience of conflict and trust, whether through the behavioral outcomes or not. To verify the relationships reflected in the correlation analysis, a series of hierarchical regression analyzes are conducted to test the unique impact of the independent variables on the dependent variables in each hypothesis.

[Table 5](#) shows the result of hierarchical regression analyzes for Hypothesis *H1* and *H2*. In Model 1, the control variables' impacts on the salience of conflict were tested. The result shows that many of the background variables, including familiarity of working styles, the closeness of the relationship, possibility of future cooperation and formal organizational arrangement, can significantly and negatively influence the salience of conflict. Then, Model 2 added the independent variables, i.e. the relational degree of general and direct conflict handling behaviors, into the equation. The result shows that the relational degree of general conflict handling behaviors can make a significant unique impact on the salience of conflict ($\beta = -0.222, p < 0.005$), while the relational degree of direct conflict-handling behavior cannot ($\beta = 0.040, p > 0.05$). Therefore, hypothesis *H1* about the relationship between the relational degree of conflict handling behaviors and the salience of conflict is partially supported. Besides, the impact of the possibility of future cooperation on the salience of conflict becomes insignificant in Model 2, indicating that its contribution may be totally mediated by relational behaviors.

Model 3 shows control variables' impacts on trust. Three background variables, which are the similarity of working styles, the closeness of the relationship and formal organizational arrangement, have a significant influence on trust. Model 4 added the relational degree of conflict handling behaviors (both general and direct) and Model 5 added the salience of conflict into the equation. The result in Model 5 shows that the salience of conflict between the contracting parties has a significant and negative impact on trust ($\beta =$

	Mean (S.D.)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	AVE root
Relational degree of general conflict handling behaviors (1)	2.74 (1.69)	—	0.120*	0.313***	0.182***	0.281***	-0.342***	0.463***	0.88
Relational degree of direct conflict handling behaviors (2)	3.00 (0.75)	0.120*	—	0.012	-0.009	-0.050	-0.077	0.030	—
Project performance relating to the claim (3)	4.51 (1.79)	0.313***	0.012	—	0.442***	0.475***	-0.535***	0.500***	—
Result of claim resolution (4)	0.63 (0.48)	0.182***	-0.009	0.442***	—	0.638***	-0.246***	0.214***	—
Equality of claim resolution (5)	2.71 (1.69)	0.281***	-0.050	0.475***	0.638***	—	-0.254***	0.272***	—
Salience of conflict (6)	3.62 (1.31)	-0.342***	-0.077	-0.535***	-0.246***	-0.254***	—	-0.578***	0.77
Trust (7)	3.98 (1.11)	0.463***	0.030	0.500***	0.214***	0.272***	-0.578***	—	0.71

Notes: *** $p < 0.005$, ** $p < 0.01$; * $p < 0.05$

Table 4.
Correlations between
the variables in the
hypotheses

Dependent variables	Salience of conflict			Trust	
	Model 1	Model 2	Model 3	Model 4	Model 5
<i>Control variables</i>					
Size of the claim	-0.069n.s.	-0.077n.s.	0.057n.s.	0.065n.s.	0.032n.s.
Similarity of working styles	-0.067n.s.	-0.065n.s.	0.120*	0.119 [†]	0.091*
Familiarity of working styles	-0.135*	-0.146**	-0.029n.s.	-0.012n.s.	-0.075n.s.
Closeness of relationship	-0.199***	-0.150*	0.166***	0.094n.s.	0.029n.s.
Possibility of future cooperation	-0.138*	-0.109n.s.	0.083n.s.	0.051n.s.	0.004n.s.
Formal organizational arrangement	-0.183***	-0.123 [†]	0.401***	0.309***	0.256***
<i>Independent variables</i>					
Relational degree of general conflict handling behaviors	-	-0.222***	-	0.317***	0.221***
Relational degree of direct conflict-handling behavior	-	-0.040n.s.	-	0.014n.s.	-0.003n.s.
<i>Mediating variable</i>					
Salience of conflict	-	-	-	-	-0.431***
F	11.688***	11.397***	17.529***	19.542***	31.358***
Adjusted R ²	0.172	0.212	0.243	0.324	0.469
R ²	0.188	0.232	0.258	0.342	0.485

Table 5.
Results of
hierarchical
regression analysis
for H1 and H2

Notes: *** $p < 0.005$, ** $p < 0.01$; * $p < 0.05$, n.s. = insignificant. Stepwise regression is conducted in the first hierarchy of all the hierarchical regression analyzes to select significant demographic variables to enter the regression as a control variable

-0.431, $p < 0.005$). Therefore, hypothesis H2 is supported. Furthermore, the significant impact of the closeness of relationship on trust in Model 3 turns insignificant after adding the conflict handling behaviors as shown in Model 4. Hence, it is possible that the conflict handling behaviors can totally mediate the impact of the closeness of relationship on trust. While the significant impact of the relational degree of general conflict handling behaviors on trust in Model 4 ($\beta = 0.317$, $p < 0.005$) remains significant in Model 5 after adding the salience of conflict into the model ($\beta = 0.221$, $p < 0.005$). As such, it is inferred that relational conflict handling behaviors in general interaction in a conflictual situation not only make trust survive throughout the conflict but also directly help trust development between contracting parties.

Table 6 shows the result of hierarchical regression analyzes for Hypothesis H3. Models 6, 7 and 8 have incorporated the control variables and the independent variables, with the result showing that the relational degree of general conflict handling behaviors has a positive unique impact on the project performance relative to the claim ($\beta = 0.253$, $p < 0.005$), a positive unique impact on the result of claim resolution ($\beta = 0.286$, $p < 0.01$) and a positive unique impact on the equality of claim resolution ($\beta = 0.170$, $p < 0.005$), respectively. Model 9 has added the mediating variables (the three indicators of behavioral outcomes) into the equation. The result shows that the project performance has a negative unique impact on the salience of conflict ($\beta = -0.433$, $p < 0.005$), while the result of claim resolution has no significant impact on the salience of conflict ($\beta = -0.037$, $p > 0.05$), nor does the equality of claim resolution ($\beta = 0.049$, $p > 0.05$).

Based on the BK method because:

Dependent variables	Project performance Model 6	Result of claim resolution Model 7	Equality of claim resolution Model 8	Salience of conflict Model 9
<i>Control variables</i>				
Size of the claim	0.046n.s.	-0.235**	0.013n.s.	-0.067n.s.
Similarity of working styles	0.047n.s.	0.166n.s.	0.056n.s.	-0.042n.s.
Familiarity of working styles	0.091n.s.	0.597*	0.109*	-0.100*
Closeness of relationship	0.033n.s.	-0.163n.s.	-0.079n.s.	-0.136*
Possibility of future cooperation	0.022n.s.	-0.355n.s.	0.004n.s.	-0.099n.s.
Formal organizational arrangement	0.119n.s.	0.156n.s.	0.116**	-0.079n.s.
Respondent's professional role (contractual/business personnel)	-0.114*	-0.641*	-	-
Contracting party's role	-	-	-0.491***	-
Beginning time of the claim situation (less than 3 months)	-	-2.801***	-0.145***	-
Beginning time of the claim situation (3 months to 1 year ago)	-	-1.336***	-0.161***	-
Beginning time of the claim situation (1 to 2 years ago)	-	-0.768*	-	-
<i>Independent variables</i>				
Relational degree of general conflict handling behavior	0.253***	0.286**	0.170***	-0.117*
Relational degree of direct conflict-handling behavior	-0.022n.s.	-0.001n.s.	-0.025n.s.	-0.045n.s.
<i>Mediating variables</i>				
Project performance	-	-	-	-0.433***
Result of claim resolution	-	-	-	-0.037n.s.
Equality of claim resolution	-	-	-	0.049n.s.
F	5.657*	69.187*** (Chi-square)	14.865***	17.540***
Adjusted R ²	0.119	0.200 (Cox and Snell R ²)	0.330	0.371
R ²	0.145	0.273 (Nagelkerke R ²)	0.354	0.393

Notes: *** $p < 0.005$, ** $p < 0.01$, * $p < 0.05$, n.s. = insignificant. Model 7 used logistic regression. Stepwise regression is conducted in the first hierarchy of all the hierarchical regression analyzes to select significant demographic variables to enter the regression as a control variable

Table 6. Results of hierarchical regression analysis for H3

- the negative impact the relational degree of general conflict handling behaviors makes on the salience of conflict is significant (see Model 2),
- the positive impact the relational degree of general conflict handling behaviors makes on the project performance is significant (see Model 6) and
- the negative impact the project performance makes on the salience of conflict is also significant (see Model 9), it is inferred that the project performance relating to the claim mediates the relationship between the relational degree of general conflict handling behaviors and the salience of conflict (Baron and Kenny, 1986).

Besides, as the independent impact of the relational degree of general conflict handling behaviors on the salience of conflict remains significant after adding the project performance into the equation (see Model 9, $\beta = -0.117$, $p < 0.05$), it is inferred that the project performance only partially mediates the relationship between the relational degree of

general conflict handling behaviors and the salience of conflict. Therefore, *H3* is partially supported.

The mediating effects of the other two types of behavioral outcomes, i.e. the result of claim resolution and the equality of claim resolution, are denied with the BK method. It is because that their impacts on the salience of conflict are insignificant as shown in Model 9. However, due to the limitation of the BK method in testing the significance of the mediating effects, a structural equation modeling approach with bootstrapping technique was adopted to verify the result of the BK method (Cheung and Lau, 2008; Özdil and Kutlu, 2019)[1]. The results of the mediating effects and their significance are reported in Table 7, also supporting the significant mediating effect of the performance and the insignificant mediating effects of both the result of claim resolution and the equality of claim resolution.

As such, it can be concluded that the relational degree of conflict handling behaviors can influence the salience of conflict and furthermore to influence the trust between contracting parties (as hypothesized in *H1* and *H2*), with this relationship mediated by the behavioral outcomes (as hypothesized in *H3*); however, all these relationships are contingent on the stage where relational conflict handling behaviors are adopted and the specific type of outcomes the behaviors result in. In particular, the relational conflict handling behaviors used in general interaction in a conflictual situation rather than direct for the claim resolution will significantly reduce the salience of conflict, partially through improving the project performance relating to the claim. Besides, many background variables can influence the salience of conflict and trust between contracting parties; some are totally mediated by the relational behaviors, but some remain to make direct impacts and need to be paid attention to.

6. Discussion

6.1 Theoretical implications

First, this study examines the relationship between conflict and trust in a direction that has been less studied. Previous studies often focus on the benefit that trust can bring in managing conflict between different parties (Wu et al., 2017). However, the studies about the influence of conflict on trust are relatively fewer, with the argument of the relationship controversial: Curşeu and Schruijer (2010) assert that trust can influence conflict however it is not influenced the other way round, while Ayoko and Pekerti (2008) show that conflict can influence trust. This research has provided empirical evidence to support the negative impact of conflict on trust, as well as the positive impact of relational conflict handling behaviors on trust. As such, more studies are appealed to examine the relationship between conflict, conflict handling behaviors and trust and to find out the factors that lead to controversial results.

Table 7.
Bootstrapping
results on the
mediating effect

Parameter	Estimate	Lower	Upper	<i>p</i>
Ind1(project performance) = a1*b1	-0.085	-0.140	-0.043	0.000
Ind2(result of claim resolution) = a2*b2	-0.005	-0.029	0.010	0.455
Ind3(equality of claim resolution) = a3*b3	0.006	-0.008	0.030	0.320
Totind = ind1 + ind2 + ind3	-0.084	-0.137	-0.042	0.000
Total = Totind + c (direct effect)	-0.174	-0.268	-0.088	0.000

Notes: Bootstrap resampling = 2,000; *ind* means the indirect effect, *Totind* means the total indirect effect, *Total* means the total effect

Second, this study clarifies the process of how relational conflict handling behaviors influence trust through altering the contracting parties' perception of conflict. Previous studies have tried to explain the positive impact of relational behaviors on trust in a conflictual situation (Korsgaard *et al.*, 2002; Tomlinson *et al.*, 2020). However, the role of conflict in this process remains vague. This study has shown that relational conflict handling behaviors are capable to reduce the salience of conflict between the contracting parties, which has a negative impact on trust between the contracting parties. Besides, the relational conflict handling behaviors not only influence trust through managing conflict but also make an impact on trust directly. It may be due to their capability to arouse positive affect in the attribution process (Molm *et al.*, 2007b), which remains for future studies to make an examination.

Besides, this study distinguishes the different roles of relational conflict handling behaviors in trust development. In a conflictual situation, the relational behaviors indirectly relate to conflict resolution will work better in reducing conflict and facilitating trust development. Comparatively, relational behaviors directly used to reach a conflict resolution may be too late to mute the conflict, and therefore lose their capability to survive the trust relation from a conflict situation. The differentiation of relational conflict handling behaviors' impact on trust appeals more deliberate studies to distinguish the relational conflict handling behaviors in different stages and examine their impacts on trust, respectively, in future studies.

At last, this study adds empirical evidence to the relationship between contract, conflict and trust between contracting parties. In this study, the formal organizational arrangement, which mainly refers to the contractual arrangement between the contracting parties, is found to be a factor that makes a significant contribution to the reduction of conflict and development of trust. Conflict and trust are two important elements in relationships (Balliet and Van Lange, 2013) and contract relates to both of them. Some researchers have discussed the impact of the contract on conflict, believing that a contract can induce conflict between contracting parties (Bai *et al.*, 2016). Some researchers concerned more about the relationship between contract and trust, arguing about whether their relationship is complementary or supplementary (Mellewig *et al.*, 2007). Then, some researchers have discussed contract, conflict and trust together (Malhotra and Lumineau, 2011). Although this study mainly discusses the relationship between conflict and trust, the contract is also an indispensable factor that has been included in this study. As shown in this study, the formal organizational arrangement not only reduces the salience of conflict but also positively influences trust both directly and indirectly through conflict. These results deny the role of contract in inducing conflict and support the complementary relationship between contract and trust. With these results, it can be concluded that a contract, as well as other formal organizational arrangements, is beneficial for the development of the cooperative relationship between the contracting parties.

6.2 Practical implication

First, this study provides theoretical support for the practitioners to adopt relational behaviors, especially in a conflictual situation, when developing trust relations with the partner is one of their primary concerns. Besides, this study reveals that the relational conflict handling behaviors indirectly, rather than directly, related to conflict resolution has a significant impact on the salience of conflict and trust. As such, practitioners should adopt relational behaviors in the early stage of a conflictual situation. For example, when a claim situation starts, the contractor can voluntarily conduct some works which are not detailed in the contract or the drawings, commence work before receiving a formal letter of award in an

emergency, resolve technical matters face-to-face without raising a formal request, propose some useful and practical ways to reduce the owner's cost, solve problems before allocating the responsibility, etc (Lau and Rowlinson, 2009). Similarly, the owner can let the contractor freely take own course to fulfill the obligations, respond to the contractor's requests quickly, make advanced payment to the contractor to deal with the changes and unexpected circumstances, offer financial support to the contractor if the contractor is in financial difficulty, provide free material support to the contractor, etc (Lau and Rowlinson, 2009). Such relational behaviors conducted in the early stage of a conflictual situation will help reduce the contracting parties' perception of the competitive aspect of their relationship to focus more on cooperation.

In addition, this study provides some background factors that need to be paid attention to when managing conflict and developing trust. According to the results in this study, the conflict between contracting parties can be influenced by the familiarity of working styles, the closeness of the relationship, the possibility of future cooperation and formal organizational arrangement. Practitioners can manage conflict from these aspects during different stages of the project life-cycle. For example, the practitioners can choose partners with a close relationship and familiar working styles through invited bidding in the bidding stage of the project. The practitioners can also draft comprehensive contractual agreements and set rigor rules within the construction project team with the partners at the beginning of the project. During the construction process, an implication for future cooperation will be a cheap way for the contracting parties to manage conflict. With these practices, the conflict of interest between the contracting parties will be muted or well managed and the danger of ruining the trust between contracting parties is reduced. Except for the factors that influence conflict, the similarity of working styles between the contracting parties has been found to make a significant impact on trust without influencing conflict, which is also an important point that can be made use of when developing trust with the partners.

6.3 Limitations and future directions

This study mainly adopts the questionnaire survey for empirical analysis. Despite the large size of the survey sample, the subjects are all Chinese respondents, although the projects involved covering international projects in different countries and the respondents' counterparties also involve foreign entities. As such, the results in this study may be influenced by the Chinese culture where people pay more attention to relationship management in their daily interactions. Therefore, future studies can access more respondents from different countries to testify the stability of the research results and findings in this study in the construction industry worldwide or to find out the difference across cultures. Besides, the questionnaires are mainly collected in four classes held in Tianjin, Beijing, Hebei and Wuhan in China, which means the generalization of the results even in China should also be careful, due to the vast territory of China. As such, more samples in different provinces can be added in future studies to at least present a better picture of the trust development in the Chinese construction industry.

Other directions for future studies have been discussed in the part of theoretical implication, including:

- the investigation of contingent factors that lead to the different results about the relationships between conflict, conflict handling behaviors and trust,
- the investigation of the different mechanisms underlying the process that relational conflict handling behaviors influence trust; and

- the investigation of relational conflict handling behaviors' impact on trust in different stages of an interaction.

All these future studies are supposed to add knowledge to trust development and conflict management in the construction industry and provide better suggestions for the practitioners to manage construction projects and construction organizations more effectively and efficiently.

7. Conclusion

This study empirically investigates the relationship between conflict, conflict handling behaviors, behavioral outcomes and trust between contracting parties. We find that the relational degree of conflict handling behaviors can influence the salience of conflict and furthermore to influence trust between contracting parties, with this relationship mediated by the behavioral outcome; however, all these relationships are contingent on the stage where relational conflict handling behaviors are adopted and the specific type of outcomes the behaviors result in.

This research has innovated on and contributed to, the existing knowledge in two main ways. First, this study has investigated the relationship between conflict and trust in a direction, which is less examined in previous studies. Lots of studies have been aware of the benefits brought by trust in facilitating integrative conflict management. This study proposes a relationship between conflict and trusts the other way round that the relational conflict handling behaviors can reduce the salience of conflict to benefit trust development. By doing so, a comprehensive cycle has been completed between conflict, conflict handling behaviors and trust. Second, this research reveals the interaction between conflict handling behaviors and conflict in the process of trust development. Previous studies have investigated conflict's and conflict handling behaviors' impact on trust development, respectively; however, few of them have examined how conflict alters with different conflict-handling behaviors, as well as different behavioral outcomes, to influence trust eventually. This research contributes to this knowledge.

Moreover, this research could also supply guidance for project practice in the construction industry. First, due to the capability of relational conflict handling behaviors in reducing the salience of conflict and improving trust between contracting parties, it is encouraged for contracting parties to adopt relational conflict handling behaviors to survive trust relations from conflict. Besides, more specific directions for the practitioners to conduct relational conflict handling behaviors and generating positive outcomes have been proposed, based on various relational behaviors' and behavioral outcomes' impact on trust. In all, this study is supposed to advance the theoretical and practical understanding of conflict management and trust development for the contracting parties in the construction industry.

Note

1. Many because of a reviewer's recommendation to use this method.

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Corresponding author

Yangbing Zhang can be contacted at: zhangyangbing1989@163.com