

# The Values of Apology in Incentivizing Construction Dispute Settlement



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## Introduction

An Apology Ordinance (AO hereafter) was enacted in July 2017. This is in response to push of the Hong Kong Government in developing Hong Kong into the dispute resolution hub in the South East Asia region. For this, mediation has been identified to be the primary alternative dispute resolution mechanism for use in Hong Kong. To promote the use of mediation, a steering committee on mediation was established in 2012 by the then secretary for justice. Having an apology legislation was one of the key recommendations of the committee. It was believed that making apology can be a valuable settlement option in mediation. Moreover, it is of equal importance to protect an apology offeror who has taken step to enhance chance of settlement. In this connection, apology ordinance has been enacted in the United States, Canada, Australia and England [1]. Hong Kong has taken similar step and enacted CAP 631 of the Laws of Hong Kon on 13th July 2017. The aim of the AO is to promote and encourage the making of apologies as a means to prevent the escalation of disputes and thereby facilitate their amicable resolution.

Negotiation has proven to be the most efficient means to resolve dispute because of the time and cost efficiency [2]. Combating settlement barriers [3] would enhance the chance of amicable negotiation [4–7]. Levi [8] suggested that offering an apology might reignite the desire for settlement by healing emotional injury. This study advocates that offering an apology can bring catalytic effect on reciprocating positive responses. Kelman [9] pioneered this concept and proposed the theory of Response Restriction (RR). In dispute negotiation, this would mean one's negotiation attitude

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can be changed by the behaviours of the negotiating counterpart [9]. The first part of the study applies the theory of RR to construction dispute negotiation (CDN hereafter) and has four parts:

- (a) To conceptualize apology in CDN;
- (b) To propose a relationship framework between apology and response in CDN;
- (c) To test the relationship framework developed in (b); and
- (d) To analyze the implications of offering apology in CDN.

The second part of the study focuses on the use of apology in mediation. Section “[Part One of the Study—Application of the Theory of RR in CDN](#)” of the AO emphasize the AO wishes to encourage a wider use of mediation by offering legal protection on the use of apology. In Hong Kong, mediation has become an integral part of the construction contractual dispute resolution regime. The part of the study aims to identify the prerequisite conditions that lead to settlement of disputes in mediation; and explore the incentivizing effects of an apology in harvesting the prerequisites.

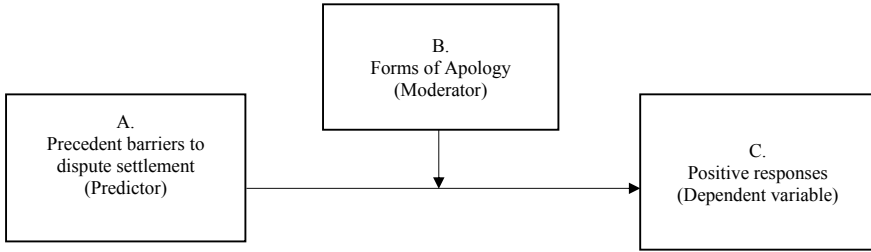
## **Part One of the Study—Application of the Theory of RR in CDN**

### *The Conceptual Bases of the Study*

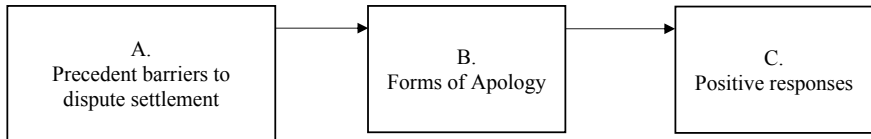
Resolving construction dispute almost always starts with negotiation [10]. Most negotiation studies are premised that negotiators are having full control of the negotiation including the form and process. Moreover, if negotiators only focus on their own wills, settlement would be unlikely. Working together is an important ingredient of a negotiated settlement [11, 12]. The theory of response restriction (RR) [9] described RR as “*any action on the part of A (a person or group, e.g., the communicator) which limits B’s (the recipient’s) choice of behaviour and thus influences B towards a response that is favoured by A*”. In CDN, disputing party’s attitude and opinion would change respective to the actions taken from the counterpart. If the response to an apology is a positive one, the gap between the parties is narrowed by overcoming precedent barriers. Three constructs are involved: (1) Barriers against settlement; (2) Forms of apology and (3) Responses towards an apology. The relationships among these three constructs are presented in Figs. 1 and 2.

### **Barriers Against Settlement**

Three forms of barrier against settlement had been identified by Korobkin [13]. These are institutional, organisational and psychological. For this study, psychological barriers are the most relevant. Ross and Ward [3] outline the following ways



**Fig. 1** An apology-response restriction relationship (apology as a moderator)



**Fig. 2** An apology-response restriction relationship (apology as a mediator)

decisions are influenced by psychological barriers: (1) cognitive and motivational processes, (2) feelings of gain or loss; (3) risk evaluation; (4) information interpretation; and (5) priority setting. Based on these, the psychological barriers against settlement in CDN are categorized as: (1) dissonance arising from the past; (2) optimistic bias; (3) loss aversion; (4) subjective construal and (5) devaluation of adversary’s concessions.

(a) Dissonance Arising from the Past

Festinger [14] used Cognitive dissonance theory to explain that humans are reluctant to take action that is contrary to their belief because one is inclined to maintain one’s cognitive consistency. In short, one’s behaviours are reflective of their beliefs, values, or feelings. This will ensure that they will feel comfortable with their behaviours. From another angle, it is not easy to change one’s course of action as this would imply some forms of inconsistency when compared with the past. Applying this conception to dispute negotiation, Ross and Ward [3] found that a negotiator would refrain from retracting from his previous stances of the dispute. Settlement will thus be less likely if the negotiator had been maintaining a negative position.

(b) Optimistic Bias

When one is overly optimistic about their positions, they are having unwarranted confidence of their judgments [15]. In dispute negotiation, it is not surprising to find negotiators are having strong faith in their cases [16]. Unwarranted optimism may lead to irrational decisions [17]. Lichtenstein et al. [17] further found that more difficult tasks are likely to derive excessive confidence. Ma [15] explained that over-confidence has both internal (cognitive) and external (environmental) dimensions.

Under cognition, three sub-dimensions are identified. The first is ‘differential attention’ that describes the tendency of human beings to refer to information that are supportive to their preferred outcomes [13]. This preference is also termed as ‘biased recall’ by Hastorf and Cantril [18]. Thus, a construction dispute negotiator would only attend to information that support his position. The second sub-dimension is called ‘above-average effect’ under which a negotiator considers himself better than the average while his counterpart is worse than the average [13]. The third sub-dimension is called ‘illusion of control’ and refer to the phenomenon where a negotiator believes that he has the power to control the outcome of the negotiation [13].

#### (c) Loss Aversion

Kahneman and Tversky [19] found that human beings are risk averse towards uncertainties. A loss-averse negotiator will thus avoid making decisions to avoid his perceived potential loss. Prospect theory explains that a settlement is more likely be viewed as loss than gain for a loss-averse [3].

#### (d) Subjective Construal

Construal theory explains how one perceive, comprehend, and interpret external stimulations. Two subcategories of subjective construal effects are identified. These are consensus effect [20] and fundamental attribution error [21]. False consensus effect can be viewed as a kind of cognitive bias that explains why humans are inclined to believe that their positions are more reasonable and better than those of the counterpart. Ross [20] added that the bias is not necessary supported by facts. Fundamental attribution error is related to one’s perception that may be instigated by speculations [21]. In CDN, subjective construal would crystallise one’s position notwithstanding there may not have been sufficient objective analyses.

#### (e) Devaluation of Adversary’s Concessions

Reactive devaluation [22] is the theoretical base that explains the habitual devaluation of others’ opinions and suggestions. Is a kind of cognitive bias against proposed by his/her counterpart are always against his/her benefits [14, 23]. The effect of reactive devaluation is drawing premature boundary of the solution set [24]. Ross [25] added that attitude polarization would be aggregated by the attitude of reactive devaluation in downgrading of other proposals with one’s proposal becomes the sole one that is considered to be worthwhile [26].

Assisted by the afore-mentioned literature review, the potential barriers against settlement have been identified. It is proposed that apology can be used as the stimulating action of the Kelman’s RR framework. In offering an apology, the apologizer (A) is prompting an altitude change of the recipient of the apology (B). Under the theory of RR, making apology can channel the disputing parties to positive responses whereby narrowing the gap between them.

## Forms of Apology

An apology can be seen as an expression of repentance or sorrow [27]. “I am sorry” is the most commonly used expression that can be taken as an admission of liability or simply a gesture of courtesy, good faith or sympathy. Orenstein [28] asserted that a genuine apology should entail the followings. First, the grievance should be acknowledged. Second, there has been violation respective to specific rule or norm. Third, the harm inflicted is understood. Fourth, certain admission of responsibility is expressed. Fifth, element of regret for the injury is presented. Sixth, there is a wish for maintaining relationship. Seventh, the wrongful act will not be repeated. Eighth, compensation will be offered to the injured.

The positive effect of an apology in dispute negotiation is to patch psychological harm [29]. It is therefore not suggested that apology can have effect in every negotiation. It is also important to catch the favourable time if making an apology. The following section discusses the forms of apology that may be made. Levi [8] suggested two generic forms of apology: tactical and win-win. Operationalising this categorisation in the context of construction dispute negotiation, four forms of apology of potential use are proposed. These are (1) Ice-breaking apology, (2) Conciliatory apology; (3) Reality-checking apology and (4) Congruence-driving apology.

### (a) Ice-breaking Apology

Ice-breaking apology aims to unleash deadlock by conveying empathy to the counterpart. Pruitt [30] opined that ice-breaking apology has attitude-restructuring effect that may remove stereotyping of the apology offeror. Ideally, the attitude change is one on trust [31]. If this is materialised, ice-breaking apology would successfully improve the conditions for negotiation between the disputing parties [32].

### (b) Conciliatory Apology

Conciliatory apology is attached with acknowledging conducting misbehaviour and seeks the understanding of the counterpart [32]. Conciliatory apology would also explicitly address the sufferer’s feelings explicitly and invite acceptance of the apology. Such apology embraces conciliatory intents and aims for reduction in anger. This would create the environment for the sufferer to render forgiveness [33].

### (c) Reality-checking Apology

Reality checking is commonly used by third-party neutrals to help disputing parties to be pragmatic [34]. In mediation, reality checking tactics are used to avoid parties anchoring on unrealistic expectations. Through checking on the likely outcome if the current impasse is maintained, the parties are invited revisit their positions by stepping into the shoes of the counterparts [8]. When parties are taking a pragmatic approach, rational decisions are more likely.

#### (d) Congruence-driving Apology

By congruence-driving, the apology is made for a win–win settlement [35]. If the prospect of having settlement can be construed, settlement focused efforts can be engendered [36]. Offering a congruence-driving apology indicates the desire to end the dispute and the willingness to pursue common goals. Schweitzer et al. [37] suggested that congruence-driving apology must be sincere and accompanied with (1) candour, (2) remorse, and (3) commitment to change.

### Responses Towards an Apology

Kelman [38] identified six forms of positive sentiment that underpin the reciprocation of positive responses to an apology: (i) sense of security; (ii) identity; (iii) recognition; (iv) autonomy; (v) sense of justice; and (vi) cooperative image.

#### (a) Sense of Security

Burton and Sandole [39] advocated that conflict is manifestation of deprivation of human needs [40]. Under Maslow's hierarchy of needs [41], security is the need next to the basic physiological needs. Security is sensed by being safe, orderly with stable, predictable and free from anxiety environment [41]. Offering an apology can be interpreted as the commitment of the offeror not endangering the apology offeree [37].

#### (b) Identity

Identity can be recognised as making sense of one's own value or worth as a person [41]. Attacking the identity of the counterpart can be an aggressive negotiating behaviour [42]. In the alternative, if identity is acknowledged, this show certain respect on the counterpart [43]. This face-saving act may reciprocate positive response [44].

#### (c) Recognition

Recognition may be the other side of the same coin of identity [45, 46]. Wolf [47] suggested that recognition is a form of respect. While disrespect breeds conflict because it would trigger a victim's anger and self-protective reactions. Burton [45] pointed out that recognition is useful in suppressing frustration. Showing respect thus will improve the relationship [47]. Murphy [48] found also that offering an apology could enhance relationship because of the recognition accorded.

#### (d) Autonomy

Deci and Ryan [49] claimed that autonomy is reflected by the freedom to make choices. This is also termed as self-determination theory [50]. In construction, autonomy is observed by the degree to which the job allows freedom, independence, and discretion to an individual has on the procedure and schedule [51]. A sincere apology would uphold one's autonomy [52].

(e) Sense of Justice

According to the Fairness theory [53], sense of justice is important to most disputants. Adams's [54] equity theory advocates that humans are intrinsically demanding an equitable balance between input and output. When one is unfairly treated and suffered loss, the resulting sense of injustice would prompt retaliation [55]. Thibaut and Walker [56] advocated that by restoring the victim to the prior position before the damage, sense of justice can be fostered. An apology can pacify a victim for the sense of justice posed [57]. By offering a sincere apology, the feeling of unfairness can be alleviated [58].

(f) Cooperative Image

Disputing parties are typically having "enemy image" [59]. This is non-conductive because of the confrontations inherent with being enemy. An apology is able to instil a sense of cooperation as explained by the Evolutionary Game theory [60, 61]. By directing efforts in engaging in cooperative relationship, it can help in avoiding opportunism [62]. Nonetheless, willingness to expose to exploitation is a bold step to canvas trust [63].

### ***Relationship Framework Between Apology and Response in CDN***

The roles of apology in conflict resolution have been investigated by Witvliet et al. [64] who found that an apology can alter the outcome expectations. Brown [32] added that such changes are effected by the messages directed towards the relationship between the disputants. Moreover, situational factors such as emotion and sentiment cannot be underestimated. In the experiment of Robbennolt [65] the reactions of 556 subjects in different pre-set scenarios of using apology were analysed. It was found that an apology can alter the perceptions and value of the apology recipients in two ways: (1) the injured parties became more amenable to discuss settlement and (2) the desire of the injured party to settle was raised. These findings supported that settlement can be promoted by apologising through overcoming certain barriers. Applying the theory of response restriction, apology can be a moderator for positive response by relishing formerly barriers of settlement". The first hypothesis of this study is as follows:

H1: An act of apology has positive moderating effect on construction dispute settlement.

However, another school of thought suggests that apology can give direct effect and hence can be a mediator of positive responses under certain circumstances. The positive effect of an apology lies in its ability to heal psychological harm and canvasses forgiveness [29]. Many psychologists found that an act of apology could relish barriers against settlement. For example, Darby and Schlenker [66] proposed that apologies could reduce the negative repercussions of the injured. This proposition

is supported by the work of Bennett and Earwaker [67] and of Hodgins and Liebeskind [68]. The second hypothesis of apology in CDN is as follows:

H2: An act of apology has positive mediating effect on construction dispute settlement.

Figure 2 shows the hypothesised relationship.

There are four key components in this part of the study: (1) the Kelman's RR Theory; (2) the precedent barriers to dispute settlement; (3) the forms of apology and (4) the positive responses of CDN. Based on that, two hypotheses are developed as afore-stated.

## *Effects of Offering Apology in CDN*

### **Research Approach**

A quantitative deductive approach is applied. A data collection questionnaire was developed. To maximize the return rate, both on-line and paper-based questionnaire were used. Data from construction professionals were collected at seminars, conferences and public lectures held in Hong Kong.

### **Measures**

The questionnaire has three parts and includes 42 questions. Part 1 is used to collect personal particulars of the respondents. In Part 2, the respondents were asked to indicate the likelihood of the 8 dispute behaviours using a seven-point Likert-scale (1 = strongly disagree; 2 = disagree; 3 = slightly disagree; 4 = neutral; 5 = slightly agree; 6 = agree; 7 = strongly agree). In Part 3, respondents were asked to score the degree of agreement on the extent of likelihood on how the four forms of apology would affect the outcome of disputes in negotiation.

Table 1 shows the matrix of questions set in Part 3.

### **Data Analysis**

Multiple regression analysis (MRA) which is a statistical technique that allows one to evaluate the relationship between dependent variables and a number of independent variables [69] is applied In this study to analyse the relationship among precedent barriers, forms of apology and positive responses. in this study. MRA has been widely applied in psychology, social science and behavioural science research to test the interactive effect on the independent variables [70–72].

(a) Moderated Regression Analysis



**Table 1** The matrix of questions set in part 3

	I. S/He tried to embrace your sense of sympathy	II. S/He tried to abscond the responsibility	III. S/He was urged by his/her advisor to be realistic	IV. S/He would honour the terms of the settlement
i. According to your experience to construction dispute settlement, please indicate the frequency of happening as in right hand side by your counterpart	← 1 2 3 4 5 6 →	← 1 2 3 4 5 6 →	← 1 2 3 4 5 6 →	← 1 2 3 4 5 6 →
ii. According to your behaviour pattern, please indicate your degree of likelihood of the following statements	Strongly Disagree Disagree Slightly Disagree Neutral Slightly Agree Agree Strongly Agree	Strongly Disagree Disagree Slightly Disagree Neutral Slightly Agree Agree Strongly Agree	Strongly Disagree Disagree Slightly Disagree Neutral Slightly Agree Agree Strongly Agree	Strongly Disagree Disagree Slightly Disagree Neutral Slightly Agree Agree Strongly Agree
<i>If my counterpart act as in right hand side, my feeling would be:</i>	← 1 2 3 4 5 6 7 →	← 1 2 3 4 5 6 7 →	← 1 2 3 4 5 6 7 →	← 1 2 3 4 5 6 7 →
1 "A sense of security is regained."	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
2 "My identity is a significance."	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
3 "Being understood."	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
4 "My will is respected."	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
5 "A sense of justice is raised."	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
6 "Cooperative relationship is rebuilt."	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7

The outcome of moderated regression analysis predicts a dependent variable  $P_i$  by two independent variables  $O_j$  and  $A_k$  [73]. A total of 120 moderated regression models (devised from the combination of five dispute settlement behaviours, six apology expectations and four forms of apology) were resulted. The significance of the moderating effect is indicated by Fisher Z test (F test) [73–76]. Critical values of such test were obtained from F-distribution table with significant level at  $\alpha = 0.05$ . Referring to the F-distribution table, the moderating analyses result with an F value  $> 3.96$  would be treated as statistically significance [73].

(b) Mediated Regression Analysis

Regression models were also conducted for mediated regression analysis [77]. Separate coefficients for each equation were further estimated and tested [78]. In this study, 120 mediated regression models were also examined to explored whether apology is a mediator of positive responses.

**Findings and Discussions**

The study investigates if and how apology can engender positive responses in construction dispute negotiation. The research findings are presented seriatim:

**The Relationship Between Apology and Responses in CDN**

Personal particulars

A total of 251 questionnaires were distributed and 103 effective responses were received representing a response rate of 42% that is considered to be reasonably good

when compared with typical response rate of 25–30% in construction management studies [79]. Table 2 shows the personal particulars:

### The Measurement of Part 2 and Part 3

Table 3 presents the descriptive statistics of the measurement of dispute resolution behaviours. With reference to Table 3, the mean scores of all the questions are higher than 4 of a Likert scale of 7. The standard deviations of the variables are all close to 1, meaning the degree of dispersion are relatively small suggesting that the respondents are in general do not have notable divergent views.

#### (a) Inter-group analysis

Kruskal–Wallis H test [82] was used to determine if there are statistically significant differences between two or more groups of an independent variable on a continuous or ordinal dependent variable. The null hypothesis of the K-W test reveals that no differences were detected within different groups of company type, project nature and respondents' working experiences.

#### (b) Correlation analysis

Pearson correlation analysis was used to test the initial consistency of the three major factors. With reference to Tables 4 and 5, the question structure in this study was subjected to revision with due regard to the correlation results. Scale inversion was applied to certain questions before conducting correlation analysis. “Q2.1: I would not initiate negotiation even settlement seemed possible.” is a question in a negative expression. It is expected that the correlation between the variables would be positive after the inversion of scale. However, the result was contrary to the expectation. The negative expression of Q2.1 perhaps confused the understanding of respondents. Thus, the question Q2.1 was taken out from further analysis. Moreover, “Q2.6: The

**Table 2** Personal particulars

Background	Type	%
Company type	Developers	30
	Consultants	37
	Contractors	33
Project nature	Building	62
	Civil	28
	Others, include maintenance, fitting-out, infrastructure and all related construction projects	10
Working experience	<5 years	33
	5–10 years	33
	>10 yrs	34

**Table 3** Descriptive statistics of the measurement of dispute resolution behaviours

Part 2: Degree of behaviour likelihood if construction dispute arises—from 1 to 7	Min.	Max.	Mean.	Std.
<b>Cognitive Dissonance [3, 14]</b>			<b>4.14</b>	<b>1.21</b>
Q2.2 I would only negotiate when there was foreseeable gain	2.00	6.00	4.14	1.21
<b>Overconfidence effect [15–18]</b>			<b>4.29</b>	<b>1.08</b>
Q2.3 I would be very confident in my assessments	2.00	6.00	4.65	1.07
Q2.4 I would take the subjective perspective rather than the objective one	2.00	6.00	3.92	1.08
<b>Prospect Theory [3, 19]</b>			<b>4.55</b>	<b>1.02</b>
Q2.5 I would be mindful of being cheated	2.00	6.00	4.72	1.02
Q2.6.1 The gain would be more important	3.00	7.00	4.39	1.01
<b>Construal Theories [20, 21]</b>			<b>4.73</b>	<b>0.94</b>
Q2.7 My first impression of the counterpart would direct my judgement	2.00	6.00	4.40	0.98
Q2.8 Past experience would direct my judgement	2.00	6.00	5.07	0.90
<b>Reactive Devaluation [3, 22, 25]</b>			<b>4.32</b>	<b>0.91</b>
Q2.9 I think the settlement proposal proposed by the counterpart would be exaggerated	2.00	6.00	4.34	0.92
Q2.10 Dispute resolution was a forceful option	2.00	6.00	4.30	0.89
Part 3(i): Frequency of happening in construction dispute resolution experience—from 1 (hardly ever) to 7 (always)				
Q3.1.1 S/He tried to take advantage of your sense of sympathy (Ice-breaking apology)	2.00	6.00	4.22	1.03
Q3.1.2 S/He tried to abscond the responsibility. (Conciliatory apology)	1.00	7.00	4.33	1.20
Q3.1.3 S/He was swapped by her/his business consulting lawyer. (Reality-checking apology)	1.00	7.00	3.86	1.10
Q3.1.4 S/He honoured the terms of the settlement. (Congruence-driving apology)	1.00	7.00	4.21	1.26
<i>Ice-breaking apology [8, 32]</i>				
* <i>S/he tried to embrace your sense of sympathy</i>			<b>4.20</b>	<b>1.19</b>
Q3.2.1.1 “A sense of security is regained.” [40, 41]	2.00	7.00	4.10	1.10

(continued)

**Table 3** (continued)

Q3.2.1.2 “My identity is a significance.” [43]	2.00	7.00	4.16	1.18
Q3.2.1.3 “Being understood.” [45–48]	1.00	7.00	4.17	1.22
Q3.2.1.4 “My will is respected.” [50]	1.00	6.00	4.18	1.20
Q3.2.1.5 “A sense of justice is raised.” [53, 54, 56, 80]	2.00	7.00	4.35	1.19
Q3.2.1.6 “Cooperative relationship is rebuilt.” [59, 81]	1.00	7.00	4.26	1.27
<i>Conciliatory apology</i> [8, 32]				
* <i>She tried not to abscond the responsibility</i>			<b>3.75</b>	<b>1.19</b>
Q3.2.2.1 “A sense of security is regained.”	1.00	7.00	3.65	1.22
Q3.2.2.2 “My identity is a significance.”	1.00	7.00	3.73	1.23
Q3.2.2.3 “Being understood.”	1.00	6.00	4.12	1.02
Q3.2.2.4 “My will is respected.”	1.00	6.00	3.64	1.08
Q3.2.2.5 “A sense of justice is raised.”	1.00	6.00	3.69	1.40
Q3.2.2.6 “Cooperative relationship is rebuilt.”	1.00	7.00	3.65	1.21
<i>Reality-checking apology</i> [8]				
* <i>She was urged by his/her advisor to be realistic</i>			<b>3.98</b>	<b>1.03</b>
Q3.2.3.1 “A sense of security is regained.”	2.00	7.00	4.17	1.22
Q3.2.3.2 “My identity is a significance.”	2.00	6.00	3.98	0.90
Q3.2.3.3 “Being understood.”	2.00	7.00	3.90	1.01
Q3.2.3.4 “My will is respected.”	1.00	6.00	3.96	1.07
Q3.2.3.5 “A sense of justice is raised.”	2.00	6.00	4.07	0.96
Q3.2.3.6 “Cooperative relationship is rebuilt.”	2.00	6.00	3.77	1.03
<i>Congruence-driving apology</i> [8, 37]				
* <i>She would honour the terms of the settlement</i>			<b>4.72</b>	<b>0.99</b>
Q3.2.4.1 “A sense of security is regained.”	3.00	7.00	4.72	0.97
Q3.2.4.2 “My identity is a significance.”	2.00	7.00	4.59	1.04
Q3.2.4.3 “Being understood.”	3.00	7.00	4.59	0.90
Q3.2.4.4 “My will is respected.”	2.00	7.00	4.78	0.97
Q3.2.4.5 “A sense of justice is raised.”	3.00	7.00	4.77	1.01
Q3.2.4.6 “Cooperative relationship is rebuilt.”	2.00	7.00	4.85	1.06

**Table 4** Descriptive statistics of frequency of happening of forms of apology

Questions	Revision	Reasons for revision
Q2.1 I would not initiate negotiation even settlement seemed possible	Deletion	Negative correlation shown; misunderstanding of respondents
Q2.6 The loss would be more important Q2.7 The gain would be more important	Combination to Q2.6.1 “The gain would be more significant than the loss.”	Both questions were asking the same object in two directions

loss would be more important.” and “Q2.7: The gain would be more important.” aims to compare the sense of loss and gain through literature loss aversion [19]. With the checking on the mean score of Q2.7 and Q2.6 (i.e., Q2.7 > Q2.6), these two questions were combined to “Q2.6.1: The gain would be more significant than the loss.” for further analysis.

(iii) Multiple regression analysis on moderating effect

The results of the Moderating analyses are summarised in Table 6. Congruence-driving apology offers the most significant moderating effects (i.e., F-value >3.96) and are highlighted with an asterisk (\*). Form of apology that is having medium significant and least significant moderating effects is conciliatory and reality-checking respectively. With reference to Fig. 3, high congruence-driving apology solicits higher positive responses than that of low- congruence-driving apology.

(iv) Multiple regression analysis on mediating effect

120 mediated regression models devised from the combination of five dispute settlement behaviours, six apology expectations and four forms of apology were identified. The results of mediated regression analyses are summarised with change of coefficients between a22 and a32, and the significance are shown in Table 7.

**Discussions**

The moderating and mediating effect in bringing positive responses of the four forms of apology are discussed here-follow:

**Moderating Effect**

The level of moderating effect is considered by the number of moderating significances with regard to the precedent barriers. It is found that not all forms of apology are having significant moderating effect in soliciting positive responses. Table 8

**Table 5** The correlation matrix of Part 2

	Q2.1	Q2.2	Q2.3	Q2.4	Q2.5	Q2.6	Q2.7	Q2.8	Q2.9	Q2.10	Q2.11
Q2.1	1	-0.351 <sup>a</sup>	-0.120	-0.299 <sup>a</sup>	-0.003	-0.062	0.003	-0.096	-0.012	-0.143	-0.164
Q2.2	-0.351 <sup>a</sup>	1	0.241 <sup>a</sup>	0.085	0.180	0.165	0.235 <sup>b</sup>	0.231 <sup>b</sup>	0.274 <sup>a</sup>	0.349 <sup>a</sup>	0.268 <sup>a</sup>
Q2.3	-0.120	0.241 <sup>a</sup>	1	0.008	0.299 <sup>a</sup>	0.151	0.159	0.038	0.188 <sup>b</sup>	0.116	0.030
Q2.4	-0.299 <sup>a</sup>	0.085	0.008	1	0.087	0.223 <sup>b</sup>	0.181	0.240 <sup>a</sup>	0.086	0.193 <sup>b</sup>	0.139
Q2.5	-0.003	0.180	0.299 <sup>a</sup>	0.087	1	0.159	0.351 <sup>a</sup>	0.184 <sup>b</sup>	0.440 <sup>a</sup>	0.354 <sup>a</sup>	-0.069
Q2.6	-0.062	0.165	0.151	0.223 <sup>b</sup>	0.159	1	0.393 <sup>a</sup>	0.066	0.313 <sup>a</sup>	0.200 <sup>b</sup>	0.131
Q2.7	0.003	0.235 <sup>b</sup>	0.159	0.181	0.351 <sup>a</sup>	0.393 <sup>a</sup>	1	0.169	0.430 <sup>a</sup>	0.299 <sup>a</sup>	0.143
Q2.8	-0.096	0.231 <sup>b</sup>	0.038	0.240 <sup>a</sup>	0.184 <sup>b</sup>	0.066	0.169	1	0.227 <sup>b</sup>	0.330 <sup>a</sup>	0.176
Q2.9	-0.012	0.274 <sup>a</sup>	0.188 <sup>b</sup>	0.086	0.440 <sup>a</sup>	0.313 <sup>a</sup>	0.430 <sup>a</sup>	0.227 <sup>b</sup>	1	0.489 <sup>a</sup>	0.269 <sup>a</sup>
Q2.10	-0.143	0.349 <sup>a</sup>	0.116	0.193 <sup>b</sup>	0.354 <sup>a</sup>	0.200 <sup>b</sup>	0.299 <sup>a</sup>	0.330 <sup>a</sup>	0.489 <sup>a</sup>	1	0.184 <sup>b</sup>
Q2.11	-0.164	0.268 <sup>a</sup>	0.030	0.139	-0.069	0.131	0.143	0.176	0.269 <sup>a</sup>	0.184 <sup>b</sup>	1

<sup>a</sup>Correlation is significant at the 0.01 level (2-tailed)

<sup>b</sup>Correlation is significant at the 0.05 level (2-tailed)

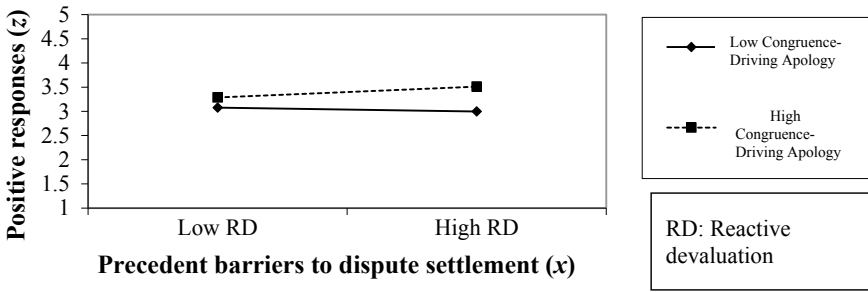
**Table 6** Summary of the F value and significance level in moderating regression analyses results

Moderator variables—Forms of apology ( $A_k$ )	Dependent variables—Positive responses ( $P_i$ )					
	P1	P2	P3	P4	P5	P6
<i>Predictor variables—Precedent barrier to settlement (<math>O_j</math>) Cognitive Dissonance</i>						
Ice-breaking apology	0.31	0.17	-0.90	-0.93	-0.41	2.40
Conciliatory apology	2.38	<b>7.16*</b>	0.20	-0.77	2.46	-0.82
Reality-checking apology	-0.63	1.02	-1.04	-0.81	-0.79	-0.99
Congruence-driving apology	<b>6.53*</b>	<b>10.16*</b>	<b>6.89*</b>	<b>6.50*</b>	<b>7.71*</b>	<b>8.51*</b>
<i>Overconfidence effect</i>						
Ice-breaking apology	-1.80	-0.89	0.20	-0.52	-0.88	-1.01
Conciliatory apology	-0.43	0.61	-0.39	-0.62	0.66	-0.72
Reality-checking apology	0.32	-1.00	-0.73	-0.93	-0.91	-0.20
Congruence-driving apology	<b>11.13*</b>	<b>7.89*</b>	<b>10.86*</b>	<b>7.47*</b>	<b>11.66*</b>	<b>9.47*</b>
<i>Prospect theory</i>						
Ice-breaking apology	-0.52	-0.41	-0.57	-0.31	-0.89	0.41
Conciliatory apology	-1.05	2.60	-0.40	0.98	-0.11	1.25
Reality-checking apology	<b>4.22*</b>	-0.80	<b>5.69*</b>	-0.91	2.56	0.61
Congruence-driving apology	<b>6.11*</b>	<b>7.18</b>	<b>5.43*</b>	<b>4.09*</b>	<b>5.89*</b>	<b>5.10*</b>
<i>Construal theory</i>						
Ice-breaking apology	-0.81	-1.10	-0.45	-0.51	-0.50	0.20
Conciliatory apology	-2.83	-0.99	-0.78	-0.68	2.31	-0.59
Reality-checking apology	1.07	-1.00	-0.65	-0.30	-0.90	-0.59
Congruence-driving apology	<b>7.37*</b>	<b>6.52*</b>	<b>10.75*</b>	<b>6.88*</b>	<b>9.21*</b>	<b>9.47*</b>
<i>Reactive devaluation</i>						
Ice-breaking apology	-0.63	-1.03	-0.46	-0.95	-0.50	2.37
Conciliatory apology	<b>4.67*</b>	<b>5.16*</b>	2.65	2.06	-0.93	0.10
Reality-checking apology	1.15	-0.84	-0.21	-0.62	-0.93	-0.98
Congruence-driving apology	<b>6.07*</b>	<b>6.11*</b>	<b>7.89*</b>	<b>7.55*</b>	<b>8.06*</b>	<b>8.61*</b>

Noted  $F > 3.92$  sig\*;  $p < 0.05$  sig\* [83]; P1 represents “A sense of security is regained”; P2 represents “My identity is a significance”; P3 represents “Being understood”; P4 represents “My will is respected”; P5 represents “A sense of justice is raised” and P6 represents “Cooperative relationship is rebuilt”

summarises the significant level of apologies having moderating effect on positive responses

With reference to Table 8, congruence-driving apology recorded the most frequent significant moderating effect. Congruence-driving apology was found to have moderating effect on all six positive responses under the five precedent barriers against dispute settlement. Cheung and Yiu [84] advocated that construction disputes can have a human dimension whereby congruence-driving apology may bring about win-win solution for the disputing parties. Conciliatory apology was found to have



**Fig. 3** Interaction effect of precedent barriers to dispute settlement (x) and forms of apology (y) on positive responses in construction dispute negotiation (z)

medium moderating effect and moderate the sense of identity when the settlement barrier is cognitive dissonance [14] and reactive devaluation [22]. When disputants’ conflicts are deeply rooted, polarisation of position as a state of cognitive dissonance is very likely. A simple compromise may not be sufficient to break the deadlock. Nonetheless, conciliatory apology that addresses the concerns of the apology offeror [32] would reduce hostility through raising the sense of security. Reality-checking apology has recorded the least number of moderating effects. Reality-checking shows moderating effect with respect to the barriers of sense of security and recognition [19]. Moreover, reality-checking may be more effective if used by third-party neutrals because a disputant may feel safer to make apology as advised. This would be of particular impact for those risk-averse disputants.

For ease of comparison, the six positive responses that can be moderated respective to the forms of apology with respect to the five settlement barriers are summarised in Table 9.

From Table 9, autonomy, sense of justice and cooperative image are the positive responses that can be moderated by congruence-driving apology (5 out of 20). Recognition can be moderated by both reality-checking apology and congruence-driving apology (6 out of 20). Sense of security and identity can also be moderated by reality-checking apology and conciliatory apology under the settlement barriers explained by cognitive devaluation and Reactive devaluation respectively (7 out of 20), which appears to be the more likely response when apology is offered.

**Mediating Effect**

Ice-breaking apology is the most significant in mediating sense of identity by addressing most of the precedent barriers except risk avoidance [19]. Ice-breaking apology involves acknowledging the suffering of her/his counterpart. Brown [32] suggested that trust can thereby be gained from the counterpart. It is further believed that trust between the disputing parties can subdue the uncertainties and alleviate the worries that hinder disputants from settling their differences. The elevated level of



**Table 7** Summary of the coefficients between  $a_{22}$  and  $a_{32}$  in mediating regression analyses

Mediator variables—Forms of apology ( $A_i$ )	Dependent variables—Positive responses ( $P_k$ )					
	P1	P2	P3	P4	P5	P6
<i>Predictor variables—Precedent barriers to settlement (<math>O_j</math>) Cognitive Dissonance</i>						
Ice-breaking apology	0.189 → 0.108	<b>0.555</b> → <b>0.384*</b>	0.243 → 0.087	0.231 → 0.165	0.244 → 0.208	0.206 → 0.165
Conciliatory apology	0.006 → 0.032	0.064 → 0.037	0.05 → 0.04	0 → 0.009	0.008 → 0.025	0.226 → 0.213
Reality-checking apology	0.216 → 0.163	0.111 → 0.07	0.146 → 0.09	0.065 → 0.011	0.342 → 0.006	0.143 → 0.116
Congruence-driving apology	0.141 → 0.078	0.23 → 0.176	0.051 → 0.042	0.076 → 0.029	0.226 → 0.171	0.076 → 0.007
<i>Overconfidence effect</i>						
Ice-breaking apology	0.223 → 0.161	<b>0.348</b> → <b>0.167*</b>	0.266 → 0.146	0.202 → 0.140	0.054 → 0.013	0.14 → 0.091
Conciliatory apology	0.294 → 0.266	0.177 → 0.153	0.086 → 0.077	0.26 → 0.26	0.308 → 0.286	0.25 → 0.237
Reality-checking apology	0.188 → 0.129	0.133 → 0.092	0.213 → 0.159	0.194 → 0.148	0.207 → 0.177	0.137 → 0.109
Congruence-driving apology	0.183 → 0.126	0.12 → 0.069	0.194 → 0.191	0.194 → 0.155	0.398 → 0.354	0.244 → 0.304
<i>Prospect theory</i>						
Ice-breaking apology	0.218 → 0.169	0.137 → 0.014	<b>0.191</b> → <b>0.095*</b>	0.094 → 0.036	0.018 → 0.033	0.147 → 0.110
Conciliatory apology	0.25 → 0.22	0.167 → 0.143	0.193 → 0.188	0.043 → 0.035	0.292 → 0.268	0.224 → 0.210
Reality-checking apology	0 → 0.049	0.046 → 0.13	0.099 → 0.055	0.071 → 0.032	0.071 → 0.043	0.152 → 0.131
Congruence-driving apology	0.13 → 0.079	0.06 → 0.011	0.004 → 0.005	0.168 → 0.133	0.293 → 0.249	0.167 → 0.113
<i>Construal theory</i>						
Ice-breaking apology	0.129 → 0.044	<b>0.189</b> → <b>0.045*</b>	0.201 → 0.055	0.111 → 0.024	0.007 → 0.079	0.133 → 0.078
Conciliatory apology	0.162 → 0.101	0.022 → 0.042	0.119 → 0.111	0.118 → 0.116	0.212 → 0.172	0.092 → 0.057
Reality-checking apology	0.194 → 0.142	0.147 → 0.112	0.265 → 0.220	0.105 → 0.058	0.143 → 0.112	0.04 → 0.008
Congruence-driving apology	0.235 → 0.185	0.181 → 0.134	0.034 → 0.025	0.244 → 0.210	0.328 → 0.285	0.268 → 0.216

(continued)

**Table 7** (continued)

Mediator variables—Forms of apology ( $A_i$ )	Dependent variables—Positive responses ( $P_k$ )					
	P1	P2	P3	P4	P5	P6
<i>Reactive devaluation</i>						
Ice-breaking apology	0.259 → 0.195	<b>0.486</b> → <b>0.262*</b>	0.334 → 0.181	0.288 → 0.239	0.123 → 0.037	0.172 → 0.117
Conciliatory apology	0.269 → 0.227	0.13 → 0.086	0.244 → 0.252	0.189 → 0.197	0.255 → 0.222	0.21 → 0.194
Reality-checking apology	0.36 → 0.31	0.285 → 0.255	0.253 → 0.193	0.217 → 0.163	0.253 → 0.226	0.041 → 0.005
Congruence-driving apology	0.203 → 0.128	0.166 → 0.095	0.014 → 0.001	0.143 → 0.088	0.207 → 0.138	0.161 → 0.078

*Noted*  $p < 0.1$  sig\* [83]; P1 represents “A sense of security is regained”; P2 represents “My identity is a significance”; P3 represents “Being understood”; P4 represents “My will is respected”; P5 represents “A sense of justice is raised”; and P6 represents “Cooperative relationship is rebuilt”

**Table 8** The significant level of apologies having moderating effect on positive responses

Level of moderating effect	Forms of apology	Significant moderating effect on soliciting positive responses						
		L1	L2	L3	L3	L4	L5	L6
Most	Congruence-Driving apology	****	****	****	****	****	****	****
Medium	Conciliatory apology	**	***					
Least	Reality-checking apology	*		*				

\*\*\*Significant under all five precedent barriers to dispute settlement

\*\*\*Significant under Reactive Devaluation [22] and Cognitive Dissonance [14]

\*\*Significant under Reactive Devaluation [22]

\*Significant under Prospect theory [19]

**Table 9** Number of apologies with significant moderating effect on positive responses (Developed from Table 8 by counting the number of significant effect)

Positive responses					
Sense of security	Identity	Recognition	Autonomy	Sense of justice	Cooperative image
<i>Number of apologies with significant moderating effect under 5 precedent barriers</i>					
7/20	7/20	6/20	5/20	5/20	5/20

sense of security would help to promote dispute settlement. The other three forms of apology do not record any significant mediating effect in soliciting positive responses. It can be concluded that offering an apology is not effective in directly bringing about positive responses from the apology recipient. In this connection, Yiu and Cheung [76] found that apology is among the range of negotiating tactics that can be deployed. In general, tactics that address the tangible issues are more likely to derive direct and spontaneous positive responses.

## ***Implications on Dispute Management***

In general, apology would have mediating and/or moderating effect in soliciting positive responses if given in the right context like emotion is at stake. For discussion purposes, “versatile” is used to describe an apology that records the highest number of moderating effects on the positive responses [76]. Accordingly, congruence-driving is the most “versatile” form of apology among the four forms of apology studied in this study. To make a congruence-driving apology effective, it is important to express the apology appropriately by the right people, at the right time and the right place [8]. It is therefore suggested that, when dispute arise, the disputant should.

### **Offer an Apology Based Specifically Targeting the Bottleneck**

When emotion is the bottleneck against settlement, Schweitzer et al. [37] pointed out that a sincere apology may provide the breakthrough. In such situation, acknowledging fault and regret would be welcome by the counterpart. Levi [8] suggested that investment in self-image, interpersonal orientation and gender will enhance the usefulness of an apology.

### **Offer an Apology at the Right Time**

Maintain the momentum of a negotiation is the gateway to settlement. One key difference between congruence-driving apology and ice-breaking apology is when to make the offer [8]. The findings of this study suggest that these two forms of apology can have quite different outcomes. Usually, a sincere apology before a complaint may suppress the conflict.

### **Offer an Apology in an Appropriate Manner**

The content of an apologising statement and the delivering tone are pivotal in creating positive effects [32]. It must be focused in addressing the emotion of the injured and avoid legalistic analysis. Sincere acknowledgment of fault and regret for the damaging conduct must be an integral part of the apology [37]. The apologetic wordings to be used must suit the context and the extent of damages caused. This study found that congruence driving apology is an added device that couple apology with the desire to drive win-win solution [85]. Moreover, because of the delicacy involved, this form of apology must be undertaken with great skill with the counterpart being an attentive listener. Sincerity is certainly a critical component of the apology.

## The Second Part of the Study

In construction, mediation is one of the commonly used alternative dispute resolution mechanisms that encompasses a softer way for the disputing parties to reach negotiated settlement through the help of a mediator. The part of the study is reported in four parts: (1) prerequisite conditions towards dispute settlement in mediation; (2) principle of Apology; (3) data collection and analysis; and (4) discussion and recommendations.

### *Prerequisite Conditions Towards Dispute Settlement in Mediation*

In Sect. “Discussions”, it has been suggested that apology offer initiated by mediator may be more receptive to a prospective apology offeror. In his part of the study, the incentivising effects of an apology in dispute settlement through mediation is explored. First, the prerequisite conditions for such settlement are examined. Chau [86] advocated the followings: (i) willingness to settle, (ii) desirability to continue amicable business relationships, (iii) intention to save cost and time, (iv) reliability of a negotiated accommodation, and (v) cultural tradition. These conditions can further be grouped psychological and perception of the dispute.

#### **Psychological Prerequisites**

##### (a) Willingness to Settle

Willingness to negotiate, communicate and bargain are the determining ingredients for a successful mediation [87]. When the disputing parties are having the desire to find a solution that is acceptable to all, the job of the mediator will become much easier. On the other hand, if the parties do not want to settle the dispute, a mediation even performed, will just perfunctory. Cohen [88] believed that willingness is indeed the necessary condition for a workable mediation [89]. Parties’ willingness to deal with the dispute and accept the facilitation by the mediator will direct how the parties to prepare for the negotiation [89]. Such willingness is also vital in determining whether the parties will accept the consequence/result of mediation [89].

##### (b) Release of Emotional Distress

The bounded rationality theory [90] explained that individuals are “Passionate economists”. Their rationality is somehow limited before of the limitation of knowledge they possess. Thus, it is not uncommon for them to settle with “satisfying” instead of “optimal” outcomes. Humans naturally prefer having emotional comfort.

This preference would take a disputant to decide on options that would enable them to be relieved from emotional and psychological effects of the wrong act.

### **Perception of the Dispute**

Different view of the issue is the crunch of a dispute. Naturally, finding common ground is the key to drive a settlement. Without common ground, it is difficult to move forward with the negotiation. In mediation, the third-party neutral is uniquely positioned to identify common grounds through soliciting wish list from the disputing parties. Once common ground is uncovered, there will be rooms for moving the negotiation forward [91]. Experienced mediators will also be skilful in noting issues arising from cultural differences [92] and hidden barriers due to mis-communication [93].

Levi [8] found also the prospect of a mediation will also depend on the perceptive view of the complexity of the issue in dispute. To this ends, Felstiner [94] suggested that the escalation of disputes typically goes through “naming” to “blaming” to “claiming”. Escalation would be attached with greater demand [86]. Lewicki et al. [95] distinguishes elements of mediation into tangible and intangible. Tangible elements are those quantitative issues like damages, while intangible elements are soft issues such as reputation, relation [96], sense of guilt or shame [97]. Intangible elements are thus more subtle and not conspicuous. Accordingly, the prerequisite conditions for dispute settlement in mediation are listed in Table 10.

### ***Settlement Incentivising Power of Apology***

Lazare [109] explained how exchange of apology works: “What makes an apology work is the exchange of shame and power between the offender and the offended.” The function of an apology is to establish the moral accountability of the wrongdoer. An apology is not simply No saying sorry. It should also recognize the consequence of saying so. By offering an apology, the apologizer runs the risk of admitting the wrong and the potential liability [110]. Beyond the injured, an apology may be seen by the community at large of admission of errors/mistakes [103].

Moreover, offering an apology can be useful in dispute negotiation. Equity theory [111] projects that inequity is a source of conflict. Inequity may arise when one’s output/input ratio is higher than others. This argument is based on the belief that output/input ratio among individuals should be compatible. When a wrongdoer harms the other party, the latter is inflicted with pain and distress [112]. Restoration of these negative effects should be addressed [113]. It is proposed that incentivising behaviours can be planned for this purpose would assist the correction [114]. In this regard, apology may be an incentivizing agent to restore the equity [115]. For example, disputants are expected to be better able to recover from emotional and

**Table 10** Prerequisite conditions for dispute settlement in mediation

No.	Description	Key references
1	Psychological prerequisites	
1.1	<i>Willingness to settle through mediation</i>	
V1	Both parties are willing to settle	[88]
V2	Sincere intent to resolve dispute	[8]
V3	Willingness to enter to mediation	[8]
V4	Intention to save money	[8]
V5	Willingness to solve the problem in an amicable way	[89, 98]
V6	Willingness to have more communication with disputants	[99]
V7	Willingness to maintain relationship	[100]
1.2	<i>Release of emotional distress</i>	
V8	Demand for emotional comfort	[101]
V9	Demand to focus on the issue rationally	[102]
V10	Demand to achieve equal footing	[103]
V11	Motivation to repair relationship	[8]
2	Perceptions of the dispute	
V12	Disputants have similar organizational culture	[104]
V13	Disputants have similar communication style	[105]
V14	The dispute is easy to solve	[94]
V15	Solving the dispute is costless	[106]
V16	The dispute contains not many intangible issues to solve	[107]
V17	The dispute is very complex	[108]
V18	The dispute involves a large number of parties	
V19	The overall likelihood of settlement is high	[8]

psychological effects of the wrong act, while offenders may reconcile and repair damaged relationships.

In addition, the more sincere an apology, the more effective it will be in reducing the tension between the disputants. Lowering tension would pave the path for accepting proposed compensation [116]. For protracted disputes, the resources consuming situation demands a sensible solution [117]. How to effect such a change, Folger [53] suggested something that breaks the pattern may work—enhancing the communication between the disputing parties [106]. A mediator can help in developing a new communication channel [8]. Hiltrop [107] suggested that tangible elements are more negotiable than intangible elements. Thus, intangible elements would need extra effort to sooth the emotional issues such as tension and distress. A sincere apology if accepted would transform an accuser-accused relationship into disputing parties of equal footing.

In summary, apology would be regarded as a plausible act to fulfil prerequisite conditions and to address perceptions on the disputes. Its usefulness is anchored

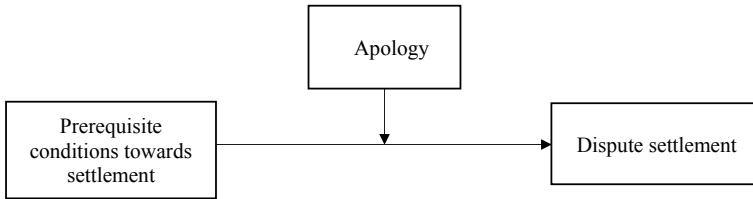


Fig. 4 Conceptual framework of incentivization effect of apology on dispute settlement

on the ability to address the emotional distress of the injured. If legal protection is accorded to the apology offeror, it can be envisaged that wider use of apology can be expected. Figure 4 shows the conceptual framework of the use of apology in mediation.

### *Data Collection and Analysis*

To verify the framework, data was collected through a specially designed questionnaire that has three parts. Part A collects the particulars of the respondents. Part B has 15 questions (v1 to v19) listed in Table 11. The respondents were asked to indicate their degree of agreement on the alone statements in a Likert Scale of 1 (not agree) to 7 (totally agree). Part C repeats the questions in Part B, but the respondents were asked to respond with reference to the following scenario within which the use of apology is incorporated:

You were the client and commissioned the construction of a 2-storey building. The contractor was given 8 months to complete the works. The contractor hired a sub-contractor to do certain works. After 3 months, the sub-contractor was in trouble in other project and the progress of the works was slow. The project could not be completed on time. There were different opinions about whether extension of time should be granted. The contractor wanted extension of time as this was out of his anticipation, but you thought it is the responsibility of the contractor to supervise the subcontractor. You were upset and did not want further delay. You and the contractor agreed to mediate the dispute on extension of time. At the meeting, the contractor softened a bit and took the following actions. He expressed his regret to you, showed his remorse for problem caused by the sub-contractor. Under the Hong Kong Apology Ordinance (CAP. 631), a regret would not be considered as an admission of responsibility.

By comparing the respondents' responses to Part B and Part C, the effects of the apology on settlement was investigated. A total of 78 responses from construction practitioners in Hong Kong were received. Table 11 gives also the descriptive statistics.

In Table 12,  $x$  and  $y$  represent the two categories of prerequisite condition towards dispute settlement in mediation;  $x$  represents the average means of the psychological prerequisites while  $y$  represents the perception of the dispute. It is suggested that both high score of  $x$  and  $y$  would imply dispute settlement is more likely.



**Table 11** Descriptive statistics of the responses

No.	Description	N	Min.	Max.	Mean	Std.
<i>Part B: Behaviour in resolving construction dispute</i>						
V1	I have the willingness to settle the construction dispute	78	3	7	5.53	0.89
V2	I have sincere intent to resolve the construction dispute	78	3	7	5.33	0.85
V3	I desire and appreciate mediation than litigation	78	4	7	5.38	0.87
V4	I have the intention to save money	78	4	7	6.19	0.81
V5	I want to settle the dispute in an amicable way	78	4	7	5.53	0.75
V6	I have proper communication	78	2	7	4.92	1.00
V7	I concern developing relationship	78	3	7	5.36	0.95
V8	I want to offer emotional comfort	78	2	7	4.83	1.16
V9	I want to focus on the issue rationally	78	3	7	5.37	0.88
V10	I want to have equal footing with the counterpart	78	2	7	4.92	1.08
V11	I have motivation to repair relation ship	78	3	7	5.15	0.99
V12	I find similar culture with the counterpart (e.g., company goal, political view)	78	1	7	4.32	1.31
V13	I find similar communication style with the counterpart	78	1	7	4.18	1.26
V14	The dispute leads to severe effect/consequence	78	3	7	4.95	0.85
V15	The dispute can consume less time/labour etc. for settlement	78	2	7	4.45	1.22

(continued)

**Table 11** (continued)

No.	Description	N	Min.	Max.	Mean	Std.
V16	The dispute includes intangible issues to be solved	78	1	7	4.94	1.17
V17	The dispute is complex	78	2	7	5.32	1.13
V18	The dispute involves a large number of parties	78	1	7	4.91	1.22
V19	The settlement can fulfil the desired outcome	78	2	6	4.76	0.82
<i>Part C: Scenario case</i>						
V1	I have the willingness to settle the construction dispute	78	2	7	5.41	0.93
V2	I have sincere intent to resolve the construction dispute	78	3	7	5.40	0.98
V3	I desire and appreciate mediation than litigation	78	3	7	5.27	0.91
V4	I have the intention to save money	78	3	7	5.58	0.88
V5	I want to settle the dispute in an amicable way	78	2	7	5.53	1.28
V6	I have proper communication	78	3	7	5.55	0.83
V7	I concern developing relationship	78	1	7	4.38	1.14
V8	I want to offer emotional comfort	78	1	7	4.28	1.19
V9	I want to focus on the issue rationally	78	4	7	5.63	0.79
V10	I want to have equal footing with the counterpart	78	2	7	5.41	1.01
V11	I have motivation to repair relationship	78	4	7	5.88	0.76
V12	I find similar culture with the counterpart (e.g., company goal, political view)	78	2	7	6.05	1.03
V13	I find similar communication style with the counterpart	78	4	7	5.54	0.82

(continued)

**Table 11** (continued)

No.	Description	N	Min.	Max.	Mean	Std.
V14	The dispute leads to severe effect/consequence	78	3	7	5.10	0.77
V15	The dispute can consume less time/labour etc. for settlement	78	2	7	5.00	0.98
V16	The dispute includes intangible issues to be solved	78	1	6	4.59	1.09
V17	The dispute is complex	78	1	7	5.60	1.17
V18	The dispute involves a large number of parties	78	1	7	4.71	1.02
V19	The settlement can fulfil the desired outcome	78	2	7	5.56	0.88

**Table 12** Score clusters of x and y

Scope	Part B			Part C		
	$x < 5$	$5 \leq x < 6$	$x \geq 6$	$x < 5$	$5 \leq x < 6$	$x \geq 6$
$y > 5$	2	14	5	0	10	6↑
$4.5 < y \leq 5$	5	14	3	5	28↑	4
$4 \leq y \leq 4.5$	8	14	1	2	13	4
$y < 4$	5	6	1	1	4	0

With reference to Table 12, it can be observed that the trends of the prerequisite conditions are mostly improved in Part C. In Part C, rising trends for both psychological prerequisites and perception of the dispute with the responses mostly located in these two clusters:  $4.5 < y \leq 5$  and  $5 \leq x < 6$ .

For some more details, the number of responses with  $x < 5$  are lower for Part C when compared to Part B. This suggests the level of having the psychological prerequisites is generally higher when apology was used. Also, the numbers of data in the ranges of  $5 \leq x < 6$  and  $x \geq 6$  also increases. Furthermore, for Part C, the respondents in cluster  $5 \leq x < 6$  showed also better perception of the dispute when apology was involved in the dispute negotiation. To further investigate the improvements in Part C, the comparison of the mean scores is shown in Fig. 5. It can be noted that only four questions in Part B are having higher mean score than that of Part C. Three of them (v4, v12 and v18) in fact show only very slight decrease in Part C. For v17, the question setting is “The dispute is very complex”, which is considered as a reverse question. The percentage (−12%) means that within apology behaviour, the respondents recognized that the complexity of the dispute is reduced.

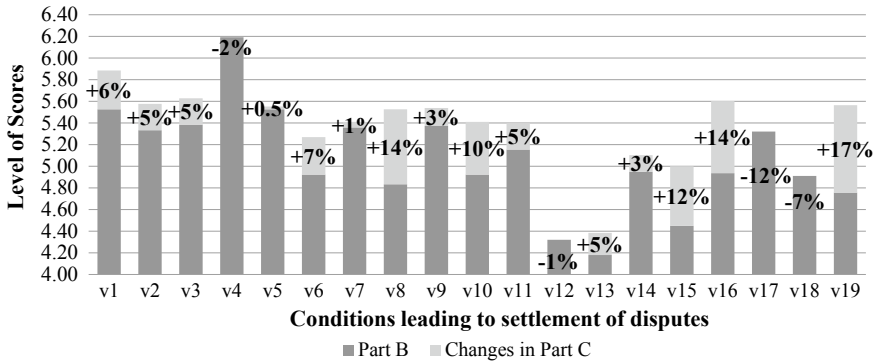


Fig. 5 Comparison of the mean scores

Accordingly, the general pattern is that with the use of apology, the conditions for a settlement are better embraced.

### Discussions and Recommendations

The settlement incentivizing power of an apology was generated by its ability to embrace the two categories of prerequisite conditions for settlement. The use of apology was incorporated in the Part C, scenario case, of the data collection questionnaire. The contributions of the apology is the most notable in releasing emotional distress (question v8~11) and improving the cognitions of the likelihood towards dispute settlement (question v 14~19). The apology appears to have enhanced the perception of the apology offeror by the recipient, the overall improvement in the negotiation environment are conducive to derive greater intention to settle. The following recommendations are made based on the findings:

#### There is No Loss to Apologize in Mediation with the Protection Rendered by the AO

Mediation is a voluntary process through which disputing parties, assisted by a neutral third-party, to iron out their differences. A mediator facilitates and enhances the communication between the parties. Most importantly, an experienced mediator would help the parties to identify common grounds to build the foundation for a settlement. Settlement is only possible if parties share the will to put an end to the dispute. Humans are in general sympathetic, and an apology can soften the psychological barriers against settlement. Protected by the Apology Ordinance, making apology in Hong Kong will not expose the parties to legal responsibility. Thus, there is no loss to apologize and the potential gain is an improved negotiation environment.

It is likely that both sides are having some wrongs and exchanging frank apology would remove skepticism and mistrust.

### **Offer Apology When Emotional Distress is at Stake**

To develop an amicable environment for dispute settlement, the emotion of the parties should be controlled. An apology from a wrong doer would be a more effective option than financial concessions when emotion is the barrier against settlement. Emotional comfort is somehow intangible and cannot be easily alleviated through monetary compensation. Offering an apology is one of the empathetic means to sooth distress and tension. It would be instrumental when people need an apology to heal their broken heart.

### **Disputants Should Be on Equal Footing**

Equity theory [54] advocates that dealing in equal footing is expected in human activities. This human nature is deep-rooted and should also be observed in dispute negotiation. Disparity in resources is inevitable in construction contracting. The protract and resource lade legal proceedings are intimidating to most small and medium sized contractors. In this connection, this group of organizations are quite disadvantaged in formal dispute resolution processes. The less resourced party may turn to more aggressive and uncompromising approach should opportunity arises. Therefore, avoiding unequal footing is useful. The use of apology can balance the positions of the disputing parties. A recipient of apology would definitely feel better and have better impression on the apology offeror. The skill of mediators can be relied on to improve the effectiveness.

## **Summary**

The enactment of the first-ever apology ordinance (AO) in 2017 marked the start of a new wave of mediation movement in Hong Kong. The AO aims to alleviate the concern of disputing parties in making apology. This study pioneers use of apology in construction dispute resolution through (i) examining the mechanism through which apology can enhance settlement; and (ii) the power of apology in incentivizing settlement in construction dispute mediation. The first part of the study has been developed based on Kalman's Response Restriction Theory [9]. It is proposed that offering an apology would solicit positive responses of the counterpart by overcoming certain barriers against settlement of the dispute. Two hypotheses are developed: (i) an act of apology has positive moderating effect on construction dispute settlement, and (ii) an act of apology has positive mediating effect on construction dispute settlement. Four forms of apology were summarized from literature- ice-breaking, conciliatory,

reality-checking and congruence-driving. It is found that congruence-driving apology is the most versatile in moderating positive responses. For mediating effect, only ice-breaking apology offers significant mediating ability in addressing most of the settlement barriers. The second part of the study examines if enacting an Apology Ordinance in Hong Kong will be useful in promoting the use of construction dispute mediation. The objective of the study was achieved by (1) identifying the prerequisite conditions that lead to settlement of disputes in mediation and (2) exploring the significant effects of apology on these components. Two main influencers to settle dispute are (i) psychological prerequisites that include the willingness to settle and the demand of the disputants to obtain emotional comfort; and (ii) perception of the dispute that can be the difficulty, efficiency and complexity. Apology is found to be instrumental in soothing human distress and mediators are ideal facilitators in formulating and delivering of apology proposals.

**Acknowledgements** The empirical work of this chapter has been reported in a paper entitled “The value of apology in construction dispute negotiation” of the International Journal of Construction Management and a paper “How apology incentivizes construction dispute settlement” of the Journal of Legal Affairs and Dispute Resolution in Engineering and Construction. Special thanks to Miss Ka In Yu and Miss Sui Yan Tong in helping with the empirical studies.

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