Client Trust in Contractors: An Investigation from Within
The Complex Network of Relationships that is
a Construction Project.

Nicholas J. Thompson, Middlesex University, London
Keith Thompson, Middlesex University, London

Abstract

The complex exchange process that exists between clients and other key parties to a
building project, something that is highly interactive and exists over an extended period
of time, has continually experienced a disbanding of that team once a building is
completed, with the contributing parties going on to other disparate projects.
The industry has developed norms and procedures to help manage this often highly
complex networked environment. However, in doing so parties are wrapped up in
organising and watching each others contractual and functional responsibilities, while
losing sight of the client. The process has become project focused. The net effect has
been one in which negative forms of risk-handling strategy have been employed as
levels of perceived risk have risen.

Trust is commonly reported as being of critical importance in the effective development
of many positive on-going relationships. However, there is a definite lack of necessary
empirical and published work on trust in this environment. This is in part due to the
recency of interest in this topic by marketing practitioners within the UK construction
industry. There is also the problem, to date, with the construction management
discipline being devoid of any appropriate tools capable of addressing this area.

This paper reports on results from a recent survey of 124 experienced private sector
clients and is a continuation of an on-going research programme investigating the nature
of client trust toward contractors in the relationship between clients and contractors
operating within a private building sector of the UK construction industry.

The paper contributes toward a number of current areas of interest, such as, the rising
discussion in marketing and relationship management literature on risk and trust. It
introduces IMP thinking to the construction management discipline. It also contributes
toward the growing interest in how to better manage relationships within highly
complex networks.

Introduction

Traditionally, the complex exchange process that exists between clients and other key
extended period of time, has continually experienced a disbanding of that team once a
building is completed, with the contributing parties going on to other disparate projects. Referred to as the Temporary Multi-organisation (Cherns and Bryant 1984), the construction industry has over 40 years developed norms and procedures to help manage this often highly complex networked environment. However, this has become increasingly institutionalised. The result has been an industry in which contributing parties are wrapped up in organising and watching each other’s contractual and functional responsibilities, while losing sight of the client. The process has become project focused.

The effect has been an escalation in clients’ perceived risk, such as: performance risk, physical risk, social-psychological risk, financial risk and time risk (Stem et al 1977). Unfortunately, poor risk-handling strategies have been employed as levels of perceived risk have risen. Conflict and adversarial behaviour have taken over, creating even greater problems. The UK construction industry has suffered severely from this.

Trust is commonly reported as being of critical importance in the effective development of many positive on-going relationships (Morgan and Hunt 1994; Moorman, Deshpande and Zaltman 1993; Berry and Parasuraman 1991; Anderson and Narus 1990; Spekman 1988; Schurr and Ozanne 1985; Hovland, Janis and Kelley 1953). More recently it has become more important in construction management and marketing (Thompson 1997 p.64; Thompson and Smyth 1997 p.13 & 1999; Ellison and Miller 1995 p.45; Harback et al 1994 p.24; Nicholson 1992 p.350). However, while many prescribe its importance, few have defined it or explained how it can be developed within an industry such as construction. It is clear that without understanding trust and how it will work in this high risk and adversarial environment, new strategies such as: client loyalty programmes, partnering, supply frame work agreements, Design & Build (DeB) and Alternative Dispute Resolution (ADR) are in danger of failing.

However, there is a lack of empirical and published work on this issue. This is in part due to the recency of interest in this topic. There is also the problem, to date, of the construction discipline being devoid of any appropriate tools capable of addressing this area. Therefore, this paper reports on results from a recent survey of 124 experienced private sector clients and is a continuation of an on-going research programme investigating the nature of client trust toward contractors in the relationship between clients and contractors operating within a private building sector of the UK construction industry (Thompson 1996, 1997 & 1999). The paper introduces results derived from the application of a model which was sourced from outside of the construction management discipline. Its purpose, to help provide some insight into how clients trust toward a contractor, might be developed or undermined within a relationship that is continually surrounded by possible influential third parties.

To Trust, or Not To Trust (Gullibility, Suspicion and Risk).

*in* McIloughlin, Damien, and C. Horan (eds). *Proceedings of The 15th Annual IMP Conference*, University College, Dublin 1999
Selecting the right contractor for a project undeniably represents one of the highest levels of perceived risk in any industry and or market. Therefore, understanding trust and the role it can play between parties in construction is potentially very valuable.

Morgan and Hunt (1994) theorise that the presence of commitment and trust are central to successful relationship managers. Commitment and trust are key because they encourage managers to do three things:

1. Work at preserving relationship investments by co-operating with exchange partners.
2. Resist attractive short-term alternatives in favour of the expected long-term benefits of staying with existing partners (e.g. achieving cost benefits through repeated competitive tendering rather than through long-term continuous improvement in strategic partnering).
3. View potentially high risk actions as being prudent because of the belief that their partners will not act opportunistically (e.g. Relying on carefully selected suppliers of construction services, rather than continually replacing them with each new project).

Commitment and trust leads directly to co-operative behaviours that are conducive to the success of relationship strategies mentioned earlier. In considering these components, Morgan and Hunt (1994) go further by saying, that without trust even commitment cannot exist. Without trust any commitment that might be developed is undermined before it starts. Therefore understanding trust and how it can be developed or undermined is of critical importance in determining whether strategies such as partnering, loyalty programmes and supply frame work agreements will work or not. In doing this what cannot be ignored is the idea by many in construction that to trust someone totally, in this case a client trusting a contractor, is simply not possible. In fact, it may be argued that, to trust is to be gullible, or foolish by expressing a willingness to rely on others in the construction process with nothing more than faith that they will perform as necessary. Rotter (1980) says that ‘... as distrust increases, the social fabric disintegrates. Unwarranted distrust can result in serious negative consequences, but foolish trust or gullibility, can also lead to serious consequences’.

A large part of the problem may be suspicion on the part of the client and client representatives, blurring their perceptions of contractors, thus creating unreasonable levels of distrust. Deutsch (1960) says, ‘The problem of trust arises from the possibility that if, during co-operation, each co-operator is individually orientated to obtain maximum gain at minimum cost to himself (without regard to the gains or costs to the other co-operators), co-operation may be unrewarding for all or for some. It is possible that third parties pursuing their own interests (e.g. a quantity surveyor or architect legitimising their presence) install a certain level of perceived risk in clients perception of contractors. Kee and Knox (1970) raise the possibility that a slight amount of suspicion (however that is determined) - a kind of alert but not distracting guardedness - may be facilitative’. Some contractors behave opportunistically and therefore require careful monitoring. It may be argued this does not amount to out and out distrust, but is in fact a necessary part of managing a positive relationship. Ali (1994), goes further asserting that, ‘Customer-perceived risk is an important issue in the provision of some services. The antidote to risk is trust. Where risk can be identified it is important to consider how any existing trust between buyer and seller may be used and how trust

in McLaughlin, Damien. and C. Horan (eds.), Proceedings of The 15th Annual IMP Conference, University College, Dublin 1999
may be developed. He goes on saying. Just as risk can be considered in terms of the certainty of an unfavourable outcome for an event, so trust can be considered in terms of an individual’s confidence that a positive event rather than a negative one will occur.

Definition of Trust in This Research

Trust is the willingness to accept vulnerability (Moorman, Zaltman and Deshpande 1992 p.315). Accepting vulnerability is dependent upon the trustor being cognizant of the risks (Mayer et al 1995 p.712) or possible undesirable consequences of their act. The trustor must be aware of the risks that make them vulnerable if they were to trust the contractor, and then proceed while accepting those risks. Currall and Judge (1995) defined trust as, ‘an individual’s behavioural reliance on another person under a condition of risk’. Therefore, whilst this research focuses on an individual’s reliance on an organisation rather than another person (as is the case for Currall and Judge (1995)) it is still under a condition of risk due to the possibility of negative consequences being realised. Trust can be defined in terms of an intangible behaviour which clients may or may not choose to act out. An intangible behaviour from which clients can perceive certain consequences or outcomes should they carry it out.

Reputation and the Influence of Third Parties on Client Trust in Contractors.

In construction, relationships for the most part operate within what Cherns and Bryant (1984) describe as the ‘Temporary Multi-organisation’. In this teams of individuals and companies are pulled together either simultaneously and or sequentially throughout the life of a project. Once the project is completed the team disbands with its contributing parties going on to other disparate projects. The net result is that opportunities exist for contractors in referral markets, where consultants and other professionals advise clients on which contractors they might use (Thompson 1996 p.88), after all reputation has been reported as being an important criteria for pre-qualifying the contractor (Fellows and Langford 1993; Baker and Orsaah 1985). According to Fombrun (1996 p.3) ‘a reputation embodies the history of other peoples experiences with that service provider. Good reputation increases credibility, making us more confident that we will get what we are promised’. However, work by Labianca et al (1998 p.55) shows how, ‘perceptions of inter-group conflict significantly relate to indirect relationships through friends, which acts toward amplifying the effect’. They argue that where third party relationships exist, ‘they will serve to heighten the salience and perception of inter-group conflict for individuals, even if they are not directly involved in the conflict themselves’. Does this mean that client trust in a contractor may well be influenced in a similar fashion? Can third parties influence trust in the same way that contractors get short-listed for tender? Does this effect clients trust behaviour toward contractors over and above their own beliefs and attitudes? Bresnen and Haslam (1991 p.327) say, ‘client experience has an important impact upon many decisions made,’ such as strategic decisions. A contractor’s own previous client experience is therefore argued as being a major influencing factor in a new client’s trust behaviour toward their contractor. Three key areas have therefore been identified as important in trying to understand client trust in contractors:

1. Clients’ own beliefs and attitudes toward the idea of trusting contractors, and their perception of the consequences of such a behaviour.

University College, Dublin 1999

Page 4 of 23
In addressing these issues, research utilised two models, which when combined provide an overall model capable of addressing all three of the issues listed above. They are Conditional, Attitudinal and Normative Influences. The purpose of this paper is to report on the findings from the first of these two models used in this research. In short, this paper will report on findings derived from the application of Reasoned Action Theory to possible Attitudinal and third party Normative influences effecting clients behavioural trust toward their contractor. Results pertaining to the conditional element of the research representing client’s past experience will be reported in a future paper.

**Research Aims and Hypotheses**

In this paper authors show how to understand and predict client behavioural intention toward trusting a contractor in future, taking into consideration the effect on clients of third party influence (e.g. from architects), and the clients own attitudes and beliefs about likely consequences of trusting the contractor. Using Reasoned Action Theory allowed the researcher to break clients trust behaviour down into two constituent parts of the Attitudinal and Normative, described in more detail below. The research described above leads to the formulation the following hypotheses:

- **H1** In relation to the proposed model (see figure 1. Reasoned Action Theory), the ‘beliefs about the outcomes’ of trusting a contractor (b), ‘evaluation of those beliefs’ (c) and overall ‘attitude toward the act’ (Aact) of trusting components, will aid understanding of the effect clients own attitudes toward trusting contractors has on their actual trust behaviour throughout the life of a project.

- **H2** The Normative Belief (nb), Motivation to Comply (mc) and Subjective Norm (SN) elements of the model (again see figure 1) will add significantly to the understanding of what third party influence has on clients trust in contractors throughout the life of a project.

- **H3** A culmination of the two elements, ‘Attitude to Act’ and ‘Subjective Norms’ will provide an overall better understanding and prediction of a clients Behavioural Intention (BI) toward trusting said building contractor in future.

**Methodology**

*Reasoned Action Model:* Designed to gain insight and understanding into ‘Rational Volitional Behaviour’ - that is to say behaviours over which the individual has control. ‘People consider the implications of their actions before they decide to engage or not engage in a given behaviour’ Fishbein and Ajzen (1980 p.5). This is in-line with Rokeach (1969) in so far as he claims ‘An attitude is a relatively enduring organisation of interrelated beliefs that describe, evaluate and advocate action with respect to an object or situation’. Fishbein and Ajzen (1980) argue that beliefs pertain not to a behaviour itself but rather the expected outcomes of carrying out such a behaviour for this research, focusing on expected outcomes represents an important distinction from

*in McLaughlin, Damien. and C. Horan (eds.). Proceedings of The 15th Annual IMP Conference. University College, Dublin 1999*
just focusing on the behaviour itself. It addresses the consequence in the mind of the client and their attitude toward trust behaviour. Consequences that may well present inherent risks. This is particularly appropriate in this particular research paper where the idea of clients trusting a contractor in the construction industry has been shown to be treated with some scepticism, seen as an unrealistic and high risk thing to do (Thompson 1997 p65).

The Reasoned Action Model also allows for outside influences by third parties within a ‘Social Normative’ element to the model. The model unfolds 2 critical influential elements effecting behavioural intention. The Attitudinal and the Normative.

**Attitudinal Influences:** The clients own attitude toward trusting the contractor, dependent upon a certain set of beliefs they have about consequences of doing this (Tuck 1976 p.83). Miniard and Cohen (1981) reliably inform us that, an actor’s attitude toward performing the behaviour by stating, ‘a person’s attitude toward a specific behaviour is proposed to be a function of the salient beliefs about the relevant attributes or perceived consequences of performing the behaviour and of the person’s evaluation of these attributes or consequences’

**Normative Influences:** This relates to the ‘Social or Subjective Norm’, Client ‘beliefs about what they think other persons or agencies think they should do’ (East 1990 p.86), or the clients perception of the social pressures put on them to perform the behaviour in question (Ajzen and Fishbein 1980 p.6). For instance, how strongly does the client believe that the architect or the quantity surveyor would want them to trust the contractor? The subjective norm or SN, is a critical part in this model. In this research clients undeniably operate within what has been termed the Temporary Multi-organisation (Cherns and Bryant 1984) and are therefore constantly subject to the opinion of others and who may represent an important influence in the clients decision making.

The ‘Theory of Reasoned Action, ultimate goal is to predict and understand an individuals behaviour’ (1980 p.5) by taking into consideration a person’s beliefs about the outcome of executing such a behaviour while considering what other people or organisations think they should do. However, researchers believe a further modification to the model was necessary. A schematic representation of the Reasoned Action Model is shown in figure 1.

**ii) In-depth Interviews** 16 in-depth face-to-face interviews were carried out with senior decision making personnel within major private sector companies deemed as being regular procurers of main contractors services for new and refurbishment building work. As key decision-makers these people were internally responsible for the client organisation buildings requirements.

Interviews were conducted over the period of one hour using pre-prepared show cards to aid focus of interview. Each card represented a different phase in the interview dedicated toward each element of the two models being used i.e. Conditional, Attitudinal and Normative elements. Where necessary, subject to the requirements of each card, questions were semi-structured and open-ended allowing a free response in accordance methods proposed by Ajzen and Fishbein (1980).

*in McLoughlin, Damien. and C. Horan (eds.). Proceedings of The 15th Annual IMP Conference, University College, Dublin 1999*
The purpose of the interviews were two-fold: 1. Elicit from interviewees salient criteria for incorporation into a survey questionnaire later, on consequential beliefs, attitudes, key influencers and the language and context in which respondents related to the elements of the reasoned action model introduced earlier. 2. To provide a background of qualitative data as an extension of material found in the literature review and later in the quantitative findings. Depth interviews had been piloted before going into the field.

Figure 1: A Schematic Representation of the Theory of Reasoned Action. (Derived from Ajzen & Fishbein 1980 p.84)

(iii) Questionnaire Survey: Using material from the in-depth interviews a questionnaire was designed and piloted. It was used in a mail survey of Chief Executive Officers and/or Managing Directors of companies within a carefully constructed population sample frame totalling approximately 600 companies. These companies were all deemed to be major experienced private sector clients for main contractors new and refurbishment building services. Specific sectors were chosen which were considered to have common building requirements (e.g. Major retailers, hotel and leisure groups, British Airports Authority (BAA) and leading property developers with related interests). The survey was carried out in two phases: 1. Questionnaire sent out with cover letter giving an explanation as to the nature of the research and asking the addressees to direct the questionnaire to the person in their company they deemed most suitable. 2. A follow up reminder was sent to those who did not respond to the first letter.

Within the questionnaire for the Reasoned Action Model, the Attitude Toward the Act of Trusting the Contractor (Aact) is represented by three scaled items. The items are presented as 5-point bi-polar scales worded as follows. Trusting this contractor would be:

(i) extremely important through to extremely unimportant;
(ii) extremely reasonable through to extremely unreasonable;
(iii) extremely beneficial to extremely detrimental.

These items from now on will be referred to as Aact 1, 2 & 3.
A response rate of 21% or 124 questionnaires were returned proving a little less than had been hoped for, but nevertheless satisfactory.

Results 1: Attitudinal - Attitude, Beliefs and Evaluation of Beliefs

The results in table 1 below indicate that a correlation of $r = 0.10, p > 0.05, n = 124$ between $\Sigma b.e$ and $\Sigma Aact$ 1, 2 & 3 is poor. The internal consistency of the seven-item multiplicative beliefs x evaluation of beliefs (b.e) component in this model shows a Cronbach’s Alpha coefficient of $\alpha = 0.40$ (see table 2), revealing a low level of internal consistency in measurement between all seven belief items. Therefore, the combination of all seven of these beliefs fails to effectively describe the clients overall attitude toward trusting a contractor.

Table 1: Belief (b) x Evaluation (e) Items Correlated With Sum-of-Attitude ($\Sigma Aact$) Items:

<table>
<thead>
<tr>
<th>Belief Items</th>
<th>Spearman Corr. Coef. (With $\Sigma Aact$)</th>
<th>Significance (n 124)</th>
<th>With Just $\Sigma Aact$ 2 &amp; 3 Significance (n 124)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I or my agent would be able to reduce the number of site visits made during the project, compared to last time.</td>
<td>0.17</td>
<td>0.061</td>
<td></td>
</tr>
<tr>
<td>2. Greater chance of an overall successful project.</td>
<td>0.22*</td>
<td>0.016</td>
<td>0.20</td>
</tr>
<tr>
<td>3. Less monitoring of contractor’s performance in terms of quality checks would be needed</td>
<td>0.28*</td>
<td>0.002</td>
<td>0.26</td>
</tr>
<tr>
<td>4. Fewer problems with disclosure of information between the contractors, my agent and myself.</td>
<td>0.30*</td>
<td>0.001</td>
<td>0.29</td>
</tr>
<tr>
<td>5. Place an unreasonable expectation on me, the client, to accept the contractor would perform as agreed.</td>
<td>0.14</td>
<td>0.127</td>
<td></td>
</tr>
<tr>
<td>6. Client more likely to be taken advantage of in terms of amount of profit contractor makes.</td>
<td>-0.19</td>
<td>0.036</td>
<td></td>
</tr>
<tr>
<td>7. Contractor more likely to behave opportunistically with regard to claims.</td>
<td>-0.19</td>
<td>0.036</td>
<td></td>
</tr>
<tr>
<td>8. $\Sigma$ of all 7 b.e items</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. With Just $\Sigma$ b.e 2, 3 &amp; 4 (Marked * above)</td>
<td>0.10</td>
<td>0.272</td>
<td>0.30</td>
</tr>
</tbody>
</table>

However, a process of item selection as prescribed by McKennell (1970) and practised by Shepherd and Farleigh (1986 p.347), improves the overall result. This iterative process results in a correlation of 0.30 when only the $\Sigma b.e$ items 2, 3 and 4 are correlated with $\Sigma Aact$ scales 2 & 3 (see table 1). Still a weak correlation according to Coolican (1994 p.296), it is nevertheless considered satisfactory in social sciences (Ajzen and Fishbein 1980 p.99). Furthermore, the alpha ($\alpha$) coefficient for just these three items is $\alpha = 0.70$ (table 3 below) which is much better than the original seven-item alpha score. This satisfies Nunnally’s ‘rule of thumb’ for internal consistency. Therefore, by isolating these three belief items and correlating them with just the $\Sigma Aact$ 2 & 3, we can begin to successfully describe a clients attitude toward trusting a contractor.

Table 2: Cronbach’s Alpha ($\alpha$) and the Internal Validity of All Belief and Evaluation Items:

<table>
<thead>
<tr>
<th>All Items</th>
<th>No. of Cases</th>
<th>No. of Coef. Items</th>
<th>Alpha ($\alpha$)</th>
</tr>
</thead>
</table>

in McLoughlin, Damien, and C. Horan (eds.), *Proceedings of The 15th Annual IMP Conference,* University College, Dublin 1999
Table 3: Cronbach’s Alpha (α) and the Internal Validity of Iteratively Selected Belief and Evaluation Items:

<table>
<thead>
<tr>
<th>Selected Items</th>
<th>No. of Cases</th>
<th>No. of Items</th>
<th>Coef. Alpha (α)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beliefs x Evaluation (b.e2, b.e3 &amp; b.e4)</td>
<td>124</td>
<td>Just 3</td>
<td>0.70</td>
</tr>
<tr>
<td>Belief Items (b2, b3 &amp; b4)</td>
<td>124</td>
<td>Just 3</td>
<td>0.73</td>
</tr>
<tr>
<td>Evaluation Items (e2, e3 &amp; e4)</td>
<td>124</td>
<td>Just 3</td>
<td>0.72</td>
</tr>
</tbody>
</table>

Results 2: Normative - Subjective Norm, Normative Beliefs and Motivation to Comply

Results for the normative element of the Reasoned Action Model seem better. The results below indicate a correlation $r = 0.51$, $p < 0.05$, $n = 124$ between $Σ_{nb.mc}$ and the single overall measure of Subjective Norm (SN) (see table 4). Described by Coolican (1994 p.296) as only a moderate score, Ajzen and Fishbein (1980 p.99) argue correlations between 0.30 and 0.50 are moderate while those exceeding 0.50 indicate relatively strong relationships between variables.

Table 4: Normative beliefs (nb) \ Motivation to comply (me) items - Correlated With The Subjective Norm (SN) Item:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The Architect</td>
<td>0.49*</td>
<td>0.49</td>
<td>0.49</td>
<td>0.00</td>
<td>0.49</td>
<td>0.00</td>
</tr>
<tr>
<td>2. Contractor’s Previous Clients</td>
<td>0.37*</td>
<td>0.37</td>
<td>0.37</td>
<td>0.00</td>
<td>0.370.000</td>
<td>0.00</td>
</tr>
<tr>
<td>3. Sub-contractors of the Contractor</td>
<td>0.32</td>
<td>0.32</td>
<td>0.32</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Suppliers to the Contractor</td>
<td>0.28</td>
<td>0.28</td>
<td>0.28</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Your Quantity Surveyor</td>
<td>0.34</td>
<td>0.34</td>
<td>0.34</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Your Building Surveyor</td>
<td>0.17</td>
<td>0.059</td>
<td>0.059</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Engineers Involved in the Project</td>
<td>0.42*</td>
<td>0.42</td>
<td>0.42</td>
<td>0.00</td>
<td>0.420.000</td>
<td>0.00</td>
</tr>
<tr>
<td>8. Colleagues in Your Firm</td>
<td>0.46*</td>
<td>0.46</td>
<td>0.46</td>
<td>0.00</td>
<td>0.460.000</td>
<td>0.00</td>
</tr>
<tr>
<td>9. Σ of all 7 nb.mc items</td>
<td>0.51</td>
<td>0.51</td>
<td>0.51</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. With Just Σ nb.mc</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1, 2, 5, 7 &amp; 8 (Marked * above)</td>
<td>0.52</td>
<td>0.52</td>
<td>0.52</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Combined with a Cronbach’s Alpha Coefficient of $α = 0.85$ for the overall $Σ_{nb.mc}$, $α = 0.90$ for just the Normative Belief (nb) Scales and $α = 0.82$ for the Motivation to Comply (me) scales (see table 5) this suggests that while the correlation in this part of the Reasoned Action Model is only just over moderate it is successful in determining those third parties who have an influential impact upon a client’s trust in the contractor.

Table 5: Cronbach’s Alpha (α) and the Internal Validity of All Normative Belief and Motivation to Comply Items:

<table>
<thead>
<tr>
<th>All Items</th>
<th>No. of Cases</th>
<th>No. of Items</th>
<th>Alpha (α)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normative Beliefs x</td>
<td>124</td>
<td>All</td>
<td>0.85</td>
</tr>
<tr>
<td>Motivation to Comply (nb.mc)</td>
<td>124</td>
<td>All</td>
<td>0.85</td>
</tr>
<tr>
<td>Normative Belief Items (nb)</td>
<td>124</td>
<td>All</td>
<td>0.90</td>
</tr>
<tr>
<td>Motivation to Comply Items (mc)</td>
<td>124</td>
<td>All</td>
<td>0.85</td>
</tr>
</tbody>
</table>

Table 6: Cronbach’s Alpha (α) and the Internal Validity of Iteratively Selected Normative Belief and Motivation to Comply Items:

<table>
<thead>
<tr>
<th>Selected Items</th>
<th>No. of Cases</th>
<th>No. of Items</th>
<th>Coef. (α)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normative Beliefs x</td>
<td>124</td>
<td>Just 4</td>
<td>0.81</td>
</tr>
<tr>
<td>Motivation to Comply (nb.mc 1, 2, 7 &amp; 8)</td>
<td>124</td>
<td>Just 4</td>
<td>0.85</td>
</tr>
<tr>
<td>Normative Belief Items (nb 1, 2, 7 &amp; 8)</td>
<td>124</td>
<td>Just 4</td>
<td>0.73</td>
</tr>
<tr>
<td>Motivation to Comply Items (mc 1, 2, 7 &amp; 8)</td>
<td>124</td>
<td>Just 4</td>
<td>0.73</td>
</tr>
</tbody>
</table>

Nevertheless, some improvement would go a long way toward making things more sure. Therefore, item selection (McKennell 1970; Shephard and Farleigh 1986 p.347) was undertaken for the normative element, as with the attitudinal beliefs above. By only summing the four items (nb.mc) that have the highest independent correlation’s with SN (i.e. nb.mc 1, 2, 7 & 8), increases from r = 0.51 to r = 0.54, p < 0.05, n = 124 (see table 4). With the coefficient alpha remaining above Nunnally’s 0.70 rule of thumb, at α = 0.81 (see table 6), this makes for a stronger description of the critical third party influencers to be effecting clients trust in their contractor.

Results 3: Ajzen and Fishbein’s Overall Reasoned Action Model (RAM)

At first glance (see figure 2 below) and in accordance with Sheppard et al (1988 p.336); Ajzen and Fishbein (1980 p.99); Coolican (1994 p.296) the predictive part of the model appears to be moderate with a correlation between behavioural intention (BI) and reported past experience as a measure of actual behaviour (B) of r = 0.52, p < 0.05, n = 124. The results for Behavioural Intention are even stronger, with a Multiple Linear Regression (MLR) correlation of R = 0.75, p < 0.05, df = 120 between BI as the dependent variable and Aact and SN as the independents. The beta coefficients indicate that a Subjective Norm β = 0.55, p < 0.05 plays the greater influential part in a client’s behavioural intention than Attitude (ΣAact2&3) which is β = 0.35, p < 0.05. Spearman’s Rank Correlation Coefficients are complimentary to the Beta weightings in terms of ranking between Aact and SN by showing r = 0.54, p< 0.05. n = 124 between Subjective Norm (SN) and Behavioural Intention (BI) and r = 0.47, p < 0.05. n = 124 between Attitude Toward Act (Aact) and Behavioural Intention (BI). The remainder of the model simply shows the results presented earlier with Σb.e2. 3 & 4 and ΣAact2&3 having a moderate correlation of r = 0.30. p < 0.05. n = 124, whilst Σnb.mc 1, 2, 7 & 8 and SN have a stronger correlation of r = 0.54. p<0.05. n=124

Results 4: Client Budgets Over a Three Year Period
For small budget clients the beta score of $\beta = 0.48$, $p < 0.05$. $df = 41$ shows subjective norm (SN) to be the greatest influencing factor on BI in comparison to $\Sigma Aact2&3$. This is closely followed by $\Sigma Aact2&3$ which has $\beta = 0.40$, $p < 0.05$. These scores show a same order of influence between Aact and SN right through all three of the budget sized categories. However, the gap between the independent variables Aact2&3 and SN does appear to increase, the larger the budget gets. Nevertheless, these figures can only be read as indicative of a difference between the client budget groups because the probability score shown under SN for large budget clients was $p > 0.05$. To say that size of client budget bears no relationship to the order of influence between Aact and SN on BI cannot be accepted with any confidence and must therefore be rejected.

**Figure 2: Results For The Overall Reasoned Action Model.**

- **Beliefs**
  - $(b)$
    - $r = 0.30^*$
- **Evaluation of Beliefs**
  - $(e)$
    - $r = 0.47^*$
- **Normative Beliefs**
  - $(nb)$
    - $r = 0.54$
- **Motivation to Comply**
  - $(mc)$
    - $r = 0.64^*$

$\beta = 0.34^*$

$R = 0.75^*$

$R = 0.52^*$

$(Note: ^*p < 0.005, n = 124)$

**Table 7: Understanding BI in Client Groups With Different Budgets Over Three Years**

<table>
<thead>
<tr>
<th>Budget (£millions) Over 3 Year Period</th>
<th>$R$</th>
<th>$\Sigma Aact2&amp;3$ $(\beta)$</th>
<th>SN $(\beta)$</th>
<th>Degree of Freedom</th>
<th>Overall Sig. F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small &lt;=10</td>
<td>0.72</td>
<td>0.40</td>
<td>0.48</td>
<td>2/41</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$p &lt; 0.05$</td>
<td>$p &lt; 0.05$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium &lt;=100</td>
<td>0.80</td>
<td>0.27</td>
<td>0.60</td>
<td>2/39</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$p &lt; 0.05$</td>
<td>$p &lt; 0.05$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large &gt;100 (e.g.500)</td>
<td>0.77</td>
<td>0.16</td>
<td>0.80</td>
<td>2/15</td>
<td>0.0042</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$p &lt; 0.05$</td>
<td>$p &gt; 0.05$</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This introduces the need to ask new questions. Why budget size is a problem is unknown. Budget size was selected as an indicator for the effect of a number of possible

*in McLaughlin, Damien. and C. Horan (eds.), Proceedings of The 15th Annual IMP Conference, University College, Dublin 1999*
additional factors that might influence a client’s behavioural intention toward trusting a chosen building contractor. Questions might now be asked of issues such as client size, power or level of experience (e.g. novice through to expert) Readers might consider this when referring to the overall figures shown in this paper. However, nothing else will be said about these issues other than it highlights the importance of the proposed modification to the reasoned action model due to be reported on soon (Thompson 1999).

Discussion of Results

This paper starts with the issue of a client’s own personal assumptions toward trusting a building contractor. This is represented by the attitudinal findings in the survey (Aact). Careful note should taken of this part of the model, for whilst this makes the weakest contribution toward behavioural intention within the basic Reasoned Action Model (See Figure 3) and clients consider it second in importance to the normative part of the model (subjective norm – SN), the attitudinal component still makes an important contribution to understanding client trust behaviour toward contractors.

The Beliefs-Attitude (b & Aact) element within the Reasoned Action Model set out to uncover what clients perceived as being the consequences of trusting a contractor in future. This was done in accordance with Ali (1994 p.118) with respect to the issue of favourable and unfavourable consequences. The list of beliefs (b) in this study reflects both positive and negative consequences as perceived by client decision-makers.

Table 8: Out of the original seven positive and negative belief items the three that fitted best with $\sum \text{Aact} 2 \& 3$ were:

<table>
<thead>
<tr>
<th>Belief 2</th>
<th>A greater chance of overall successful project.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belief 3</td>
<td>Less monitoring of contractor’s performance in terms of quality checks would be needed.</td>
</tr>
<tr>
<td>Belief 4</td>
<td>There would be fewer problems with the disclosure of information between the contractor, the clients own agent and the client themselves.</td>
</tr>
</tbody>
</table>

The belief items that were removed:

<table>
<thead>
<tr>
<th>Belief 1</th>
<th>That in future the client and their agent would be able to reduce the number of site visits made during the project, compared to the last time the contractor was used.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belief 5</td>
<td>That trusting the contractor places unreasonable expectations on the client to accept the contractor would perform as agreed.</td>
</tr>
<tr>
<td>Belief 6</td>
<td>The client is more likely to be taken advantage of in terms of amount of profit contractor makes.</td>
</tr>
<tr>
<td>Belief 7</td>
<td>Contractor more likely to behave opportunistically with regard to claims</td>
</tr>
</tbody>
</table>

Three consequential beliefs were found to contribute most to understanding clients’ perceived consequences of trusting contractors. These were separated from the initial seven beliefs because they correlated best with the sum of Aact measures 2 and 3 which stated that to trust the contractor would be both a reasonable and beneficial thing to do (see table 8 below).

Before interpreting what the three remaining belief items tell us, the author checked for collinearity among them. This was to make sure that the remaining items could not be
argued to be measuring the same thing and thus resulting in the 'accidental selection of one variable rather than another for the multiple regression equation' (Ehrenberg 1994 p.206).

A Clients Perceived Consequences of Trusting Their Contractor

'There has been a considerable amount of research, in the management science literature, that emphasises the importance of beliefs or expectations about another's trustworthiness with respect to the process of trust'. 'That is, trust in specific others has been argued as being activated and sustained by a multidimensional set of attributes relating to beliefs about the trustworthy characteristics of others' (Clark & Payne 1995 p.11). This section focuses precisely on this issue of client attitudes and beliefs about the outcome of trusting their building contractor, and in doing so makes two important assertions.

1. Even though the correlative results pertaining to this section of are relatively weak, the belief items identified in this research are valid, and as such supported by existing literature. The belief items identified are correct.

2. That rather than being incorrect, the low correlative results are an indication of the current status of construction industry clients' attitudes toward trusting contractors, compared with the role that other elements within the Reasoned Action Model, currently play. This, therefore, provides valuable insight into client trust behaviour toward contractors.

Brock-Smith and Barclay (1995 p.9) in discussing others' work on social exchange theory state, 'a variety of actions may indicate trust, five standing out as being central to on-going exchange relationships', this being precisely the type of relationship experienced by clients and contractors. The five actions are:

Relationship-specific Investments - Where resources, effort and attention are devoted to the relationship that has no outside value and cannot be recovered if the relationship is terminated (Wilson and Mummulaneni 1988).

Control Reduction - The degree to which exchange partners with hold the use of power in their relationships (Gibb 1964; Zand 1972).

Influence Acceptance – The degree to which exchange partners voluntarily change their strategies or behaviours to accommodate the desires of the other (Blau 1964).

Communication Openness – Formal and informal sharing of timely information between partners. Concerned with the mutual disclosure of plans, programmes, expectations, goals, motives and evaluation criteria rather than the quantity or frequency of information exchanged (Anderson and Narus 1984).

Forbearance From Opportunism - Acting in the spirit of co-operation, not cheating and not withholding helpful action (Buckley and Casson 1988; John 1984).

In examining these key indicators of trust action, it can be seen that the remaining belief items identified in this research compare well with Brock-Smith and Barclay's Communication Openness and Control Reduction. This goes some way to validating the three chosen beliefs items and highlighting their importance.
It appears that clients may be beginning to believe, that where they can have confidence in their contractor, communication amongst the contractor, client and their agent would be easier, thus leading to less need for monitoring of contractors performance and a greater chance of a successful project.

This interpretation of findings is further reinforced by the work of Zand (1972 p.229) who says there is, ‘significant differences between high-trust groups and low-trust groups in the clarification of goals, the reality of information exchanged, the scope of search for solutions and the commitment of managers to implement solutions’ Trust has been shown to be higher where there is good communication and the parties involved can rely upon each other.

Anderson and Weitz (1989 p.320), also demonstrated the link between trust and better communication stating, ‘older relationships involve less communication rather than more, suggesting the parties have developed such a good understanding of each other that they can make their points more efficiently’.

**Figure 3:** Consequence of Trust Behaviour Toward a Trustworthy Contractor.

- Have confidence in the trustworthy contractor
- Fewer problems over disclosure of information between all concerned
- Less monitoring of contractors performance required
- Greater chance of overall successful project
- Based upon past & present experience creating a cyclical build up in the strength of consequential beliefs and clients overall attitude toward trusting their building contractor

The suggestion is, trust is built-up through a cyclical process of experience, leading to future expectations and thus trust behaviour. This is demonstrated in time through better communications and a willingness of participants to take action to ensure the success of a relationship. If this is so, then the author’s interpretation of client beliefs as illustrated above (figure 3) is not unreasonable.

This interpretation of client beliefs shown above is further reinforced by the work of Zand (1972 p.231) in which he shows a close association between trust and the reduction of control over the other trusted parties. He expresses the inter-relationship between control and trust and increasing ones vulnerability to others by accepting more interdependence between trustor and trustee. They ‘impose less procedure to control others’, demonstrating ‘greater confidence others will do what they agree to’. This supports belief 3 given by clients in this research stating that were trust able to be given.

"less monitoring of contractor’s performance in terms of quality checks would be needed”. This is further reinforced by Michell et al (1998 p.160) whilst relating reliability and trust together, by defining reliability in terms of quality consistency, quality standing, predictability and guarantee and the firm being trusted having the required expertise to perform its business effectively and reliably.

Anderson and Narus (1990 p.50). In their model of working partnership, show how communication is closely associated with and feeds into co-operation and then into trust, which is based upon one party’s past and present experiences of the other (p.49). This feeds into the question of satisfaction on the part of the trustor and showed a strong negative correlation with issues of conflict between the parties involved (p.53).

The literature therefore supports the idea that fewer problems in the disclosure of information between clients, contractors and other parties is entirely reasonable where trust and confidence in a contractor build up over time. The literature is equally supportive of the notion that clients may be prepared to lower their amount of control, in the form of monitoring, as trust in the contractor develops. The literature is therefore very supportive of the belief variables utilised within the Reasoned Action Model but two points must be addressed.

1. What of those consequential beliefs that have been removed ?
2. If the belief items identified are correct why were correlative scores with overall measures of attitude (Aact) so low ?

Removed belief items: This provides an interesting insight into client attitudes toward trusting contractors. The items removed (table) are also found to relate to the literature. Links between the removed belief items can be seen with Brock-Smith and Barclay’s (1995) trust actions. For instance, belief 1 is directly related to the idea of ’control reduction” whilst beliefs 5, 6, & 7 directly relate to ‘forbearance from opportunism’. However, whilst the belief items that were removed could be said to compare equally well with the literature it does not explain why results are so low. Depth interviews and anecdotal history tell us that clients are very wary of trusting contractors due to the potential consequences identified under belief 5, 6, & 7. However, with a lack of clear positive correlation between these items and the overall measure of attitude, this suggests possibly a change of opinion. For many decision makers within experienced private sector client companies where they have used a specific contractor before and are considering using them again, the issue of opportunistic and or unfair behaviour on the part of the contractor may no longer be of the concern they once were.

However, responses to belief 1 are curious in terms of interpreting the nature of control reduction that clients are prepared to undertake. Where belief three’s low to moderate correlation with attitude suggests clients may be more willing to reduce their monitoring activities of contractors with regards to quality issues, they appear undecided with regards to any change in the number of site visits during a project. It is not immediately clear why this is. A distinction may be drawn between issues of schedule and project progress, and issues of quality for which clients may simply be relying upon third parties to keep them informed. This inconsistency on issues of control reduction by clients seems to suggest the continued existence of slight suspicion and maintained guardedness (Kee and Knox 1970) on the part of the clients when it comes to trusting

University College, Dublin 1999
the contractor. Given the importance placed in this element of the research toward good communication between the client, contractor and other third parties involved on a project, in the authors opinion an examination of the Subjective Norm element within this research will help here.

**Third Party Influence on Decision Makers Intention Toward Trusting The Contractor**

The Normative (SN, nb & mc) element within the Reasoned Action Model set out to uncover the effect that third party influence had on a client decision maker’s behavioural intention toward trusting a contractor. This was done in line with Ali (1994) and Cherns and Bryant (1984) with regard to the most likely influencers and the effect of the temporary multi-organisation (TMO).

This was found by far to be the dominant element within the reasoned action model. It has reinforced the suspicion that select third parties are the dominant influence in whether or not a client is likely to trust a building contractor. It further reinforces the idea that within the temporary multi-organisation that is experienced within the UK construction industry, third party word-of-mouth can have an impact on clients perception of a contractors trustworthiness through reputation in referral markets (Thompson 1996 p.86). It also supports the assertion that problems of client suspicion and perceived risk toward contractors when considering the question of trust may well be developed through inter-group dynamics where positive or negative client perceptions of the contractor are heightened or amplified through intermediaries influence (Labianca et al 1998).

The rank order according to strength of correlation showed that out of the eight originally selected salient normative influencers the most likely were:
1. the architect,
2. colleagues from within the clients own firm,
3. engineers involved in the project,
4. and contractors own previous client’s.

This, to a certain extent, confirms the idea raised in earlier work (Thompson 1996 p.89), which listed consultants and contractors own past and existing clients as key influencers of both the clients own decision making and levels of perceived risk. The inclusion of colleagues within the list of key influencers is interesting, and supports the idea in relationship marketing that multiple relationships between employees in both the client and contractor organisations should be developed rather than relying solely on one point of contact. Furthermore, the results also show the Reasoned Action Model’s ability to comply with the established principles found within the theory pertaining to a buying centre (Ford 1990 p.422-23) The decision maker relies upon a network of other parties both internal and external to the organisation within which they work to arrive at a decision as to whether the contractor is to be trusted or not. Furthermore, each member of the decision-making unit may have their own objectives and thereby present the opportunity for conflict to arise. This falls in-line with Deutsch (1960) who talks about how each co-operator within this network of influencers may well be individually orientated toward obtaining maximum gain for themselves. Combine this with the Labianca et al (1998) principle of heightened inter-group dynamics and it can be seen

how trust in a contractor can be made so difficult for clients, how perceived risk can be
easily escalated along with the potential for conflict. This highlights why dependency on
third party influencers has become so dominant as to be almost surrogate over a decision
maker's own beliefs and attitudes.

What is of particular interest is that even though the client decision maker reports
previous experience of a contractor, they continue to rely more upon third party opinion
more than their own attitude and set of beliefs where trusting the contractor in future is
concerned. This may be in part due to the complexity of a construction project and the
risks involved, an thought that complies with ideas about reducing complexity in
decision making (Ford et al 1998 p 59). However, equally possible is the idea that in
construction management there still remains a lack of awareness about how to evaluate
the trustworthiness of a contractor. The recent importance given to trust within this
industry, combined with the lack of tools to help decisions makers in this situation,
despite clearly why clients still rely so strongly on third parties rather than upon their
own beliefs and experience.

**The Architect** – The fact that this third party is so high on the list appears to reinforce
the view that clients depend upon architects where issues regarding design and quality
are concerned. This supports the assertion regarding control reduction made under
attitudes and beliefs above, and suggests that client decision makers remain uncertain as
to whether they can personally trust the contractor or not. What this does tell us is that
the architect is a critical influencer between client and contractor regarding the
effectiveness of communication, and thus all parties' ability to rectify problems as and
when they occur.

**Decision Makers' Colleagues** – This third party element is important because it
reinforces the view that multiple contacts must be developed and maintained across
buyer and supplier organisations where successful positive on-going inter-organisational
relationships are concerned. If trust and a positive on-going relationship are to work
then the, 'selling (contractors) and buying (clients) companies must be closely aligned
and communicating at all levels' (McDonald et al 1996 p.22). The Bow-tie to Diamond
principle appears to be of critical importance here. Whilst projects can be run on a single
point of contact through appointed inter-organisational boundary role persons, trust and
successful long term relationships like partnering cannot exist on this basis. Even partial
integration between organisations through lower ranking personnel working on the
ground, without the involvement of senior managers and directors will not suffice.

**Engineers Involved in a Project** – Often problems during a project go unnoticed by the
client until far too late. Changes of mind and/or incomplete designs result in engineers
often being the ones to highlight problems long after they are able to influence the
design process. Design and Build procurement sets out to alter this by bringing the
client and contractor directly together from the start with the engineers and architect
working under the contractors control. This eliminates intermediary interference with
communication and allows the contractor to be more responsive to client needs and
wants. But have contractors earned the right to do this? This research suggests that
experienced clients are still relying on architects and engineers first and foremost before
listening to the contractor. This may in part be due to the unfavourable image
contractors have moulded for themselves historically. It may also be down to poor
communication between all concerned. It appears, rightly or wrongly, that contractors

in McLoughlin, Damien. and C. Horan (eds.). *Proceedings of The 15th Annual IMP Conference,*
University College, Dublin 1999
can still not be trusted directly and that the architects and engineers play an important role in providing checks and balances where the client is unsure of the contractor. This needs to change, and to a greater extent it is the responsibility of the contractor to bring about changes in what they do and how they behave so as instil greater confidence in among clients. But it is not solely their responsibility.

**Contractor’s Own Previous Clients** – As Bresnen and Haslam (1991 p.327) tell us, ‘Client experience has an important impact upon many decisions made’, and where the decision maker new to a client organisation has not had direct personal experience of a contractor then a contractor’s own previous clients, combined with colleagues within the firm, clearly play a major role. What is surprising is that where respondents have already reported past experience of a contractor they have still highlighted contractor’s past clients as being important. It may be that consistency between project and project teams is a valuable indicator of trustworthiness. For with consistency there is predictability and thus lower risk. Therefore, clients may well be combining their own experience with that of other clients. After all, as mentioned earlier, Fombrun (1996 p 3) says, ‘a reputation embodies the history of other peoples’ experiences with that service provider. Good reputation increase credibility, making us more confident that we will get what we are promised’.

**Conclusion**

Where trust by the client toward a contractor may previously have been considered inconceivable, things may be beginning to change. In closing, it is felt that items identified within this research said to describe factors influencing the clients’ behavioural intention toward trusting a building contractor are by no means permanent. As interest grows in the importance of trust clients may well start to form stronger more reliable opinions rather than falling back on what may have become institutionalised scepticism and a dependency upon third parties like the architect, engineers, colleagues and other past clients. It may be that the attitudinal element of the Reasoned Action Model, has weaker results due to a lack of agreement between clients as to precisely what the consequences of trusting a contractor are. They appear to be only just beginning to formulate an idea as to what is required from a contractor where trust toward them is concerned. While they still remain unsure clients continue to depend upon third party opinion, in the same way as has previously been the case, when short listing a contractor for tender and selecting them for a project. The problem here is that whilst this approach might have been appropriate for one off sporadic contracts where the client keeps repeating the process of tendering it undermines progress of positive on-going relationships being developed through strategies such as partnering, supply framework agreements, and design and build procurement.

Future research might take into consideration differences in perceived consequences across different types of client. Sampling could focus much more on specific clients’ groups rather than drawing from a more generalised population according to common project requirements across larger experienced private sector clients.

Nevertheless, this research has clearly validated the role the Reasoned Action Model can play. It has successfully identified Subjective Normative influences as being of critical importance in decision making between organisations. Thus underpinning a commonly

upheld principle within business to business marketing literature that decisions are the product of a group of interacting participants and not a single individual. This therefore for the first time provides a tool that can enable construction marketing and management thinkers and practitioners to address the question of trust behaviour in the complex networked environment that is a construction project.

References


Ehrenberg, A. S. C. 1994 in *A Primer in Data Reduction*. John Wiley & Sons Ltd.


McDonald, M., Millman, T and Rogers, B 1996 Key Account Management - Learning From Suppliers and Customers Perspectives. A Cranfield University Centre For Advanced Research in Marketing report by Cranfield School of Management in association with Chartered Institute of Marketing. ISBN: 1-85905-077-8


Rokeach 1969 in Beliefs, Attitudes and Values Jossey-Bass Inc., SF.


