# IMPACT OF PSYCHOLOGICAL ASPECTS TOWARDS CONSTRUCTION NEGOTIATION

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### LIST OF ABBREVIATIONS

ADR = Alternative Dispute Resolution

BDT = Behavioural Decision Theory

CII = Construction Industry Institute

CPD = Continuous Professional Development

DPI = Dispute Potential Index

DRB = Dispute resolution Board

SWOT = Strengths, Weaknesses, Opportunities and Threats

## CHAPTER ONE INTRODUCTION

### 1.1 Background

Construction industry breeds a wide array of projects which are distinctive in nature with the association of myriads of interconnected tasks and work packages (Chris, 2009). Further to him, it is a complex and dynamic industry which encompasses many players at various stages. These players entail client, designer, contractor and manufacturers who involved from the initiation to completion of a construction project (Nawi, Nasrun, Baluch & Bahaudin, 2014). Hai, Yusof, Ismail and Wei (2012) expounded that, conventional construction projects are fragmented in means like remoteness of professionals, lack of coordination between design and construction and sequential manner execution. Due to these unique characteristics of construction industry, it is considered to be the most adverse business which leads to bulky waste, deficient productivity, cost and time overruns and enduring conflicts and disputes (Xue, Li, Shen & Wang, 2005).

Conflicts and disputes are inevitable in construction industry as it extremely exposes to adverse risks and uncertainties (Winegard & Warhoe, 2003). Conforming, Cushman, Carter, Coppi and Gorman (2001) explicated that, "if high risks and uncertainty are the salt of construction industry, controversy and disputes are its pepper" (p.21). This emphasized that, risk and uncertainty attributable to construction industry extremely encourage the coexistence of disputes and conflicts within it. Further to Cushman et al. (2001), construction industry raises number of conflicts and disputes even due to its size, complexity, contract structure, litigious nature and multiparty collaboration. Moreover, Kumaraswamy and Yogeswaran (2003) expressed that, construction conflicts and disputes are engendered mostly due to contractual matters related to variations, extension of time, payments, quality of technical specification, availability of information, administration and management, unrealistic client expectations and determinations.

Even if, there is no apparent variance between construction conflict and dispute, they are distinct wordings which have detached meanings. According to Fenn, Lowe and Speck (1997), conflict exists wherever there is an inconsistency of interests, beliefs and opinions. Thus, conflict can be managed by preventing its evolution to a dispute. However, dispute is the climax of a conflict which associated with discrete justiciable issues that require a proper resolution method (Fenn et al., 1997). Henceforth, a proper dispute resolution process is essential to eradicate disputes for the successful endurance of construction industry.

Presently, resolving construction disputes has become a momentous and inexorable task in project management (Kriesberg, 2007). Decades ago, similar to the commercial disputes, the construction disputes also were resolute through litigation (Brooker & Lavers, 1997). However, with the time, litigation became less popular and considered as a tedious dispute resolution method due to its adverse outputs of immense cost, delay, procedural technicality, high transparency and generation of antagonism (McGeorge et al, 2007). Due to this, Alternative Dispute Resolution (ADR) methods were introduced to the construction industry as a solution to eradicate all the hostile shortcomings in litigation. As per Barker, Bunni and Williams (2002), there are lot of ADR methods practicing in modern construction industry namely arbitration, Dispute Resolution Boards (DRBs), expert determination, conciliation, mediation and negotiation. Ritchter (2000) explicated that, negotiation holds an extreme end in ADR continuum which has the least degree of hostility, cost and control over the outcome. Since, negotiation primarily promotes the amicable settlement between parties (Dixon & Senese, 2002), it is important to distinguish on negotiation in depth.

The construction negotiation plays an important role in a construction project. According to Ross (2006), negotiation refers to the ways in which individuals convey information about what they want, what they desire, and what they expect from other people as well as how they receive information about other people's wants, desires and expectations. Similarly, Fisher, Ury and Patton (1991) stated that, it is a basic means of getting what you want from others. Ross (2006) and Fisher et al. (1991) are of the view that the negotiation is a science, while Michael and Wayne (1981) viewed the negotiation is the art of getting what you want. Generally, construction negotiations

are taking place throughout the construction project ranging from simple interactions between parties to complex dispute resolutions. Basically, construction professionals negotiate during planning, pre- contract and post contract phases for selection of consultants, contractors, materials, acquisition of land, buying materials and plant which are highly impact for time, cost and quality parameters of the project.

As per Thompson and Nadler (2002), negotiators' beliefs, perceptions, ideas and opinions are critical factors which influence the success of negotiation. Therefore, involvement of people has made a space to integrate psychology in to the negotiation. Conforming, Rubin and Brown (2013) expounded that, negotiation is arguably one of the most multifaceted psychological processes which involves individual psychological processes like cognition, emotion and motivation. Subsequently, Malhotra and Bazerman (2008) have defined this psychological influence as "the effort to positively influence another party's attitude towards a given idea or proposition without changing the incentives or objective information set of the other party" (para. 8). Therefore, involvement of ideas, thoughts and attitudes of the people who are involved in the negotiation may create the game of negotiation to a victory or defeat.

### 1.2 Research problem

Many studies have been conducted to identify the psychological aspects affecting the negotiation process in marketing and management fields. Tsay and Bazerman (2009) expounded that Behavioural Decision Theory (BDT) has a significant influence on the practice of negotiation. Further to them, it is the best theory to discuss psychological factors within behavioural decision perspective in social negotiation and bargaining processes. Thus, many researches have used BDT as the base to deliberate psychological process within negotiation.

March and Shapira (1982) and Neale and Bazerman (1992) have applied BDT to discuss the managerial negotiators' cognitional in organizational culture. Moreover, Malhotra and Bazerman (2008) have employed BDT to converse the psychological aspects related to economic negotiations or structural levers of bargaining situations in common financial markets. Furthermore, Tsay and Bazerman (2009) have discovered the decision-making perspective to negotiation with respect to BDT in

commercial environment. However, there is no study carried out to explore psychological aspects influencing construction negotiation.

Construction industry is having inherited characteristics which make it more significant and different to other industries (Ofori, 2000). In construction industry, negotiation is the basic ADR method which endorses the amicable settlement of disputes. Thus, it is a method where people manage their own interdependencies. Henceforth, involvement of human factor linked the psychology into negotiation. Thus, it is important to study on these psychological aspects which determine negotiation behaviours and outcomes in construction industry.

#### 1.3 **Aim**

Aim of the study is to explore the influence of psychological aspects for negotiation in construction.

### 1.4 Objectives

In order to reach the aforementioned aim, following are the objectives to be accomplished;

- 1. To review the concept of negotiation in construction projects
- 2. To identify the types of psychological aspects involved in negotiations.
- 3. To investigate the impact of psychological aspects for the negotiations in construction projects.
- 4. To determine the psychological aspects which can be applied for the successful construction negotiation

### 1.5 Research Methodology

The primary stage of the research was a comprehensive literature survey to identify the nature of construction negotiation. Subsequently, theories behind psychological aspects which influence the individual decision making was investigated extensively, while reviewing on how they can be applied for construction negotiation. The literature survey was escorted by books, journals, electronic articles and conference proceedings.

Consequently, the qualitative research approach was selected to accomplish to subsequent objectives. The data were collected from nine construction negotiators through semi-structured interviews. Interviewees were the construction professionals who were involved in construction negotiations. Finally, an extensive qualitative content analysis was carried out in order to reach the research aim successfully.

### 1.6 Scope and Limitations

The scope of the research is to identify the psychological aspects which determine the negotiation behaviours and outcomes in construction negotiation. Thus, the study will be only limited to determine psychological aspects related to BDT which influences the negotiation process due to the available time constraints. Further, the study is limited only to the Sri Lankan building and civil construction projects due to the geographical constraints. Moreover, the negotiation cases for the study will be selected from construction stage of selected projects.

### 1.7 Chapter Breakdown

Table 0-1: Chapter Breakdown

Chapter Breakdown		
Chapter 01 Introduction	Provides an introduction to the research assisting the reader to comprehend the research problem. Afterwards, it exposes the research problem, aim and objectives of the research.	
Chapter 02 Literature Review	A comprehensive literature review will be given which was assisted in investigating nature of construction disputes and the available ADR methods in construction industry. Further, it will provide an inclusive literature study on construction negotiation and psychological aspects which influence the negotiation.	
Chapter 03 Methodology	This chapter provides the systematic methodology to conduct research, it will include the research strategy, approach, data	

	collection and analysis methods which will be conducted to reach
	the research aim successfully.
Chapter 04 Findings and Analysis	This chapter comprehends all the findings of data collection and its analysis and interpretation to accomplish 2 <sup>nd</sup> , 3 <sup>rd</sup> and 4 <sup>th</sup> objectives of the research.
Chapter 05 Conclusions and Recommendations	Lastly, derived conclusion and recommendations of the study will be exposed in the chapter while highlighting limitations of the research and further research directions.

### CHAPTER TWO LITERATURE REVIEW

#### 2.1 Introduction

This chapter incepts with a thought to the background study and develops an extensive review on prevalent scientific knowledge to further establish the research aim. First off, the consideration is given to the nature of construction industry. Subsequently, a brief introduction is given to the disputes in construction industry and how ADR methods can be used to resolve disputes in construction industry. The succeeding section carries an in-depth introduction on general negotiation and how it deviated in construction negotiation. Thereby, the focus is utterly given to the construction negotiation process and how it can be explained as a psychological process.

### 2.2 Nature of Construction Industry

A construction project pleads an extreme participation of all key industry professionals to deliver the project successfully (E. Cakmak & P.I. Cakmak, 2014). Davis and Harty (2012) explained that, construction project involves diverse group of professionals and organizations to accomplish its ultimate project target. Even if, all these professionals have one goal of accomplishing cost, time and quality targets, each of them is having their own concealed targets to be achieved from eventual project execution (Bartos, 1977). When achieving these individual targets, inevitably different disputes develop between project participants (Yates, 1998). Thus, Groton (2005) explicated that, construction industry is a paradoxical leader in both dispute manifestations and dispute settlement systems for many years.

### 2.3 Disputes in Construction Industry

In the early days of construction industry, a construction projects were continued within a smooth and simple arrangement. The employer appointed an engineer to develop the design and specifications for his desired project. Thereby, the employer awarded the contract to a suitable contractor to perform the physical construction of works. At these times, contracts were relatively forthright and simple, without having

more complex and exculpatory clauses. Thus, limited number of disputes were arisen between parties and even the occurred disputes were settled on the job premises with an informal meeting between parties on the basis of a handshake (Treacy, 1995).

Acharya, Dai Lee and Man Im (2006) explained that, the present construction industry is dynamic in nature due to upsurge in uncertainties in cost, time, technology and processes of development. Due to this complexity of modern construction industry, it has subjected to a dramatic increase in conflicts and disputes (Kassab, Hipel & Hegazy, 2006). As per Yates (1998), these conflicts and disputes usually lead to delays in completion, higher project costs and deterioration of individual and corporate relationships between participants.

Even though, conflict, dispute and claims are inter-related terms, they are having different concepts. As per Collins, (2000) conflict is a "serious disagreement and argument about something important and also as a serious difference between two or more beliefs, ideas or interests". Safinia, (2014) described that, a dispute is a succeeding stage of conflict that involves the resolution of legitimate issues. As per Eggleston (1993), dispute occurs when a claim or conflict notified by one party is rejected by the other party and that rejection is not accepted by the first party. Accordingly, Kumaraswamy (1997) specified that, disputes evolve due to protracted disagreements on unsettled claims and long-drawn-out unresolved conflicts.

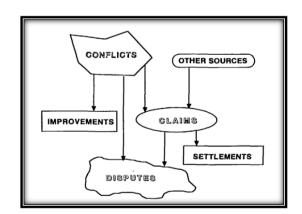


Figure 0-1: Differentiation of claim, conflict and dispute

Source: Kumaraswamy (1997)

As per Rhys Jones (1994), conflict is 'inevitable in human relationships'. Thus, the claims and disputes, which generate from conflicts also are predictable phenomena in

projects, where multiple human relationships exist, as in construction. Figure 2.1 clearly elaborates the difference between claims, conflicts and disputes. Therefore, it is apparent that, conflicts, claims and disputes are unavoidable events in construction industry where these should be properly managed to yield successful results of a project.

### 2.4 Dispute Resolution Management System in Construction Industry

Currently, resolving construction disputes has become a significant and inexorable task in project management. According to Moore (as cited in Fenn et al., 1997), there is an apparent evolution from conflict management to dispute resolution. Figure 2.2 illustrates the conflict continuum. It clearly describes that, unless a conflict managed at the initial stage of its occurrence, it will become a dispute which needs sever and complex management procedure.

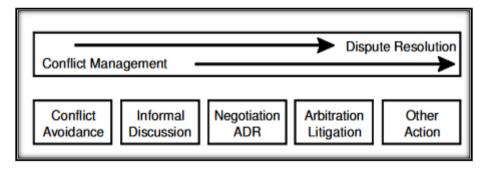


Figure 0-2: Conflict continuum

Source: Moore (as cited in Fenn et al., 1997)

As per the figure 2.2, the dispute resolution is trailed by a series of complex processes. First off, a possible conflict should be identified with its causes to avoid it. If it failed, informal discussions can be conducted before proceeding to the ADR methods. If it becomes abortive, the assistance from arbitration can be seek and if it fails, legitimate actions can be taken. Thus, dispute management is not a smooth and short time process which can implement and yield output instantly.

Gebken and Gibson (2006) explained that, a proper dispute resolution management is a blend of dispute identification, assessment and control. Figure 2.3 exhibits the summary of an effective dispute resolution management system in construction industry.

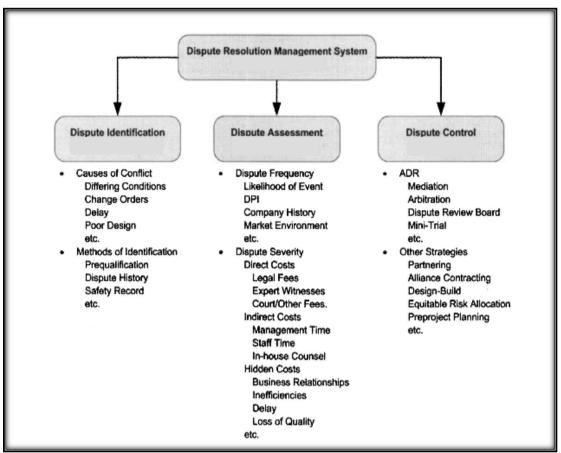


Figure 0-3: Dispute resolution management system

Source: Gebken and Gibson (2006)

#### 2.4.1 Causes of conflicts

Construction industry accentuated an adversarial relationship between owners and contractors (Fenn et al., 1997). Even though there is a great bond between these two parties, each party's interests are predictably at conflict with the other (Gebken & Gibson, 2006). Thus, there are many ways of evolving conflicts in construction industry which will lead to disputes if they are not properly managed.

In order to manage the disputes in construction industry, it is important to discover the root causes of evolving a dispute. The methods to be followed in identification of causes are equally important in dispute identification. Generally, prequalification, analysis of historic and business constraints including company history, safety and financial records, bonding capacity, litigation occurrences and other specific

equirements help to identify the causes of conflicts before they actually arise (Cheung & Suen, 2002). Apparently, from the initial point of perception to tender until to the completion of the project, the disputes can occur. The best way to minimize disputes is to prevent the incidents of conflicts and if it occurs, eradicate before it becomes severe. Thus, it is necessary to encourage, develop and utilize various methods of resolving conflicts when they do occur.

After identification of dispute, it is important to assess the dispute in order to decide the method of controlling it. As per Diekmann and Abdum-Hadi (as cited in Gebken & Gibson, 2006), Dispute Potential Index (DPI) which was developed by Construction Industry Institute (CII) based at the University of Texas at Austin can be used to assess the likelihood of dispute occurrences. Basically, Kim (as cited in Gebken and Gibson, 2006) expressed that, dispute assessment assists to set a benchmark for practitioners to measure their performance and improvements. According to Gebken and Gibson (2006), dispute assessment is described under two main sections namely; dispute frequency and dispute severity.

### 2.4.2 Dispute Control

Dispute controlling is a significant process which is widely expressed in literature. Since, disputes are inevitable in construction, different arrangements of legal proceedings can be applied to solve them (Barrett, 2008). Decades ago, similar to the commercial disputes, the construction disputes were resolved through litigation (Brooker & Lavers, 1997). However, due to the adverse deficiencies of the legal system such as immense delay, cost, procedural technicality, high transparency and generation of antagonism, arbitration has widely accepted (McGeorge et al, 2007). Similarly, with the time, arbitration also has lost its popularity due to the same notorious lapses. According to Flood and Caiger (1993), this imitation of court procedures has woven a name for arbitration as 'juridification of arbitration'. Therefore, even if arbitration has introduced as an alternative to litigation, the solution is not much prevalent and holds many disadvantages similar to litigation (Brooker & Lavers, 1997). Thereby, the discovering of ADR methods has regarded as a serious problem in construction industry practitioners. Due to the immense dissatisfaction with

traditional dispute resolution method of litigation and foremost ADR method of arbitration, consideration on new ADR methods began to develop.

### 2.5 Alternative Dispute Resolution (ADR) Methods

Over the decades, various methods of ADR have been introduced to the construction industry. Even if, arbitration has similar deficits of litigation, it also considered as ADR method, since it has introduced to the industry as an alternative to litigation (Jannadia, Assaf, Bubshait, & Naji, 2000). Therefore, ADR methods are the methods which have been introduced to the industry as alternative methods to avoid notorious deficiencies of litigation

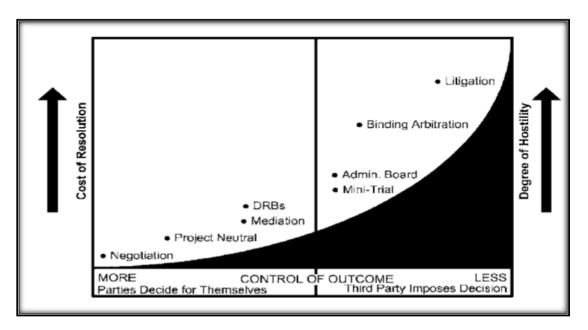


Figure 0-4: Dispute resolution continuum

Source: Richter (2000)

Figure 2.4 illustrates the different types of dispute resolution methods available in construction industry including litigation. Accordingly, litigation has the highest cost, degree of hostility and lowest control in final outcome. Due to these drawbacks, other ADR methods have been introduced to the industry which have different degrees of favourable perfections than in litigation.

According to Richer (2000) and Gould, Capper, Dixon and Cohen (1999), ADR methods can be classified under two major categories, namely;

1. Control of outcome depend on parties

### 2. Decisions are imposed

Table 0-1: ADR methods in construction industry

	ADR method	Description	Reference
	Negotiation	Negotiation is the foremost step in ADR. It is	McGeorge et al,
rties		simple communication approach between	(2007), Eaton,
e pa		parties in attempting to reach an agreement.	(1993).
n th		Maximum parties control over the output and	
Control of outcome depend on the parties		least cost and hostility.	
ере	Mediation	It is a kind of negotiation made with a mediator;	McGeorge et al,
ne d		a third party who assists the parties to settle their	(2007), Eaton,
ıtcor		dispute. The final output is not binding.	(1993).
o Jo	Conciliation	Similar to the mediation but more formal in	Holtham
rol		nature. Conciliator; an official third party helps	et al, (1999)
ont		the parties to reach an agreement. Non-binding	
		decision.	
	Expert	The parties present their dispute with evidences	McGeorge et al,
	determination	to a neutral third party who chosen on their	(2007), Eaton,
		specialist qualifications and experience on the	(1993).
		subject matter of the dispute. Mostly, the	
peg		decision is binding over the parties depend on	
Decisions are imposed		the contractual proceedings.	
re ir	Dispute	DRB should establish at the initiation of the	McGeorge et al,
ns a	Resolution	project. When a dispute arises, the board	(2007), Gould,
isio	Boards (DRB)	members give their determination in an	(2006). Bailey,
Dec		impartial manner by considering all the	(1998).
		available evidences. The final decision is	
		binding over the parties unless it will challenge	
		and taken to the forthcoming steps of arbitration	
		or litigation by the parties.	

Arbitration	Parties selected an arbitrator and refer their	McGeorge et al,
	dispute to him. Based on evidences presented	(2007), Eaton,
	before the arbitral tribunal, arbitrator(s) declare	(1993).
	their determination; the award is final and	
	binding upon the parties.	

Amongst the available ADR methods, negotiation is the primary and foremost step in resolving a dispute. In negotiation, there is no involvement of neutral third party for the agreement. Thus, only the parties to the dispute are attaining to the negotiation and attempt in reaching to an agreement. Therefore, the perception and physiological condition of these parties essentially influence the success of negotiation process. Henceforth, it is paramount important to investigate the physiological influence on parties for the accomplishment of successful negotiation.

### 2.6 What is negotiation?

Negotiation is a word that appears with substantial frequency in human lives (Rubin & Brown 2013). It has a widespread application ranging from simple discussions between companions to crisis negotiation between two nations. It is not an unusual behaviour for mankind. Therefore, negotiation has grabbed most of the researchers' attention in the fields of economics (Ghauri, 2003; Ren et al., 2011; Mahmoodi, 2012), psychology (Elfenbein, 2015; Baker & Hill, 2013; Mazei et al., 2015), social science (Rubin & Brown 2013; Lickson & Madduz, 2005), conflict management (Caputo & Ayoko, 2016; Zhang, Ting- Toomey & Oetzel, 2014, Elliott & Kaufman, 2016) and politics (Vecchi, Hasselt & Romano, 2004; Dolnik, 2007).

Negotiation can be defined in multi perspective as per its application. According to Walton and Mckersie (1965), negotiation is "the deliberate interaction of two or more complex social units which are attempting to define or redefine the terms of their interdependence" (p.03). Further, Spector (1977) defined negotiation as "a process of value and behaviour modification in which peaceful means are used to alter divergent positions toward a common convergence of values" (p.608). Simply, Fisher et al., (1991) explained it as a" basic means of getting what you want from others" (p.06). When considering all these explanations, it is clear that, negotiation is the interaction

that befalls between two or more parties to agree on mutually acceptable outcome, where the individual preferences are not equally interrelated.

### 2.6.1 Negotiation as an ADR method

In construction industry, goals, values and interests of each party differ to one another. Thus, disputes are common in construction projects and negotiating these disputes are part of the daily routine of construction stakeholders (Cheung, Yiu, & Suen, 2004). According to Zhang, Gao and Zheng (2016), construction negotiation is a process, both formal and informal which plays an important role in the industry. Basically, in each phase of construction life cycle, there are numerous negotiations taking place. These negotiations are ranging from simple interactions between parties to the complex conflict resolutions in a construction project.

Negotiation is the most under estimated ADR method in construction industry (Kumar, 2017). The basic difference between negotiation and mediation is in negotiation parties themselves attempt in resolving their dispute without intervention of a third party, whereas in mediation the parties are not actively participate, but they come to a solution through an active involvement of a third party. People are more like to involve a third party to solve their problems due to the perception that the solution will become more effective and the responsibility of giving solution is with the third party (Lee et al., 2016). Thus, negotiation is not popular and considered as the least successful ADR method in construction industry. According to the Chatterjee and Lefcovitch (2008) and Jayasena and Kavinda (2012), negotiation is the most effective ADR method to solve disputes between employer and contractor, as in negotiation parties by consensus agree how to settle their dispute with least cost and practicable approach. Further, Jayasena and Kavinda (2012) expressed that, negotiation preserves party autonomy, privacy, informality, flexibility, speediness and virtuous relations between parties than other ADR methods.

### 2.6.2 Negotiation Process

Negotiation process consists of series of steps which should be followed to reach an agreement (Jeong, 2016). Both Ren and Anumba (2002) and Gauri (2003) explicated that, the whole process of negotiation can be discussed under three main stages

namely; pre-negotiation, negotiation and post negotiation. According to Baduge and Jayasena (2016), there are eight phases in an ordinary negotiation process. Table 2.3 exhibits a detail summary of each phase of negotiation process and their respective explanations as per different literature.

Table 0-2: Negotiation process

	Negotiation process	Description
	STEP 01	It is essential to gather the disputants to the negotiation table on
	Getting people	their real interest for the amicable settlement.
	into negotiation	their rear interest for the anneaste settlement.
Ę	STEP 02	The best selection of negotiators is the most successful factor in
iatio	Forming	negotiation. Negotiator should be a person with high negotiating
Pre-Negotiation	negotiation team	skills and excellent knowledge on distance substance.
e-N		•
Pr	STEP 03	Getting preparation for the negotiation is important and consumes
	Setting up bottom	more time. Here, the negotiators should establish bottom line and
	lines	do a Strengths, Weakness, Opportunities and Threats (SWOT)
		analysis for it before sit for negotiation.
	STEP 04	In negotiation, the negotiators should forget their humanistic
	Separate the	qualities and relations and should deal with appropriate
	people from the	negotiation styles. They should sit in negotiation table not for
	problem	their personal interests but for the interest of the whole business.
	STEP 05	Parties should focus no interest of each party throughout the
	Focus on interest,	whole negotiation process. Mostly, negotiators challenge
on	not positions	opponent's position by wearing extreme positions. This reduces
Negotiation		the real essence of using negotiation in dispute resolutions.
Vego	STEP 06	Premature judgement, premature conclusion, assumption of a
	Invent options for	fixed pie and short-sighted self-concern attitudes make
	mutual gain	negotiation process unsuccessful. Thus, all these barriers should
		be eradicated, for a better negotiation through innovative options.
	STEP 07	If parties do not reach to a solution, established objective criteria
	Insist on using	will help them to come to an agreement. These criteria should be
	objective criteria	impartial, legitimate and practicable. Further, it will help the
	objective criteria	impartial, regionale and practicable. Further, it will help the

		parties to derive a solution in a logical manner without disturbing
		from personal emotions and perceptions.
no no	STEP 08	Negotiation is not a single turn process. It will drag for number of
Post- Negotiation	Summarizing	trials. Thus, it is important to keep summaries and minutes of each
egot	discussion and	meeting to draft final agreement of the negotiation by
Ţ	keeping minutes	incorporating all the agreed terms and conditions.
Pos	of meeting	

Source: (Adopted from: Baduge & Jayasena, 2016; Ren et al., 2011; Smith, 1992; Fisher et al., 1991; Craver, 2003)

When deeply scrutinizing the above process, it is apparent that, psychology plays a significant role in negotiation. Thus, it is important to discuss on negotiation as a psychological process.

### 2.7 Negotiation as a Psychological Process

Negotiation is the approach in which people manage their interdependence and it is arguably one of the most multifaceted psychological process to study (Rubin & Brown, 2013). According to Steinel, Van Kleef and Harinck (2008), negotiation involves individual-level psychological processes such as cognition, emotion and motivation.

### 2.7.1 Negotiator cognition

Negotiator's cognition highly interferes the negotiation decision. Basically, negotiators have a tendency to make systematic errors when they make decisions with the effect of different cognition biases. Mostly, framing, anchoring, overconfidence, winner's curse and number of other cognitive biases influence the success of negotiation decision (Bazerman, Magliozzi & Neale, 1985).

### 2.7.2 Negotiator motivation

Social motives are also social interactions that influence the negotiators' decision. According to Messick and McClintock (1968), there are three types of negotiators such as:

 Prosocial or cooperatively motivated negotiators- attempt to maximize gains for self and other

- Pro-self-negotiators with individualistic motives- attempt to maximize gains for self only
- Pro-self-negotiators with competitive motives- attempt to maximize the difference between outcomes of self and other.

Based on these different motivational perceptions, the decisions that negotiators take on different situations may differ.

### 2.7.3 Negotiator emotions

Emotion, moods and other psychological states immensely influence the negotiators' decision. According to Carnevale and Isen (1986), positive emotions at the negotiation table build connection and creative processes that help to avoid deadlocks. However, negative emotions such as anger, shy, and sorrow make negotiators less concerned towards each other and generate lower gains than the negotiators with positive emotions (Allred, Mallozzi, Matsui & Raia, 1997). Thus, negotiators with negative emotions such as anger, shy, and sorrow were less likely to reach agreements and extract concessions. Thus, it is apparent that, negotiators' emotions highly influence the final negotiation outcome.

### 2.8 Behavioural Decision Theory (BDT)

Social psychologists have given their utmost consideration on negotiation during 1960s and 1970s. Basically, these researches have extremely influenced by the cognitive revolution of psychology and moved into the direction of BDT (Bazerman, Curhan, Moore & Valley, 2000). According to Gintis (2014), BDT is an exploratory theory on human decision making which has effectively synergized with the psychological aspects. As per Takemura (2014), BDT is a blend of two interconnected facets namely, normative and descriptive. Further to him, the normative theory is concerned with recommending courses of actions that adapt most closely to the decision maker's belief and values, whereas the descriptive theory explains the means in which these beliefs and values can be merged in to their decision.

Even though, BDT is known as value rich theory, it is not a single theory. Takemura (2014) emphasized that, it is a theoretical platform which comprehends multiple psychological theories. In BDT, all these theories are unified and expressed how different psychological aspects influence the decision making of mankind. Bestowing to Kahneman and Tversky (2013), this advanced knowledge of BDT has been applied widely in fields like economics (Camerer, Loewenstein, & Rabin, 2011; Loewenstein, 2000), law (Issacharoff, 2001; Korobkin & Ulen, 2000), marketing (Han and Kim, 2010) and business management (Loe, Ferrell & Mansfield 2000; Barberis & Thaler 2003) to discuss the influence of psychology in respective decision making. Thus, it can be argued that, BDT is a well-recognized and prevalent theoretical paradigm which effectively explains the impact of psychology on decision making process.

The construction industry is a prominent industry where significant decisions should be taken by different stakeholders. Amongst various circumstances where these decisions should be taken, negotiation plays an important role. Construction negotiation is a preliminary dispute resolution method for which human psychological aspects can be highly influenced. Thus, it is important to research on identifying these psychological aspects which influence the negotiation parties in construction industry.

## 2.8.1 Integrating Behavioural Decision Theory (BDT) to discuss psychological influence in negotiation

According to Plotnik and Kouyoumdjian (2013), psychology is the "systematic, scientific study of behaviours and mental processes" (p.4). There are different psychological aspects which determine the human behaviour under a particular condition (Koffka, 2013). These psychological aspects essentially impact the personal decision-making process.

Negotiation is a discussion between people with the goal of reaching an agreement on issues and separating the parties when neither party has the power to get the desired outcome (R.J. Lewicki, Saunders, Minton, Roy & Lewicki, 2011). Thus, it is a mean of making effective decisions to derive a justifiable and reasoning agreement. Accordingly, Malhotra and Bazerman (2008), negotiation can be introduced as a decision-making process. Further to them, BDT can be successfully applied to

negotiation process to discuss the psychological aspects which influence the negotiators' behaviour in negotiation.

As per the literature findings, table 2.1 clearly exposes the different psychological aspects of an individual which influence his negotiation behaviour.

Table 0-3: Physiological aspects which influence the negotiation

	Psychological	Description	Citation
	aspect	Description	Citation
1	Influence based	Individuals assess the probability of victory or	Kahneman and
	on diminishing	defeat comparative to outstanding reference	Tversky, 1979
	marginal losses	points.	
	and gains		
2	Influence based	People are more encouraged to evade losses than	Kahneman and
	on losses looming	they are to accrue gains.	Tversky, 1979
	larger than gain		
3	Influence based	People tend to intensify their commitment to a	Staw, 1976
	on escalation of	former course of action.	
	commitment		
4	Influence based	When planning a change, individuals are more	Baron and
	on the status quo	probable to be disturbed on the peril of change	Jurney, 1993
	bias	than about the peril of failing to change and will	
		be realm current systems and beliefs.	
5	Influence based	People often reciprocate the actions of others	Gouldner,
	on the reciprocity	even when it goes against their egotism.	1960
	heuristic		
6	Influence based	People do not quantitatively assess the cost of an	Kahneman and
	on reference	item or an issue; rather they assess costs in	Tversky, 1981
	point effects	contrast to salient reference points.	
7	Influence based	In lack of impartial ways for assessing the	Festinger,
	on the overweight	relevance of an opinion, individuals will descend	1954
	of social	towards the comparable opinion of others.	
	comparison		

8	Influence based	Individuals who have both skill and inspiration to	
	on the ability and	process information will cautiously make	Petty and
	motivation to	decisions based on an organized assessment of	Cacioppo,
	process	'central cues', but, if either skill or inspiration is	1986
	information	low, decision will be based on 'peripheral cues'.	Mills and
		r p	Harvey (1972)

Source: (Adopted from: Malhotra and Bazerman, 2008)

All the aforementioned psychological aspects effect a general negotiators' negotiating behaviour and outcome. These aspects have been derived from different psychological studies done by diverse psychologists. All the conclusions of these studies unitized and concentrated to explicate the BDT.

Tsay and Bazerman (2009) explained that BDT has a substantial influence on the practice of negotiation. Further to them, it is the best theory to discuss psychological factors within behavioural decision perspective in social negotiation and bargaining processes. March and Shapira (1982) and Neale and Bazerman (1992) have applied BDT to discuss the managerial negotiators' cognitional in organizational culture. Moreover, Malhotra and Bazerman (2008) have employed BDT to converse the psychological aspects related to economic negotiations or structural levers of bargaining situations in fields of marketing. Furthermore, Tsay and Bazerman (2009) have discovered the decision-making perspective to negotiation with respect to BDT in commercial environment. Additionally, Hillman (1999), has explicated the application of BDT in negotiations in legal environment. However, it is lacking the studies carried out to explore psychological aspects influencing construction negotiation. Henceforth, it is vital to research and explore whether these psychological aspects influence the negotiators' behaviours and outcomes even in construction industry.

## 2.8.2 Critical review on how psychological aspects influence the construction negotiation

It is important to reconnoitre, whether afore-identified psychological aspects are similarly applicable for the negotiations in the construction industry. This is an apparent research gap which should be cautiously studied and assessed to derive final conclusions. Thus, in order to accomplish it successfully, the real essence of psychological aspects in BDT were reviewed and fragmented into simple propositions highlighting its applicability to construction industry.

### 1. Influence based on diminishing marginal losses and gains

According to Kahneman and Tversky (1979), the individuals are assessing the possibility of triumph or defeat comparative to a salient reference points. Further to their argument, gains of the people are associated with the diminishing marginal utility, whereas the losses are associated with diminishing marginal disutility. According to Layard, Mayraz and Nickell (2008), diminishing marginal utility is the concept which affirming that as a person upsurges consumption of a product while keeping consumption of other products constant whereas diminishing marginal disutility is the opposite of diminishing marginal utility. As per the work of Thaler (1985), the importance of this phenomenon to psychological influence is apparent. Here, he has studied that majority of people were very enthusiastic to find \$10 in two different streets at two different times rather than \$20 at a same time. Contrariwise, he has found that majority of people were unhappier to lose \$10 at two different sequential times than loss of \$20 at once. This proves that people are more favour of receiving money in instalments but losing money in single lump sum.

This effect can be simply applied to the psychological influence in negotiation. Thus, it is important to assess whether this aspect is similar influence the construction negotiators during the conduct of negotiation. Henceforth, the following two propositions can be moulded to assess the influence based on diminishing marginal losses and gains for negotiator's behaviours and outcomes in construction industry.

**Proposition 1:** Construction negotiators are more enthusiastic to admit an offer which contains two portions of gains offered by the opposing party than a nutshell offer which includes one gain in equal magnitude to the previous two gains.

**Proposition 2:** Construction negotiators are more enthusiastic to admit an offer that involves a nutshell loss demanded by the opposing party (a cost or a penalty) than two small losses in two turns which totals to the same amount.

### 2. Influence based on losses looming larger than gain

Kahneman and Tversky, (1979) expressed that, "losses loom larger than gains" (p.456). This stressed that, decision makers are contemplating information about latent losses more deeply than they do information about the possible gains. Accordingly, Kalichman and Coley (1995) have conducted a study at a medical awareness clinic on HIV testing. Here they have found that when they have shown the benefits of testing HIV, only 23% of women are tend to tested it whereas, when they have shown the costs and risks associated with not getting tested, 63% of women are tend to get tested. Thus, they proved that negotiators are more persuasive on risk and costs associated with a deal rather than the benefits associated with it. Consistent with these findings, the following proposition was generated to investigate whether this psychological aspect is influencing the construction negotiators as well.

**Proposition 3:** Construction negotiators are more probable to gain support and acceptance for their proposals from the opposition, if they are stated the losses that opposing party will gain if the proposal rejected than the benefits the opposing party will receive if the proposal accepts.

### 3. Influence based on escalation of commitment

Staw (1976) expounded that, the compliance to an initial request may increase the commitment given to the subsequent requests of same kind. For an example, a seller may more effortlessly obtain the consent for a large sale after the buyer has approved to a minor early purchase. Thus, considering this psychological phenomenon, negotiators may strategically force the opposition party to invest more time and energy at the bargaining table to the negotiated subject. Thus, the following preposition was generated to assess the construction negotiators' psychological influence based on escalation of commitment.

**Proposition 4:** If the construction negotiator has invested more time and other resources to the negotiation, the negotiator has a willingness to admit the offered agreement.

**Proposition 5:** If the construction negotiator strategically forces the opposition party to invest more time and other resources to the negotiation, it will encourage them to admit the offered agreement.

### 4. Influence based on the status quo bias

Baron and Jurney (1993) explicated that, people are more worrying about risk of change than the risk of failing to change. Thus, the status-quo is a psychological aspect which immensely forces the individuals to oppose the change even there are chances to gain lot of improvements from such change. In negotiation, people are in perception that the party who drafted the initial document has the advantage of acquiring the benefit of accepting it. Further, negotiators are unwilling to negotiate on a matter on which earlier agreement has made than when the issue has not been negotiated previously.

**Proposition 6:** In complicated construction negotiations, the party who creates the first draft of the contract or agreement will acquire a premeditated advantage.

**Proposition 7**: Construction negotiators dislike negotiating on an issue of value to one party or both, when a previous agreement on that issue exists than when the issue has not been negotiated beforehand.

### 5. Influence based on the reciprocity heuristic

As per Gouldner (1960), people are reciprocating for actions even when they go in contradiction to their egotisms. According to him, it is better to start from a more extreme request which is sure to be rejected and then moderated the condition of request to get the consent of respondent towards the decision. Considering this conclusion, the following proposition was engendered to assess the psychological influence based on the reciprocity heuristics on construction negotiators' behaviors and outcomes.

**Proposition 8:** There is a likeliness to accept an offer made by a construction negotiator when he has previously made an extreme offer which was not accepted but did not end the discussion.

### 6. Influence based on reference point effects

Gouldner (1960) expounded that, the mean in which individuals assess their own interests is subject to psychological influence. This emphasized that, individuals do not quantitatively assess the cost of an item or an issue, rather they assess costs in contrast to noticeable reference points. For an example, imagine two situations where two buyers are going to buy a calculator and laptop which are cost \$50 and \$2000 respectively. However, in both cases, shopkeeper inform two buyers that there is a sale in one of the branches which is located a 20-minute drive from away. Here, the buyer who is going to buy calculator expect discount of \$20 whereas the other buyer expects a discount of \$200 for laptop. In both cases, two buyers value the 20-minute drive differently as per their psychological influence with respect to salient reference points. Accordingly, this type of psychological influence is likely to prevalent at the bargaining table. Thus, the following proposition was created to assess the influence based on reference point effects on Construction negotiation.

**Proposition 9:** Construction negotiators are more likely to agree on the size of demanded concessions when it is outlined against the greater magnitude of the whole deal, than when it is outlined against the slighter magnitude of the deal currently being discussed.

### 7. Influence based on the overweight of social comparison

Festinger (1954) explained that, individuals sometimes depend on social judgement in means that deviate from rationality. This emphasized that, people are descending towards the opinions of others whenever there is a lack of accurate means to assess the appropriateness of a viewpoint. Furthermore, he exposed that, even if two utterings are similar in informational content and inducements offered, they evidently differ in the imagery that they persuade in the audience. For an example, a house vender limits the house viewing time only for one hour allowing all the potential buyers to present at the same time. Further, when a venture capitalist asks entrepreneur to provide list of dates on which they can discuss the funding process, the entrepreneur only provides few available dates within a week. Each of these situations implies the negotiator that the offer made by opposing party is in great demand. Accordingly, the following

preposition was formed to evaluate the influence based in the overweight of social comparison on negotiation.

**Proposition 10:** Monitoring the anticipated value of the deal that can offer and for the actual value of the alternatives exists, construction negotiators who are apparent to have alternatives

- I. will consider as more smart negotiator,
- II. will be less likely to have aggressive negations with others,
- III. will easily grasp an agreement,
- IV. will seizure a higher percentage of the value in negotiations.

### 8. Influence based on the ability and motivation to process information

Petty and Cacioppo (1986) explicated that, even though the information set is held persistent, an individual will persuade to generate number of decision according to the way the information presented, the speed of presenting, and the language in which it presented. Thus, these factors can influence the persuasiveness of the message.

Mills and Harvey (1972) expounded that, when the source of evidence being provided is extremely reliable, urgings are more convincing if the source is exposed at the beginning rather than at the conclusion. Considering these theories, the following propositions were formulated to evaluate the influence based on the ability and motivation to process information in construction negotiation.

**Proposition 11:** When the issue being negotiated is highly significant for the opposition party, the negotiator will be more possible to have his deal accepted when the solid justifications and rationalisations are exposed early in the argument.

**Proposition 12:** When the issue being negotiated is of low significant to the opposition party, or when only frail justifications exist, the negotiator will be more possible to have their deal accepted when justifications and rationalisations are exposed late in the argument.

**Proposition 13:** A negotiator with rigid rationalisations and arguments will be more probable to have his offer accepted if he;

- > expresses slowly and calmly
- > evades being excessively technical,
- delivers a written description of the essential demands and explanations
- > avoids negotiating when the other opposition is distracted

**Proposition 14:** A negotiator with weak and frail rationalisations and arguments will be more probable to have his demands accepted if he;

- > speaks rapidly
- becomes excessively technical
- > avoids demands to put the offer in writing
- > negotiates when the opposition is busy or distracted

Finally, all the built-up prepositions can be summarized as table 2.4 All these propositions were formulated based on psychological aspects that have been triggered out in BDT. Thus, it is crucial to evaluate whether these psychological propositions are valid for the negotiation in construction industry as well.

Table 0-4: Summary of psychological aspects affecting negotiation

Preposition No	Description
1	Construction negotiators are more enthusiastic to admit an offer which
	contains two portions of gains offered by the opposing party than a nutshell
	offer which includes one gain in equal magnitude to the previous two gains.
2	Construction negotiators are more enthusiastic to admit an offer that involves
	a nutshell loss demanded by the opposing party (a cost or a penalty) than two
	small losses in two turns which totals to the same amount.
3	Construction negotiators are more probable to gain support and acceptance
	for their proposals from the opposition, if they are stated the losses that

	opposing party will gain if the proposal rejected than the benefits the	
	opposing party will receive if the proposal accepts.	
4	If the construction negotiator has invested more time and other resources to	
	the negotiation, the negotiator has a willingness to admit the offered	
	agreement.	
5	If the construction negotiator strategically forces the opposition party t	
	invest more time and other resources to the negotiation, it will encourage	
	them to admit the offered agreement.	
6	In complicated construction negotiations, the party who creates the first draft	
	of the contract or agreement will acquire a premeditated advantage.	
7	Construction negotiators dislike negotiating on an issue of value to one party	
	or both, when a previous agreement on that issue exists than when the issue	
	has not been negotiated beforehand.	
8	There is a likeliness to accept an offer made by a construction negotiator	
	when he has previously made an extreme offer which was not accepted but	
	did not end the discussion.	
9	Construction negotiators are more likely to agree on the size of demanded	
	concessions when it is outlined against the greater magnitude of the whole	
	deal, than when it is outlined against the slighter magnitude of the deal	
	currently being discussed.	
10	Monitoring the anticipated value of the deal that can offer and for the actual	
	value of the alternatives exists, construction negotiators who are apparent to	
	have alternatives	
	I. will consider as more smart negotiator,	
	II. will be less likely to have aggressive negations with others,	
	III. will easily grasp an agreement	
	IV. will seizure a higher percentage of the value in negotiations.	
11	When the issue being negotiated is highly significant for the opposition party,	
	the negotiator will be more possible to have his deal accepted when the solid	
	justifications and rationalisations are exposed early in the argument.	
12	When the issue being negotiated is of low significant to the opposition party,	
	or when only frail justifications exist, the negotiator will be more possible to	
	have their deal accepted when justifications and rationalisations are exposed	
	late in the argument.	

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# 2.9 Summary to the chapter

This chapter initiates with an introduction to construction industry and disputes in it. Basically, the construction industry is dispute oriented due to its multi-party collaboration. Thus, a proper dispute management process is vital for a construction project. Due to the large number of negatives in the traditional litigation process, ADR methods have been introduced to the construction industry to resolve the disputes within it. Negotiation is the primary ADR method in which the amicable settlement is encouraged with the involvement of disputants.

Negotiation is a discussion between disputants with the goal of reaching an agreement on issues. There is an intricate process associated with negotiation which has several stages. According to the nature of negotiation being conducted, there is an apparent psychological process blend in it. Henceforth, negotiation behaviours and outcomes may inevitably have influenced by different psychological scenarios.

BDT is the most established and well recognized theoretical platform which explains the psychological aspects in individual decision making. Accordingly, eight psychological aspects were identified from different theories which were triggered in BDT. Accordingly, 13 propositions were developed based on identified psychological aspects and directed towards subsequent stages to assess the psychological influence on negotiation in construction industry in order to achieving the established research aim successfully.

# CHAPTER THREE RESEARCH METHODOLOGY

#### 3.1 Introduction

As specified by Panneerselvam (2004), research methodology is a "system of models, procedures and techniques used to find the results of a research problem" (p.02). The aim of this study is to explore the influence of psychological aspects for construction negotiation. Consequently, this chapter replicates the complete procedure that followed to accomplish the research aim.

# 3.2 Research Design

Saunders, Lewis and Thornill (2009) expounded that, research design is an assortment of research approach, strategies, choices, time horizons and techniques. Henceforth, all these constituents should be well-matched to yield successful output from the research.

# 3.3 Research Approach

As per Smith, Lowe and Torpe (2002), research approach is the method that research activities are prearranged to reach the research aim. Saunders et al. (2009) explicated two different research approaches namely; deductive and inductive approach. According to them, the deductive approach starts from a theory and basically focused on a theory testing approach. Thus, deductive approach is only based on a recognised theory and not produce new theories. Contrariwise, inductive approach starts from a test or observation and proposed a new theory at the end based on the results of observation or test (Saunders et al., 2009). This research is formulated based on well-recognized theories in BDT. Henceforth, the deductive conclusions were derived from BDT to be confirmed through data collection and analysis.

Bestowing to Naum (2007), there is another classification of research approach namely; qualitative and quantitative which are subjective and objective in nature. Qualitative research approach encourages an exploratory in-depth analysis and ideal

for research problems which start with "how" and "what" (Cresswell, 1998). The research problem of this study is to explore psychological aspects which influence the construction negotiation. Thus, it is a mandatory to conduct a subjective and exhaustive analysis of human psychological perception towards construction negotiation. Henceforth, the qualitative research approach with deductive reasoning was selected as the research approach for the study.

# 3.4 Research Techniques

#### 3.4.1 Data collection

There are number of data collection methods in qualitative research approach and the best method should be clarified prudently considering the aim of the study (Thomas & Brubaker, 2008). According to Taylor, Bogdan and DeVault (2015), three most common qualitative methods are participant observation, in-depth interviews and focus groups. Further to them, in-depth interviews are more perfect to collect data in sensitive researches which are based on humanistic histories, perceptions and experiences. Therefore, semi-structured interviews were used as data collection technique for the study with valid justifications and reasoning.

### **Semi- structured interviews**

As per Liamputtong (2009), interviews are the most prevalent and feasible data collection technique under qualitative research approach. Interview is a data collection method of "presentation oral verbal stimuli and reply in terms of oral verbal responses" (Kothari, 2004, P.97). Dawson (2002) introduced four types of interviews namely; structured, semi-structured, unstructured and non-directive. Further to him, the most popular method is semi-structured method in qualitative researches.

The semi-structured interviews can be used to probe sudden questions and validate expressed opinions from others (Harrell & Bradley, 2009). Furthermore, these interviews can be steered personally helping researcher to grasp the implied verbal expressions and clarifying the doubts while consulting interviews. The aim of this research is to explore psychological aspects which influence the construction negotiation. Psychological aspects are subjective and should be explored in-depth,

smoothly and without disturbing to their originality. Therefore, semi-structured interviews were used to assess the applicability of identified psychological aspects to the construction industry (The interview guideline is attached in Appendix A).

The guideline was prepared with open ended questions based on the literature findings to grasp the real psychological aspects related to construction negotiation. The respondents were invited to respond for each question based on their prior experience in negotiation. Furthermore, the respondents have given the maximum autonomy to elaborate their answers without disturbance from researcher's perception. Nine semi-structured interviews were conducted among nine professionals who are experts in construction negotiations.

# 3.4.2 Data analysis

As per the aim of this research, semi-structured face to face interviews were selected as the qualitative data collection technique with proper reasoning and justifications. According to Hsieh and Shannon (2005), content analysis is the extensively used qualitative data analysis technique to develop rational and consistent conclusions from qualitative data. Henceforth, content analysis was used as the data analysis technique for the research.

#### **Content analysis**

The aim of content analysis is to analyse the collected qualitative data by weighting most important facts, opinions and reasoning (University of Surry, 2008). Furthermore, it is the best way to summarize explanations and point out the most important contents by using unambiguous rules (Flick, 2006). The data collected from the semi-structured interviews were comprehensive and informative as they reveal the human psychological contextual. Thus, content analysis was used to summarize and stress the most important and relevant facts to yield the successful output for the research.

#### 3.5 Research Process

After defining the entire research design, the process which followed to accomplish the research aim can be illustrated as Figure 3.1.

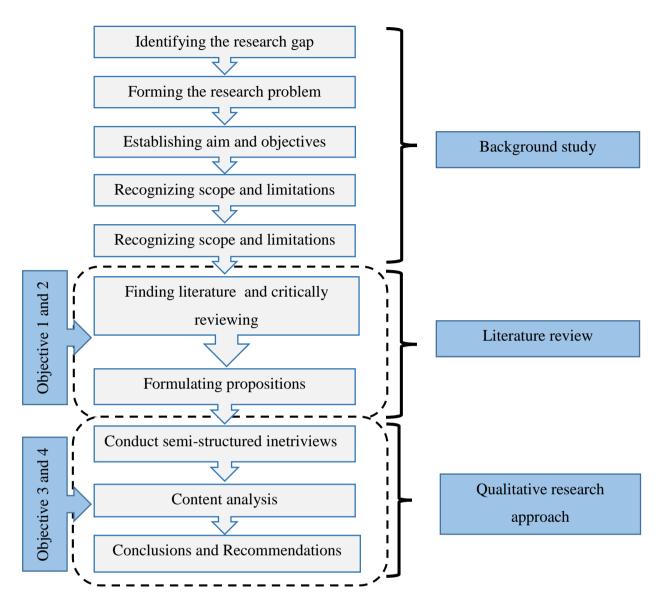


Figure 0-1: Research process

# 3.6 Summary to the Chapter

This chapter describes the recognised research methodology with proper reasoning and justifications. Accordingly, qualitative research approach was selected as the most prudent research approach which conducted by steering semi structured face to face interviews. Nine interviews were conducted, and the collected qualitative data was analysed using content analysis. The analysed data was assisted in accomplishing the research aim successfully, which is depicted in the following chapter.

### CHAPTER FOUR

# DATA ANALYSIS AND RESEARCH FINDINGS

#### 4.7 Introduction

The aim of the research is to explore the influence of psychological aspects for construction negotiation. This chapter utilized in accomplishing the final objectives, objective 03 and objective 04 of this research by investigate the impact of psychological aspects for the negotiations in construction projects and by identifying the psychological aspects which can be applied for the successful construction negotiation.

Semi structured interviews among nine industrial experts were carried out during the data collection period to collect the industry perception towards the psychological aspects for construction negotiation and the findings were analysed by using Content Analysis. Significant extents of data collection and data analysis are further described under this chapter. The chapter as a whole lead towards the achievement of research objectives 03 and 04. Further, it describes about the influence of psychological aspects for construction negotiation and achievement of the research aim finally.

#### 4.8 Expert opinion survey

In order to acquire required data relevant to the research, industry experts who have experience on the ADR and especially experts on Negotiation process were selected. Expert opinion surveys were carried out using unstructured interviews with the selected experts focusing to gather necessary information relevant to the research topic. To fulfil this objective an interview guideline was used with four sections addressing different aspects of the research area.

The first section of the interview guideline was directed to obtain the general information of the interviewee. The information relevant to the practice of dispute resolution through Negotiation was gathered through the second section of the guideline. Third section was directed on obtaining information required for the assessing the impact of psychological aspects for Negotiation. All the questions in this

section were focused on the identified fourteen perceptions in the literature review and their impact upon the success and failure of the negotiation process.

Expert opinion survey consisted nine industry experts who are currently practicing Negotiation as an ADR in the Sri Lankan construction industry. All of them are representing the private sector under contractor or client while some of them are servicing as freelance practitioner. Table 4-1 illustrates the general information about the interviewees including designation, experience, practice and awareness of ADR and Negotiation.

Table 0-1: Composition of the Respondents

Respo ndent	Designation	Highest educational qualification	Highest professional qualification	Representation (employer/Consu ltant/Contractor)	Years of Experience in Construction Negotiation
R1	Chief Quantity Surveyor	BSc	Chartered Quantity Surveyor	Consultant	10 Years
R2	Claim Specialist	MSc	Chartered Quantity Surveyor	Contractor	10 Years
R3	Contract Manager	BSc	Chartered Quantity Surveyor	Contractor	11 Years
R4	Claim Specialist	B.Sc	Chartered Quantity Surveyor	Consultant	24 Years
R5	Freelance Quantity Surveyor	BSc	Chartered Quantity Surveyor	Contractor/ Consultant	12 Years
R6	Freelance Quantity Surveyor	BSc	Chartered Quantity Surveyor	Consultant	14 Years
R7	Chief Quantity Surveyor	MSc	Chartered Quantity Surveyor S	Consultant	20 Years
R8	Freelance Quantity Surveyor	Post Graduate Diploma in CL & DR	Chartered Quantity Surveyor	Consultant	20 Years

R9	Chief Quantity	BSc	Chartered Quantity	Contractor/	15 Years
	Surveyor		Surveyor	Consultant	

When considering the industry experience of the respondents three of them were having experience of twenty years and more, which could lead to slightly dissimilar views than others, if they expressed their opinion with respect to their experience. All the respondents were engaging in construction negotiation. All the respondents were accompanied with the highest professional qualification and required educational qualifications. Thus, their opinion might develop a rich data and concepts towards the research. Additionally, they represent a wide range of designations where the opinions from all their view points as negotiators might saturate the analysis on to a wide range of interpretations.

# 4.9 Analysis of the findings and discussion

The data collected through the unstructured interviews were subjected to content analysis to compare and contrast the miscellaneous views held by the nine different experts. The summaries produced through the N-Vivo 11 software was primarily used to conduct the analysis.

# 4.9.1 Influence based on diminishing marginal losses and gains

Initially the experts were interviewed on their perception of their arrangements and their psychological aspects in concern with diminishing marginal utility, whereas the losses are associated with diminishing marginal disutility. Thus, under the following propositions the analysis was carried out to accomplish the 3<sup>rd</sup> and 4<sup>th</sup> objectives.

**Proposition 1:** Construction negotiators are more enthusiastic to admit an offer which contains two portions of gains offered by the opposing party than a nutshell offers which includes one gain in equal magnitude to the previous two gains.

Apparently out of the nine experts six of them were enthusiastic to nutshell offers under the given proposition considering on several facts and the summarized analysis is depicted in the Figure 4.1.

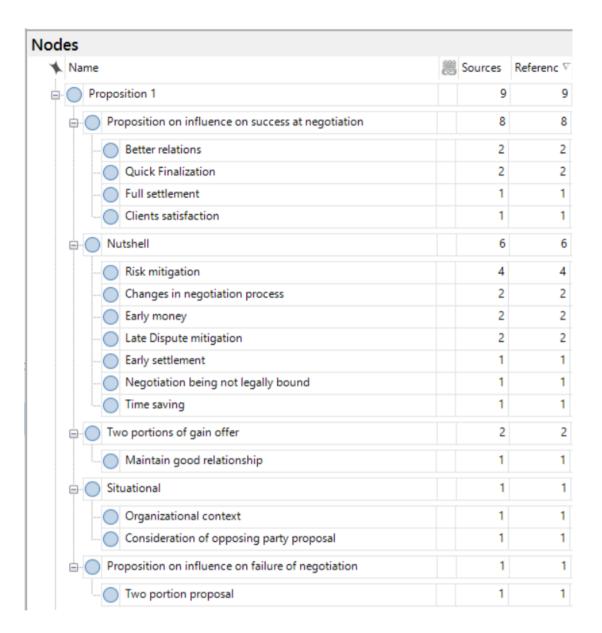


Figure 0-1: Negotiators' perception on Proposition 01

# **Experts' Opinion in favour of the Proposition 01**

As per the opinion of R1 "for two portions of gains to keep the good relationship with client" where his emphasis is on the maintaining the beneficial relationship with the client. However, this opinion does not emphasis any other beneficiary aspects to be received, and as well it was identified that their focus on the offer would impact on the basis of the situation only through the expression of R6 "I consider the ultimate benefit for my company. Weight of the proposal. I would like to go even 3-4 portions. Mainly opposing party give proposal for their benefit. If that is benefit for me, I will accept."

where negotiator would be flexible upon the situation and act accordingly where the proposal is considered and then offer is made. This emphasis on the fact that negotiators are cooperatively motivated where attempt to maximize gains for self and others especially in here the organization.

Thus, it is clearly emphasis on the fact that the negotiators are prominent towards the future risk mitigation and concern on the monetary benefits and the time saving in considering the nutshell offer, where they are comfortably innocuous on the above terms.

### **Experts' Opinion not in favour of the Proposition 01**

R3 specified on the fact that "Disputes are increase in the later stage of the projects hence early settlement is safer Hence early settlement is safer." implying the fact that their concern on the early settlement which would otherwise adversely impact on the project. This simply indicate on the psychological behaviour where negotiators are mostly concern on fact on their awareness and logical thinking on the future proceedings. Additionally, according to R2 "Firstly, it is a risk. When other party has money or other benefit, they may change their decision. It will another chaos". Thus, they are positively move forwards with the thinking of risk mitigation on the payments as they are received at once to and further for the avoidance of the future disputes. This is further intensified with the attitude of the respondent R5 with his statement of "Early money is better than late money. Situations may change. "where negotiators are more concerned on the dispute mitigation which also beneficial them in the monitory value in certain ways. Furthermore, their awareness on the future changes directs them to take decisions on their benefits where future predictions are difficult to make with the current facts. This was emphasized through the expression of the R2 with the statement of "On the other hand, negotiator may change timely and total negotiation process may start again. Then agreement will no longer exists. I prefer to go for a nutshell gain even with a discount. Then, there is no burden at all". This further emphasis that negotiators are even accepted with a discounted value rather than gaining the whole value two portions to ensure there would be no disadvantages. Additionally, their present decisions are taken with attitude of being safe from any other disputes in the future which again cause in utilization of time, resources and money in a disadvantageous term to the party. The statement of R4 reinforces the above fact by the statement of "This is negotiation process. There is possibility that in some stages agreed terms may change and not valid. In that basis I would like to go for nutshell gain." where their psychological on saving the party's monitory status rather than being vigilant on the future gaining which enable them to ensure to engage them in other activities and to be free from the disputes from the earliest possibility. As per R9 "Whoever the person come for negotiation, he is expecting to obtain actual cost what he has already incurred. Then why should it delay and if the total gain gets at once, the dispute ends. That's better "emphasis on the fact that decision must be taken without hesitation which would be ultimately beneficial on all the aspects of time saving, dispute resolution and future benefits.

# Success or failure of the Negotiation Process due to the practice of Proposition 01

In terms of the perception of the influence of the success of the negotiation nutshell has a prominence as it is identified to be a success factor by 8 respondents. "When considering the negotiation process, I think this perception is really a positive and successful. When the negotiation process takes long period, it will again come to another dispute" as per R2 which emphasis on the fact that the success is gained through the nutshell method where all the settlements are finalized and will return benefits to the parties. This simply indicate on the fact that the negotiators are more prominent towards less risky, and speediest solution in negotiation process where financial entitlement could be gained at once. This is further emphasized through the statement by R4" I think that perception (two portions proposal) do not influence the success of negotiation. Nutshell gain will finish the issue" where full settlement can be gained through a less duration which efficiently solve the dispute and conclude the negotiation process with further emphasis that two-portion offer would considered as a failure to the project. Further as per R9 "I think it is successful if the client's requirements accepted, because client will satisfy and have a chance to win future project" where negotiator is further concern on positive relationships with the client in reach of the success of negotiation.

# Proposition 2: Construction negotiators are more enthusiastic to admit an offer that involves a nutshell loss demanded by the opposing party (a cost or a penalty) than two small losses in two turns which totals to the same amount.

In respect to the negotiators on the basis of their admitting an offer in terms of loss on nutshell form or on two portion perspectives were then analysed through the collected data. Thus, it has been identified that the negotiators are deviate from the Proposition which is identified through the literature where their perception is towards the two portions of losses due several identified reasons as illustrated in Figure 4.2.

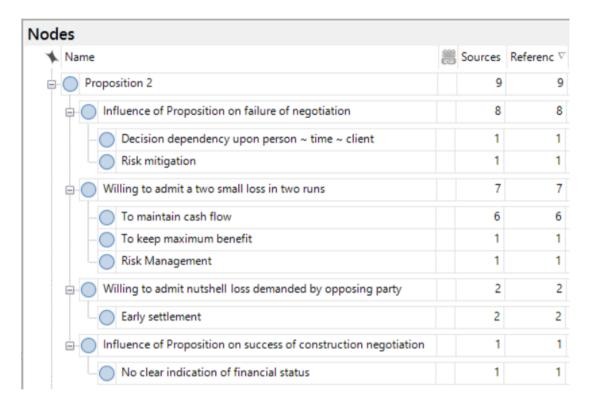


Figure 0-2: Negotiators' perception on Proposition 02

# Experts' Opinion in favour of the Proposition 02

As per the opinion of R9 expressing an oppose view on the payment to another party states "It is better to pay at once and to have the good will because they will not handle any project in here again" where early settlement is gained to nutshell payment, where the negotiator must express it under the impression of the closure of the matters easily where free will be gained to engrave themselves on to further work.

# **Experts' Opinion not in favour of the Proposition 02**

With respect to the opinion it was obvious that a deviation from the literature review was identified where 07 respondents prefer the partial instalments in respect the payment to the other parties irrespective of nutshell payment. The above statement is reinforced with the statement of R1 "I would like distribute the loss and go for partly payment basis." where the decision is loss is divided on partly basis where as per the statements of R1 and R5, "To maintain the cash flow of the company I would like to distribute the losses in time basis" the main reason is to establish a financial stability where the party is not impacted with the loss of capital. Thus, this emphasis on the fact that negotiators more engrossed towards safest direction where their psychological is toward impression of establishing stable and comfortable environment. Hence it is implied that in order to maximize the outcome of the action their decisions are impacted by their psychological behaviour. Additionally, according to R4" I will think about partly settlement according to the client's cash flow." imply on the fact that the decision taking is considerably impacted by the stakeholder involvement, where, a negotiator who represent the client must strictly consider his terms in leaning to a decision. Thus, their decision making is impacted by the impression on being beneficial for the party they represent and for their betterment where it is likely to refer to the actions of a prosocial or cooperatively motivated negotiator who attempt to maximize gains for self and others.

Moreover, R2 expressed on the fact that "We like to keep money in our own hand. I would like to keep maximum benefit." express that their decisions are empowered with the attitude of the negotiators are much on the strict condition of establishing their status in the process of negotiation where the advantage is upon with them. The above fact is further highlighted through the statement of R6 where "I want to minimize my burden. I can earn money and pay leisurely if I pay partially." that negotiators are confident over the fact of their decisions when their self-assurance on positive business activities in the future is concerned. Hence this imply that confidence and their stability over their personal conduct of business impact their decision making in the negotiation process. Besides with reference to the statement by R7 "We are in business. Lost is risk. We have to manage the risk. If we have to take the risk I would like to distribute

the for longer period. Therefore, I would like to pay in instalment bases emphasize on the fact, the negotiators are keen on their self-establishment in decision making which directs them towards being free form future complications. Thus, their self-assurance impacts their mind-set to take decisions for their present and future welfare.

# Success or failure of the Negotiation Process due to the practice of Proposition 02

Considering the perception influence the success or failure of construction negotiation it was intense that 8 of respondents stated the fact that this impact upon the failure of the negotiation. This was expressed through the R9 "I don't think it is a method for successful negotiation. But according to the situation we are compelled to do it" where there have to act as per the situation to mitigate the risk of future imbalance of financial status. Situational behaviour might have occurred as per the view of R6 "The decision depend person to person, time to time, Client to client" where their decision is taken with the impression of the establishment of firm basis for their conduct. However, as per the statement by R9 "I agreed to pay as a nutshell payment because the financial status of the future was not clear at this time" where negotiators are agreed with their confidence over their future rigid financial establishment, but it was not a prominent psychological impact upon decision making in negotiation in this perception.

#### 4.9.2 Influence based on losses looming larger than gain

The perception of the negotiators on the basis that their attention is on risk or costs associated with a deal or the benefits associated in them were analysed where a single proposition was evaluated.

Proposition 3: Construction negotiators are more probable to gain support and acceptance for their proposals from the opposition, if they are stated the losses that opposing party will gain if the proposal rejected than the benefits the opposing party will receive if the proposal accepts.

Under the above proposition, possibility of acquisition support and acceptance for proposals from the opposition, where the negotiators state the losses that opposing party will gain if the proposal rejected than the benefits the opposing party will receive if the proposal accepts. Further the analysed content is followed by the Figure 4.3.

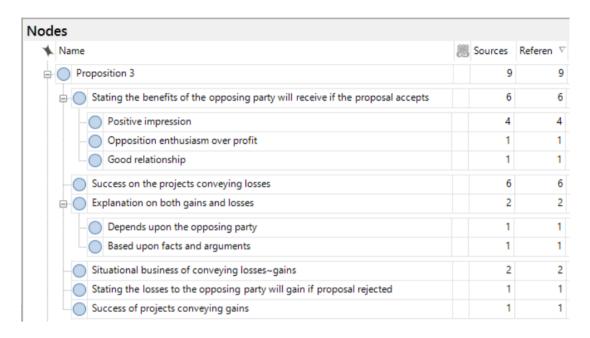


Figure 0-3: Negotiators' perception on Proposition 03

# Experts' Opinion in favour of the Proposition 03

The situational dependency on the revelation of benefits or losses were highlighted among two respondents. According to respondent R4 "I think explaining both ways is the way to success negotiation. Showing losses and come to a settlement is not professional approach" emphasis on the fact that negotiator might change their decision in respect to the situation and thus engage in the negotiation process irrespective of the negative impact of from the other party. Reinforcing above fact, as per the opinion of R4 "When I am explaining real situation, opposing party may fear or happy. It depends on person to person, who sit on the table. I believe when I explain real situation, they will catch the points" highlights on the confidence over the negotiator on making the decision of the fact revelation to the opposing party.

# Experts' Opinion not in favour of the Proposition 03

In respect to that, six respondents were agreed upon the fact that they are explaining advantages rather than emphasizing the losses they will be gained in the rejection of the proposal which is being deviated from the literature finding. However, one respondent agreed upon the proposition 3 where indication of the benefits would be best arrangement while two respondents stated their perception would be the

explanation of both merits and demerits without providing a priority to any of the above.

The negotiators are emphasizing on the benefits rather than the losses with their intention of holding a positive environment to the negotiation table. Thus, the respondent R1 emphasis the reasoning of the benefits of a negotiation which clearly highlights of the insights of a mind of a negotiator in the negotiation table.

"I am always show them advantages. Because humans are more enthusiastic to listen the gains rather than listening loses. We have to start negotiation with good mind, if the opposing party cannot be convinced, we shall go for disadvantages. On the other hand, if we start negative impression, negotiation process will fail."

The above statement highlights on the fact that the negotiator utilizes the beneficial psychological aspects of all the parties in the negotiation process. In here the negotiators utilize the enthusiastic minds of the opposing party for the settlement of the negotiation building up a friendly environment of participants in a negotiation process. Thus, parties interested in victorious result from the negotiation process remain themselves with this perception. This emphasis is further elaborated through the statement of the respondent R6 "Every time, mentality of people is to gain something than loss. Interest is benefit rather than loss. They think this is incentive for them" which indicates that the positive emotion, positive moods and other psychological states immensely influence the negotiators' decision where decisions can be easily processed through the negotiation process.

Additionally, the statement by R5 "Within the contract we are in friendly manner. We must maintain the relationship already built and obtain the gains for both parties. If we are going to threat or fear to other party, it will affect to goodwill of our" elaborate on the upkeep of the good relationships among parties where the negotiator's vision on the building up trust with the opposing parties towards the negotiation process. This is further intensified with the opinion of R7 that "I would like to go win-win situation. Finally, the project shall complete successfully. I don't want to lose the Contractor. I am going to get our entitlement but not hearting others" and as per R2 on the same

basis explains where negotiator utilize the trust, positive impressions and opposition's positive enthusiasm over the decision making of negotiation process. Moreover, they recognized it as a professional conduct which adversely impact upon the decision making in and impacts on the mentality of the negotiator as it is an entrusted act of himself as a professional.

# Success or failure of the Negotiation Process due to the practice of Proposition 03

Considering on the fact of success or failure of this perception, 6 respondents were claim on the fact that conveying benefits to the opposing party will triumph the negotiation process and it is further intensified with the statement of the respondent R3 "When opposing party feel that they have gain something rather than net loss it will help to come to an amicable settlement. I like that approach". This highlights on the fact that the confidence over other party's gain and building up thrust upon the opposing part ensure on the success of the negotiation process. However, in contrast it was emphasized by 2 respondents that the professional conduct always to be applied in such a scenario irrespective of its impact on the success or the failure of the situation as per the opinion of the respondent R4 "I think explaining both ways is the way to success negotiation. Showing losses and come to a settlement is not professional approach." Nevertheless, the building up of positive psychological emotions in the parties enable in the success of the negotiation process.

#### 4.9.3 Influence based on escalation of commitment

The compliance to an initial request may increase the commitment given to the subsequent requests of same kind. However, its applicability on the construction negotiators is relieved the data analysis on the below two perceptions.

# **Proposition 4:** If the construction negotiator strategically forces the opposition party to invest more time and other resources to the negotiation, it will encourage them to admit the offered agreement.

The respondents view on the strategic application of more time on to the negotiation by the other party was not appreciated according to six of the respondents with several opinions and expressions relating to the psychological terms and the professional conduct. The summarised data analysis is shown in the Figure 4.4.

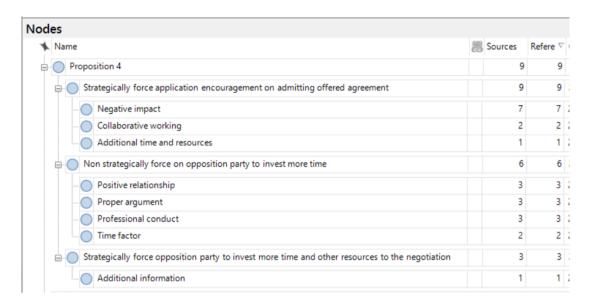


Figure 0-4: Negotiators' perception on Proposition 04

# Experts' Opinion not in favour of the Proposition 04

As strongly expressed by the respondent R1 "This is negotiation with professionals and company owners. Both parties concern money and time. Therefore, I am not wasting time, even opposing party, we have to consider the relationship with other parties also." imply on the fact that negotiation process is a professional conduct of disputes thus, unnecessary action relating to one's party is not ethical and viable in the conduct of practice due one's person's requirement. Additionally, on the perspective that one's opinion on extra work will consume both money and time which would negatively impact on the project as well as to the positive relationship among the parties. The above fact is further strengthened by the response of R4 and R6"If opposing party provide solid justification, why does we waste our time. I have no intension to fed up the opposing party requesting unnecessary details and Construction negotiation is professional approach to a settlement". Additionally, it highlights the non-requirement of the extra time and money but clear facts and arguments which are essential in the conduct of negotiation process. Thus, if the negotiator is confident in the facts and arguments based on them according to contractual proceedings the proceeding might not require additional time and money. Reinforcing the above facts, the respondent R7 expressed "Always we have to go with actual facts. If other party feels, that they are being harassing unnecessarily, it will

affect to the negotiation process. Negotiation is process mainly go with honestly" emphasis that the positive thoughts and the ethical arguments must be applied in the negotiation process rather than taking decisions which would impact undesirably of the both parties. Hence, a negotiators psychological behaviour should act on such way that the procedure is not being hindrance to the other parties as the outcome might impact on negotiator's future procedure in an objectionable as oblique by the respondent R5 "I would like to keep fare deal if other party is in that mentality as mine. If other party come to treat me in such bad manner, I will be the same reactor".

# Experts' Opinion in favour of the Proposition 04

Three respondents agreed on the forcing of opposing party utilising the money and time on the negotiation procedure and it is vividly expressed through the statement by R3 "I think that the other party will come to a settlement if they have not enough documents to prove. I have many experiences that when I questioned additional information regarding with claims, they will not submit and vanish" implying their ideas being the other parties less preparedness towards the negotiation process. Nevertheless, negotiator's this perception would be totally base upon his over confidence of the readiness toward the preparation for the negotiation process.

# Success or failure of the Negotiation Process due to the practice of Proposition 04

With reference to forcing the opposition party to invest more time and other resources to the negotiation encourage them to admit the offered agreement, all the nine respondents agreed that this is not an applicable method of strategy in negotiation. This would be a decision taken by the negotiator basically by his though of underestimating the opposing party and being over self-assurance on his perception. According to the respondent R9 "we provided unbearable work load. So now they take our help as well. So, they fed up and going for our target. As well, this depend on our gut feeling. That this case will end with success." express on the negative impact to the negotiation process and the collaborative working with extra expenditure because of one's over confidence.

# **Proposition 5:** If the construction negotiator has invested more time and other resources to the negotiation, the negotiator has a willingness to admit the offered agreement.

With the analysis it was obvious on the fact negotiators are not willing to admit an offer where they invested more time and other resources to the negotiation. It was highlighted by all the nine respondents that they do not prefer this arrangement which is based upon the fact they have to engage themselves in additional work in order to be success at a negotiation but rather engage themselves in building up strong and contractually arguments on the disputes and the analysed content is shown in Figure 4.5.



Figure 0-5: Negotiators' perception on Proposition 05

# Experts' Opinion not in favour of the Proposition 05

The above fact was highlighted through the statement expressed by R1 "I will flexible. But if we feel that they are doing things unnecessarily, then, I ask them to evaluate what we have already submitted. Do not allow to do such harassments. Otherwise looking to next ADR method.". This strongly emphasis on the fact that negotiators are not contented with the acceptance of an offer if they are to spend more time and cost which would be ultimately being a cost to the whole project. Being only compliant with the required and essential facts and documents and being confidence and assured of the required status for the negotiation process. Thus, implication is the negotiators do not tolerate the unnecessary time and money and they would rise against them which would direct the negotiation in to a failure. The negotiators are confidence and

they have the integrity lies with them in their professional career, hence they are strongly stated that their professional conduct is in a higher status with their educational and professional qualifications and hence the spending of more time and money would not be endured and be disadvantageous to both the parties.

Additionally, their self-assurance in the conduct of the professional with the industrial experience encourage them to simply the activities and broaden their minds to build up their arguments in a string manner with a required time while making the negotiation process efficient and effective. This assurance is intensified through the expression of the respondent R2 "We have established the strong points in our documents and waiting for their response". Reinforcing the above facts respondent R3 also exaggerated that comprehensive documentation enable in the effective continuation of the negotiation process.

With reference to the as emphasized by the respondent R8 the economic side also must be considerate in the fact to spending of more time and money would be worth in terms of the return of the offer. Thus, the psychological impression is generated considering the outcome of their work. Hence with that valuing the benefits to the party the spending of more money and time would be a wastage to the negotiator.

Irrespective of the negotiator psychological imprint, they are considerate on the opposing party's mentality on the decision making of the negotiation process. The statement by R6 emphasis the above fact with the statement of "Anybody whoever inserted unreasonable terms get only the mentally happiness for little period". The negotiator is keen on the facts of the draft where he is prepared with the actions to be taken in order to make the benefits out of the condition he is. Thus, the psychological impression is made to build their strong arguments and face the opposing party with the clear impression of being successful at the negotiation with their self-assurance.

# Success or failure of the Negotiation Process due to the practice of Proposition 05

In view of the investing more time and other resources to the negotiation influence the success or failure of construction negotiation, eight respondents were emphasized with the fact it would be a failure of the negotiation. The reasons are visible with the above perception where psychological expression is on completing the negotiation procedure

with minimum time and minimum resource with their professional conduct and assurance of the industrial experience. Mainly the use of more time and resource impact their psychology that excess exercise and financial disadvantage to their negotiation process.

# 4.9.4 Influence based on the status quo bias

The influence of the status-quo is a psychosomatic characteristic which enormously forces the people to battle with the change even there are probabilities to gain lot of enhancements from such change. In negotiation, a perception is prevailing that the party who conscripted the initial document has the benefit of obtaining the advantage of accepting it. Additionally, negotiators are reluctant to negotiate on a matter on which earlier agreement. However, the above perception is evaluated with the current context and the data analysis is summarised in following content.

# **Proposition 6:** In complicated construction negotiations, the party who creates the first draft of the contract or agreement will acquire a premeditated advantage.

With reference to the proposition 6, mixed views were generated through the respondents with several reasoning implying the psychology of the negotiators behind them. Thus, the summarization of the analysis is depicted in the Figure 4.6.

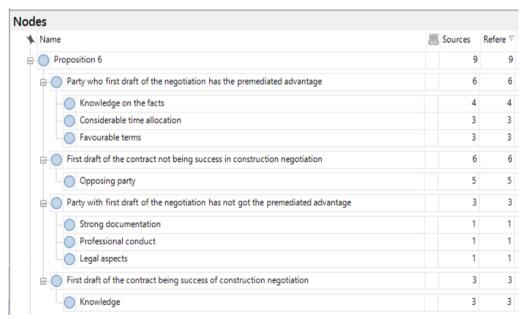


Figure 0-6: Negotiators' perception on Proposition 06

# Experts' Opinion in favour of the Proposition 06

According the view of six respondents their impression is towards the fact that there is a premediated advantage to the party who initially prepare the draft of the negotiation. With reference to the respondent R1 "Most of the time, advantage goes to the drafting party. We have no time to read the document thoroughly" vividly express the fact that other party is not contented in reading the full document with the available time thus creating a disadvantage towards them by missing out important facts for the negotiation process. Hence, a psychological expression is built upon the negotiators with their industrial experience a huge advantage is always with the first drafting party which emphasis the first to deliver will gain the benefit. Additionally, an impression is built upon the negotiator that their awareness of the proposal should be high as the it creates an advantage over the other party in terms of the benefits.

Aforementioned fact is further reinforced with the statement of the respondent R3 with the statement of "The party who drafted the document knows from head to toe of the document. On the other hand, other party do not read the document thoroughly. Hence advantage goes to drafted party". Thus, this emphasise mindset of the negotiators that the drafted party's alertness and knowledge on the draft is increased where inevitably brings an advantage to them. Hence, their view point might change on the content of the draft that the first party would attempt in including beneficial terms to their draft, with their perspective of the proposal to be advantageous as they are the first to draft and it is vividly expressed through the opinion of R2 "The party who drafted the document, they put the terms for their benefit". And with the opinion of R7 with the statement of "The party who drafted the document have through knowledge about what they are drafting. And they are inserting their requirement to the document". The above perception has been identified with the current context as per the declaration of R9 that "Definitely there is an advantage for the drafting party according to the situation of the country. Specially the provided time and resources are not enough to go through the contract document for the bidders" which inevitably emphasis that the negotiators minds are experienced with the first draft advantage as their mindset would direct this perception in the decision making during the negotiation process in order to gain the advantages to them. Thus, the majority of the respondents are stressed upon this perception and this clearly direct them in their psychology to make the decisions.

# Experts' Opinion not in favour of the Proposition 06

However, three of the respondents were not in the acceptance of the perception of besides the first draft advantage where their argument based upon the professional conduct and their assurance over the strong documentation of the negotiator being the second party to the proposal. The view of respondent R6 "any party insert unfair terms to documents, it will bounce back one day. It may have questioned in legal environment. Because everybody has to play with professionals" express on the fact that the negotiators are more concern on the legality and professionalism where they use them as a shield in the above perception of first draft advantage where they utilize their knowledge, experiences and the awareness of the opposing facts to eliminate the advantage of the drafted party. Consequently, psychological impact of positive thinking and keen awareness of negotiator of facilitate negotiators avoid deadlocks from the opposition. This is further intensified with the viewpoints of respondents R3 and R5 where their intention of directing themselves into the proposal to find their beneficial fact s to win the negotiation. Hence as per the opinion by R5 "drafting party cannot insert unreasonable clauses by their own. Therefore, we shall read carefully and find out the plus points to our side. I have experienced in the industry that many professionals do not properly read documents." The negotiators are not backward with their situation of disadvantageous status but use their identified weakness to secure benefits for them.

# Success or failure of the Negotiation Process due to the practice of Proposition 06

Although they accept the fact of the first draft advantage, its success upon the construction negotiation is not vividly expressed by the respondents. With response of respondent R1 "I would like to go No, I don't think so. I will depend on the person who sit for negotiation table", the success lies upon the situation readiness of the opposing party. The negotiators are well experienced upon the procedure and the logical argumentation and they utilize these facts in their advantage to be success at the negotiation process. Hence six of the total respondents were agreed upon of first draft

not being successful at the negotiation table. Nonetheless, three respondents agreed upon the being success at the negotiation, where they utilize that opportunity for the preparation of wining environment at the negotiation and it is expressed by the view of R2 "As an experienced person, I will get the benefit of drafting the documents. It basically how I implement my knowledge and skills". Consequently, it is emphasised that the success of the negotiation is not confirmed with the first draft advantage due to the positive approach of the negotiators to convert them in to the success towards their representation.

# Proposition 7: Construction negotiators dislike negotiating on an issue of value to one party or both, when a previous agreement on that issue exists than when the issue has not been negotiated beforehand.

A controversial perception of the above Proposition 7 was identified among the respondents where their view point debated over several facts about it. The summarized the opinion of the respondents were depicted in Figure 4.7.

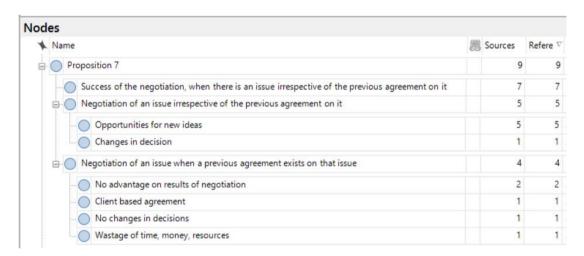


Figure 0-7: Negotiators' perception on Proposition 07

# Experts' Opinion in favour of the Proposition 07

With reference to the response of four respondents their insight correspondence of the aversion of negotiating on an issue of value to one party or both, when a previous agreement on that issue exists than when the issue has not been negotiated beforehand. The above fact is specifically indicated through the statement of R1 "If there is an agreement for previous issue, no need to discuss again. It will waste time, money and

resources. We already know the results. If we take the issue again it will affect to the project cost." The negotiator is being aware on his instincts of the conservation of cost to the project in means of money and resources to all the parties. Additionally, with the opinion of R9 "Not going for negotiation if the previous similar case was a principally, because there cannot be two decisions for the same scenario." the negotiator is being consistent with the professional conduct where he utilize his experience in decision making to avoid unnecessary negotiation process towards the project.

# **Experts' Opinion not in favour of the Proposition 07**

With reference to the respondents' argument over the Proposition 7 controversial opinions of them were represented which are being deviated by the literature synthesis when they are summarised to review the common response. Accordingly, the response provides by the respondent R2 by stating "There may an opportunity that new idea, which has not been seen in first time, will come to the mind. Therefore, I think each and every item shall be address" express the ambition of the negotiators to discover solutions for previous agreements where they can provide new solutions which may supersede the previous agreements and being act on their benefit and this also agreed with the opinion of the respondent R3 with his statement of "There may an opportunity that new idea, which has not been seen in first time, will come to the mind. Therefore, I think each and every item shall be address". This is further emphasised through the opinion of R5 with his statement of "I believe it is a new opportunity for me to study again get more benefit to my side. I know where loss was in previous one. Then I can address properly in new issue", where they utilize these circumstances to develop themselves and to make benefits for their parties with novice solutions. Thus, this make an impact on the psychology of the negotiator to make these situations for their own success with their intention of developing themselves with additional experience.

Additionally, negotiators take these to disclose the real facts because they are impacted that there must be controversy behind the previous agreed issue with their sense of assurance to deliver the correct decision. This fact is vividly expressed with the statement of R6 which states that "If the same issue comes repetitively there shall a

fundamental error. We have find out the real facts and faced properly. In my negotiation works, I am going to deep and core level until finding the reality." Hence, such as situation impact on the negotiator to further utilize his sense of awareness to the circumstance and to act upon it. Thus, in terms of current condition this provide an insight for the negotiators to extend their cooperation to reveal the facts and to act upon it irrespective of previous agreement.

Moreover, as per the opinion of R4 "The decision may change with the interpretation of clauses. It will depend on the skill of the negotiator. Therefore, I would like to consider event basis although previous decision is available", wherever a contractual complication might arise dur to these issues the negotiators re much motivated towards pervious issues and consider whether it is relative to current contractual conditions. With this the future disputes might mitigate and provide a beneficial environment to all the parties. Thus, the negotiators psychologically impacted by their professionalism to resolve the issues to gain the most optimum solution.

# Success or failure of the Negotiation Process due to the practice of Proposition 07

The application of all the issues to the success of the negotiation would impacts positively as per the response of seven respondents. Strengthening the above fact as per the opinion of R4 "Consideration of all events is a plus point of negotiation process. It will develop the skills and image of the negotiator." Hence, it was magnified that the current context performance controversial to the aversion of reviewing all arguments irrespective of previous agreements as the negotiators have an insight of obtaining optimum result of it through reviewing all the essential facts.

# 4.9.5 Influence based on the reciprocity heuristic

The view point of offering an excessive appeal which is certain to be disallowed and considering a justifiable offer with moderation of the previous offer is analysed through the following content I respect to the current Sri Lankan context.

Proposition 8: There is a likeliness to accept an offer made by a construction negotiator when he has previously made an extreme offer which was not accepted but did not end the discussion.

Apparently out of the nine experts seven of them were keen on the justifiable offer as the offering party under the given proposition considering on several facts and the summarized analysis is depicted in the Figure 4.8

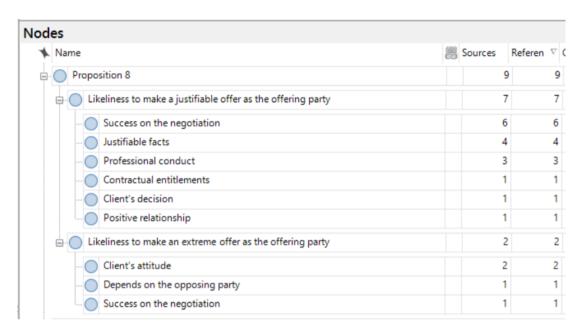


Figure 0-8: Negotiators' perception on Proposition 08

# **Experts' Opinion not in favour of the Proposition 08**

The summary of analysed data deviated with the Proposition 8 of the possibility to take an offer made by a construction negotiator when he has previously made an extreme offer which was later accepted dur to the reduction of it. As per the view point of the respondent R1 and strengthening his opinion with the statement of R8 "I will take justifiable facts and figures only. It is better to ask real figures rather than going for unjustifiable amount as we are in professional discussion "emphasis that Construction negotiators are more prominent towards their professional conduct and thus their decision is impacted with the integrity to conduct their practice in an ethical behaviour. Moreover, they are expressively influenced to act in a justifiable manner without preparing unjust proposals to the parties safeguarding their reputation. Hence

negotiators emotions influenced with the effects such as integrity and reputation and therefore the negotiators are not keen on making excessive offers to act independently.

In addition to that above fact it is further magnified with the opinion of the respondent R7 with his view point "I will with correct facts and figures. It is easy. No need to break our professionalism. As well the trust can be developed with opposing party". Consequently, the construction negotiators are more projecting towards the establishment and continuation of positive relationships with all the parties where they are built up with honest work and acting as per the contractual terms as expressed by the respondent R2. This expressly highlights the construction negotiators are psychologically impacted to make decisions to continue integrity and dignity among themselves. Furthermore, as per the opinion of the respondent R6 "I am going to actual figures and add other allocations according to the situation such as risk, profit "the construction negotiators do take the full consideration of the whole situation to arise on the solutions.

# Experts' Opinion in favour of the Proposition 08

Two respondents were agreed with the Proposition 07 by considering the behaviour of the people and their psychological condition and converting them to be beneficial in the process of construction negotiation. Mainly, as per the view point of respondent R4, this perception is evidently realized.

"Most of the time, there is an attitude of clients' to deduct the claimed amount. They like to deduct at least a rupee. We have to inject that attitude. We cannot deduct actual amount. Therefore, I claimed little more amount to cut. But I think that margin shall not be too high"

Consequently, the negotiators are clearly impacted by the attitudes of others in the negotiation process, where they had to act by understanding the acuity of others to continue the negotiation process in an undisrupted manner. Thus, negotiators are forced to act in the satisfaction of the others and to their understanding irrespective of the professional conduct. Additionally, as per the statement by the respondent R5 "There is discount base perception. Always thinks about the discount. When they get a discount, it feels wining situation therefore, to cater the situation of the industry, I put

additional amount for my figures to obtain the actual figure" the above perception is further reinforced and express how the industrial context affect the offer magnitude and thus, the contractor negotiators are psychologically affected to act beyond their professional conduct and ethical practice

# Success or failure of the Negotiation Process due to the practice of Proposition 08

Hence it was the opinion of the majority that the justifiable offering is successful as it benefited and accepted by most of the representing parties while enabled to act contractually and professionally. Hence, with that perception it can be identified although there is a conduct of discount base perception the construction negotiators are much forwarded to be act in a reasonable way with the dealings of the construction negotiation.

Proposition 9: Construction negotiators are more likely to agree on the size of demanded concessions when it is outlined against the greater magnitude of the whole deal, than when it is outlined against the slighter magnitude of the deal currently being discussed.

The impression of the Construction negotiators on the size of demanded concessions when it is drawn against the greater magnitude of the whole deal, than when it is outlined against the slighter magnitude of the deal is analysed and thus it represented results which move forward parallel with the Proposition 9 with respect to the industrial experts' opinion and the result are summarized in the Figure 4.9.

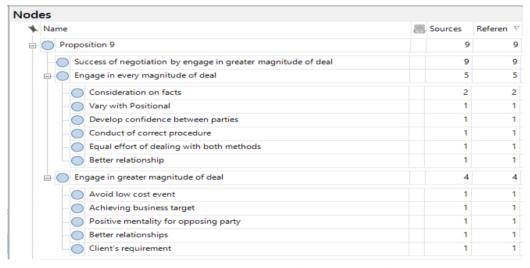


Figure 0-9: Negotiators' perception on Proposition 09

# **Experts' Opinion in favour of the Proposition 09**

Several ideas were represented by four respondents on the fact, of engaging in greater magnitude of deal with several reasoning. Accordingly, as per the view of R2 "I always advise my clients to avoid low cost events and go for more magnitude claims. It is worth when consider the business point of view", the negotiators are more willing to consider the most cost-reduction procedure where more benefits could be gained through the deals with higher offer. Additionally, the negotiators are most considerate with attitude of others where then the negotiations are on table and it is intensified with the opinion of the respondent R3 "We are dealing with mentality of others. Therefore, if we are going for each and every item, bad mentality will be developed in opposing. Therefore, it is better to go for significant events to keep the good relationship." Thus, negotiators are more forced towards to keep a steady a comfortable mind setting of the representatives enabling negotiator to deal with them easily. Further they are more prominence towards the other's impressions are further highlighted with the opinion of R8 "Specially, my clients like grate magnitude deals. Less magnitude events don't entertain clients' desires".

# **Experts' Opinion not in favour of the Proposition 09**

As per the opinion of R4 on the dealing with the offerings with greater magnitude and minor magnitude deals the opinion emphasised conduct of correct procedure in the negotiation table irrespective of the magnitude of the benefit from it. This is further emphasised with his opinion on "They are separate issues. Irrespective of the cost we have to go for the negotiation. We have to assess and submit properly. I go for the actual facts and figures." Hence these further emphasis construction negotiators are bound to be evaluate and follow the proper path and being correspondence to their professional carrier. Additionally, R5 highlighted that "I believe that there is not much difference between efforts we put for both situations. As well as, to obtain the larger benefit we shall deal with many small events and varies with my position" the effort he has to be taken in order to obtain benefits irrespective of the magnitude of it. Due to that the negotiators are psychologically influence about their hard work on the proposals and the exclusion of them would be disadvantageous to them. The

confidence over the negotiator increase with his dedication be paid over the table and thus he is influenced to deal with offers of any magnitude.

Furthermore, as per the opinion of the respondent R1 "In the negotiation table, low magnitude events might be neglected and giving priority to major events. This approach will develop the confidence between parties. Then negotiation process can be finalised without wasting time" rather than avoiding minute events it is justified to bring them to the negotiation table which ultimately develop a sturdy understanding among the parties. This emphasis on the fact that negotiators are further influenced by the other parties conduct and thus, he is dealing with the procedure in an accurate manner while decisions on them would be hanged later. This is further strengthened with the opinion of the respondent R6 "Even though I have submitted all events, I like to negotiate major events first. After reaching to a conclusion we can decide for low magnitude events. It is better to neglect low magnitude issues for the good faith and better relationship of both parties" where negotiator is further respect and considerate about the other representatives' views instead taking decisions of the deals by himself.

# Success or failure of the Negotiation Process due to the practice of Proposition 09

Diverging from the opinion of the most respondents over their engagement on minute and greater deals, all of them highlighted the fact that the success of a negotiation would fall upon if the minute deals were avoided considering the advantage that would receive the party irrespective of the other negative impacts on the decision.

### 4.9.6 Influence based on the overweight of social comparison

In here emphasis on, people are plunging towards the opinions of others whenever there is an absence of correct means to judge the suitability of a perspective is concerned and under that Perception 10 is analysed through the collected data

Proposition 10: Monitoring the anticipated value of the deal that can offer and for the actual value of the alternatives exists, construction negotiators who are apparent to have alternatives will consider as more smart negotiator, will be less likely to have aggressive negations with others, will easily grasp an agreement and will seizure a higher percentage of the value in negotiations. Initially, the respondents were questioned on the fact that when they show other party what they have offered is in great demand without altering information or incentives, whether they are feel to, be a smart negotiator, be less likely to have aggressive negotiations with others, easily grasp an agreement and seizure a higher percentage of the value in negotiations and represented their response in Table 4.2.

Table 0-2: Summary of the respondent's perception of Proposition 10

interviewee	be a smart negotiator	be less likely to have aggressive negotiations with others	easily grasp an agreement,	seizure a higher percentage of the value in negotiations
R1	Yes	Yes	Yes	Yes
R2	Yes	Yes	Yes	Yes
R3	Yes	Yes	Yes	Yes
R4	Yes	Yes	Yes	Yes
R5	Yes	Yes	Yes	Yes
R6	Yes	Yes	Yes	Yes
R7	Yes	Yes	Yes	Yes
R8	Yes	Yes	Yes	Yes
R9	Yes	No	No	Yes

The above Table 4.2 represent the tabulated data and it further intensity other than the single response by R9 that the respondent is not being be less likely to have aggressive negotiations with others and not easily grasp an agreement, all others are content with the above four points at the Proposition 10. Thus, their reasoning is further analysed through content analysis and illustrated under Figure 4.10.

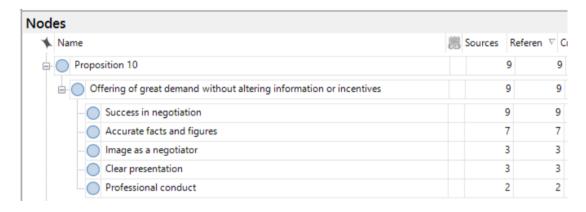


Figure 0-10: Negotiators' perception on Proposition 10

# Experts' Opinion in favour of the Proposition 09 and its impact on the success or failure of the Negotiation Process due to the practice of Proposition 10

Several ideas were represented by four respondents on the fact, of engaging in greater magnitude of deal with several reasoning. Accordingly, as per the view of R2 "I always advise my clients to avoid low cost events and go for more magnitude claims. It is worth when consider the business point of view", the negotiators are more willing to consider the most cost-reduction procedure where more benefits could be gained through the deals with higher offer. Additionally, the negotiators are most considerate with attitude of others where then the negotiations are on table and it is intensified with the opinion of the respondent R3 "We are dealing with mentality of others. Therefore, if we are going for each and every item, bad mentality will be developed in opposing. Therefore, it is better to go for significant events to keep the good relationship." Thus, negotiators are more forced towards to keep a steady a comfortable mind setting of the representatives enabling negotiator to deal with them easily. Further they are more prominence towards the other's impressions are further highlighted with the opinion of R8 "Specially, my clients like grate magnitude deals. Less magnitude events don't entertain clients' desires".

Most of the respondents expressed their acceptance of the above Proposition 10, where they have to established and maintain their image and status as negotitors. as per the opinion of R1 "The image we build up as a negotiator is very important. Hence argue with correct facts and figures develop the confidence of opposing party. If we present our entitlement in proper way, that is very good and avoid litigation" which is further corresponds with the view point of respondents R5, R7 and R9. Thus, the negotiators are being keeping their image as a valued negotiator thus emphasising the professional conduct they carry on keeping those statuses on a positive establishment. Along with that the development of assurance of the representatives at the negotiation would be beneficial for the success of the event. Thus, not being aggressive in negotiations with others also encourage on being making the comfortable environment to others and built up their trust upon them where the negotiation would take place in a very successful manner.

In addition to that as per the opinion of R5 and which is further intensified with the stamen of respondent R2 "We shall have a basis for every event. That is professional way to approach the cases" further express their willingness to act being less aggressively in a given condition and where they utilise their professional conduct along with their industrial experience grasp the negotiation procedure for according to their way. Moreover, the statement by R3 "The best way to practice in negotiation table is provide exact facts and figures" represent the reasoning to be a smart negotiator where through the justifiable terms and contractual proceeding, which enable more towards being much approachable in the negotiation table. Herein as per R4 "Neat presentation will tune other party's mind. This will lead to go for quick agreement." enable to penetrate in to others view points and to make them beneficial for us and thus it enables seizure a higher percentage of the value in negotiations with the established status with the conduct of negotiation. Consequently, with above identified reasoning it is visible that these will enable in being success at the negotiation proceedings as Proposition 10.

Proposition 11: When the issue being negotiated is highly significant for the opposition party, the negotiator will be more possible to have his deal accepted when the solid justifications and rationalisations are exposed early in the argument.

The exposure of the arguments over the given perception was extensively debated over the respondents and their summarised opinions are expressed in the Figure 4.11 where majority of the respondents were deviated with the above Perception on bring arguments early on the procedure, but with the controversial view that in aid in the successful negotiation.



Figure 0-11: Negotiators' perception on Proposition 11

# **Experts' Opinion in favour of the Proposition 11**

As R2stated "if we couldn't put forward our arguments, opposition party will not allow us to get out actual entitlement. They are try to put down our claim." Where the negotiator must concern on the settlement of the argument while viewing its possibility in being advantageous to the representing party. Thus, the early representation of the arguments is push forward by four respondents and there respondent R3 emphasised "We shall build up the trust that we are come with genuine facts and figures. it is important to build up the confidence and it will direct the desired targets" that the establishment of the positive minds enable in the success of the negotiation procedure as the presenters' and the participants are more comfortable with the proceedings.

# **Experts' Opinion not in favour of the Proposition 11**

According to the opinion of R7 which resemble with the view point of R1 express that "We shall give opposing party to reveal their arguments I like to consider opposing party behaviour and treat accordingly. I am a person that play my trumps at the beginning" show the performance of a negotiator with the tactics of identifying their points to be argued for the success of the deal. This further enable negotiator to identify the other's status upon the deal enable the negotiator to build up the attitude and other solid arguments for the advantage of the deal. The above fact is further reinforced with the argument of R5 "We shall give opposing party to reveal their all arguments. If I put my solid arguments, opposing party may frustrate". This, this built up the self-confidence of the Negotiator and then the positive mind set is forwarded to success of the deal.

Consequently, as per the view point of R6 "I will give maximum time for their explanations. Because I have all weapons. If I am strong, definitely other party weak. That means, other party in depression situation. then, it is better to argue with depressed opposing party", the negotiator can build up their strong suit and then be a smart negotiator with the high intense of grasping the winning out of others. Hence, the negotiator could utilise their depressed mentality over to their side and then act on the way success in the arguments with solid justification. In addition to that as per the opinion of R8 "We shall start in low level. If we think about the success of negotiation

process, we shall start calm from low level. Flexibility shall be there." the controllability over the negotiation procedure could be gained by the negotiate where it leads to success in the proceedings of the negotiation process.

## Success or failure of the Negotiation Process due to the practice of Proposition 11

Nevertheless, R9 specified that "If solid and justifiable then we can put then as soon as possible. It will affect to other party to come for a settlement.". Thus, this strengthen the fact that with this early settlement could be achieved which ultimately lead to the success of the negotiation. Along with that the perception of the success of the negotiation process as per the above perception was approved by the all respondents as it enables to move forward with developed trusted environment.

Proposition 12: When the issue being negotiated is of low significant to the opposition party, or when only frail justifications exist, the negotiator will be more possible to have their deal accepted when justifications and rationalisations are exposed late in the argument.

The expressed view on the above perception was on a debated environment as the respondents expressed on the positive view point to the perception was encountered to be five. In addition to that one respondent were refraining to be attending the negotiation procedure due to the availability if weak arguments. Nonetheless, the analysed data are summarised and shown in the Figure 4.12

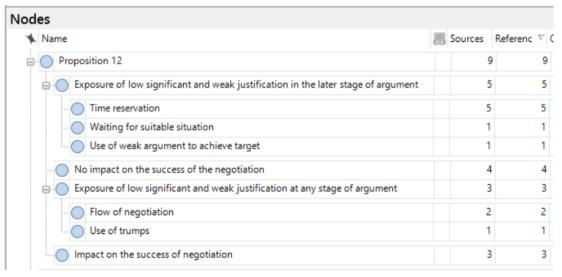


Figure 0-12: Negotiators' perception on Proposition 12

# **Experts' Opinion in favour of the Proposition 12**

Nevertheless, as per the respondents R7, R8, R6, R4 and R3 stating that "Because we have weak points. We have to wait until suitable time comes to our end. Otherwise there is no way to argue with weak points" emphasis that negotiators utilise the time effectively and wait until the suitable opportunity to use the weak argument over the negotiators benefit to achieve the target. This is further intensified with the statement of R6 where the listening s utilized in bringing down the loopholes of opposition and converting them to be strong points for the success of the negotiation.

# **Experts' Opinion not in favour of the Proposition 12**

According to the R1 "Ilisten to opposing party and give my points. I will use my trumps considering the situation. Always we shall listen to other party and understand their considerations. Accordingly, we shall play our weak arguments to achieve the target" emphasis on the fact that negotiator is utilizing then logical strategies to gain the advantage through the other's arguments creating alternative strong points with other's weak arguments. Thus, this enable the negotiator to express their points of view anytime and through precise listening and understanding the problem of weak points can be overcome. Moreover, as per R5 "I would like to put my arguments according to the flow of negotiation. Provide in last moment will not affect to process at all" emphasis the procedural flow of the negotiation thus the above proposition is being useless in such a scenario. This simply intensify the fact that the negotiators are impacted by the contractual proceeding thus utilizing such perception in the success of negotiation may not be practical at that point

However, on the argument of above Proposition over the success of the negotiation was expressed to non-influential by five of the respondents by stating that delivering them at the earliest possibility enabling in the early finish of the procedure and it further intensified with the opinion of R9 "Whatever the facts we have, we have to forward them in first time. It will make to finish the negotiation process early. It is the way of success of negotiation process." Other four respondents were argued on its success that it enables the negotiator to utilize the available opportunity to make advantage upon the weak environment.

Proposition 13: A negotiator with rigid rationalisations and arguments will be more probable to have his offer accepted if he; expresses slowly and calmly, evades being excessively technical, delivers a written description of the essential demands and explanations and avoids negotiating when the other opposition is distracted

All the respondents were stated that the Preposition 13 being slowly and calmly in dealings with rigid rationalism might be a successful in the negotiation process.

Table 0-3: Summary of the respondent's perception of Proposition 13

		Preposition 13								
		If y	If you had rigid rationalisations and arguments							
		1	2	3	4	5	6	7	8	9
a)	Express them slowly and calmly	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>a)</i>	Express them quickly and restlessly	No	No	No	No	No	No	No	No	No
b)	Avoids being excessively technical	No	No	No	No	No	No	No	No	No
	Uses technical language	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
c)	Provides a written explanation of the core demands and justifications	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
	Evades requests to put the offer in writing	No	No	No	No	No	No	No	No	No
d)	Avoid negotiating at a time when other party is distracted	Yes	No	Yes						
	Negotiates when the other party is busy or distracted.	No	No	No	No	No	No	No	Yes	No

Hence the above Table 4.13 depicts on the conduct of the respondents on above perception and their point of view for the above actions is analysed through the collected data, summarized and depicted in the Figure 4.13

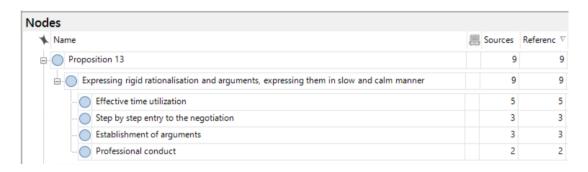


Figure 0-13: Negotiators' perception on Proposition 13

# Experts' Opinion in favour of the Proposition 12 and its impact on success or failure of the Negotiation Process due to the practice of Proposition 13

According to the view point of R6 and by the statement if R1 "We shall put forward our facts in calm & quite manner. Because, opposing party have to think what we are expecting. We have to enter to negotiation step by step" the sequential procedure in the negotiation process might enable in gain an advantage over the position. Thus, the negotiator has the self-confidence and the willingness to produce strong argument on the defence at a such a scenario.

Moreover, as per R8, R7, R5 and with the opinion of R2 "Because there shall be an enough time to other party to think leisurely. It will help to success of the negotiation. Negotiation process shall be fast and quick", the negotiator utilizes the extra time and hence direct it to establish an advantageous environment over the negotiation procedure, which clearly enable in the success of the negotiation. In addition to that as per the opinion of respondent R3 "Professionals shall handle the situation in professional way. "hence this clearly express the fact that the use of above proposition can be done in a very calm manner where the professional conduct accompanied with ethical conduct enabling the success of the negotiation process.

Consequently, it is evident with the respondent's point of view and with their opinions this perception can be utilized in the negotiation process to be successful.

Proposition 14: A negotiator with weak and frail rationalisations and arguments will be more probable to have his demands accepted if he; speaks rapidly, becomes excessively technical, avoids demands to put the offer in writing negotiates when the opposition is busy or distracted

Respondents had expressed different view upon their perception on the Proposition 14 and their view points are tabulated in the Table4.4. In here all the respondents except R2 and R9 were not compatible with the above perception and said they are not attending in presence of weak rationalization for the procedure of negotiation.

Table 0-4: Summary of the respondent's perception of Proposition 14

		Preposition 14								
		If yo	If you had weak rationalisations and arguments							
		1	2	3	4	5	6	7	8	9
a)	Express them slowly and calmly	Yes	NA	Yes	Yes	Yes	Yes	Yes	No	NA
<i>a)</i>	Express them quickly and restlessly	No	NA	No	No	No	No	No	Yes	NA
b)	Avoids being excessively technical	No	NA	No	No	No	No	No	Yes	NA
	Uses technical language	Yes	NA	Yes	Yes	Yes	Yes	Yes	No	NA
c)	Provides a written explanation of the core demands and justifications	Yes	NA	Yes	Yes	No	No	Yes	Yes	NA
	Evades requests to put the offer in writing	No	NA	No	No	No	Yes	No	No	NA
d)	Avoid negotiating at a time when other party is distracted	Yes	NA	Yes	Yes	Yes	Yes	Yes	No	NA
d)	Negotiates when the other party is busy or distracted.	No	NA	No	No	No	No	No	No	NA

NA: Not applicable

Consequently, the arguments given by the respondents were analysed and the summary is depicted in the Figure 4.14



Figure 0-14: Negotiators' perception on Proposition 14

# Experts' Opinion in favour of the Proposition 14

As per the opinion of all except the R2 who is not attending the negotiations with weak rationalisations all others except the that point presentation should be done in a very calmly manner in order to be successful at the negotiation process, as per the opinion of R8 "Even the weak rationalisation, we shall calm until come to our point. Keep in mind always, we are professionals and act as same. If there is a possibility to put the argument, put forward at that time". This enable in leading the negotiation in a beneficial manner and utilization of the opportunity to negotiators benefit at suitable time should be done as professionals who are in the conduct of these negotiation procedures.

With respect to the avoiding being excessively technical when you are having rigid rationalisations and arguments on construction negotiation, the opinions were in favour of being technical. As per respondent R8 "There shall technical approach to success of negotiation. It will help to develop our arguments". Thus, this enable the negotiator to utilize his full capacity of knowledge and the experience and to bring the professional practice to the negotiation table. Additionally, according to R3 "Even we have solid justifications, we shall prove them in highly technical manner" this facilitate in presenting strong arguments which would ultimately enable in the success of the negotiation process.

# Experts' Opinion not in favour of the Proposition 14 and its impact for the success or failure of the Negotiation Process due to the practice of Proposition 03

Furthermore, concerning on the impacts of having rigid rationalisations and arguments while avoid negotiation with other party when they are distracted could be supplementary elaborated thought the view point of respondents. According to R1 "If other party is not listen to us and in honest way, we cannot go ahead with negotiation process. Best thing is to stop the process because there is no negotiation if other party not attend properly", it is better to delay the process in order to gain a successful negotiation over the table where all the parties are influenced with positive attitudes towards the procedure. In the meantime, as per the opinion of R2 "if we cannot go for our target, they are wasting our time, we look forward another ADR method" the parties would move onto other possible solutions which would ultimately impact on the failure of the negotiation process.

# 4.10 Summary of the Research Findings

The data that collected through the expert opinion surveys, were analysed throughout this chapter to reach on a conclusion. Descriptive analysis and content analysis were used as the analysis techniques and it was supported with the N-Vivo software. From the findings of the analysis, the objective 04 and objective 05 were satisfied. Further they were summarized under their position over the preposition and evaluating success over their point of view as per the Table 4.15. Along with that Prepositions were arranged upon their impact towards negotiations in construction projects in respective to current Sri Lankan context and among those modified fourteen Prepositions, nine Prepositions enable the success of the Negotiation process and five of them impact towards the failure of the negotiation process. Hence, the arrived conclusion is illustrated on the Table 4.5

Table 0-5: Summarization of the Proposition in terms of its conduct and success to the Negotiation

	Proposition	Reasons being favour of the Proposition	No of respondents in favour of the Proposition	Reasons being not in favour of the Proposition	No of respondents not in favour of the Proposition	No of respondent in favour of the preposition impact on the success of the negotiation
1	Construction negotiators are more enthusiastic to admit an offer which contains two portions of gains offered by the opposing party than a nutshell offer which includes one gain in equal magnitude to the previous two gains.	•For the maintenance of good relationships among the parties	2	<ul> <li>Higher risk</li> <li>Delay in settlements</li> <li>Delay in financial procedures</li> <li>High Time consumption</li> <li>Questions on legality of negotiation</li> </ul>	6	1
2	Construction negotiators are more enthusiastic to admit an offer that involves a nutshell loss demanded by the opposing party (a cost or a penalty) than two small losses in two turns which totals to the same amount.	•Early settlement	2	<ul><li>Difficulty in maintaining cash flow</li><li>Higher risk</li><li>Low benefits</li></ul>	7	1
3	Construction negotiators are more probable to gain support and acceptance for their proposals from the opposition, if they are stated the losses that opposing party will gain if the proposal rejected than the benefits the opposing party will receive if the proposal accepts.	Depends upon the opposing     Party     Based upon the facts and arguments	1	<ul> <li>Negative impression on opposition</li> <li>Do not create opposition enthusiasm over profit</li> <li>Negative impact for the relationships among parties</li> </ul>	6	1
4	If the construction negotiator has invested more time and other resources to the negotiation, the negotiator has a willingness to admit the offered agreement.	N/A	0	<ul> <li>Prior preparation of comprehensive documents for the argument with a required time and other resources</li> <li>Improper professional conduct</li> <li>Unnecessary action</li> <li>Time and money wastage</li> </ul>	9	0
5	If the construction negotiator strategically forces the opposition party to invest more time and other resources to the negotiation, it will encourage them to admit the offered agreement	Additional information can be gained	6	<ul> <li>Negative impact for relationships</li> <li>Negative impact of the professional conduct of the negotiator</li> <li>Availability of proper arguments</li> <li>Wastage of time</li> </ul>	3	0
6	In complicated construction negotiations, the party who creates the first draft of the contract or agreement will acquire a premeditated advantage.	Having considerable time in the preparation of the documents     Complete knowledge on the facts and familiarisation with the document     Ability to include favourable terms on the draft	6	<ul> <li>The first draft could be held against by strong documentation of the opposition</li> <li>Legal aspects</li> <li>Impact by the professional conduct</li> </ul>	3	3

	Proposition	Reasons being favour of the Proposition	No of respondents in favour of the Proposition	Reasons being not in favour of the Proposition	No of respondents not in favour of the Proposition	No of respondent in favour of the preposition impact on the success of the negotiation
7	Construction negotiators dislike negotiating on an issue of value to one party or both, when a previous agreement on that issue exists than when the issue has not been negotiated beforehand	<ul> <li>No advantages on the results of negotiation</li> <li>Wastage of time, money and resource</li> <li>Impacts from clients</li> <li>No changes in the decisions with continuous negotiation on previous agreed issues.</li> </ul>	4	<ul> <li>It avoids the opportunities for new ideas</li> <li>There can be changes in the decisions of prior agreed matters.</li> </ul>	5	0
8	There is a likeliness to accept an offer made by a construction negotiator when he has previously made an extreme offer which was not accepted but did not end the discussion.	<ul> <li>Due to client's attitude of offering extreme offers initially</li> <li>Depends upon the who sat in the opposition.</li> </ul>	2	<ul> <li>Presentation of justifiable offer</li> <li>Being in the professional conduct</li> <li>Application of contractual entitlements</li> <li>Negative impact on the good relationship with other parties</li> </ul>	7	1
9	Construction negotiators are more likely to agree on the size of demanded concessions when it is outlined against the greater magnitude of the whole deal, than when it is outlined against the slighter magnitude of the deal currently being discussed.	<ul> <li>Avoid low cost events</li> <li>Achievement of business targets</li> <li>Creation of positive mentality to opposing party</li> <li>Development of better relationships</li> <li>As per the requirement of the client</li> </ul>	4	<ul> <li>No consideration of all the facts in the negotiation which is essential</li> <li>Confidence of other parties might negatively have impacted.</li> <li>No in accordance with the correct conduct of procedure.</li> <li>Due to the equal effort dealings with both methods</li> <li>Due to its negative impact on relationships among other parties</li> </ul>	5	9

	Proposition	•Reasons being favour of the Proposition	No of respondents in favour of the Proposition	Reasons being not in favour of the Proposition	No of respondents not in favour of the Proposition	No of respondent in favour of the preposition impact on the success of the negotiation
10	can offer and for the actual value of the alternatives exists, construction negotiators who are apparent to have alternatives	<ul> <li>Being concerned on accurate facts and figures</li> <li>Enable in clear presentation</li> <li>Develop a good image as a negotiator</li> <li>Handling issues in accordance with the professional code of conduct</li> </ul>	9	NA	0	9
11	significant for the opposition party, the negotiator will be more possible to have his deal accepted when the solid justifications and rationalisations	<ul> <li>Enable early entitlement</li> <li>Development of trust among other parties</li> <li>Building up of confidence among other parties</li> </ul>	4	<ul> <li>Unable to identify opposition status over the issue</li> <li>Having strong negotiators do not make an advantage of late revealing of the arguments</li> <li>No opportunity to reveal oppositions arguments</li> <li>No flexibility over issues</li> </ul>	5	9
12	significant to the opposition party, or when only frail justifications exist, the negotiator will be more possible to have their deal accepted when justifications and rationalisations are exposed late.	<ul> <li>Conservation of time</li> <li>Enable to approach in an advantageous situation to the party</li> <li>Enable to use weak arguments to achieve the target</li> </ul>	5	<ul> <li>Interruption the sequential flow in the negotiation procedure.</li> <li>Disruption to the use of trumps</li> </ul>	3	3
13	arguments will be more probable to have his offer accepted if he expresses slowly and calmly, evades being excessively technical, delivers a written description of the essential demands and explanations and avoids negotiating when the	<ul> <li>Effective time utilization</li> <li>Enable in the establishment of arguments</li> <li>Enable in the professional conduct</li> <li>Enable to enter in to the negotiation in the sequential order.</li> </ul>	9	NA	0	9

	Proposition	•Reasons being favour of	No of respondents	Reasons being not in favour of the	No of respondents	•
		the Proposition	in favour of the	Proposition	not in favour of	the preposition impact on the
			Proposition		the Proposition	success of the negotiation
14	A negotiator with weak and frail rationalisations and arguments will be more probable to have his demands accepted if he speaks rapidly, becomes excessively technical, avoids demands to put the offer in writing and negotiates when the opposition is busy or distracted	<ul> <li>Enable in strong point establishment</li> <li>Enable in development of arguments</li> <li>Enable in solid justification</li> <li>Enable in professional</li> </ul>	8	<ul> <li>Engage in calm behaviour to make a comfortable environment for the negotiation process.</li> <li>Delay the process without conducting it in a busy time</li> <li>Look forward for other ADR methods</li> </ul>	1	9
		conduct		methous		

The final summarization of the study is depicted in Table 4.16

Table 0-6: The summary of qualitative analysis

Preposition No	Description	Impact towards the success or failure of the Negotiation
1	Construction negotiators are more enthusiastic to admit an	Success
	offer which contains nut shell offer by the opposing party than two portions of gain offer which includes one gain in	
	equal magnitude to the previous two gains.	
2	Construction negotiators are more enthusiastic to admit an offer that involves than two small losses in two turns which totals to the same amount demanded by the opposing party (a cost or a penalty) than a nutshell loss	Failure
3	Construction negotiators are more probable to gain support and acceptance for their proposals from the opposition, if they are stated the benefits that opposing party will gain if the proposal rejected than the losses the opposing party will receive if the proposal accepts.	Success
4	The construction negotiator has no willingness to invest more time and other resources to the negotiation, to admit the offered agreement.	Failure
5	If the construction negotiator strategically forces the opposition party to invest more time and other resources to the negotiation, it will encourage them to admit the offered agreement	Failure
6	In complicated construction negotiations, the party who creates the first draft of the contract or agreement will acquire a premeditated advantage.	Success

Preposition No	Description	Impact towards the success or failure of the Negotiation
7	Construction negotiators like negotiating on an issue of value to one party or both, when a previous agreement on	Success
	that issue exists than when the issue has not been negotiated beforehand	
8	There is a no likeliness to accept an offer made by a construction negotiator when he has previously made an extreme offer which was not accepted but did not end the discussion.	Success
9	Construction negotiators are more likely to agree on both demanded greater magnitude of the whole deal and slighter magnitude of the deal in negotiation process	Failure
10	Monitoring the anticipated value of the deal that can offer and for the actual value of the alternatives exists, construction negotiators who are apparent to have alternatives  I. will consider as smarter negotiator,  II. will be less likely to have aggressive negations with others,  III. will easily grasp an agreement  IV. will seizure a higher percentage of the value in negotiations.	Success
11	When the issue being negotiated is highly significant for the opposition party, the negotiator will be more possible to have his deal accepted when the solid justifications and rationalisations are exposed end in the argument.	Failure

Preposition No	Description	Impact towards the success or failure of the Negotiation
12	When the issue being negotiated is of low significant to the opposition party, or when only frail justifications exist, the	Success
	negotiator will be more possible to have their deal accepted	
	when justifications and rationalisations are exposed late in	
	the argument.	
13	A negotiator with rigid rationalisations and arguments will be more probable to have his offer accepted if he expresses slowly and calmly, evades being excessively technical, delivers a written description of the essential demands and explanations and avoids negotiating when the other opposition is distracted	Success
14	A negotiator with weak and frail rationalisations and arguments will be more probable to have his demands accepted if he does not speak rapidly, becomes excessively technical, avoids demands to put the offer in writing and not negotiates when the opposition is busy or distracted	Success

# **CHAPTER FIVE**

# CONCLUSIONS AND RECOMMENDATION

The chapter commenced with accomplishing a conclusion after the analysis conducted in the previous chapter four. In addition, summary to the research is composed and further recommendation have been addressed for the enhancement of the research area. Limitations to the research is itemised while intensifying further research areas to be carried out.

# 5.1 Summary of the Research Study

Undertaking and solving of construction disputes has become a significant and inevitable in the current context. Alternative Dispute Resolution (ADR) methods were presented to the construction industry as a resolution to exterminate disadvantages and to achieve more benefits towards the parties to engage themselves in the conservation of time, money and resources and thus Construction Negotiation has gained a prominent place in resolution of construction dispute. It has acknowledged through the studies that psychological viewpoints affect the negotiation process where Behavioural Decision Theory (BDT) has a noteworthy stimulus on the conduct of negotiation. In construction industry, negotiation is the elementary ADR method which approves the amicable settlement of disputes. Consequently, through these individuals concern on their own interdependencies. Henceforward, participation of human factor allied the psychology into negotiation and therefore it is required to identify their impact over the construction negotiation and their influence over the success or failure of the negotiation process.

In order to continue the research qualitative method was used and as the aim of the study is to explore the influence of psychological aspects for construction negotiation. The data collection was carried out through expert opinion survey, using nine number with open ended interviews. The experts were selected from the industry who have moderate to high level of awareness and experience in relation Construction Negotiation and ADR. Content analysis was used as the procedure to analyse the data by using the N-Vivo software, which is proficient to present the results in an organised

manner. The conclusions and recommendations which are identified below were based on the results of the analysis.

#### 5.2 Conclusions

Within the Sri Lankan context, the ADR has gained a significant place in terms of dispute resolution. Thus, it has been identified that Negotiation is a prominent procedure among them which heavily concerned with the behavioural patterns of participants where their positive or negative emotions are impacted with the decisions and procedures of the negotiation. Hence, it is required to identify the influence of psychological aspects for construction negotiation.

Initially, through the research, the concept of negotiation in construction projects were discussed. Accordingly, it was identified that Negotiation act as a significant factor in the ADR method where it is carried out in eight steps under three categories of Pre-Negotiation, Negotiation and Post negotiation. The study further revealed on the negotiation as psychological process where individual's and especially negotiators emotions and behaviour influenced in the decision making of negotiation. Thus, the study of BDT was adhered to discuss psychological influence in negotiation and eight physiological aspects were identified. Consequently, those identified physiological aspects were further critically reviewed to identify influence the construction negotiation along with 14 Propositions.

It was further intensified that the 14 Propositions were subjected to several changes with the psychological influence on the negotiators in Sri Lankan context. Thus, their mentality was most prominent to build a comfortable environment among the participants of the negotiation and while delivering the offers and continuing their relationships among the parties. Consequently, they have identified that nine of the revised propositions are influencing on the success of the negotiation and five of the revised propositions are causing the failure of the negotiation procedure. With regard to that the identified psychological aspects for the successful construction negotiation can be applied in the Sri Lankan context to acquire beneficial results to the construction

stakeholders as per their requirement. Here onwards, the manner in which the objectives were accomplished are comprehensively discussed.

# Objective one: To review the concept of negotiation in construction projects

The first objective was entirely accomplished through the literature synthesis. In order to accomplish the objective, firstly, the basic concept of negotiation was elaborated with the available literature. Furthermore, the negotiation was critically reviewed as an ADR method in construction industry together with discovering the negotiation process.

Accordingly, negotiation is a word that appears with substantially frequency in a construction project. Basically, disputes are common in construction projects and in order to solve these disputes negotiations are taking place ranging from simple interactions to complex conflict resolution. Thus, negotiation is considered as an ADR method in construction industry but has given the least popularity due to its nature. Generally, in negotiation, no intervention of a third party to settle the dispute. Since people think that the intervention on a third party is essential for a dispute resolution, negotiation has become the least prevalent ADR method in construction industry. However, according to literature, negotiation can be highlighted as the most successful dispute resolution method, as in negotiation parties by consensus agree to settle their dispute with least cost and practicable approach.

# Objective two: To identify the types of psychological aspects involved in negotiations

The second objective was also wholly achieved via extensive literature synthesis. Initially, negotiation was describing as a psychological process by using prevalent literature. Accordingly, negotiator's cognition, motivation and emotions psychologically influence the final negotiation decision. BDT is considered to be the most predominant theory which can be logically applied to discuss the psychological aspects involved in negotiation. Henceforth, the theories behind BDT was unified and 12 psychological aspects were introduced. Subsequently, the aforementioned aspects were further detached into 14 propositions to derive final conclusions. Thus, all these theories and retrievals efficaciously attempted in succeeding the objective two.

# Objective three: To investigate the impact of psychological aspects for the negotiations in construction projects.

In order to achieve the third objective, semi structured interviews were conducted among experts in the industry who had more than 10 years of experience in construction negotiation.

According to the findings, all most all the propositions of psychological aspects favourably or unfavourably impact the negotiation decision in construction industry. Favourably, in order to maintain good relationship among parties, achieve early settlement, gain additional information from opposition, create positive mentality in opposition party and to achieve business targets these psychological aspects can be used in construction negotiation. Moreover, unfavourably, these aspects generate high risks, delays in settlement, low yielded benefits, negative impression on opposition and interrupts the sequential flow of negotiation process. In addition to these, under each aspect, there are lot of adverse and favourable impacts to the construction negotiation. To recapitulate, all most all the aspects have a direct or indirect impact on negotiation decision which can be deviate from favourable or unfavourable.

# Objective four: To determine the psychological aspects which can be applied for the successful construction negotiation

In order to accomplish the final objective, the findings of the semi structured interviews were used. Accordingly, all the respondents who has given favourable responds to the psychological aspects were asked on the impact of such aspect towards the success or failure of negotiation process. As a finding of this in-depth interviews, it has discovered that 9 psychological propositions were successfully impacts the psychological process, whereas 5 propositions were adversely impacts the negotiation process. Thus, it can be concluded that majority of the discovered psychological aspects influence the psychological process more positively than negatively. Henceforth, the study successfully manifests that there is a greater impact from psychological aspects towards the victory of negotiation.

#### 5.3 Limitations of the Research

Numerous limitations were encountered during the progress of research process and limitations identified for the study is identified as follows,

- 1.The study will be only limited to determine psychological aspects related to BDT which influences the negotiation process due to the available time constraints.
- 2. The study is limited only to the Sri Lankan building and civil construction projects due to the geographical constraints.
- 3. The negotiation cases for the study will be selected from construction stage of selected projects.

## 5.4 Recommendations

Recommendation to the research could be comprehended utilising the identified influential psychological aspects in the negotiation procedure.

 Thrive the practice of contractual proceeding and professional conduct in the practice of Negotiation procedure.

It is intense negotiators are most prominent towards the acquiring their beneficial terms through the non-practice of the professional conduct. Thus, it is required to ensure that all the proceedings are held in a professional conduct where all the participants are comprised with the required knowledge to participate the procedure.

 Conduction of CPD (Continuous Professional Development) sessions, to enhance the knowledge of ADR

The knowledge on ADR should not be only limited to the professional but also to the other stakeholders who are in the construction industry. Hence it will be more beneficial if all the participants to a ADR session to be thrive with the required knowledge.

# 5.5 Contribution to the Knowledge

With the research the following areas were added to the knowledge stream which were not previously intensified in the construction field.

- the impact of psychological aspects for the negotiations in construction projects in terms of negotiators, perspective was identified
- the psychological aspects which can be applied for the successful construction negotiation were identified

hence the above contribution could be effectively utilized in both academic and industrial improvement.

#### **5.6 Further Research Directions**

At the conclusion of this research study, further research directions that were derived through BDT and its applicability on construction industry can be identified as follows;

- A study of influence of psychological aspects for the ADR methods in Construction industry.
- 2. A review of the BDT during the whole life cycle of a construction period.
- Impact of the BDT over the conduct of professional ethics of Construction industry practitioners.

# REFERENCES

- Acharya, N. K., Dai Lee, Y., & Man Im, H. (2006). Conflicting factors in construction projects: Korean perspective. Engineering, Construction and Architectural Management, 13(6), 543-566. doi:10.1108/0969980610712364
- Allred, K. G., Mallozzi, J. S., Matsui, F., & Raia, C. P. (1997). The Influence of Anger and Compassion on Negotiation Performance. *Organizational Behavior and Human Decision Processes*, 70(3), 175-187. doi:10.1006/obhd.1997.2705
- Baduge, S., & Jayasena, H.S. (2016). Win-win Settlement: Applicability of Negotiation Principles for Dispute Negotiations in Construction Projects (Unpublished master's thesis). University of Moratuwa, Moratuwa, Sri Lanka.
- Bailey, I. H. (1998). *Construction law in Australia*. Pyrmont, N.S.W: Thomson Reuters (Professional) Australia.
- Baker, S. M., & Hill, R. P. (2013). A community psychology of object meanings: Identity negotiation during disaster recovery. *Journal of Consumer Psychology*, 23(3), 275-287. doi:10.1016/j.jcps.2013.01.007
- Barberis, N., & Thaler, R. (2003). A Survey of Behavioral Finance. *Handbook of the Economics of Finance*, 1, 1053-1128. doi:10.3386/w9222
- Barker, I., Bunni, N. G., & Williams, D. (2002). The resolution of disputes. *The Contract in Successful Project Management: Innovations in Contract Forms & Dispute Prevention and Resolution*, 199.
- Baron, J., & Jurney, J. (1993). Norms against voting for coerced reform. *Journal of Personality and Social Psychology*, 64(3), 347-355. doi:10.1037/0022-3514.64.3.347
- Barrett, K. (2008). *Defective construction work and the project team*. Oxford: Wiley-Blackwell.
- Bartos, O. J. (1977). Simple Model of Negotiation. *Journal of Conflict Resolution*, 21(4), 565-579. doi:10.1177/002200277702100402
- Bazerman, M. H., Curhan, J. R., Moore, D. A., & Valley, K. L. (2000). Negotiation. *Annual review of psychology*, 51(1), 279-314.

- Bazerman, M. H., Magliozzi, T., & Neale, M. A. (1985). Integrative bargaining in a competitive market. *Organizational Behavior and Human Decision Processes*, 35(3), 294-313. doi:10.1016/0749-5978(85)90026-3
- Brooker, P., & Lavers, A. (1997). Perceptions of alternative dispute resolution as constraints upon its use in the UK construction industry. *Construction Management and Economics*, 15(6), 519-526. doi:10.1080/014461997372728
- Cakmak, E., & Cakmak, P. I. (2014). An Analysis of Causes of Disputes in the Construction Industry Using Analytical Network Process. *Procedia Social and Behavioral Sciences*, 109, 183-187. doi:10.1016/j.sbspro.2013.12.441
- Cakmak, P. I., & Cakmak, E. (2014). An Analysis of Causes of Disputes in the Construction Industry Using Analytical Hierarchy Process (AHP). *Procedia-Social and Behavioral Sciences*, 109, 183-187. doi:10.1061/9780784412909.010
- Camerer, C. F., Loewenstein, G., & Rabin, M. (2011). *Advances in behavioral economics*. Chicago, NY [u.a.: Princeton University Press.
- Caputo, A., & Ayoko, O. B. (2016). The role of cultural intelligence in negotiation and conflict management: a conceptual model. *Negotiation and Conflict Management Research*.
- Carnevale, P. J., & Isen, A. M. (1986). The influence of positive affect and visual access on the discovery of integrative solutions in bilateral negotiation. *Organizational Behavior and Human Decision Processes*, *37*(1), 1-13. doi:10.1016/0749-5978(86)90041-5
- Chatterjee, C., & Lefcovitch, A. (2008). *Alternative dispute resolution: A practical guide*. London: Routledge.
- Cheung, S. O., Yiu, T. W., & Suen, H. (2004). Online Construction Dispute Negotiation. *Journal of construction engineering and management*, 130(6), 884-852.
- Cheung, S., & Suen, H. C. (2002). A multi-attribute utility model for dispute resolution strategy selection. *Construction Management and Economics*, 20(7), 557-568. doi:10.1080/01446190210157568
- Chris, M. (2009). Business organisation for construction. London: Taylor & Francis.
- Craver, C. B. (2003). The negotiation process. Am. J. Trial Advoc, 27, 271.
- Creswell, J.W. (1998). Qualitative inquiry and research design. California: SAGE publications.

- Cushman, R. F., Carter, J. D., Gorman, P. J., & Coppi, D. F. (2001). *Construction Disputes: Representing the Contractor*. Aspen Publishers Online.
- Dawson, C. (2002). Pretical research method. United Kingdom: How to Books Ltd.
- De Zylva, E. (2007). Alternative dispute resolution systems for construction contracts. In K. Kanag-Isvaran & S. S. Wijerathna (Eds.), Arbitration law in Sri Lanka (pp. 117-138). Colombo, Sri Lanka: The Institute of the Development of Commercial Law and Practice.
- Dixon, W. J., & Sense, P. D. (2002). Democracy, Disputes, and Negotiated Settlements. *Journal of Conflict Resolution*, 46(4), 547-571. doi:10.1177/0022002702046004004
- Dolnik, A. (2007). Negotiating the impossible? the Beslan hostage crisis. Retrieved from https://www.rusi.org/downloads/assets/WHR2-07.pdf
- Eaton, D. S. (1993). Alternative dispute resolution: a viable method for settling government contract disputes (Unpublished doctoral dissertation). Naval Postgraduate School Monterey CA.
- Eggleston, B. (1993). ICE Conditions of Contract. Chichester: John Wiley & Sons.
- Elfenbein, H. A. (2015). Individual differences in negotiation: A nearly abandoned pursuit revived. *Current Directions in Psychological Science*, 24(2), 131-136. doi:10.1177/0963721414558114
- Elliott, M. L., & Kaufman, S. (2016). Enhancing Environmental Quality and Sustainability through Negotiation and Conflict Management: Research into Systems, Dynamics, and Practices. *Negotiation and Conflict Management Research*, 9(3), 199-219. doi:10.1111/ncmr.12077
- Fenn, P., Lowe, D., & Speck, C. (1997). Conflict and dispute in construction. *Construction Management and Economics*, 15(6), 513-518. doi:10.1080/014461997372719
- Festinger, L. A. (1954). A theory of social comparison processes. *Human Relations*, 7, 117-140.
- Fisher, R., Ury, W., & Patton, W. B. (1991). *Getting to yes* (2nd ed.). Retrieved from http://6thfloor.pp.fi/fgv/gettingtoyes.pdf
- Flick, U. (2006). An Introduction to Qualitative Research (3rd ed.). London: Thousand Oaks.
- Gebken, R. J., & Gibson, G. E. (2006). Quantification of Costs for Dispute Resolution Procedures in the Construction Industry. *Journal of Professional*

- Issues in Engineering Education and Practice, 132(3), 264-271. doi:10.1061/(asce)1052-3928(2006)132:3(264)
- Ghauri, P. N. (2003). *A framework for international business negotiations*. Retrieved from http://books.google.lk/books?id=YdLV7JpM90C&printsec=frontcover#v=o nepage&q&f=false
- Gintis, H. (2014). Decision Theory and Human Behavior. *Princeton University Press*. doi:10.23943/princeton/9780691160849.003.0001
- Gould, N. (2006). *Establishing dispute boards Selection, nominating and appointing board members*. London: Society of Construction Law, Paper 135.
- Gould, N., Capper, P., Dixon, G., & Cohen, M. (1999). Dispute resolution in the construction industry: An evaluation of British practice. London: Thomas Telford.
- Gouldner, A. W. (1960). The Norm of Reciprocity: A Preliminary Statement. *American Sociological Review*, 25(2), 161-178. doi:10.2307/2092623
- Groton, J. P. (2005). How to keep your project out of litigation, arbitration, and even mediation. *CII Annual Conf.—Leadership of Tomorrow: Bridging the Gap, Grapevine*, 49.
- Hai, T., Yusof, A., Ismail, S., & Wei, L. (2012). A Conceptual Study of Key Barriers in Construction Project Coordination. *Journal of Organizational Management Studies*, 1, 1-14. doi:10.5171/2012.795679
- Han, H., & Kim, Y. (2010). An investigation of green hotel customers' decision formation: Developing an extended model of the theory of planned behavior. *International Journal of Hospitality Management*, 29(4), 659-668. doi:10.1016/j.ijhm.2010.01.001
- Harrell, M. C., & Bradley, M. A. (2009). *Data collection methods. Semi-structured interviews and focus groups*. Rand National Defense Research Inst santa monica ca.
- Hillman, R. A. (1999). *Limits of behavioral decision theory in legal analysis: The case of liquidated damages.* Cornell L. Rev., 85, 717.
- Holtham, D. (1999). *Resolving construction disputes*. Oxford: Chandos Pub. (Oxford)
- Hsieh, H., & Shannon, S. E. (2005). Three approaches to qualitative content analysis.

  Qualitative Health Research, 15(9), 1277-1288.
  doi:10.1177/1049732305276687

- Issacharoff, S. (2001). Behavioral Decision Theory in the Court of Public Law. *Cornell L. Rev*, 87, 671.
- Jannadia, M., Assaf, S., Bubshait, A., & Naji, A. (2000). Contractual methods for dispute avoidance and resolution (DAR). *International Journal of Project Management*, 18(1), 41-49. doi:10.1016/s0263-7863(98)00070-2
- Jayasena, H. S., & Kavinda, Y. H. (2012). Most appropriate dispute resolution strategy for Sri Lankan construction industry. In *Proceedings of the 2012 World Construction Conference*, (pp.180-187). Colombo, Sri Lanka: Ceylon Institute of Builders
- Jeong, H. W. (2016). *International negotiation: Process and strategies*. Cambridge, United Kingdom: Cambridge University Press.
- Jones, S. R. (1994). How constructive is construction law? *Construction Law Journal*, 10, 28.
- Kahneman, D., & Tversky, A. (1981). The framing of decisions and the psychology of choice. *Science*, 211(4481), 453-458. doi:10.1126/science.7455683
- Kahneman, D., & Tversky, A. (2013). Prospect Theory. An Analysis of Decision Making Under Risk. *Handbook of the Fundamentals of Financial Decision Making*, 1, 99-127. doi:10.21236/ada045771
- Kalichman, S. C., & Coley, B. (1995). Context framing to enhance HIV-antibodytesting messages targeted to African American women. *Health Psychology*, 14(3), 247-254. doi:10.1037//0278-6133.14.3.247
- Kassab, M., Hipel, K., & Hegazy, T. (2006). Conflict Resolution in Construction Disputes Using the Graph Model. *Journal of Construction Engineering and Management*, *132*(10), 1043-1052. doi:10.1061/(asce)0733-9364(2006)132:10(1043)
- Koffka, K. (2013). Principles of Gestalt psychology. *SpringerReference*, 44. doi:10.1007/springerreference\_224575
- Korobkin, R. B., & Ulen, T. S. (2000). Law and Behavioral Science: Removing the Rationality Assumption from Law and Economics. *California law review*, 1051-1144. doi:10.2139/ssrn.229937
- Kothari, C.R. (2004). Research methodology Methods and Techniques. New Dheli: New Age International (Pvt) Ltd.
- Kriesberg, L. (2007). *Constructive conflicts: From escalation to resolution*. Rowman & Littlefield.

- Kumaraswamy, M. M. (1997). Conflicts, claims and disputes in construction. *Engineering Construction and Architectural Management*, 4(2), 95-111. doi:10.1046/j.1365-232x.1997.00087.x
- Kumaraswamy, M., & Yogeswaran, K. (2003). Substantiation and assessment of claims for extensions of time. *International Journal of Project Management*, 21(1), 27-38. doi:10.1016/s0263-7863(01)00052-7
- Kumar, D. (2017). E-Negotiation: Emerging Trends in ADR. *Information and Communication Technology for Intelligent Systems (ICTIS 2017) Volume 2*, 92-98. doi:10.1007/978-3-319-63645-0\_10
- Layard, R., Mayraz, G., & Nickell, S. (2008). The marginal utility of income. *Journal of Public Economics*, 92(8-9), 1846-1857.
- Lee, C. K., Yiu, T. W., & Cheung, S. O. (2016). Selection and use of Alternative Dispute Resolution (ADR) in construction projects Past and future research. *International Journal of Project Management*, 34(3), 494-507. doi:10.1016/j.ijproman.2015.12.008
- Lewicki, R. J., Saunders, D. M., Milton, J. W., Roy, Y., & Lewicki, N. (2011). Essentials of negotiation.
- Liamputtong, P. (2009). Qualitative data analysis: conceptual and practical considerations. *Health Promotion Journal of Australia*, 20(2), 133-139.
- Lickson, C. P., & Maddux, R. B. (2005). *Negotiation basics: Win-win strategies for everyone*. Boston, MA: Thomson Course Technology.
- Loe, T. W., Ferrell, L., & Mansfield, P. (2000). A Review of Empirical Studies Assessing Ethical Decision Making in Business. *Journal of Business Ethics*, 25(3), 185-204.
- Loewenstein, G. (2000). Emotions in Economic Theory and Economic Behavior. *American Economic Review*, 90(2), 426-432. doi:10.1257/aer.90.2.426
- Mahmoodi, K. (2012). Negotiation strategies and skills in international business. Retrieved from http://www.theseus.fi/bitstream/handle/10024/42807/Mahmoodi\_Kosar.pdf?sequence=1
- Malhotra, D. K., & Bazerman, M. H. (2008). Psychological Influence in Negotiation:

  An Introduction Long Overdue. SSRN Electronic Journal.

  doi:10.2139/ssrn.1088115
- March, J. G., & Shapira, Z. (1982). Behavioral decision theory and organizational decision theory. *Decision making: An interdisciplinary inquiry*, 92-115.

- Mazei, J., Hüffmeier, J., Freund, P. A., Stuhlmacher, A. F., Bilke, L., & Hertel, G. (2015). A meta-analysis on gender differences in negotiation outcomes and their moderators. *Psychological Bulletin*, *141*(1), 85-104. doi:10.1037/a0038184
- Mcgeorge, D., Love, P., Davis, P., Jefferies, M., Ward, P., & Chesworth, B. (2007). Dispute Avoidance and Resolution A Literature Review. *CRC for Construction Innovation Rep*, 1.
- Messick, D. M., & McClintock, C. G. (1968). Motivational bases of choice in experimental games. *Journal of Experimental Social Psychology*, 4(1), 1-25. doi:10.1016/0022-1031(68)90046-2
- Michael, S., & Wayne, R. C. (1981). *Negotiation: The art of Getting What you want*. Retrieved from http://www.negotiationdynamics.com/bookart.pdf
- Mohd Nawi, M. N., Nasrun, M., Baluch, N., & Bahauddin, A. Y. (2014). Impact of Fragmentation Issue in Construction Industry: An Overview. *MATEC Web of Conferences*, 15, 01009. doi:10.1051/matecconf/20141501009
- Naoum, S.G. (2007). Dissertation research and writing for construction student, (2nd ed.). United Kingdom: Elsevier Ltd.
- Ofori, G. (2000). Challenges of construction industries in developing countries: Lessons from various countries. In 2nd International Conference on Construction in Developing Countries: Challenges Facing the Construction Industry in Developing Countries, Gaborone, November (pp. 15-17).
- Panneerselvam, R. (2004). Research methodology. New Delhi: Prentice Hall.
- Petty, R. E., & Cacioppo, J. T. (1968). Communication and persuasion: Central and peripheral routes to persuasion. New York: Springer-Verlag.
- Plotnik, R., & Kouyoumdjian, H. (2013). *Introduction to psychology*. Cengage Learning.
- Ren, Z., & Anumba, C. (2002). Learning in multi-agent systems: a case study of construction claims negotiation. *Advanced Engineering Informatics*, 16(4), 265-275. doi:10.1016/s1474-0346(03)00015-6
- Richter, K. (2000). The project neutral: Neutralizing risk, maintaining relationships and watching the bottom line. *Constr. Business Rev*, 82, 52-54.
- Ross, G. H. (2006). Trump-style negotiation: Powerful strategies and tactics for mastering every deal. New Jersey: John Wiley & Sons.

- Rubin, J. Z., & Brown, B. R. (2013). *The Social Psychology of Bargaining and Negotiation*. Burlington: Elsevier Science.
- Safinia, S. (2014). A Reviw on Dispute Resolution Methods in UK Construction Industry. *International Journal of Construction Engineering and Management*, 3(4), 105-108. doi:10.1680/dritci.43503
- Sambasivan, M., & Soon, Y. W. (2007). Causes and effects of delays in Malaysian construction industry. *International Journal of Project Management*, 25(5), 517-526. doi:10.1016/j.ijproman.2006.11.007
- Saunders, M. N., Lewis, P., & Thornhill, A. (2009). Research methods for business students (5th ed.). Retrieved from https://is.vsfs.cz/el/6410/leto2014/BA\_BSeBM/um/Research\_Methods\_for\_Business\_Students\_\_5th\_Edition.pdf
- Smith, E. M., Lowe, A., & Thorpe, R. (2002). Management research: An introduction. London: Sage Publications
- Spector, B. (1977). *Negotiation as a psychological process*. Beverly Hills: Sage Publications.
- Staw, B. M. (1976). Knee-deep in the big muddy: a study of escalating commitment to a chosen course of action. *Organizational Behavior and Human Performance*, 16(1), 27-44. doi:10.1016/0030-5073(76)90005-2
- Takemura, K. A. (2014). Behavioral Decision Theory: Psychological and mathematical descriptions of human choice behavior. Place of publication not identified: SPRINGER.
- Taylor, S. J., Bogdan, R., & DeVault, M. (2015). *Introduction to qualitative research methods: A guidebook and resource*. John Wiley & Sons.
- Thaler, R. (1985). Mental Accounting and Consumer Choice. *Marketing Science*, 4(3), 199-214. doi:10.1287/mksc.4.3.199
- Thomas, R. M., & Brubaker, D. L. (2008). Theses and dissertations: A guide to planning, research and writing. California,: Sage Publications Inc.
- Thompson, L., & Nadler, J. (2002). Negotiating via Information Technology: Theory and Application. *Journal of Social Issues*, 58(1), 109-124. doi:10.1111/1540-4560.00251
- Treacy, T. B. (1995). Use of alternative dispute resolution in the construction industry. *Journal of Management in Engineering*, 11(1), 58-63.

- University of Surrey. (2008). Introduction to research. Retrieved from: http://libweb.surrey.ac.uk/library/skills/Introduction%20to%20Research%20 a nd%20Managing%20Information%20Leicester/page\_74.htm
- Vecchi, G. M., Van Hasselt, V. B., & Romano, S. J. (2005). Crisis (hostage) negotiation: current strategies and issues in high-risk conflict resolution. *Aggression and Violent Behavior*, 10(5), 533-551. doi:10.1016/j.avb.2004.10.001
- Walton, R. E., & Mackersie, R. B. (1965). Behavioral theory of labor negotiations an analysis of a social interaction system: An analysis of a social interaction system. New York: Cornell University Press.
- Winehard, L. A., & Wathoe, S. P. (2003). Understanding risk to mitigate changes and avoid disputes. *AACE International Transactions*, RI12.
- Xue, X., Li, X., Shen, Q., & Wang, Y. (2005). An agent-based framework for supply chain coordination in construction. *Automation in Construction*, 14(3), 413-430. doi:10.1016/j.autcon.2004.08.010
- Yates, D. J. (1998). Conflict and Dispute in the Development Process: A Transaction Cost Economic Perspective [Online]. Retrieved from http://business2.unisa.edu.au/prres/Proceedings/Proceedings1998/Papers/Yat es3Ai.PDF 1998
- Zhang, Q., Ting-Toomey, S., & Oetzel, J. G. (2014). Linking Emotion to the Conflict Face-Negotiation Theory: A U.S.-China Investigation of the Mediating Effects of Anger, Compassion, and Guilt in Interpersonal Conflict. *Human Communication Research*, 40(3), 373-395. doi:10.1111/hcre.12029
- Zhang, S. B., Fu, Y. F., Gao, Y., & Zheng, X. D. (2016). Influence of Trust and Contract on Dispute Negotiation Behavioral Strategy in Construction Subcontracting. *Journal of Management in Engineering*, 32(4), 04016001. doi:10.1061/(asce)me.1943-5479.0000427

# INTERVIEW GUIDELINE

Priyankara M.L.S.
MSc. Post-graduate student,
Department of Building Economics,
University of Moratuwa.
Dear Sir/ Madam,

## **Conducting an Interview for Dissertation**

I am currently a Postgraduate student following the Degree of Master of Science in Construction Law and Dispute Resolution at University of Moratuwa. In order to fulfil the requirements of this degree, it is required to undertake a research and produce a dissertation.

My selected topic is "Impact of Psychological Aspects towards Construction Negotiation". As the initial step, through literature review, I have reviewed the concept of negotiation in construction projects. Furthermore, different types of psychological aspects involved in negotiation were identified in advance.

In order to gather data for the research, I wish to conduct **semi structured interviews** among construction professionals who were involved in construction negotiations. I have recognized your organization as an eligible participant who could provide me valuable information to this research. Each interview will be conducted approximately 40 minutes and the data will be collected through notes taking and voice recording with the permission of the interviewee.

I kindly request your assistance to conduct interviews for the aforementioned topic. An introduction to topic and the interview guideline are attached herewith.

The information collected through this interview will be kept strictly confidential and will only be used for the purpose of the dissertation. Any of your personnel information will not be disclosed within the research.

Thank you.

Yours faithfully,

M.L.S. Priyankara MSc. Post-graduate student, Department of Building Economics Dr. (Mrs.) T.S. Jayawickrama Supervisor, Senior Lecturer Department of Building Economics University of Moratuwa

# **INTRODUCTION**

# IMPACT OF PSYCHOLOGICAL ASPECTS TOWARDS CONSTRUCTION NEGOTIATION

The research aim is exploring the impact of psychological aspects for construction negotiation. In order to reach the aforementioned aim, following are the objectives to be accomplished.

- 5. To review the concept of negotiation in construction projects.
- 6. To identify the types of psychological aspects involved in negotiations.
- 7. To investigate the impact of psychological aspects for the negotiations in construction projects.
- 8. To recommend how psychological aspects can be used for the success of negotiations in construction projects.

Therefore, through semi-structured interviews, the researcher intends to collect the opinions of the construction professionals who involved in the construction negotiation. Here, the main intention of the researcher is to distinguish the impact of psychological factors which were identified through literature for the construction negotiation. Lastly, the results of the analysis will help to identify how these psychological factors can be used for the success of construction negotiation.

Ref No	:	
Date of interview	:	
Venue	:	
Duration	:	

# 1.0 GENERAL INFORMATION ABOUT THE RESPONDENT

1.1 Project Name (optional	):				
1.2 What is the party you re	epresented?				
Employer		Contractor			
Consultant					
1.3 What is your designation	on?				
1.4 Can you explain your re	ole in this projec	et?			
1.5 What are your highest education qualifications?					
1.6 What are your professional qualifications?					

1.7 How many years of experience do you have in construction negotiation?

# 2.0 GENERAL INFORMATION ABOUT THE SELECTED CASE

- 2.1 Can you briefly describe the conflict cause for this negotiation?
- 2.2 In respect of this case, what was the position of your side resolving the dispute through negotiation?
- 2.3 Did this negotiation become successful or un-successful?
- 2.4 As per your understanding, what were the reasons for the negotiation to become successful/unsuccessful?

# 3.0 ASSESSING THE IMPACT OF PSYCHOLOGICAL ASPECTS FOR NEGOTIATION

You can answer all the below questions by referring to your own perception during the selected negotiation case

# 1.0 Influence based on diminishing marginal losses and gains

# Preposition 1

- a) Are you more enthusiastic to admit an offer which contains two portions of gains offered by the opposing party or a nutshell offer which includes one gain in equal magnitude to the previous two gains?
- b) Why do you feel like that?
- c) Did you experience such kind of perception in real context of negotiation? Can you describe the circumstance when you felt that perception?
- d) Did that perception influence the success/ failure of construction negotiation? Explain.

## Preposition 2

- a) Are you more enthusiastic to admit an offer that involves a nutshell loss demanded by the opposing party (a cost or a penalty) or two small losses in two turns which totals to the same amount?
- b) Why do you feel like that?
- c) Did you experience such kind of perception in real context of negotiation? Can you describe the circumstance when you felt that perception?
- d) Did that perception influence the success/ failure of construction negotiation?
   Explain.

# 2.0 Influence based on losses looming larger than gain

# Preposition 3

a) Was it probable to gain support and acceptance for your proposals from the opposition, if you are stated the losses that opposing party will gain if the

- proposal rejected than the benefits the opposing party will receive if the proposal accepts.
- b) If yes/no, why you are saying like that? Provide reasons.
- c) Do you think that conveying losses/gains which receive from rejection/acceptance of proposal influence the success/failure of construction negotiation? Explain.

## 3.0 Influence based on escalation of commitment

# Preposition 4

- a) Did you strategically force the opposition party to invest more time and other resources to the negotiation?
- b) If yes, why did you do that?
- c) Do you feel that forcing the opposition party to invest more time and other resources to the negotiation encourage them to admit the offered agreement? Elaborate your answer with prior experience.

# Preposition 5

- a) Did you have a willingness to admit the offered agreement, if you had invested more time and other resources to the negotiation?
- b) If yes/no, why do/don't you feel like that?
- c) Do you think that investing more time and other resources to the negotiation influence the success/ failure of construction negotiation? Explain.

# 4.0 Influence based on the status quo bias

# Preposition 6

- a) Did you experienced that in complicated construction negotiations, the party who creates the first draft of the contract or agreement will acquire a premeditated advantage?
- b) If yes/no, what is the reason for it as per your view?

c) Do you think that creating first draft of the contract or agreement that subjected to negotiation has an impact on the success/failure of construction negotiation? Explain.

# Preposition 7

- a) Do you like to negotiate on an issue when a previous agreement on that issue exists than when the issue has not been negotiated beforehand?
- b) If yes/no, why do you feel like that?
- c) Do you think that existence of previous agreement on the same issue impacts the success/ failure of negotiation than non-existence of previous negotiation on the same matter? Explain.

# 5.0 Influence based on the reciprocity heuristic

# Preposition 8

- a) Do you think that there is a likeliness to accept an offer made by you when you have previously made an extreme offer which was not accepted, but did not end the discussion?
- b) If yes/ no, why do/don't you feel like that? Elaborate your answer with your prior experience
- c) Do you think that making an extreme offer at the beginning which will be surely rejected impacts the success/ failure of construction negotiation? Explain.

## **6.0** Influence based on reference point effects

## Preposition 9

- a) Are you more likely to agree on the size of demanded concessions when it is outlined against the greater magnitude of the whole deal, than when it is outlined against the slighter magnitude of the deal currently being discussed?
- b) If yes/ no, why you say so? Elaborate answer with your prior experience.

c) Do you think that there is an impact on success/failure of construction negotiation, when the concession is outlined against greater magnitude of the whole deal? Explain.

# 7.0 Influence based on the overweight of social comparison

# Preposition 10

- a) When you have shown other party what you has offered is in great demand without altering information or incentives, do you feel that you can;
  - be a smart negotiator
  - be less likely to have aggressive negotiations with others
  - easily grasp an agreement,
  - seizure a higher percentage of the value in negotiations
- b) If yes/no, why do/don't you feel like that?
- c) Do you think that showing other party that what you has offered is in great demand without altering information or incentives impacts the success/ failure of construction negotiation?

# 8.0 Influence based on the ability and motivation to process information

# Preposition 11

- a) Did you feel that when the issue being negotiated is highly significant for the opposition party, you will be more possible to have your deal accepted when the solid justifications and rationalisations are exposed early in the argument?
- b) If yes/no, why do/don't you feel think like that?
- c) Do you think that exposing all the justifications and rationalisms early in the argument impacts the success/ failure of construction negotiation when the issue is highly significant to opposition party? Explain.

## Preposition 12

a) Did you feel that when the issue being negotiated is of low significant to the opposition party, or when only weak justifications exist, you had more

- possibility to accept your deal when justifications and rationalisations are exposed later in the argument?
- b) If yes/no, why do/don't you feel like that?
- c) Do you think that exposing all the justifications and rationalisms later in the argument impacts the success/ failure of construction negotiation when the issue is low significant to opposing party? Explain.

Put tick  $(\checkmark)$  for the appropriate aspect under two different conditions

		Preposition 13	Preposition 14
		If you had rigid rationalisations	If you had weak rationalisations
		and arguments	and arguments
a)	Express them slowly and calmly		
	Express them quickly and restlessly		
b)	Avoids being excessively technical		
	Uses technical language		
c)	Provides a written explanation of the		
	core demands and justifications		
	Evades requests to put the offer in		
	writing		
d)	Avoid negotiating at a time when		
	other party is distracted		
	Negotiates when the other party is		
	busy or distracted.		

- e) Do you think that if you are having rigid rationalisations and arguments, expressing them in slow and calm manner impacts the success/failure of construction negotiation? Explain
- f) Do you think that if you are having weak rationalisations and arguments, expressing them in quick and restless manner impacts the success/failure of construction negotiation? Explain

g) Do you think that avoiding being excessively technical when you are having rigid rationalisations and arguments impacts the success/failure of construction negotiation? Explain.

h) Do you think that being excessively technical when you are having weak rationalisations and arguments impacts the success/failure of construction negotiation? Explain.

i) Do you think that if you are having rigid rationalisations and arguments, avoid negotiation with other party when they are distracted impacts the success/failure of construction negotiation? Explain.

j) Do you think that if you are having weak rationalisations and arguments, negotiating with other party when they are distracted impacts the success/failure of construction negotiation? Explain.

I would like to thank you for providing this opportunity to conduct the interview and for the information given and time you have dedicated to this research.

M.L.S. PriyankaraMSc. Post-graduate student,Department of Building Economics

University of Moratuwa