MODELLING CONFLICT RESOLUTION STYLES IDEAL FOR RISK CONTROL IN
CONSTRUCTION PROJECT EXECUTION IN THE CAPE METROPOLIS

by

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DECLARATION

I, LUCKY SIYABONGA ZITULELE, declare that the contents of this thesis represent my own unaided work, and that the thesis has not previously been submitted for academic examination towards any qualification. Furthermore, it represents my own opinions and not necessarily those of the Cape Peninsula University of Technology.

Signed _____   **Date**_____

DEDICATION

This research is dedicated to my late father Zandise Zitulele, who once asked while I was still young, "What standard do you think you will stretch to in life?" I replied by saying that I will stretch my education until I get to "Standard 20". It was standards back then in school, not grades.

To my late sister Zininzi Zitulele, who was sick for a long time until she passed away, I am dedicating this research to you as well.

My mother Nomawethu Zitulele, I do not have enough words to thank you. Even if though you never wore a graduation gown, with this qualification you are honoured because you raised me to wear it for you.

ABSTRACT

The development of any country is intrinsically tied to infrastructure development, which, by definition, involves large construction operations. On the other hand, the rate of project execution failure is disturbing, thus promoting the need to study and understand the construction phenomenon well. Conflicts are a common phenomenon in construction projects and these are largely responsible for most, if not all, project execution failure. With an unprecedented project failure rate in construction projects designed and headed by appropriately qualified and experienced construction personnel, it is difficult to understand why conflict would be a major issue. However, dealing with human conflict is a science and skill on its own – the result of most disturbances and unrest in the community at large, suggesting a problem that is inherently human. The human element therefore becomes an area of specific concern considering that all the necessary equipment, tools, techniques and technologies are adequate to ensure the eradication of project execution failure.

This study focused on the types of conflict management styles compared to the traditional methods used in other parts of the world. The nature of conflict is too often domesticated and influenced by diversity in the organisation, with specific focus on culture and race in the South African context. Descriptive research design and methodologies were used with the assistance of a three-section structured research tool that required the biography of respondents, ranking scale, and open-ended questions.

The findings point to adherence to basic or traditional conflict management styles, but with pronounced diversion evidently emanating from cultural diversities. The study shows an urgent need for contingency leadership, with special focus on individual tasks, people and the organisational environment. The suggestion from this research is that the pre-emptive management of conflicts as a critical risk factor would allow for the reduction of both occurrence and impact of conflict in construction projects.

Keywords: Communication, conflict management, cultural diversity, project execution success, contingency leadership.

ACKNOWLEDGEMENTS

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CHAPTER ONE: INTRODUCTION

1.1 Introduction

Although most, if not all, construction projects are managed by qualified engineers with a discipline related to the construction field, the project management failure rate is extreme. It would generally be expected that since the specialists in the discipline are generally involved at all levels, the failure rate would be contained. Not only are the practitioners themselves schooled in the discipline, but they also have been largely involved in previous construction projects, allowing their experience to work positively in their favour.

Two phrases are interchangeably used, and too often wrongly so – project success and project management success. Project success is defined as the ability of the finished product to satisfy the objectives for which it is established (Ika, 2009:6-19). Thus, whilst it may take time to get the project ready for use, the completed project will meet its set objectives, i.e. the purpose for which it was established. This is considered project success.

On the other hand, project management success (Kim & Huynh, 2008:758-769) is the ability of the project team to complete the project within stipulated constraints of time, quality and budget (the iron triangle – triple constraints) or when a scope is included with measurement of success (square root of project management success). Whenever the square root (Papke-Shields, Beise & Quan, 2010:650-662) or the iron triangle is used, the ability of the team to complete the project within these constraints is considered project management (execution) success.

1.2 Background to the study

Research findings provide many reasons for the failure of the project team to deliver the complete project within the stipulated time, budget, technical specifications and scope (McLeod, Doolin & MacDonell, 2012:68-86). Some of the critical causal factors for these failures include the wrong estimation of the time needed to complete the project, wrong estimations of the cost to be budgeted for, and the failure to understand fully the expectations of the customer, among others. Whichever way, most of these problems result in cost and time overruns (Fugar & Agyakwah-Baah, 2010:103-116) failing to deliver the product in due course. This will cause losses for the contractor (added costs) and/or the customer (if the project was needed for other operations),

depending on what the project was scheduled to do, and when. Generally, the causal factors may cause conflicts (Flyvbjerg, 2014:6-19), or it may be the cause of conflict, which in itself should be treated as a risk to the successful execution of the project processes.

Conflict is an intrinsic state of mind causing, or able to cause a standoff between two or more parties (Webster, 2001:229-237). This can also be understood as a form of incompatibility between people who may be working towards the same objective, but see things differently. These conflicts may manifest in many different forms, such as:

- The allocation of resources
- Information relevant to effectively execute the project in order to reach the expected deliverables satisfactorily (Gomes, Yasin & Small, 2012:315-328)
- Differences in modus operandi issues, given the differences in the understanding of people from various disciplines, or people having different experiences or preferences on what constitutes correctness

It is necessary to state that some conflicts are a direct result of interference by senior management for political purposes, thus creating a serious authority gap that disables management's ability of the project leaders.

1.2.1 Types of conflicts

The organisation is generally a complex structure with many levels and many differences of operational demands, types of people and needs. Conflict can therefore be classified in many ways since there is the possibility of differences in the thinking around what is correct and what is appropriate. Consequently, there are many different ways of classifying conflicts, largely depending on the source of the conflict.

Mauerhofer (2008:496-506) suggests that conflicts may be classified according to the organisational structure, in which case they can be listed as vertical, horizontal, line staff and role conflicts. The nature of organisations is such that most if not all departments consider themselves as 'silos' operating on their own, and may once in a while want to interact with other units. The type of leadership has much to do with the way departments interact and understand how they are integrated in the process of executing a project or any function for that matter.

Table 1.1: Organisational colours
 (Source: Adopted from Mauerhofer, 2008:496-506)

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Type of Conflict	Characteristics of the Conflict
Vertical conflicts	Generally stemming from, or found in subordinates that may be resenting micro-management by managers. Common with experienced personnel who are confident in their work and may feel belittled when they have to be monitored like novices. Common in highly structured/formal structures with rigid reporting systems to be followed. The manager here is generally the transactional type of manager who does not trust the employees to do a good job.
Horizontal conflicts	Common among subordinates at the same level, be they in the same department or interdependent departments. More to do with perceptions about what is correct and what is not – especially common where people working together stem from different disciplines. It may also be purely for control (power) purposes, where self-centred subordinates always want things their way.
Line staff conflicts	Common among line and support staff, possibly originating from approaches to certain operational issues even though they stem from the same department. Typical in organisations where there is competition for control between operational and administrative staff in the same department. It may be a result of the absence of good leadership or the absence of clearly defined roles and responsibilities for decision making.
Role conflicts	Typical situations where subordinates do not fully understand the work assigned to them, resulting in duplication of roles. This may bring about competition among the subordinates, where none of them is willing to relinquish what they think is their responsibility. This may bring about animosity among the employees and result in dysfunctional conflicts.

Mannarini et al. (2017:13-22) suggest another conflict classification type, depending on the origin of the conflict. These are intrapersonal conflict, interpersonal conflict and interdepartmental conflict. People are social organisms that interact with each other, and in the process have their own tastes, likes, attitudes and many other phenomena that determine the way they do things. Consequently, conflicts are bound to take place at one time or another.

Conflicts by their nature may not necessarily be bad for an enterprise, but the extent to which a conflict is allowed to surface may have undesired effects. In project execution, there are a few factors playing into the hands of the project leader.

Table 1.2: Conflicts coming from human-human relations
 (Source: Adopted from Zafar, 2014:6137-6148)

Type of Conflict	Characteristics of the Conflict
Intra-personal	Intra-personal conflict is the state of mind where the individual is in a state of "cognitive dissonance". Because it is internal to the individual, it is generally the most difficult type of conflict to manage, as it does not show openly and easily. Instead, it might affect the participation, cooperation and performance of the individual. This may be noticed in the way people are frustrated about themselves and the apathy and moody behaviour shown regularly.
Interpersonal	This relates to how individuals interact with one another, and has many underlying causes that may be difficult to measure. Some may originate from upbringing, culture, perception about oneself, diversity and many other hidden factors that may cause people to think, behave or respond in a particular way. These may manifest as personal or functional conflicts, which may lead to dissatisfaction of the individual and be the cause of regular conflicts.
Inter-departmental	This is essentially structural due to different management systems (leadership styles) from department to department, with different visions and operational systems, yet in the same organisation. It manifests in the form of competition between departments. Some of the causal factors for interdepartmental conflicts include different attitudes between units, the size of the organisation, standardisation, communicational barriers, physical barriers, unequal reward systems, uncertainty on task allocation, and many other anomalies in terms of the functioning of different departments in the same organisation.

1.2.2   The project manager's dilemma

The project leader needs to recognise and accept that in a typical project environment embedded in a large organisation, the sources of conflicts are many. Topmost among these are the presence of the authority gap; the problem of dual loyalty by practitioners; the level (point) at which the project manager is assigned to a project; interference from senior management; interference from departmental managers; limitations of resources; the customer's interest in and regularity of interference; and the demotivated employee working on a project limited by time.

1.2.2.1   The presence of the authority gap

Most large organisations have adopted the concept of management by projects (Leask, 2010:155-166) as an ideal management tool to effectively utilise the limited resources and maximise the gross contribution margins. Jowah (2012:1097-1106) posits that this structure, in as much as it is praised for leveraging the limited resources for the benefit of the organisation, is inherently a difficult system for the manager. Such

organisations operate as a matrix organisation, sourcing and utilising already existing resources. Balzarova and Castka (2008:1949-1957) laud that a matrix organisation system is the best method ever envisaged to assist with the use of the scarce resources for the benefit of the organisation. Nevertheless, since most of the resources are seconded from existing departments, the matrix system creates a serious problem in terms of the authority gap, as the project leader does not have direct authority over the seconded practitioners who continue to pay allegiance to their departments (Hobday, 2000:871-893). The project leader may not be able to fire, hire, demote or promote a secondment without the express permission of the functional head of the department from where the employee was seconded. Dual loyalty, therefore, remains a critical source of possible conflict.

1.2.2.2   *The problem of dual loyalty by the practitioners*

Embedded projects obtain their resources from existing departments that have functional heads. The project leader is merely a project coordinator in the project and depends largely on the cooperation of the functioning heads. A project by definition is a temporary endeavour specifically meant to provide deliverables at a given time, and with a predetermined budget and specific technical specifications (Froimson et al., 2013:157-165).

From the onset, the employees seconded to the project already know that they will be involved for a limited time until the deliverables are realised. There is a likelihood also that they may be 'pushed' to go and help with the project temporarily since they are permanently employed in the organisation. As such, they may see no need for devote themselves fully to a temporary exercise, knowing very well that they will be going back to their position at the end of the project. Their loyalty, therefore, remains with the department from which they come. Needless to point out that some of the sentiments are likely to be people 'who are not in good relationships' with the line manager. Sending them to assist in the project may be a welcome relief for the functional head, at least for the duration of the project, creating a new problem for the project leader who has no direct authority over the secondment, and these remain loyal to their functional head (where they are permanently employed). This dual loyalty (King, 1999:315-326) becomes a serious problem for the project coordinator who may find it difficult to direct the operations with some authority.

1.2.2.3 The point at which the project manager is hired

Too often, the whole process of project selection, project costing, determination of time and resources required is done before the organisation appoints a project coordinator (Zou, Zhang & Wang, 2007:601-614). This practice limits the project manager's knowledge and confidence needed to manage the project with adequate knowledge about the planning of the project. The result is that the project manager will be learning along the way, therefore depending largely on written work and sometimes information from outside sources (Ter Bogt, 2004:221-252). Failure to understand each other may become a recipe for conflict, causing unnecessary delays and disruptions in the project execution process.

Anbari, Carayannis and Voetsch (2008:633-643) propose that the most ideal practice would be to involve the project manager at all stages of the project life cycle, as their input may assist with effective project execution. The participation of the project coordinator from the onset will provide the coordinator with adequate working knowledge and pre-empt any possible conflicts (Clear et al., 2015:1-39) due to misunderstandings about the project and the deliverables.

1.2.2.4 Interference from senior management

Too often senior management shows considerable vested interest in a project, which may lead to regular interferences and sometimes micro-managing the project leader (Ford et al., 2003:46-60). More often, there is a conflict from senior or functional management emanating from differences over the selection of the project coordinator (Söderholm, 2008:80-86). The reporting system is also flustered with interference coming from the top, some of which may be noble but not justifiable. Some of the interest may originate from a genuine concern that the project may fail to produce the expectations, while some may have more to do with politics at a senior level (Kanter, 2009:93). This will inevitably result in conflicts on different levels and structures. This may involve, among others, vertical, horizontal and or interdepartmental conflicts as indicated above.

1.2.2.5 Interference from departmental managers

From time to time, the department heads may need the services of the personnel seconded to the project (Keegan, Huemann & Turner, 2012:3085-3104). In a sense, this strengthens the dual loyalty and at the same time may slow down some of the project's activities if the expertise is withdrawn at critical times. In most of these matrix

structures (Vidal, Marle & Bocquet, 2011:5388-5405), the project coordinator may also depend heavily on the material resources procured by the departments for the use of the project. That may become a cause for conflict when the project manager, pressed for time and budget, may have to wait for procurement done by departments the project coordinator has no control over. Delays in completing the project, even if it may be because of uncontrollable procurement, will still be blamed on the manager. Those delays will create room for conflicts over resources, costs and time overruns (Kwatsima, 2015:12-36), or purely the procurement of materials that may not be ideal to meeting the technical specifications as required by the project charter.

1.2.2.6 Limitations to the resources

If the resources are not provided in the right quantities, right specifications and at the right time, this may be cause for discontent (Kazaz, Manisali & Ulubeyli, 2008:95-106), which could lead to unsavoury relationships between the parties, considering the iron triangle imperatives for project execution success. When projects are completed in time, senior management and functional heads are praised for their cooperation and the success of the project execution processes (Jonas, Kock & Gemünden, 2013:215-226). If the project processes are not successful, for any reason, the project coordinator is solely responsible for the failure of these processes.

1.2.2.7 The customer's interest and regularity of interference

From time to time, the customers will request meetings or visits to the project sites to satisfy themselves of the progress (Ferris, Watkins & Borning, 2010:1807-1816). The customer could be anyone from outside, or the project sponsors within, in the form of senior management. These may interfere with the processes if they are not happy (Sharma & Kearins, 2011:168-203), or if they want some issues to be relooked at. Thus, if it is not according to expectations that were agreed to, it may end up with a change in scope, and redoing some work, among others. These on their own are conflicts that will alter the way things are done or the expectations that the project coordinators were working towards (Stronza & Gordillo, 2008:448-468).

1.2.2.8 Demotivated employee working in a project limited by time

Project employees may not see the need to hurry their work since they know that the project is temporary – the longer they stay the more they are paid (Evans, Kunda & Barley, 2004:1-38). On the other hand, most of them spend half of their time looking for other jobs, permanent employment, if they are not already permanently employed.

Generally, job satisfaction is key to performance, and the slow pace may be a cause for conflict with the project coordinator (Chen, Chang & Huang, 2010:514-527). Overall, all employees need assurance that they will still have a job after completing the rest of their tasks. There may be a deliberate slow down to extend the time the employees may be occupied or under in the employment of a organisation (Loretto & White, 2006:313-330).

1.2.3 The Big Five factor

The Big Five personality traits (also known as the five-factor model) essentially are the taxonomy of the personality traits common among people. Whiteside and Lynam (2001:669-689) identified five distinct personality traits, common to people, which may be used to predict behaviour. The five factors are illustrated diagrammatically in figure 1.1.
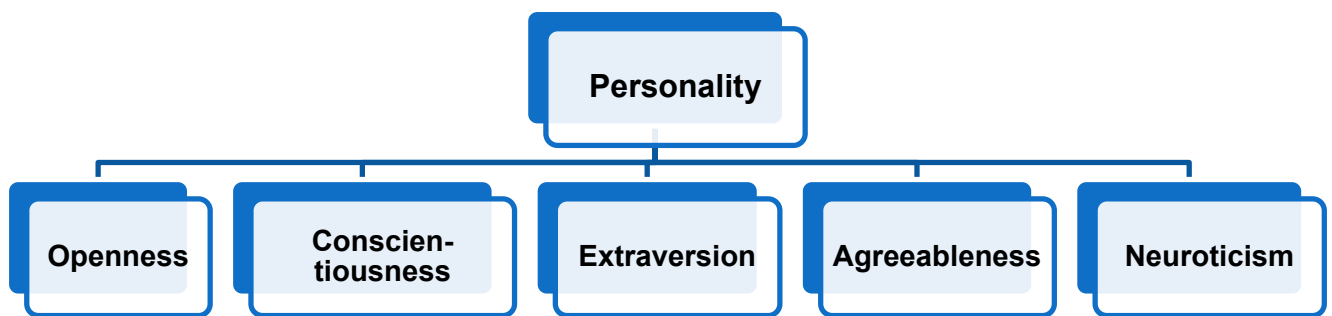
Figure 1.1: The Big Five personality traits
(Source: Adopted from Ali, 2019:44)

These personality traits inform the behaviour of an individual largely, even though there are no people who may be strict that, there is a known movement of individuals between two or more of those traits. These personality traits are listed and discussed in table 1.3. The personality traits, as evidenced above, have much to do with the behaviour of an individual in the final analysis. This, therefore, allows for or predetermines the behaviour of certain people towards being controversial or aversive of disagreement. Some of the conflicts experienced are associated with the personality traits of the individuals and the circumstances in which they find themselves.

Table 1.3: Personality traits
(Source: Adapted from Albuquerque et al., 2012:447-460)

Type	Description

Openness to experience	Generally intellectually curious, likes adventure and learning new things. Imaginative and relatively accommodative, but can be unpredictable and without focus of appreciation of the other people's performances and or views.
Conscientiousness	Generally, well organised, predictable and dependable, with a high level of self-discipline and does not like carelessness, specifically in terms of procedures and processes. Shows high levels of stubbornness and obsession with principles and procedures, and is rarely flexible with processes and procedures (Lott, 2012:645-650).
Extraversion	Full of energy and generally assertive, emotionally positive and socialises well with peers and other people. High in attention seeking, enjoys stimulation in the company of others, and tends to be domineering (Toegel & Barsoux, 2012:51-60).
Agreeableness	Ordinarily compassionate and cooperative, generally trusting of other people, and is largely helpful and submissive. They are not competitive nor do they like controversy, choosing to withdraw from confrontation or conflict (Dwan & Ownsworth, 2019:1119-1130).
Neuroticism	Stresses easily and becomes angry fast; can suffer from anxiety and depression easily, making them vulnerable at times. Low on emotional stability and shows low levels of motivation and inspiration; yet, they are highly excitable and reactive. They are considered adaptable but weak on principle; they may not stand for anything as they can be swayed easily (Poropat, 2009:322–338).

1.2.4 Conflict models

Conflicts do not just happen; they are caused by some misunderstanding or failure to understand each other. Whilst other people may be considered as "troublemakers" and causing conflicts, it indeed takes two to tango. Moore (1996:60-61) designed a model showing the circle of conflict. Figure 1.2 below shows that the origin of conflicts is compounded by many other matters and factors, which may be silent yet effective.

The relationships between people are based on the premise that people are in agreement or at least be tolerant of each other. To the extent that people have common values, People may be able to live together in harmony to the extent that they have common values. These values, culture, expectations, societal structures and other circumstances shape the environment in which people operate (Bandura, 2009:110-140). An understanding of these circumstances may help in pre-empting possible conflicts or at the very best, minimise the conflicts and reduce the impact. This supports the notion that diversity may be a critical element in the process of conflict, where most conflict is caused by the perceived phenotypic diversity more than the way people relate (Sterling, Gómez & Porzecanski, 2010:1090-1098). Language is equally a source of conflict, where language symbols may have different forms of meaning.

Sultana (2011:163-172) refers to ethnocentrisms as another source of conflict when different personalities seeking to dominate are put to work together. Communication, therefore, is pivotal to the harmony or discord between any two or more people working in the same environment or with correlated tasks to be performed together.

Model 1: Circle of Conflict

Relationships	Values
• Negative past experiences • Stereotypes • Poor communication • Negative behavior patterns	• Belief systems • Right and wrong • Good and evil • Just and unjust

External / Moods	Data
• Psychological or physiological factors • Unrelated factors • Bad hair day	• Lack of information • Misinformation • Too much information • Data collection issues

Structure
• Limited resources (time, money) • Authority issues • Geographical constraints • Organizational structures

Circle diagram labels: Relationships, Values, Externals/Moods, Data, Structure, (Interests)

Figure 1.2: The circle of conflict
(Source: Moore, 1996:60-61)

1.2.5 Communication in conflicts

The human element of project execution is critical to the success of the execution processes. Projects are designed by people, for people, and executed by people. Different people have different perceptions about the same things and some are more willing to cooperate than other (Martinko et al., 2018:116-133). This is where the Big Five personality traits come into play.

As stated in this theory, there are different personalities found among human beings, namely: openness, conscientiousness, extraversion, agreeableness and neuroticism. Different projects are executed daily; some fail and some are successful. Many researchers explored the impact of communication on the success of a project. Leeuwis and Aarts (2011:21-36) define project communication as the exchange of

project-specific information, with the emphasis on creating an understanding between the sender and the receiver of the project. Čulo and Skendrović (2010:219-228) mention that communication is an essential process of project management. Singh, Sharma and Chandra (2012:953-956) postulate that communication is a key component in coordinating and tracking project schedules and action items. The root cause for the success or failure of a project to deliver the expected results to stakeholders always comes down to 'communication' (Flyvbjerg, 2014:6-19). Peters and Karren (2009:479-504) add that how well a project team performs is directly proportional to the timeliness and effectiveness of the team's ability to communicate the status of the project among each other. Sauser, Reilly and Shenhar (2009:665-679) state that the impact of communication on the success of a project is immense. Chen, Law and Yang (2009:157-170) add that according to statistics, 74% of projects are unsuccessful with one of many factors contributing to this failure being poor or insufficient communication. Researchers presented different findings on the impact of communication on the success of a project. This research serves to assess the impact of effective communication and different communication models on the success of a project.

In the context of organisational project management, communication is a core competency, which, when properly executed, connects every member of the team to a common set of strategies, goals and actions (PMI, 2013:2). Effective communication is vital to the success of a project, programmes and portfolios; the right information has to be transmitted to the relevant parties, accurately and consistently, to meet their expectations (Čulo & Skendrović, 2010:219-229). Careful communication planning with all the project stakeholders is extremely important to the success of a project (Chen, Law & Yang, 2009:157-170). These authors strongly agree that communication plays a vital role in the success of a project. PMI (2013:2) reinforces that effective communication leads to successful projects, thereby allowing organisations to become high performers competing for 80% of projects being on time, on budget and meeting original goals.

Meng (2012:188-198) mentions that to some extent, the way communication affects project managers define the performance of managers and the team during the project, and superior performance demands superior communication during the project. Project success is strongly linked to the communication and cooperation of the stakeholders

(Davis, 2014:189-201). Davis further explains that without effective communication the project is prone to failure. Schroeder et al. (2008:536-554) support Davis by stating that communication is a vital component of any performance improvement approach in projects. Organisations eager to achieve project goals establish well-defined communication strategies that result in successful projects. Ika (2009:6-19) adds that effective communication is one of the most important factors contributing to project success. The effectiveness of communication is determined by the arrangement of the configuration of all elements involved for the project to be successful. This combination explores a time in the future, or in the pipeline, of the project at hand. Ika (2009) further explains that members of the project team prepare information in a variety of ways to meet the needs of project stakeholders, and the team receives feedback from these stakeholders as shown in figure 1.3.

Pope-Ruark (2015:112-133) states that communication is often regarded by management as something that just happens as part of regular project management tasks using basic generic tools such as emails and spreadsheets. The author adds that without a well-planned communication plan, strategy and tools designed to store and regulate project information and communications, many companies are throwing millions out of the window with every project they attempt to execute. Kabirifar and Mojtahedi (2019:10-15) cite that poor communication during projects affects the schedule, budget and quality of the project and results in project failure. As listed by Verburg, Bosch-Sijtsema and Vartiainen (2013:68-79), typical definitions of effective communication in successful projects include:

- An exchange of information
- An act of transmitting clear information
- A verbal or written message
- A technique for expressing ideas
- A tool for getting things done
- A process by which meanings are exchanged between individuals through a common system of symbols
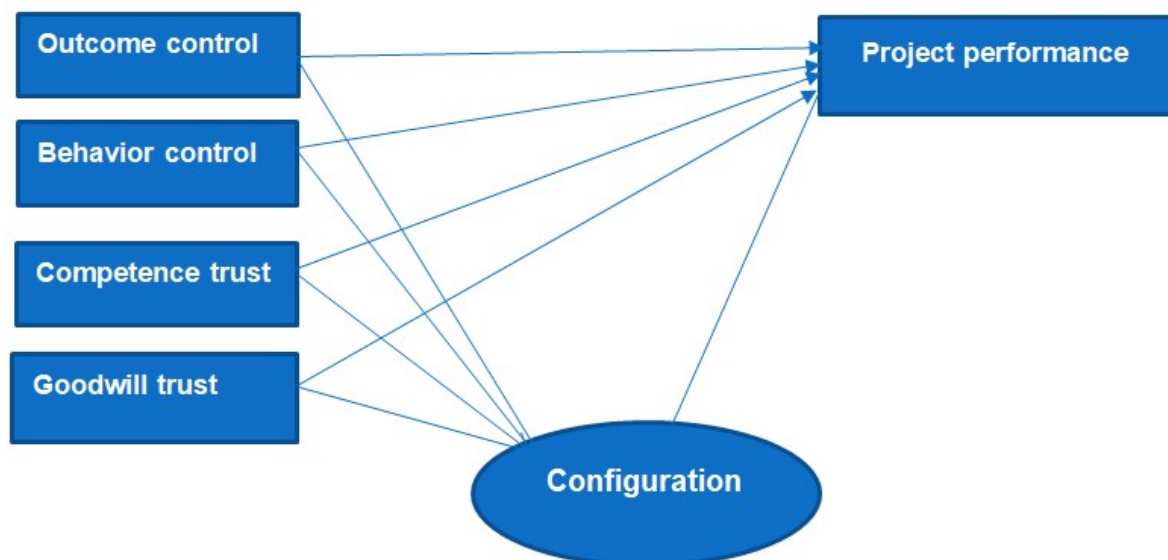
**Figure 1.3: Configurations of formal control and trust
(Source: Adopted from Ning, 2017:1243)**

Ramsing (2009:345-357) speaks of both internal and external communication in a project. The author adds that project communication consists of the following aspects:

- External project communication is the act of dealing with all project stakeholders and the communication on project marketing
- Internal project communication is the act of using written and interpersonal communication during the project

Ramsing continuous to say that a good communication plan is fundamental and a project manager will have to ask the following:

**Table 1.4: Communication plan
(Source: Own construction)**

Communication plan	
Who needs to be communicated with?	When is communication required?
What kind of communication is required?	What type of media needs to be used for communication?
How frequent is the communication required?	What preferred language of communication is preferred by certain stakeholders?
Is team communication internal or external?	

Atkinson, Crawford and Ward (2006:687-698) emphasise that a project communication plan is the key foundation of effective communication for project success. The authors

mention that the plan assists the project team with identifying internal and external stakeholders and enhances communication between all parties involved. The authors add that the project manager leads the project development team in preparing a communication plan to ensure that an effective communication strategy is built into the delivery process. Kim and Huynh (2008:758-769) add that a detailed, well-thought project plan is extremely beneficial in establishing stakeholders' expectations from team members to customers, hence resulting in a successful project.
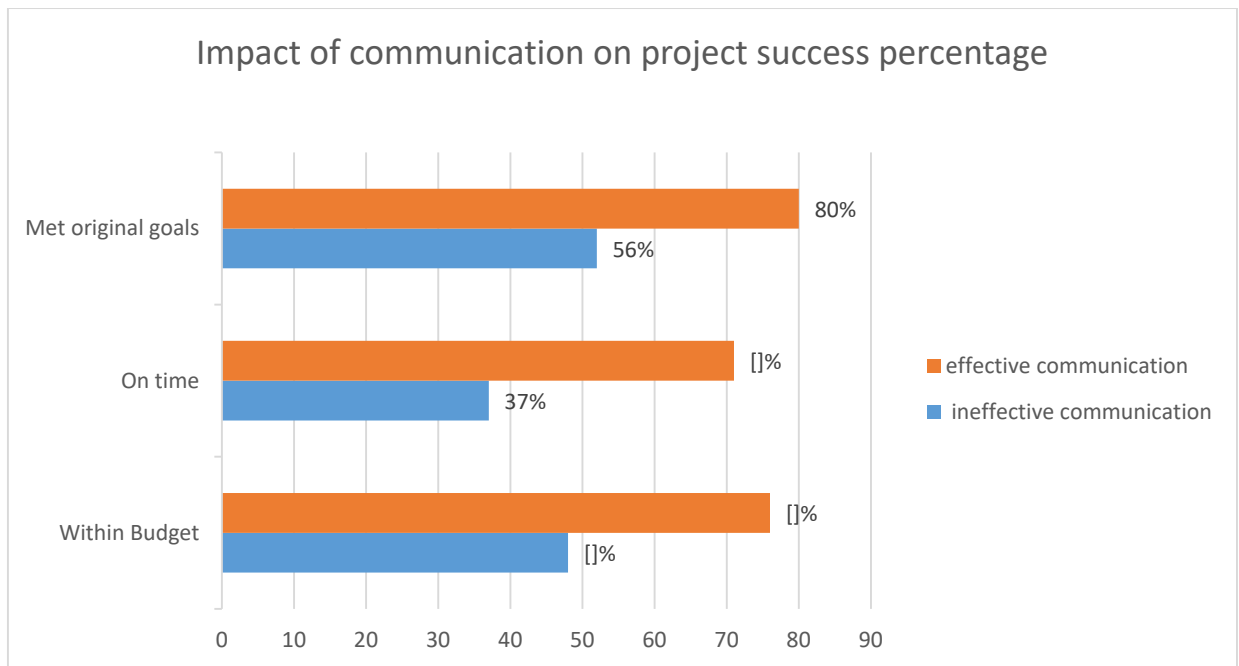
Figure 1.4: Organisations that communicate effectively deliver successful projects more often (Source: PMI, 2013:3)

1.3   Problem statement

Managing risks in project management execution is considered a critical success factor because of the possible influence of conflicts. The most worrisome part is the multiplicity of the sources of conflicts that may result in project failure. Risk is defined in project management as any event that may disrupt the execution of the project, causing delays or total failure. Whilst other factors may affect the failure of the project execution, of particular importance are failures resulting from conflicts. Jowah (2013:79-108) posits that projects are conceptualised by people with intentions of helping people by making people do the projects for the benefit of people. This means therefore that the human element is an indispensable part of project implementation. As referred to above, there are different sources of conflicts, resulting in different conflict types and magnitude. The focus of this study is to inspect closely the

effectiveness of findings in the literature on how to efficiently solve and resolve conflicts in projects. The researcher is of the view that there is a strong cultural element to how problems can be resolved, thus, there may be differences in how these conflicts can be resolved in the South African context.

1.4 Research objectives

Research objectives are the expectations of the researcher in alignment to the problem statement context as indicated above. These objectives are helpful in that they are derived from the problem statement and they seek to provide direction in terms of what is expected from the research. It was therefore envisaged that the research would enable the researcher to:

i) Identify known sources of conflicts in the execution of projects in the highly diversified construction industry of the Cape Metropolis.

ii) Identify existing models of conflict management style in the project management discipline in general.

iii) Determine conflict management styles contingent to the context in the Cape Metropolis diversified workplace.

iv) Construct a conceptual framework for an effective conflict management style for the Cape Metropolis considering the nature of diversity.

1.5 Research questions

Research questions are in a sense derived from the objectives, and they seek to break down the problem statement into finer elements that should be used to solve the problem under review. The most critical aspect of the research questions is their ability to direct the literature that relates to the study. These questions are also related to the objectives, since they seek to ask and establish what the objectives seek to establish. The following research questions were formulated for this study:

1) What are the general sources of conflict in a culturally diverse construction project in the Cape Metropolis context?

2) What are the current models of conflict management style generically practised in the project management discipline?

3) What is the conflict management style ideal for the culturally diversified situation in the Cape Metropolis?

4) What can be used as an ideal driver for the eradication of culturally based dysfunctional conflict in a construction project in the Cape Metropolis?

These questions formed the basis on which the research instrument, required to obtain data for the study, was constructed. It is equally important to acknowledge that the questions influenced the research methodology used to gather the required data.

1.6 Research design and research methodology

The design (or road map) determines "what" is to be done during the research phase and is of critical importance in any research undertaking. It outlines all the important steps or processes to be followed in any scientific research, which allows for the promotion of objectivity during the research (Tranfield, Denyer & Smart, 2003:207-222). The research methodology determines "how" the processes will be executed from the research design. The actions have to be performed in a specific way to enables the process to derive the maximum benefit. It is equally important to note that the methods used determine the quality of the research outputs. There are two methodologies commonly practised in research, namely: (i) quantitative methodology, which is considered a positivist approach, generally applied in the natural sciences and related fields; and (ii) qualitative methodology (anti-positivist), commonly used in social sciences to measure attitudes and perceptions (Brand, 2009:429-449). The researcher adopted both methods to maximise the benefits and enable a much deeper and more comprehensive understanding of the study to meet the aspirations of the researcher.

1.6.1 Target population

The target population included people working on construction projects in the Cape Metropolis, hereafter referred to as project practitioners or stakeholders. The population therefore consisted of people working in teams where intra-team and inter-team conflicts happened continually, thus affecting task execution. Conflicts may become dysfunctional, and, if not managed correctly, this may lead to the execution process failing to meet the triple constraints.

1.6.2 Sample

The sample included construction project practitioners taking part in daily construction project execution, i.e. builders, plasterers, plumbers, carpenters, painters, electricians, and general helpers working for the company or contract workers. One large construction company in the Cape Metropolis was selected for the survey on conflict management styles applied at construction sites.

1.6.3 Sampling methods

Random sampling was deemed appropriate for selecting research participants at all the sites where construction took place. In instances where people might not have had an equal opportunity to be selected, the researcher resorted to convenience sampling.

1.6.4 Sample size

A medium-sized construction company, according to the national definition, will employ on average between 50–100 people at the site. Using this measurement (50 at the least) the sample frame was estimated to be 250–500 practitioners involved in project execution. Fischer and Krauss (2018:654-669) posit that a fifth (1/5) of a sample frame is adequate to derive generalisations. In total, 100 practitioners were approached to participate in the research.

1.6.5 Data collection instrument

A structured questionnaire, based on the literature reviewed and the expectations from the problem statement, was used to gather information. The first part of the instrument was the biography section to assist with identifying relevant respondents for the research. The second section focused on the measurement of attitudes and perceptions using a Likert scale, which is an element of qualitative methodology. The last section was open-ended to enable open discussion with the respondents, but within the topic of study. The questionnaire was constructed and then submitted to a statistician to test its validity and reliability. A pilot survey was conducted with a few qualified respondents; this provided adequate information to construct the final document that was used to gather the required data.

1.6.6 Data collection method

The questionnaires were administered directly by the researcher, with the assistance of four trained research assistants. All government regulations were observed based on current circumstances. Basic training for Covid-19 regulations was observed and adhered to as per government and/or host organisation stipulation. The assistants were trained to explain any areas that might not have been clear to the respondents, and to conduct the survey ethically. It was assumed that this method would assist in increasing the rate of return of the questionnaires as well as providing answers to any questions the respondents might have had. As most of the site contained a large number of people, the area was monitored and wearing protective masks along with the use of hand sanitisation was implemented (Smith, 2008:26). All the questionnaires

were brought together, edited, cleaned, coded and captured for analysis purposes. Questionnaires are less costly and more dependable as they can be referred to long after the research is concluded should there be any queries about the research.

1.6.7   Data analysis

The questionnaires were returned collectively, and edited and cleaned from errors and inconsistencies. They were coded and then captured onto an Excel spreadsheet (ESS) for the construction of illustrations (graphs, histograms, frequency polygons, charts and tables, among others). The ESS was chosen because the research could readily access that captured data, and because it provided all the information required for the research project (Schwartz & Watson, 2004:2-31). The illustrations were used for easy comparison of the variables being studied. Data coding is essential to highlight the meaning provided by the research; preliminary codes are extracted before further filtering and refining to derive accurate codes. Values, percentages and/or numerical quantities draw inferences, and the purpose of data coding is both to eliminate excessive data and to allow for meaningful summarisation (Radinsky et al., 2014:143-158). Therefore, for this research, interpretations of the relationships (through data coding) were produced and a report was provided.

1.7   Ethical consideration

Participation in the research was voluntary; the selected respondents were informed of their rights. This free-will participation means that participants could withdraw from the research at any point in time without providing a reason for their withdrawal. Respondents were ensured that no information provided by the respondents would be released to any authority. Strict confidential systems were put in place to protect the respondents. No company or site marking was allowed to use the research instrument. Confidentiality was maintained and no names were allowed on the questionnaires. Ethical considerations assist researchers with identifying if the research impinges on the morality and rights of respondents (Fritz & Jorgensen, 2008:32-42). The three ethical principles to be considered are respect for the respondents, beneficence, and justice (Tulyakul & Meepring, 2020:86).

1.8   Chapter classification

Chapter One: The chapter introduces the study, discusses the literature used to establish the study gap, the problem statement, research objectives, research

question, research methodology, research instrument, data collection methods, data analysis, ethics and conclusion.

Chapter Two: The chapter discusses the different types of conflicts, the sources of conflicts specific to construction projects, the different levels of conflicts and the impact on the project, the role of stakeholders and the general risk management programme to pre-empt stakeholder conflicts, and leadership style and impact on conflicts.

Chapter Three: The chapter focuses on models of conflicts, conflict resolution models, contrasting the conflicts with the maturity of the followers, the impact of different followership styles on conflict resolution, classification of followership, and the existing formulae for conflict resolution.

Chapter Four: The research design, research methodology, population, sampling techniques, sample frame, questionnaire, data collection methods, data cleaning, data editing, data coding, data capturing and tools for data analysis are discussed in detail.

Chapter Five: The research findings are presented diagrammatically, with emphasis on the relationships between the variables. The illustrations are presented in the form of tables, histograms, charts, graphs and frequency distributions. An analysis is made from these findings.

Chapter Six: The summary of findings, conclusions and recommendations are presented.

1.9 Chapter summary

Whenever human beings work together, there is bound to be some misunderstanding emanating from innumerable sources, most having to deal with cultural differences, discipline-related issues, politics and general incompatibility of personalities. The ability of a manager to manage the risk of conflict by pre-empting it will enable the project manager to weaken the impact. Besides, the manager's understanding of stakeholders, their interests, and the impact they may have on a project, may serve as a deterrent for would-be dysfunctional conflicts. Managing conflict as a risk should therefore be practised similarly to Total Quality Management (TQM) as this will inevitably emerge at some point. Researchers and practitioners have stated numerous times that project execution has conflict as a norm. It is therefore prudent for the project

leader to anticipate conflict, measure the possible impact, and take pre-emptive steps to reduce the impact, if not eradicating it altogether.

CHAPTER TWO: DIFFERENT TYPES OF CONFLICTS, THE SOURCES OF CONFLICTS, DIFFERENT LEVELS OF CONFLICTS

2.1 Introduction

Conflict plays a large role in human life because no matter the similarities, in many respects we will always have different preferences. The clash in interest originates from many sources, too numerous to mention by name. Suffice to say that the basis of conflicts is caused by politics, religion, societal class, cultural differences, values and beliefs. Whatever the drivers of conflict, disagreements may be allowed to totally get out of hand or not being managed properly. There is also an element of poor management of the conflict process or purely the inability of the leader, or the conflicting parties, to manage their emotions. The intensity of views and/or opinions may also determine the extent to which a disagreement may grow.

There is no single universal definition for a conflict, and too often, the argument lies in whether contention may be merely a certain type of behaviour, or a situation (Koopmans & Olzak, 2004:198-230). A working definition of a conflict may be stated as interactive processes between individuals or groups characterised by their incompatibility. Conflicts by classification are also identified as starting with individuals suffering from intrapersonal conflicts.

According to Destradi (2012:595-616), conflict is a result of conscious individuals or groups who may want to carry out activities not accepted by others. These activities would generally be inconsistent with the perceived expectations, and insistence would result in the escalation of this disagreement. Insistence will turn into unacceptable behaviour towards those that may have different views and perceive themselves as equally strong to resist. This is generally followed by distinct acts meant to hurt the other individual group in a show of power, too often starting with verbal abuse. What could have been a simple disagreement may turn ugly to the extent that this would create animosity between the belligerents.

2.2 Types of conflicts

Conflicts can be classified in numerous ways, and the basis of classification may be with *whom*, *where* or *how* the conflict takes place. Whichever way it is looked at, one common thing about all conflicts is that they affect the operations of an organisation. Conflicts in the workplace may also be considered as a learning process for the

organisation since not all conflicts necessarily end negatively (Kossek et al., 2011:289-313). One way of classifying conflict is by dividing it into personal conflict, intragroup conflict and intergroup conflict, because conflicts in the workplace occur within individuals (personal conflicts), or it may occur between two or more individuals in the same group (intragroup conflict), or it may transpire between groups (intergroup conflict). Workgroup conflicts generally are a result of competition for control of resources or gaining and keeping a status (Richard, 2000:164-177).

2.2.1 Task conflict

This type of conflict occurs when intragroup members have disagreements on an issue or issues that are part of the process of reaching their intended goals. With good effective leadership, these can be recorded and used as learning curves that may be necessary to avoid future problems of the same nature. Risk planning for projects is a critical field of study, and such conflicts should be noted and used in the planning of risks in the future (Curhan, Neale & Ross, 2004:142-151). Anyone seen to be dissenting in the group might be treated unfavourably, thereby further allowing a deepening of the crisis, which then leads to a conflict.

2.2.2 Process conflict

Process conflict common in the project execution process can occur from the project conceptualisation stage through to project handover. The disagreements may occur over the procedures and/or methods to be used in the execution of the project (Farh, Lee & Farh, 2010:1173). It might occur because of the strategies to be used to reach the intended goals and/or the policies to be promulgated for the execution of these undertakings. Some of the issues contested may not be of any scientific nature, but simply a matter of preference that would always differ among the individuals.

2.2.3 Political

Politics is described by Basu (2004:109-132) as a set of undertakings related to making decisions and rules. Political conflicts play a big role in all government-related affairs of a country. There appears to be too many differing opinions about the benefits and acceptance of infighting in political movements. The same people who come to work are themselves members or sympathisers of some political ideology and party. One school of thought thinks political party members in conflict help the organisation to identify its weaknesses whereas the other school thinks it weakens the party (Van Kleef & De Dreu, 2002:59-77). Whichever way, conflict robs the organisation of time that

people should be productive instead of squabbling, and it may eventually lead to animosity towards each other.

2.2.4 Small group conflicts

Both outcomes of conflict – constructive or destructive – happen in small groups too. It will always take the same shape of interpersonal conflicts complemented or compounded by issues (Steinel & De Dreu, 2004:419-434). Sometimes, allowing dissenting voices enables the organisation to take inventory of itself and correct practices that may help improve the working of the organisation.

Research results in other areas have reported advantages, where organisations reaped great benefits. The cause for the success is attributed to management suppressing conflict but using the conflict to benchmark with what should be the ideal standard (Behfar et al., 2008:165-170). There is evidence that an organisational culture that promotes, or does not condemn, disrespect will unintentionally generate a crop of people who will fight against it.

2.2.5 Personal conflict

A personal conflict happens between people likely to have a mutual dislike in each other, or a clash of personalities. The differences in personalities, and the unwillingness of the conflicting individuals to be "subdued" by other, lead to conflict. It has also been noticed that personal problems bring about discomfort that will lead to conflict with other people (De Dreu, 2006:83-107). The sources of this (type of personal problems) may include, among others, personality, drug abuse, childhood upbringing matters, or even problems at home brought to the workplace (Fischer & Ferlie, 2013:30-49), most of which are beyond the control of management or the organisation at large. Conflicts within the control of management will eradicate poor communication, provide resources, and create an environment conducive to diverse people working together.

Personal conflict from an organisational perspective affects all the means of fulfilling the objectives and goals of the project. Among peers on an interpersonal level, personal conflict will most certainly involve subordinate against subordinate, subordinate against their supervisor, and sometimes people outside the group but as individuals (Fischer & Onyango, 2012:253-263).

The main causes of this particular aspect of conflicts (personal conflicts) are listed in table 2.1 below.

Table 2.1: Sources for personal conflicts
(Source: Researcher)

Common sources of personal conflicts	
Poor communication	Resources that can be scarce
Drug or substance abuse	Poor performance of the other
Childhood issues	Poor management
Difference in values	Poor workplace ergonomics
Differing interests and goals	Difference in culture of individuals
Different value systems	Language barriers to communication
Gender stereotyping	Ethnocentrism

2.2.6 Intragroup conflict

Although individuals may work in the same group with their organisational objectives clearly defined, people still have their own issues and perceptions. One of the possible causes for intragroup member conflict is that some people may feel restrained and not able to move freely (Jehn & Mannix, 2001:238-251). Resources may be another source of the conflict, especially if it is thought that they are not evenly distributed to the practitioners. Intragroup conflict may restrain the development of individuals and promotion of others; others may cause conflict and despondency among the workers. Some of these are listed in table 2.2 below.

Table 2.2: Sources for intragroup conflict
(Source: Researcher)

Types of intragroup conflict	
Unequal distribution or scarcity of resources	Incompatibility with the environment
Competition for position and power	Unmanaged group-diversity
Scarcity of freedom	Looking for acknowledgement and recognition
Bias from supervisor on allocation of duties	Roles that are not clearly defined
Cultural differences	Bullying by other group members

The expectation is that people working in the same group should put together all their energy and as peers forge ahead with the tasks. Unfortunately, whether by design or accident, there will always be disgruntled people, either because of the style of

management that might create or promote some deviant behaviour or because people have their personal problems and would want things their own way (Eidelson & Eidelson, 2003:182-192). Some of the employees feel let down because they have not achieved what they wanted to in life, and yet others come to work to occupy themselves. With all these variances, compatibility is likely to be a serious challenge for management and the workers' peers. As stated above, people work in the same organisation towards the same goals but with different cultural backgrounds, and this creates big misunderstandings within the organisation. Cultural differences play a big part in the creation of conflict; 'what seems irrelevant to me does not seems the way to another person', thus creating a stumbling block in achieving all the expected objectives of the project.

2.2.7 Intergroup conflict

Most large organisations have departments operating differently and largely interdependent in one way or another. These groups perform as silos in that they focus on the work and tasks and only interact with other departments when it matters. In many instances, these groups compete instead of working in cooperation with each other; consequently, the intergroup conflicts can be classified into horizontal and vertical.

- **Horizontal:** Strain or conflict is the competition between units or departments in the same organisation, for example, marketing versus operations, engineering against research and development, staff (workers) versus line management (Steinel et al., 2004:419-434)

- **Vertical:** Strain or conflict occurs on a hierarchical level where there is conflict between the labour union and management, shop floor workers (shop stewards) conflicting with the foreman or supervisor (Van Kleef & De Dreu, 2002:59-77).

2.2.8 Factors that propel group conflicts

According to Eidelson and Eidelson (2003:188), conflict between groups are promoted or pre-empted through critical roles that are performed by people's believes. Five generic beliefs speak to this, namely: feeling of superiority by a group, injustice; the level of vulnerability of the group; the level of distrust by the group; and helplessness of the group. The feeling of superiority and over self-confidence is generally the serious weakness that causes others views not to be considered.

2.2.8.1 Superiority

- **Individual-level core belief:** This core belief revolves around a person's enduring conviction that he/she is better than others in important ways (Philipp, 2007:257-315). The proponents of this view consider themselves special and they think of themselves as being entitled to this, hence their actions.

- **Group-level worldview:** This worldview includes with it the notion of shared convictions for which they claim superiority in moral standards and having a confirmed destiny. The group-level worldview is the source of the phenomenon of ethnocentrism and monoculturalism (Olneck, 2011:675).

2.2.8.2 Injustice

- **Individual-level core belief:** Refers to individuals who believe in themselves and claim respect because they feel entitled to it. This mentality by individuals leads to the assumption of mistreatment, which may result in unfortunate actions of inappropriately retaliation.

- **Group-level worldview:** This worldview has the group believing that they are treated unjustly and that they have perceive significant and legitimate grounds to lay a grievance claim against the opposing group. These resentments will be easy to observe along with cultural structures.

2.2.8.3 Vulnerability

- **Individual-level core belief:** Individuals believe they perpetually live in a world that they are not safe in, or where they are vulnerable. This makes the individual develop convictions of not being safe where ever they may opt to go because of their vulnerability (Shamir & Eilam, 2005:395-417).

- **Group-level worldview:** The group may suffer collective vulnerability along the same lines as the individual-level core belief. They are fearful about the future, especially where ethnicity is considered a major issue. This view, to say the least, is "catastrophic thinking" (Kennedy, 2018:714).

2.2.8.4 Distrust

- **Individual-level core belief:** The expectation from this group concerns the perceived hate and hurt that will be exercised on them in the form of abuse,

cheating, humiliation, lying and other possible actions (Fitness, 2000:147-162). The harm considered here will be intentional on them or it could be unjustified and unprecedented (Bruckman, 2002:217-231).

- **Group-level worldview:** The focus is generally on the outside groups that may most probably plan to hurt the inner group, which is the focus of the distrust. This involves the mistrust of the other group and suspicion of their intentions against this group (Williams, 2001:377-396).

2.2.8.5 *Helplessness*

- **Individual-level core belief:** It is perceived that even if the group has a carefully structured plan, they will not be safe until the other group leaves. Sometimes the concerned individuals may think of themselves as unworthy to perform the tasks they are meant to perform (DeWall et al., 2011:47).

- **Group-level worldview:** This is a collective group of people with no hope and they show high levels of dependency without adequate capability, meaning, they feel powerless. They see the environment as being devoid of possibilities for the safe existence and development of the group (Buss, 2000:15). Group dynamics should be understood in its complexity, and the interaction of these groups has to be well understood by anyone who will be a project manager (Marion & Uhl-Bien, 2001:389-418). Stirling (2013:625-639) adds that these types of conflict are shown by their differences, the marked differences between content conflict and relational conflict.

- **Content conflict:** For this type of conflict, the conflicting individuals disagree on operational modalities for the particular issue or task-at-hand.

- **Relational conflict**: The concerned individuals disagree mostly about each other seeing that the content conflict may be beneficial and increase motivation apart from initiating discussion. Relational conflict is envisaged to be responsible for the reduction in performance, commitment, loyalty and satisfaction (MacInnes, 2005:273-295).

The different types and aspects of conflict all lead to some disturbance in the execution of projects, and for that matter, in all stages of the life cycle, with some of the types allowing for benefits and others causing dysfunctional situations in the workplace. Evidence has shown that task conflict may increase job satisfaction through group

discussions and decision making. Amason and Sapienza (1997:495-516, cited by Jehn & Mannix, 2001:238-251) reveal a marked difference between affective conflict and its ramifications with cognitive conflict (task-oriented). They authors further state that conflicts emanate from differences in perceptions, perspectives or judgment, whereas effective conflict tends to deal with emotional matters and stems from differences between the individuals that inform the type of dispute.

2.3   Sources of conflicts

Disagreements between people emanate from many factors, primarily because human beings will always possess differences. It is challenging to find people who are homogeneous in all respects, including parents and siblings, let alone "strangers". Salleh and Adulpakdee (2012:1-13) posit that conflict occurs in a physical space if two or more people with different views, values and understanding occupy the same space. This incompatibility of ideas, values, beliefs and perceptions, among others, creates a desire for one party to control the other, resulting in a strained relationship.

In the workplace, the sources of conflict may be because of uncertainties and even resource constraints (York & Venkataraman, 2010:449-463). In a way, some situations and circumstances have the potential to cause conflicts, some of which would have been managed earlier. Figure 2.1 below lists some of the sources of conflict.

Of the many possible causes of conflict indicated by scholars, the above mentioned seemed to be involved in most cases that occur in the workplace. Thus, each cause depends on the organisation level and capability of handling conflict. Some might be prevented in time but with no necessary pro-activeness towards solutions, it is impossible and remains problematic for a long time.
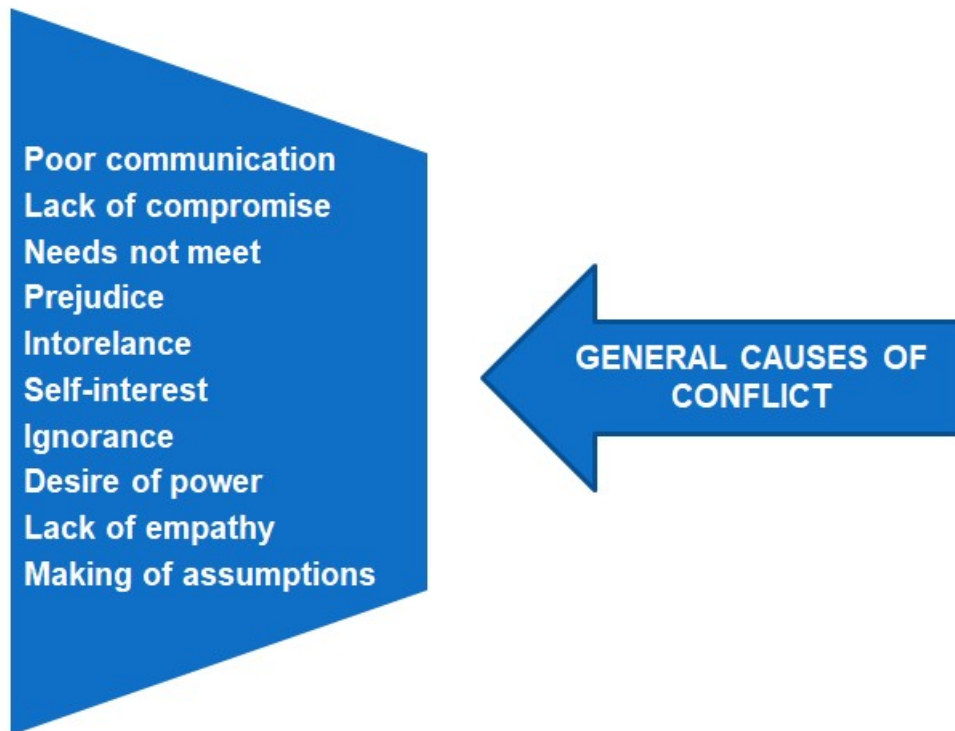
Figure 2.1: Potential causes of conflicts
(Source: Adopted from Van Tonder, Havenga & Visagie, 2008:11-29)

2.3.1 Generic causes of conflicts

The potential causes of generic conflict above are not exhaustive, more so since the definition of what a conflict is remains contested among researchers. Added evidence of the causes of conflict, not merely understanding the conflict, situations or behaviours, has made it difficult to come up with a universal definition of the word. As indicated in the list above, the potential causes include poor communication, lack of compromise, needs not met, prejudice, intolerance, self-interest, ignorance, desire for power, lack of empathy, and making assumptions.

- **Poor communication:** Communication is the ability to pass information from one source to another in a way that is understood by the recipient. This refers to verbal, written, signal, or any other form of communication available. Both the sender and the receiver must have the same meaning for the message (Dennis, Fuller & Valacich, 2008:575-600). If the communication is not effective, this will result in different understandings of the subject matter, which may be cause for conflict. Most conflicts in life, specifically in projects, are a result of miscommunicated messages because of the format of the message or because the message was not properly constructed for the receiver.

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- **Lack of compromise:** Compromise is the willingness to settle on some issues by the many parties in the conflict (Sharma, 2004:1-36). The intent is to achieve a win-win situation where, for the sake of harmony, people or individuals may decide to relax some of their demands. Refusal to compromise may result in a standoff between the belligerents and this becomes destructive, especially when the parties resort to physical solutions for the problem (Anderson, 2016:169-173). **Nelson Mandela** is known to have said that, "…you only negotiate because you are prepared to compromise".

- **Needs not met:** Service delivery strikes are a common phenomenon in South Africa because the citizen's expectations have not been met. Unmet needs too often result in physical confrontation between the opposing forces, and such a conflict is dysfunctional and disrupts processes from achieve the objectives (Barki & Hartwick, 2004:216-244). In the project workspace, if the need for resources is not met in time, it will cause delays in the execution of the project, resulting in delays and sometimes total disruption (Chester & Hendrickson, 2005:102-107). Resource planning and distribution are critical to the execution of any project and when activity leaders do not get their supplies in time, it may cause conflicts with the suppliers.

- **Prejudice:** This refers to an individual being approached in an unfounded or poor way, which, as for this study, is formed based on a perceptive belief of a person, sometimes without knowledge, reason or stereotyping; this opinion is not necessarily based on reason (Lindeman & Svedholm, 2012:241-255). Prejudice refers to the prejudgment of an individual, groups or situations where the participant makes a judgement and sometimes confuses it with adequate knowledge. This creates negative attitudes (Tyler & Wakslak, 2004:253-282) towards the one who is prejudiced against and generally, the judgement is made in a negative sense.

- **Intolerance:** Intolerance is defined as the refusal to consider the views of others when these views differ from your own views or the understanding thereof (Cheung & Chan, 2002:199-215). Some people have their natural dislikes and inherent intolerance to certain things or behaviours. It is generally difficult to work with people who have a problem with diversity, as the workplace is a very diverse environment (Hicks, 2002:379-396). This may lead to damage or unnecessary disagreements with the other members, which, if not managed, may erupt into an a conflict that could have been avoided.

- **Self-interest:** For this study, focused interest refer to those who deliberately include the persuasion of someone for their own interest without regard for other people, and generally refers to focusing on the desire of oneself (Alvesson et al., 2008:5-28). Too often, this personality cares little about the other people and items around them as long as they themselves are the beneficiaries. Such individuals create resentment from other people, and this may lead to disagreements that result in conflict if not pre-empted (Hodder, 2012: 60-64).

- **Ignorance:** Refers to non-existing understanding and/or information. An ignorant person is referred to as not having an understanding or being unaware of information (Radovic, 2017:679-699). When individuals do not know or are oblivious of certain facts, the chance that they may act incorrectly is high. These actions may not be perceived as mistakes by other members who might want punishment or some form of sanction for the individual/group at fault (Bandura, 2002:101-119). If the unaware individual or group does not try to stop the progress of the disagreement, this can easily lead to confrontation and conflict.

- **Desire for power:** Power can be defined as the ability to influence (Adler, Forbes and Willmott, 2007:119-179) and this is likely to cause disgruntlement. Where people do not have formal power, or where there are others with the same power or an alternate type of power, this may lead to conflict. Power is generally used to control other people, and a clash of personalities is very likely in such a situation (Hofmann et al., 2012:1318).

- **Lack of empathy:** This refers to the absence of the capability to understand what other people are feeling at a time when situations are going astray (Kirchhof et al., 2016:1-88). Team or group members will always have situations, say personal, where they need to be understood and/or helped. If no empathy is shown to others, people will grow a negative mentality about the characters with whom they interact. This may eventually lead to unnecessary disagreements, which, although treated as disagreements, may simply be a form of payback or retaliation (Moore, 2014).

- **Making assumptions:** Accepting things "as is: without fact checking is mostly associated with power (Kane, 2013:1-73). It is always a problem when people depend on assumptions and not realities, as it leads to misunderstandings. This in itself may progress to differences and disagreements, causing an unhealthy environment or relationships with workmates or any other people (Miller, Chen &

Zhou, 2007:25). This issue can be overcome by looking at the facts before any decisions are made regarding matters involving others, directly or indirectly.

- Most situations that result in a conflict have people consciously acting in a display of power and unwillingness to succumb. Political strife and wars that are fought bear witness to people's state of minds, and until that is controlled, conflicts will always be present. Understandably, the above is an identification of generic causes of conflict, whereas workplace conflicts are unique.

2.3.2 Workplace conflicts

The environment in which people interact, the nature of the interaction and tasks performed, together with the type of people, dictates the type of conflicts likely to occur. In the workplace, there is a high possibility of dealing with people with various backgrounds, work ethics and priorities (Gursoy, Maier & Chi, 2008:448-458). As referred to earlier, conflict may take on the form of insults, defiance, bullying and anger. The causes range from personality clashes to miscommunication, envy, sheer malice, and bad management processes.

Conflict leads to negative outcomes, including, disruption to work processes, poor or low productivity, absenteeism and high labour turnover, among others (Williams, 2019:54). It is also important to acknowledge that the workplace is further complicated by the presence of rules and regulations, some of which may not allow motivation. This may cause emotional stress to employees if they are not able to be innovative, efficient productive (Dorenbosch, Engen & Verhagen, 2005:129-141). Employees' emotional state may lead to further disagreement with other members or people from different groups.

Within an organisation, there are intragroup or intergroup conflicts. Figure 2.2 provides details of some of the causes of workplace conflicts.
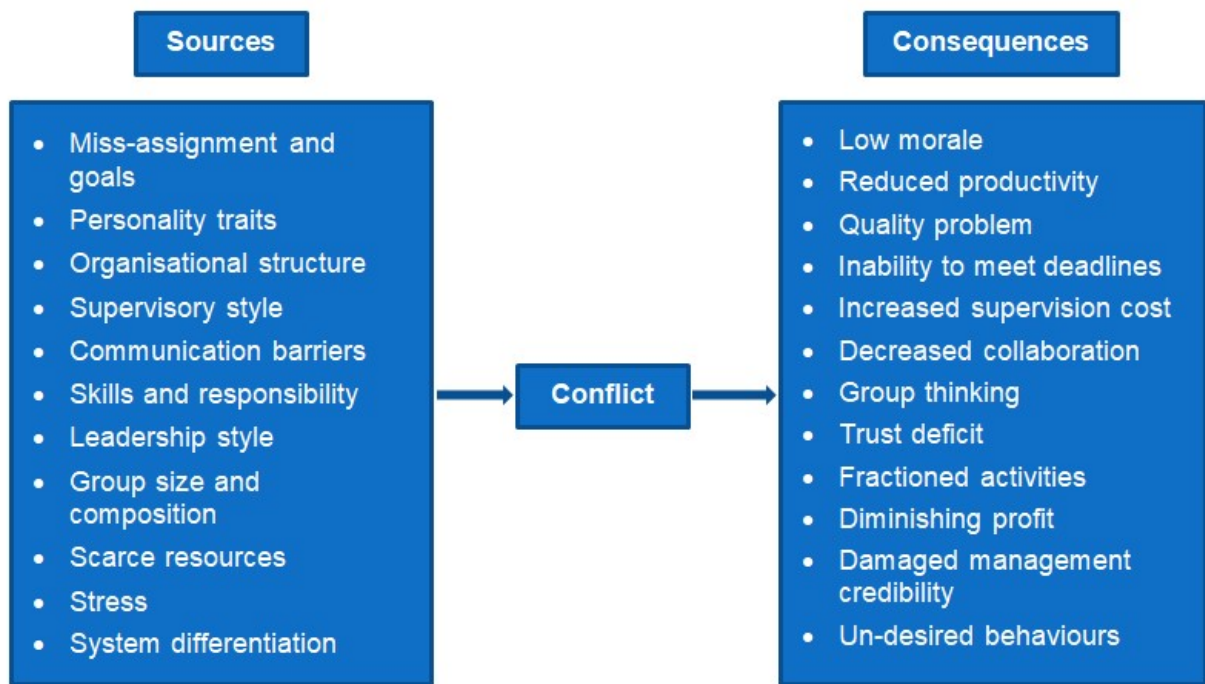
Figure 2.2: Workplace conflicts
(Source: Adopted from Riaz & Junaid, 2014:9)

The workplace has a structure of employee functions depending on the tasks and types of management within the organisation. Thus, some of the conflicts might be structural as they are embedded into the organisational structure (Peters & Pierre, 2013:77-87). Such conflicts are likely to be an ongoing situation unless management addresses the structural problems that may cause the conflict.

On the other hand, some of the conflicts are personal, originating from individual behaviour (Simon, 2006:10-21), which may be difficult to correct unless the individual does allow the change to happen. This may also depend on the type of power that the individual or group has and how much they are prepared to sacrifice for a win-win situation.

- **Structural conflicts:** This involves specialisation, interdependence, common resources, goal differences, authority relationships, status inconsistencies and jurisdictional ambiguity. Structure may play a role in creating ground for disagreements and confusion, which may develop into conflict. On the other hand, it is individuals that become involved in these conflicts and in the case of personal causes of conflicts, a number of these have been identified, as depicted in Table 2.3.

Table 2.3: Sources of structural workplace conflict
(Source: Researcher)

Factor	Definition
Specialisation	This stipulates the procedure of becoming more expectant of a particular task, specifically a skill. Because of this, the division of labour in an organisation tends to create an invisible wall and ends up with people thinking in a particular way because of the influence of the needed skills to perform tasks, so the lack of specialised characters create conflict.
Interdependence	When activities and individuals or divisions depend on each other for productivity, it may create disagreement and blame, leading to conflict (Teicher et al., 2004:80-85).
Common resources	Shared resources in operations that may result in conflict if one group or individual thinks they are not allowed adequate access any similar situation that may cause conflict.
Goal differences	Differences in what individuals want to achieve, be it the work tasks or individual goals. The tendency would be for individuals to try to make the best, of shared resources, but at the disadvantage of others. This may result in conflict (Locke & Latham, 2019:93).
Authority relationships	This has to do with managerial hierarchy and reporting systems that may be dual. It may create loyalty difficulties for employees who report to more than one manager. As such, employees may prefer one leader over another, which may show disloyalty, leading to conflicts.
Status inconsistencies	This refers to managers or employees who seem to shift responsibilities depending on the issues at hand. Consequently, there is no clearly defined system to use for determining accountability – they may start taking responsibility for other people, causing conflict.
Jurisdictional ambiguity	In these situations, it is unclear where the responsibility lies, as the lines of authority rely on geographical region. This causes disagreement to all involved in terms of giving orders as approval is needed across all regions that form part of the organisation, which creates the disagreement conflict.

- **Personal:** This involves skills and abilities, personalities, perceptions, values and ethics, emotions, communication barriers, cultural differences.

Table 2.4: Sources of personal workplace conflict
(Source: Researcher)

Factor	Definition
Skills and abilities	The abilities an individual possesses; depending on demand, the individual may behave differently. The lack of certain skills in people may cause discord and is sometimes disrespected by skilled individuals. Too often, this results in bullying in the workplace, which breeds further conflict (Baillien et al., 2014:511-524).

Factor	Definition
Personalities	A combination of qualities that distinguishes behaviours, cognitive thinking, and emotions, sometimes considered biological, and which may show characteristics such as motivation, dedication, uncooperative attitudes and behaviour, similar to the Big Five personality traits. When personalities clash, it will inevitably result in a conflict unless someone is willing to step down or compromise (Yazdani et al., 2019:2501-2519).
Perceptions	Essentially, perception is the interpretation and alignment of certain values by an individual, be it true or imaginative. These are the realities lived by, and positive perceptions may enable cooperation, whereas negative perceptions may be seen as deviant behaviour by the individual or group. Generally informed by upbringing or education with much influence from culture of religion (Barnes & Brownell, 2018:36-59).
Values and ethics	The motive behind the purposeful behaviour of an individual and can be regarded as personal or societal values, much of which is derived from upbringing [culture and religion] and some are learnt along the way. This affects the behaviour that is used to decide on ethics and morality – any indifference may cause dislike and antagonism, which can lead to conflict (Dickman, 2010:458-466).
Emotions	Biological and associated with neurophysiological changes varyingly associated with thoughts, feelings, behavioural responses and express pleasure and displeasure. These are intertwined with moods, personality, creativity, motivation and disposition (Kuhl, 2000:665-703).
Communication barriers	Common communication barriers are classified as physical barriers due to the location and structure of the workplace that may separate individuals and groups from each other. Because of diversity, language barriers can become a challenge because of people speaking different languages while expected to work together. The tendency in South Africa is that European languages are mostly used (Afrikaans and or English). The difference in languages creates language groups that may not be easy for others to comprehend and learn, thereby hindering informal communication that promotes the elimination of language groups. Cultural differences further create divisions in the workplace, including barriers because of gender differences, emotional barriers and perceptions, among others (Croft, Schmader & Block, 2015:343-370).
Cultural differences	Culture tends to group people of the same culture together and in the South African context, there is a direct relationship between the language spoken and culture, which may result in a fragmented workplace. Culture-bound people share the same values, beliefs and ethical considerations, thus strengthening the connection. This makes it difficult for "outsiders", which may become a recipe for conflict leading to ethnocentrism that could easily result in group conflict and group fighting (Rose Carlson & Waller, 2007:1019).

Table 2.5: The Big Five personality traits
(Source: Adopted from Goldberg, 1993:26-34)

Factor	Definition
Openness to experience	This personality is the "teachable" type, willing to learn, too often adjusting to circumstances albeit with much curiosity, and tends to be good listeners. The personality may work to avoid disagreements and subsequent conflicts in their relationships.
Conscientiousness	Very sensitive to situations and happenings in and around them and tends to be formal about things. Shows high levels of efficiency and organisation, and is sensitive to other people's situation and their predicament, but shows rigidity.
Extraversion	Generally outspoken, shows high levels of energy, likes forming relationships and getting to understand others in a more personal capacity, and loves company. May work well with different people, is considerate to other people's situation, and shows levels of empathy.
Agreeableness	This personality is friendly and ready to compromise, analytical and always willing to negotiate when there are problems. Soft and a good listener but analytical and can be difficult to convince without solid facts, tries to be very understanding.
Neuroticism	A sort of an introvert, very touchy about things and circumstances, and not easy to move from a position decided on. Difficult to predict because they say very little and think deeply. Can be stubborn unless good cause is shown to them.

These personality traits are brought to the workplace and each employee interacts with people of different personality traits. Some of the interactions involve powerful people (power is the ability to influence) even though they may be on the same level (Gagné, 2004:119-147). It is within these that a project is run, and the task of the project manager is to understand all the complexities, pre-empt possible conflicts, and motivate employees to perform and enable job satisfaction among people of diverse personalities.

2.4   Causes of conflict

Resources such as money, time, and equipment are often scarce. Competition among people or departments for limited resources is a frequent cause of conflict. For example, cutting-edge laptops and gadgets are expensive resources that may be allocated to employees on a need-to-have basis in some companies. When a group of employees have access to such resources while others do not, conflict may arise among employees or between employees and management. While technical employees may feel that these devices are crucial to their productivity, employees with

customer contact such as sales representatives may make the point that these devices are important for them to make a good impression on clients. Important resources are often limited, causing this to be a source of conflict many companies have to live with.

2.4.1 Task interdependence

Another cause of conflict is task interdependence, which is when the accomplishment of goals requires reliance on others to perform their tasks. For example, if you are tasked with advertising your product, you are dependent on the creative team to design the words and layout, the photographer or videographer to create the visuals, the media buyer to purchase the advertising space, and so on. The completion of your goal (airing or publishing your advertisement) is dependent on others.

2.4.2 Personality differences

Personality differences among co-workers are common. By understanding some fundamental differences in the way people think and act, we can better understand how others see the world. Knowing that these differences are natural and normal lets us anticipate and mitigate interpersonal conflict – it is often not about "you", but simply a different way of seeing and behaving. For example, Type A individuals have been found to have more conflicts with their co-workers than Type B individuals (Mehra, Kilduff & Brass, 2001:121-146).

2.4.3 Communication problems

Sometimes conflict arises simply out of a small, unintentional communication problem, such as lost e-mails or dealing with people who do not return phone calls. Giving feedback is also a case where the best intentions can quickly escalate into a conflict situation. When communicating, be sure to focus on behaviour and its effects, not on the person. For example, say that Jeff always arrives late for all your meetings. You think he has a bad attitude, but you do not truly know what Jeff's attitude is. You do know, however, the effect that Jeff's behaviour has on you. You could say, "Jeff, when you arrive late for the meeting, I feel like my time is wasted". Jeff cannot argue with that statement, because the impact of his behaviour is a fact. It is indisputable because it is your reality. What Jeff can say is that he did not intend such an effect, and then you can discuss the behaviour.

In another example, the Hershey Company was engaged in talks behind closed doors with Cadbury Schweppes about a possible merger. No information about this deal was

shared with Hershey's major stakeholder, the Hershey Trust. When Robert Vowler, CEO of Hershey Trust, discovered that talks were underway without anyone consulting the Trust, tensions between the major stakeholders began to rise. As Hershey continued to underperform, steps were taken in what is now called the "Sunday night massacre", in which several board members were forced to resign and Richard Lenny, Hershey's then-current CEO, retired. This example shows how a lack of communication can lead to an escalation of conflict. Time will tell what the lasting effects of this conflict will be, but in the short term, effective communication will be the key.

2.5   Chapter summary

This chapter discussed conflict within the workplace in the construction sector in the Cape Metropolis. The types of conflict playing a role in the workplace were identified. Conflict is becoming part of the working environment. This chapter focused on the generic causes of conflict that are not taken seriously by everyone on daily basis in the workplace. The discussion highlighted personal behaviours as the main contribution to all the selected conflicts types. The real causes of specific conflicts arising in the workplace were explained in detail, providing more understanding on certain sources of conflicts in the construction sector. A suitable approach to recognise conflict in time based on the individual's source(s) of conflict was mentioned. The Big Five personality traits relevant to all conflict engagements were highlighted.

CHAPTER THREE: RISK, MANAGEMENT OF RISK, CONFLICT AS A RISK FACTOR AND CONFLICT RESOLUTION MODELS

3.1 Introduction

Conflicts are part of the risks that commonly affect project execution processes, which can be dysfunctional at worst and may bring the process to a halt (Stecke & Kumar, 2009:193-226). A risk is defined as the likelihood of something negative that might happen; a simple explanation for risk is the uncertainty of possibility that something bad might happen. This definition suggests that incidents are not or happen not as expected; as such, they may be of paramount importance in that they will take the organisers by surprise.

Part of effective project execution means that upon completion of the execution of any project, some lessons have been learnt. Experienced project practitioners should be able to learn from experience to pre-empt any possibility of unplanned risks (Turner, Aitken & Bozarth, 2018:5-24). Risk management is a critical competence for all project practitioners considering the high project failure rate and that any form of failure is a risk. There are different types of risks, classified according to their impact, project execution process, and eventual outcome.

3.2 Risk

Conflict in project execution processes should be better understood as risks that need to be mitigated through planning by anticipation. Risks present in different forms for projects and can therefore be classified as understand the structure of the risk, and the probable impact. Neill et al. (2009:17-24) define risk as uncertainty that might happen, posing as a barrier to execution throughout the productive life of the entire project.

This definition is complemented by Twomey (2015:255-268), who posits that risk is aligned with independent decision making by people who aim towards one purpose, not forgetting that ethics is an important part, although the uncertainty is not yet considered. This, therefore, suggests that the risk factors in projects include stakeholders, technically poor projections, and numerous other factors. These are diagrammatically represented in table 3.1 below.

Table 3.1: Risk category/factors in projects
(Source: Adopted from Sant & Raut, 2019:4)

Risk Category	Extended Category
Technical	Requirements, technology, interface, performance, quality, etc.
External	Customer, contract, market, supplier, etc.
Organisational	Project dependencies, logistics, resources, budget, etc.
Project management	Planning, schedule, estimation, controlling, communication, etc.

Risk factors in a project that are probable risk events in the whole process are categorised as shown above. The organisation recommends high-level, standard categories, which will put in place a suitable risk analysis. That, in turn, will involve the examination or testing of the outcomes of the project based on the categories mentioned in the project. This aids the understanding of the impact on project outcomes and objectives overall, in the event of a risk. Risks apply to all the categories, meaning all departments involved in the project will be affected by risk.

3.2.1 Risk classification

Risk has been defined as the likelihood of something negative taking place. Generally, unexpected events may have undesirable effects that may not have been anticipated (Gerber & Von Solms, 2005:16-30). Straying from the original plan or deviating from expected events in a way constitutes a risk to the owner(s) or stakeholders who have particular expectations. This is associated with the possibility of losing a valuable expectation or injury to individuals or adverse situations experienced in the organisation. To identify this, the risk needs to be classified according to its combination of characteristics. Aven (2012:33-44) states that risk classification can be associated or characterised by a combination of consequences that will increase the likelihood of an event happening or not happening as a deviation from an expectation or plan. Risks can be classified as operational risks, which may be a result of failing systems, processes or other systematic deviations from the "normal", thus causing failure (Paltrinieri et al., 2012:1404-1419). The inadequacy of the necessary resources, whether technical or material, may result in a risk to the successful execution of a project. Diabat, Govindan and Panicker (2012:3039-3050) classify risk into five or more

different types: strategic risk, financial risk, operational risk, compliance risk and other risks.

Figure 3.1: Risk categories/classification
(Source: Adopted from Dickinson, 2001:362)

Strategic risks are generally associated with operations that involve human interaction and need to be managed properly to afford conflict (or allow conflict to happen) among practitioners (Chang & Wang, 2010:54-62). The financial risks involve decision making, which may result in different approaches and/or judgements lending themselves to potential conflict between the belligerents. The value systems and understanding of compliance may differ between operatives, resulting in conflict between practitioners over what constitutes "correct". Essentially, the one common factor threading through all of these risk types is the human element, and coincidentally, conflict among people in the system is a reality. Baloi and Price (2003:261-269) posit that risks are inevitable in any operation, but suggest that they need to be mitigated from happening or their impact on the project/organisation needs to be reduced. In other words, risks will always be present and effective management means risks and conflicts should be planned for and managed.

3.2.2 The project management book of knowledge

"The Project Management Book of Knowledge" identifies risk management as one of the ten critical knowledge areas for effective project execution (Zwikael & Ahn, 2011:25-37). Table 3.2 illustrates the knowledge areas and relations between them.

Table 3.2: Ten project management knowledge areas
 (Source: Adopted from Chih, Nguyen & García de Soto, 2015:2)

Project integration management
Project scope management
Project cost management
Project time management
Project quality management
Project human resources management
Project communications management
Project procurement management
Project risk management
Project stakeholder management

The project management knowledge areas has been broken down into smaller digestible parts, called the ten project management knowledge areas, which can be found in "*A guide to the Project Management Body of Knowledge"* (PMBOK)*.* PMBOK specifically identifies construction projects as critically requiring project management knowledge given the nature of the industry (Thomas & Mengel, 2008:304-315). Willcox et al. (2017:98-104) highlight the prevalence of misunderstandings between units and misunderstanding the problem while working towards integrating the complex structure effectively. It would appear that disagreements are found at every stage of the process, even before operations commence. Scott-Young and Samson (2008:749-766) posit that construction execution calls for leadership more than it does for needing a manager because of the nature of the conflicts during the project processes. Disagreements need to be ironed out in time before developing into conflict zones, thus leaders are needed because they are relationship-focused. According to Li, Zhu and Zhang (2010:766-775), there are five processes through which construction projects (and many other projects) progress, each having its own set of challenges which, if not attended to properly (managed properly), may develop into conflicts. Aaltonen (2011:165-183) defines project processes as unique actions representing the entire project operation and the internal processes of the project. These include work instructions, procedure methods and network plans, while tools are also considered.

The five processes are: (i) project initiation phase; (ii) project planning phase; (iii) project execution phase; (iv) project monitoring and control phase; and (v) project closure phase.

Project initiation phase: This is the initial stage during which conceptualisation of the project takes place; there is no clarity yet as to what the product will look like. Since this is the level of idea creation, differences of opinion emerge, which may lead to disagreements that develop into conflicts (Bowen, 2008:137-152). Contingent leadership is necessary for effectively managing the development of divergent mind maps that form the basis on which project objectives will be defined. The thinking and rethinking process may cause irreconcilable differences that may develop into future conflicts if they are not handled appropriately from the beginning (Pache & Santos, 2010:455-476). Some of the project conflict areas may involve: (i) what the problem is that needs to be solved; (ii) what the exact wants and needs of the client are; and (iii) what the possibility is of the project being successful. Many conflicts usually arise during this phase, because it also determines operational issues and may involve the identification of skills needed as well as the appointment of practitioners. The project initiation phase culminates or results in the project initiation document.

Project planning phase: Project planning is the process of deciding how things will be done during the execution of the project (Ayub, Thaheem & Ullah, 2019:734-748). At this level, the tools and techniques required to execute the project are identified and there may be as many disagreements as there are experts. Communication plans, risk management plans, resources management/allocation plans, deciding on Work Breakdown Structures (WBS), Gantt charts, PERT carts, agile applications, and CPA charts, among others, are included in the project planning phase (Margea & Margea, 2011:180-196). All these documents require special training, as they are critical tools and techniques to facilitate the execution of the project plan (Marcelino-Sádaba et al., 2014:327-340).

Project execution phase: Disagreements carried over from other stages may play out in this phase when plans are transformed into deliverables (Aitken, 2009:47-64). Most conflicts in construction projects surface at this stage and could range from simple disagreement to dysfunctional conflicts that risk the successful execution of the project. Risk management and conflict resolution management should be continuous processes throughout the project life cycle and within the scope of the work. The roles

of the team members should be clearly defined and the resource allocation "system" needs to be discussed and agreed upon in advance to avoid conflicts over these sensitive areas (Heal, 2005:387-409). To avoid conflicts at this stage, it may be important for the project leader to put in place certain things, including what is listed in table 3.3 below.

Table 3.3: Indispensable activities during project execution process
(Source: Adopted from Fawcett et al., 2010:22-29)

Activities that are indispensable during project execution	
1. Need to develop a formidable team	2. Procure resources according to plan
3. Convert the project plan into deliverables	4. Allocate resources according to tasks
5. Project management to direct and manage project execution	6. Set tracking systems to monitor and control
7. Define tasks and roles for execution	8. Regular report on project progress status
9. Construct a Gantt chart to estimate progress	10. Construction of PERT and CPM tools

Project execution is not a one-stop-action. It is a process involving many interrelated, dependent and independent activities and tasks. Yet, all these activities and tasks should be managed from one source to enable integrated management of the project. The coordination of these activities involves people of different professions, minds and with differing shareholder capacities and objectives – a source of disagreement (Zahra & George, 2002:185-203). Without exception, all conflicts start as disagreements, which, if not managed correctly or satisfactorily, will end up as conflicts.

Monitoring and control: Defined as setting up determined steps of the process to measure performance in the running of a project as well taking helpful action to assure that everything in the organisation is aligned and leads to the goals of the project. The nature of disagreements is generally a matter of individual interpretation and may lean towards personal relations between the auditing team and the practitioners in that unit. Sovacool, Axsen and Sorrell (2018:12-42) posit that a well-monitored and controlled execution process pre-empts the need for crisis management if deviations from the plan can be identified in time. Monitoring and control are applied for reviewing the performance of the units to confirm adherence to the prescribed plan and to evade any avoidable risks. The control process is presented in table 3.4.

**Table 3.4: Focus area for control processes
(Source: Researcher)**

Areas for Control Processes	
Planned process vs. the actual process	Identify deviations that cause risks
Plan corrective actions where needed	Check output against documentation
Constant forecast on resource allocation	Check budget vs. actual at all centres
Identify adherence to scope change plan	Identify scope change needs in time

Disagreements and conflicts may result where adequate training and general resource allocation have been contested or disagreed with. This process should not be a mere inspection exercise; rather, it should be done with integrity to identify both weak and strong points (Krylov, 2016:5682-5694). The primary purpose should be to enable effective overall project integration management, and limit, if not eradicate, all possible disagreements and risk factors. Monitoring and control comprise different types of project management tools and techniques, including: work breakdown structures (WBS), Requirement Traceability Matrix (RTM), control chart, Gantt charts, review and status meetings.

Project closure: The phase can be defined as a successfully delivered project in accordance with the required specifications through accomplishing the deliverables as per the objectives of the three constraints. Project closure is achieved when the work completed satisfies organisational requirements – from handing over the deliverables to the clients and managing all the necessary documents, to cancelling the contracts and informing the stakeholders (Gallivan, 2001:243-266). At this stage, deliverable are finalised and formally transferred, and all documentation is signed off, approved, and archived. All project management processes have thus been executed.

During this phase, disagreement may start in-house if practitioners disagree on whether the project objectives have been met fully as per customer expectations (Barclay & Osei-Bryson, 2010:272-292). The largest part of the problem may lie with the customer if they believe that their expectations have not been met satisfactorily. According to Storvang and Clarke (2014:1166-1182), a project customer does not include all the customers of the project; it specifically includes stakeholders with a substantial given interest in the outcome of the project, especially project sponsors and management who provide resources for the project. This confirms the critical nature of

the customer, as there will be final payments to be made, which can only be effected if there is an agreement on the deliverables. These deliverables can be defined as the statement of Work Breakdown Structure (WBS), when all deliverables defined and agreed to by the project sponsor, as per the WBS, have been provided (Parker, 2012:54-70). If these aspects of the agreement are not satisfactory to the customer, it becomes a breeding ground for serious conflicts. Too often, this happens when there is no regular communication with the customer during the different stages of the execution process.
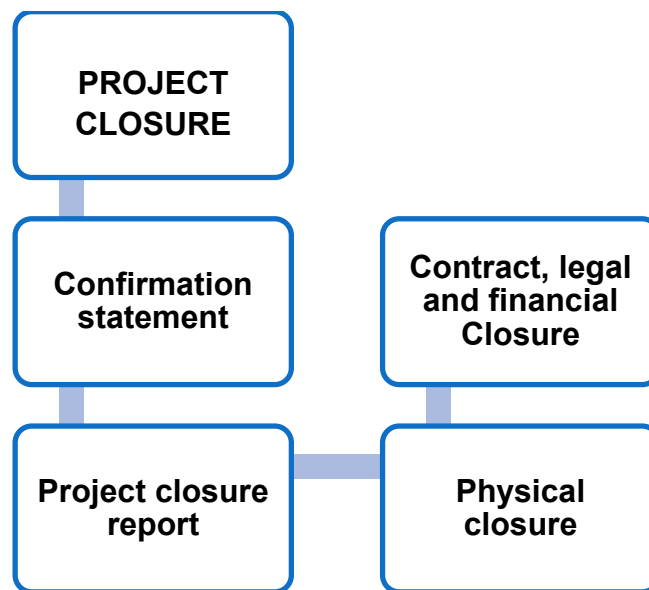
Figure 3.2: Closedown phase stages
(Source: Own construction adopted from Zohrehvandi, Khalilzadeh & Cheraghi, 2017:274-281)

As with all disagreements and conflicts before this level, the best way out would be to include this in the risk management plan and pre-empt them. These conflicts may lead to court cases, which may cost the partnering stakeholders dearly and may create negative publicity for the project company. Consistent communication and review meetings will help develop a relationship and allow for corrections from deviations in advance (Ouedraogo, 2013:28-41).

3.2.3 Project integration management

Project integration management is the involvement of all the elements of a project by means of coordinating tasks, resources, stakeholders and all other elements included in a project (Huang & Newell, 2003:167-176). Pohekar and Ramachandran (2004:365-381) point out that integration leads to conflict; thus, what is needed to properly

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manage the conflicts during all the phases of the project is assessing the process in order to make informed decisions, which is key. This, successful project integration management is a hand-on process; it should not be done remotely (Jaafari, 2001:89-101).

In practice, the project leader needs to know and understand all the aspects of the project. The project can be divided into technical and social aspects, and both are critical to successful execution of the project. A construction project involves many technical specifications generally headed by an expert, usually an engineer or highly skilled technician (Kunda, Barley & Evans, 2002:234-261). Civil, construction and electrical engineers/technicians, architects, quantity surveyors, plumbers, bricklayers, plasters, tillers, and carpenters, among others, will be involved. Each one of these skilled individuals has their own way of thinking and operating, with professional-cultural patterns of behaviour, yet, they all have to be integrated into one project (Vaara et al, 2012:1-27).

Joining these individuals into one operation is inevitably a source of many disagreements emanating from technical orientation differences as well as individual behavioural patterns. These complexities, added to them the size of the project and the interrelatedness of the operations, calls for effective leadership to minimise, if not eradicate, differences. Differences will always be present, and managing these differences is needed for effectively integrating the dependent and interdependent tasks into one product (Dewett & Jones, 2001:313-346). Figure 3.3 below illustrates the different aspects of a project that need integration – each of these has its own conflicts, let alone intergroup conflicts.

It is natural for humans to have differences and disagreements, and it is established in intergroup dynamics studies that groups have their own cultural norms (Lee, Pratto & Johnson, 2011:1029). In the same vein, organisations made up of very different individuals in all imaginable respects eventually have to integrate into one organisational culture. Shin and Kook (2014:180-189) posit that all these individuals and individual task-units develop their own norms, which then define them as an operational entity. However, most individuals remain in their own 'mental structures' that determine the norms by which they operate – cultural, educational and/or religious (Yagi & Kleinberg, 2011:629-653). Managing this diversity, which is a regular source of differences, disagreements and eventually conflicts, is a critical competency

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necessary for any construction project manager. To avoid this risk, there should be a plan in place from the onset to manage this risk, or risk conflicts, that may eventually become dysfunctional.

**Figure 3.3: Aspects of Project Integration Management
(Source: Adopted from Demirkesen & Ozorhon, 2017:5-9)**

3.3 Management of risk

3.3.1 Risk and the human factor

Increasingly, the study on risk management is focused on the human factor, considering that projects are designed by human beings, for human beings and executed by human beings (Jowah & Laphi, 2015:5-9). Risk management is defined as the process of making decisions to manage risks, and the identification thereof, considering that most decision makers prefer the status quo and not risk aversion (Caliendo, Fossen & Kritikos, 2009:153-167). The process of making decisions against risk is generally complicated, with different managers thinking differently about the appropriate action to be taken.

Some managers are more risk aversive and scared (too precautionary) than others who prefer the status quo, and change only if situations promise difficulties. Reise et al. (2012:133-141) posit that framing is a general concern with the various types of

methods used to assess risks because the human brain is overloaded (bounded rationality). Thus, the tendency is to take shortcuts as immediate solutions to human challenges, and the extreme risk is treated as having the lowest chance of occurring. These natural tendencies of human beings are contrary to documented scientific methods; instead, the practice is group thinking. Hartley and Phelps (2012:113-118) observe that lessons learnt as presented in negative and positive reports of previous experiences, may influence the decision making process. This, however, depends largely on the individuals taking the risk decision, as well as on their experience and the extent to which they were prepared to accept other views.

In construction projects, the risk management process inevitably considers the chances of cost overruns, redoing work, and work done without specifications (Yap, Abdul-Rahman & Wang, 2018: article 04018025). Work specifications may apply to any of the elements of the project square root. The square root (time, quality, budget and scope) is commonly used to measure the successful execution of a project (Dvir & Lechler, 2004:1-15). Project risk management (as identified by PMBOK) is a critical element, considering the current project execution failure rate. It is estimated that between 47%-61% of construction projects fail during the execution phase, and that the risks are a result of human factors. The level of technical expertise, the technologies available, and the availability of materials for project execution can be standardised (Sardroud, 2012:381-392). The only aspect that cannot be standardised is human behaviour since there are regular disagreements between individuals working together. There are different types of disagreement models, and the most commonly used model is illustrated in figure 3.4 below.

According to Graham, Nash and Kool (2011:283-294), disagreements are caused mostly by the human factor, thus creating conflict and potential failure of any project. It does not take unusual skills to identify and recognise the significant starting point of conflict. The human factor's arguments tend to be related to negative emotions. Themnér and Wallensteen (2014:541-554) posit that the reappearance or accumulation of disagreement between people and groups lead to conflict. The human being remains the only constant in the process and is the only one who has no static behavioural patterns; thus, their behaviour is not always predictable.
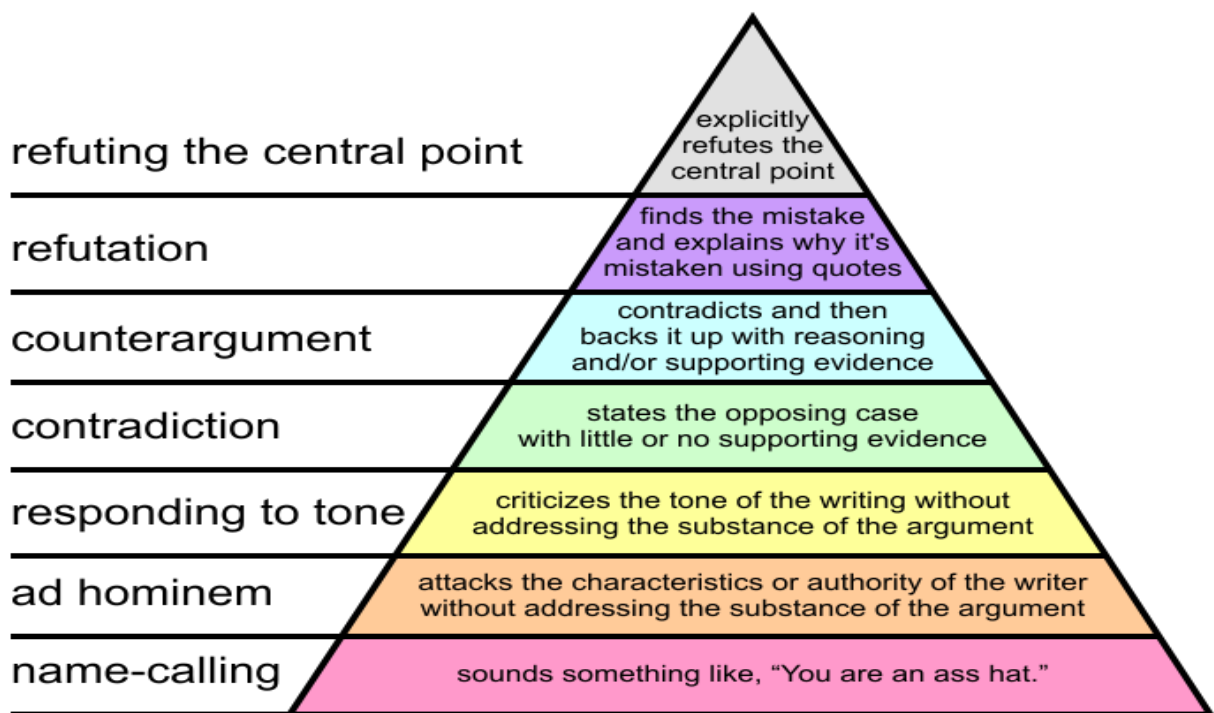
Figure 3.4: Disagreement model
(Source: Ertas, Pak & Newton, 2020:10)

Risk management of the human factor in a project to minimise disagreement has to be properly identified and analysed, and a suitable responding approach is needed. All risks that may arise throughout a project need to be detected /perceived in time to keep the organisation's goals on track. Therefore, risk management is a vital part of the planning process in order to understand risk at all levels, should it happen. Management should not only be reactive, but proactive in ensuring that action steps are in place should any risk occur. Being proactive in risk planning means a workaround on disagreements must be determined, without the involvement of personal agendas and in alignment with the objectives of the project.

According to Johnson and Johnson (2006:147-174), managing risk does not necessarily mean all-around sound decisions, positive team dynamics, spirited workforces, and good professional relationships reduce conflict. Conflict and tension form part of human nature and the aim is not to obstruct agreements, but to inspire and consider the disagreements, as these actions benefit the organisation.

3.3.2 Communication as cause of and solution to conflict

Central to the relationships of human beings, positive or negative, is communication between the belligerents (Hill, 2010:1-14). Whatever is communicated or considered as real or perceived, is what informs the nature of the relationship between the

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individuals and/or groups. In practice, people's perceptions become the realities they live by, whether appropriate or inappropriate to an observer (Treviño, Brown & Hartman, 2003:5-37).

There is at this stage a need to distinguish between a project leader and a project manager as the first step in deciding on conflict solutions in project execution processes. Li, Kim and Zhao (2017:193-204) define a manager as someone responsible for a particular department or function in the organisation, leading the team or groups with the assistance of the supervisors who oversee the employees. It is suggested that managers are task-focused and tend to be transactional in their management.

Rosenthal and Pittinsky (2006:617-633) define a leader as someone who leads people with the best skills and capabilities possible and in doing so, has the drive to motivate and make a positive impact on the people he/she leads. Boulouta (2013:185-197) suggests that leaders need to be compassionate and direct people in the right direction while at the same time having a diverse understanding of the work environment. From the definitions, it is clear that whilst the two terms, project leader and project manager, have been used interchangeably, the terms do not always mean the same thing, nor do they always complement each other. Edum-Fotwe and McCaffer (2000:111-124) differentiate a project leader from a project manager as illustrated in table 3.5 below.

Table 3.5: Differences between project leaders and project managers
(Source: Burke & Hutchins, 2007:263-296)

Project Managers	Project Leaders
Project managers focus on systems	Project leaders focus on people
Project managers are appointed	Project leaders are chosen by team members
Project managers administer	Project leaders innovate
Project managers focus on conforming and maintaining	Project leaders focus on challenging and developing
Project managers have short term visions	Project leaders have a long term perspective
Project managers prefer/accept the status quo	Project leaders challenge the status quo
Project managers are risk averse	Project leaders are risk opportunists
Project managers plan, budget and control	Project leaders create the future horizon
Project managers develop communication systems	Project leaders are interpersonal in their communication

Project Managers	Project Leaders
Project managers focus on organisational structures	Project leaders focus on people
Project managers like problem solving	Project leaders aim to inspire and motivate
Project managers focus on targets and goals	Project leaders focus on creating change
Project managers want to control their project	Project leaders are passionate about the project
Project managers focus internally on the project	Project leaders focus externally on the client, competition, market, and new technology

3.3.3 Leadership and communication

Anantatmula (2010:13-22) defines a leader as one who leads a team through encouraging them to achieve work targets and by following the correct procedures to achieve the objectives of the organisation. Shin and Zhou (2007:1709) suggest that a leader should support the team in the best interest of the goals of the organisation through easy, effective and absolute communication. Leadership is people-focused, and leaders acknowledge that projects are done by people, through people and for people (Jowah, 2013:708-719).

Motivating people to work together and attain the expected results, requires, among other things, maintaining good relationships with people, thereby enabling oneself to create a mental contract of cooperation with the followers. Bobba and Legnante (2017:221-234) posit that communication is the foundation for effective relationships; thus, effective leaders are effective communicators. Communication also means responsiveness (Withers, Taylor & Warme, 2008:4419-4432); feedback is expected since communication is a two-way system involving a receiver and a sender of a message. The sender and the receiver alternate at different times and an understanding between them is vital as it bonds the relationship. It is important to note that whilst the differences between a leader and a manager are clear, they merely represent the extreme ends of the various types of leaders and managers. Many project practitioners directing the execution processes use both leadership and management, too often determined by the circumstances. It is sad to say that some may be more of managers than leaders in that their focus is on the task and not on the people that perform the tasks.

Whilst leaders are not born but formed, it may be necessary to assert that the choice of leadership style has much to do with how the leader or manager perceives the followers or subordinates. The attitude of the practitioner towards the people they are in charge of is the first determinant of how they will treat the people. This is the basic principle of the X and Y theories (Borda, Reason & Bradbury, 2006:27-37). Leadership in any organisation and or structure – educational, political, religious or commercial – is difficult to explain, except for accepting that the practice of leadership leads to the flourishing of morale, team synergy, and enhanced interpersonal relationships and cooperation (Von Krogh, Nonaka & Rechsteiner, 2012:240-277). Communication remains key to this new atmosphere and becomes the tonic that takes care of conflicts, discord and mistrust. Leadership required characters to be a leader of effective communication, as shown in figure 3.5.

Figure 3.5: Leadership
(Source: Adopted from Bailey et al., 2019:481-499)

As referred to in the preceding chapter, disagreements that are allowed to remain or grow unattended may eventually become conflicts. It may be necessary for management to classify the differences into low, medium and high categories in terms of potential to advance into conflicts, at the early stages. The risk of disagreements

developing into conflict may be measured through quantitative analysis (Raleigh & Urdal, 2007:674-694), by measuring the loss or effect in terms of quantities. This is easier when previous records are referred to, which may be used to determine the probability and extent of the damage.

3.4   Conflict resolution models

Workplace conflict is not only experienced by team members and leadership, it also involves the entire complexity of the organisation, whether left unsolved or being addressed adequately. Rothman and Olson (2001:289-305) define conflict resolution as the approach needed to solve a problem where two or more parties are involved. This is done to find a solution for the conflict that occurs in a peaceful mission setting. It can be a positive and/or negative disagreement and may include personal, political and/or financial conflict in the workplace. Consequently, negotiation needs to be well formulated when disputes arise. Bickmore (2014:257-278) emphasises the important of dealing with conflict as early as possible to avoid further and multiple engagements with conflict. Regan's (2002:55-73) thoughts about early-stage intervention are significant to addressing conflict negotiation between all parties involved. There is no one crucial feature to determine the time when conflict will arise, but to be prepared is the way forward. To resolute conflict, common causes must be understood.

3.4.1   Causes of conflict

3.4.1.1   *Poor communication*

In most cases, conflicts start through the conveyance of communication. This plays a big part if communication is of a poor standard, as it contributes significantly to conflict escalation. Dunning, Heath and Suls (2004:69-106) argue that the biggest cause of conflict in the workplace is poor communication. Some people were not exposed to or taught adequate communication skills during the early stage of childhood. Poor communication leads to uncertainty in the organisation, making employees feel concerned at all times and this is noticeable in various ways:

- **No clarity of job roles:** If an individual's roles, i.e. scope and responsibilities, are not properly communicated, it creates uncertainty about what he/she needs to do in the workplace. Each person's role needs to be defined clearly and properly, explicitly outlining the boundaries in the workplace. Once there is clarity regarding roles and responsibilities, the boundaries of the workspace is

apparent and employees will have sufficient knowledge to avoid interfering with other areas within the same working space. However, uncertainty about responsibilities may result in quarrels among everyone involved in the same department.

- **Misunderstandings:** Small disagreements in the workplace among colleagues happen due to small arguments and the lack of accountability. Misunderstanding sometimes turns the working place into a war zone, where individual points of view or the main purpose of points raised is not clearly understood. This causes a lack of trust and makes it hard to work proficiently in the same capacity. Sometimes, the diversity in backgrounds causes these misunderstandings. In some instances, stereotyping among colleagues creates an unhealthy work environment due to misunderstanding certain views and backgrounds.

- **Lack of transparency:** The purpose needs to be explained clearly to all colleagues, especially regarding the mission and vision of the organisation. If the vision and mission of an initiative in the organisation are not properly communicated, conflicts become more serious and escalate faster. Each individual's role and opinion, aligned to the values of morality, are important to the success of any project.

- **No feedback:** It is considered disrespectful not to provide feedback to employees regarding any aspect the employees may be responsible for; thus, feedback is an essential part of proper communication. It is important to keep employees updated about all developments within the workplace. Imagine working on the project with many staff and they are not provided feedback on their activities within the project scope. It automatically gives the impression that they are not respected and their contribution is not valued. This may cause major disagreement and possible project failure.

3.4.1.2 Unfairness

According to Folger and Cropanzano (2001:12), unfairness is wrongful behaviour towards certain individuals. It discriminates against a person without taking into consideration their feelings. Some people claim to act fairly, but this is based on their own experience without much understanding of other people's experience. Continued unfairness in the workplace produces a breeding ground for conflict across

departments. Unfair practices considered as the most common within the workplace, are listed below:

- **Not practising equal opportunities:** Everyone in the organisation should be given the same access to training, promotion opportunities and reward systems. When opportunities are not distributed equally, it creates frustration for individuals who are being refused the opportunity, and it is perceived as discrimination against those particular individuals.

- **Biased treatment:** All colleagues should treat each other justly; not only on management level, but everyone in the workplace because prejudice causes conflict among those who are treated unfairly.

- **Insufficient tools or equipment:** The necessary tools and/or equipment relevant to particular tasks should be made available to all employees in the workplace. If training is needed, employees must have equal opportunity to be trained within their particular area of expertise. Too often, training is deemed as a lower priority, yet it is expected of employees to deliver quality work only obtainable through proper training. The frequent occurrence of withholding the right tools, training and resources to complete required tasks is a failing attempt that causes conflict within the workplace. This, in turn, results in project failure, even before completing the first phase of a project.

3.4.1.3 *Problematic environment*

Beatty and Kirby (2006:29-44) define one's environment and workplace as the surroundings and conditions a person lives and operates in. Costanza et al. (2007:267-276) clarify that it is the interaction regularly needed by individuals to adapt, and it must present suitable conditions for any individual to live or work in. The conditions people work in plays a major role in causing conflict in the organisation. If the conditions they work in are not sufficient and always problematic, it may cause huge conflict. Failing to recognise and improve problematic environment conditions in time leads to conflict. The factors that contribute to questionable workplace environments include:

- **Unresolved conflict:** Arguments need to be settled in time, not because of how one is perceived by the superintendent, but because of people tending to take sides and start gossiping if the issue remains unresolved. This creates a very unpleasant environment, causing people around to feel uncomfortable.

- **Uninformed change:** People do not easily adapt to a change, which makes it even more important for adjustments to be communicated in the workplace. At the very least, change must be addressed in time to avoid people saying, "We were not informed". If the organisation makes frequent changes without properly engaging with colleagues on this, it may result in conflict. Important changes such as management structures, responses, developments, payments and bonuses cannot be made without the consent of all the people involved. Should they not be included or consulted, it will trigger conflict.

- **Working conditions:** The conditions people work in determine the state of their environment. Taiwo (2010:299-307) posits that working conditions are becoming unpleasant when in a reduced state, which consequently causes workers to become unproductive. According to Charalampous et al. (2019:51-73), poor working conditions include noise, scarce equipment and unpleasant workspaces, which build frustration among workers in the organisation.

- **Harassment:** Saunders, Huynh and Goodman-Delahunty (2007:340-354) define harassment as degrading behaviour that offends and humiliates any individual. It is characteristics of social and moral humility and it includes bullying and discrimination. Working conditions of this nature that are left unresolved cause conflict that may reach an irreparable level and manifest through cultural background identification and allowing other groups to be filled with fear and intimidation.

- **Persona focused:** People tend to be self-centred rather than focusing on the organisation's viewpoint. They demand to be placed in roles that do not necessarily match their skills or attributes while under the selfish impression that they are in control. This is shown to be one of the main problems in today's organisations, large or small, without considering suitable and needed requirements to be placed in a certain position.

3.4.2 Models of conflict management

Kuchar and Yang (2000:179-189) define conflict management as the process that resolves a disagreement, including the method taken to solve that particular instance. This is done by involving different tactics and is based on the situation at hand. Lu, Zhang and Pan (2015:711-718) mention that it should be done based on proper management and creative thinking. No one is at fault if concluded otherwise. The

handling of disputes must be presented in a fair approach, with clear sights into the objectives of the organisation and without causing harm to any parties involved. When solving a problem, certain management styles need to be considered to have a productive response based on the situation at hand, not to align to what is irrelevant. Tsai and Chi (2009:5) discuss the five conflict management styles that should be considered when solving a conflict in the workplace, as shown in figure 3.6:
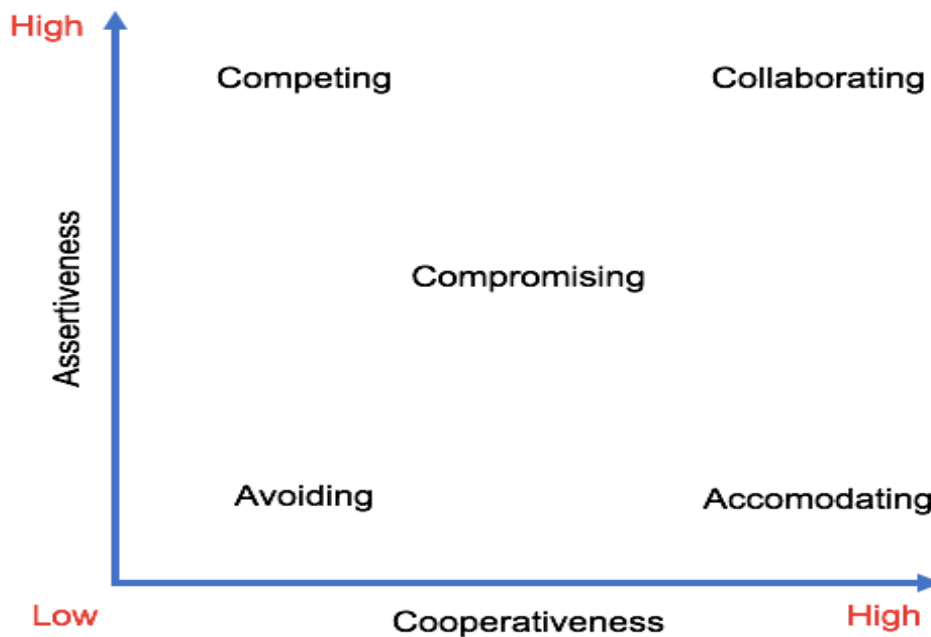
Figure 3.6: Five conflict management models
(Source: Adopted from Howell, 2014:15)

3.4.2.1 The five conflict management styles

- **Accommodating:** Solving conflict using this type of style simply means acting to keep peace in the working environment. This style is based on a willingness to accommodate all parties involved in the dispute, for the sake of meeting an agreement, by allowing them to 'get their way'. However, focusing on making peace this way may lead to offending the other party involved, because it allows a certain party to win.

- **Avoidance:** The main contribution of this method is to reduce conflict in the workplace by avoiding the primary conflict so that it does not intensify further. Nevertheless, avoiding the main conflict sometimes is not the solution because the initial conflict will still exist and remain unresolved. Sometimes avoidance means removing the parties that do not get along. Weiss et al. (2017:66-80)

suggest that avoidance of conflict for any reason should not be taken as the first solution; rather, it should be considered to underplay the conflict at hand at that particular instance in time. Zapf and Gross (2001:497-522) agree that avoidance will lead to more conflict in future if this management style is always applied. Furthermore, the parties that feel neglected might cause more problems, thereby hindering progress of the project.

- **Compromising:** According to Bar-Tal (2000:351-365), compromise is a way of resolving any disputes throughout by allowing all the parties involved in the conflict to raise their concerns. Unification of the environment is sought by finding common ground that all parties agree with. This style is viewed as a loss by both parties, as they have to give up certain things and consider the impact on the bigger picture rather than the current situation.

- **Competing:** De Wit, Greer and Jehn (2012:360) suggest that this style requires influential managers who take quick action and who do not side with any party. No compromise is considered and only that which is relevant, is recognised. This style comprises stating your position and not being phased by the opposing parties' points of view. This is a common approach and parties are not allowed to raise their viewpoints of the dispute(s). Decisions are made without their involvement. By not giving other parties the chance to raise their perspective on the issue, decisions are final and without other's involvement, sometimes without aligning principles and morals – all of this appear correct for those in control. Bear in mind that this style is common, as the conflict is solved quickly with little time wasted on obtaining all the facts. However, this style is usually disastrous and must not be deemed as the best solution.

- **Collaboration:** Reis, Vieira and de Sousa-Mast (2016:107-119) define collaboration as an approach of achievement by using techniques to produce positive interaction. The collaboration management style focuses on working well with others and valuing input to achieve a particular outcome. This is done by being cooperative, and having a simple way of identifying necessary issues, and solving them together as a team. The team collaboration should be taken seriously to manifest long-term results. It creates a win-win situation for everyone involved, with all feeling satisfied with the final decision.

3.5 Chapter summary

This chapter explained the risks found in running a project. The human factor was identified as the most common cause of risk. It was found that past experiences determine the existence of risk in the working environment and life in general. Some of the common causes of conflict that management needs to deal with professionally were explored. Models that can be applied when trying to resolve conflict in the working place were also discussed, as risk is always to be expected. Resolving conflict in the workplace needs fair leadership that that communicates well with colleagues and mitigates misunderstandings. The clear identification of roles and responsibilities is important to leaders, managers and the organisation as a whole. Even disagreements must be in the best interest of the organisation, without causing discomfort to any individual. Should a disagreement arise, management can apply various ways or models to solve conflict in the workplace. These models must however be used carefully and to the benefit of all the parties, without prejudice or discrimination against certain individuals. Ultimately, a good leader is needed, able to apply only the most beneficial skills, to resolve conflicts and mitigate a lack of accountability among colleagues.

CHAPTER FOUR: RESEARCH DESIGN AND METHODOLOGY

4.1 Introduction

Research is defined as a systematic process used for gathering data that are required to assist with answering a problem statement or research question (Gale et al, 2013:1-8). The process is scientific, with logical, sequential steps that can be repeated by others who may want to conduct the same research (Polkinghorne, 2005:130-137). The approach is systematic and follows a particular path that should have relevance to the type of data that are needed and the purpose for which the data are required. The critical aspect is that the data collected may too often be needed to make decisions about situations or problems that require proper decision making. The approach to this research is informed by the type of problem and based on information covered in the preceding chapters in relation to this problem. Saunders et al. (2018:1893-1907) posit the theoretical application (as provided in the preceding chapters) is ideal for decisions that need to be made on which methodologies to followed. These are based on the problem statement of the research, the study gap.

4.2 Problem statement

Conflict in projects is a common phenomenon and takes on different shapes depending on its impact on operations. Mitigation of risks is a critical component of effective project execution considering the possible effect of conflicts on the project execution success rate. The estimate is that approximately 40% of construction projects do not complete on time, and are then classified as failed execution processes. Conflicts are not limited to any one aspect of project execution, as these may happen from the conception stage right through to the project handover stage; thus, the monitoring of conflicts becomes critical for effective execution. Project conflict resolution is therefore part of the project risk planning needed from the beginning and throughout the process. The multiplicity of the sources of conflicts increases risk management failure, as some conflicts are not easy to identify beforehand, because conflicts are engendered in the people that are the single most critical element of any successful project execution. This study focused on evaluating the relevance and applicability of traditional methods within the Cape Town (South African) context, considering the volatile racial demography.

4.3 Research objectives

Research objectives are primarily the expectations that the researcher has embarking on the research process. These are directly related to, or derived from the problem statement, which identifies the study gap to be researched. The research objectives in this study are classified into two main types, namely primary research objectives and secondary research objectives. The primary research objective is the main research objective for the project.

4.3.1 Primary research objective

- Establish the relevance of the traditional five conflict management methods to the multi-cultural construction project in the Cape Metropolis

4.3.2 Secondary research objectives

- Identify common predictable sources of conflicts in the construction project environment
- Identify common areas of agreement that motivate performance and harmony among the project practitioners
- Identify forms of discomfort that may demotivate teams and sub-teams to perform effectively
- Identify racial or cultural differences on work ethics among the practitioners in the project environment
- Identify the level of compliance of the existing processes used for conflict management among the practitioners

4.4 Research question

The research question is a key element in any research as it determines what literature will be used to gather information. The research question is a direct extraction of the research objectives as it seeks to help meet the research objectives of the problem statement. The research question is further divided into a main research question and sub-research questions.

4.4.1 Main research question

- How effective are the conflict management methods to the multi-cultural construction project in the Cape Metropolis?

4.4.2 Sub-research questions

- ➤ What in your view are the common factors or causes of conflicts among the project practitioners in the Cape Metropolis?
- ➤ What in your view are the common areas of agreement that motivate performance among project practitioners?
- ➤ What in your view are behaviours of team members that cause discomfort among the project practitioners?
- ➤ What observable cultural differences have an impact on work ethics and discord among the construct project team members?
- ➤ In your view, is the current format of conflict management ideal for creating a united project practitioner force?

The research questions are in a sense a 'break down' of the problem statement into finer elements that should be used to solve the research gap. The research questions also inform the researcher on what designs and methodologies may be the most applicable for the research. Not every research design or research methodology fits the research; decisions have to be taken on what exactly should be researched. Therefore, the researcher had to make informed decisions on the research design and the research methodology.

4.5 Research design and research methodology

Too often, research design and research methodology are interchangeably used as if they are the same. The reality is that these are two very different sequential processes, addressing different aspects of the research process. The research design is defined as the process, stages, or road map to be followed sequentially and logically in the research process (Tait, Mazibuko & Jowah, 2015:313-335), answering the question, "What needs to be done?" On the other hand, the research methodology and philosophy focus on how the different stages of the design process will be conducted. This is critical, as the "how" process may mean the difference between correct, valid findings, and findings that may not be relevant to the reality of the situation (Nosek, Spies & Motyl, 2012:615-631).

4.5.1 Research design

The research design as alluded to above is the road map to be followed in research, and starts with the questions in the following order: (i) What is to be researched? (the problem statement); (ii) What are the research objectives? (expectations by the

researcher); (iii) What are the research questions? (answers should be provided by the survey). These questions together lead to deciding what research design will be the most ideal, and the reason for this. There are numerous research designs from which to choose the design. The decision is based on the discipline and the intended results from the research. Table 4.1 below lists the commonly used research designs.

Table 4.1: Generic research designs
(Source: Researcher)

Research Designs	
Descriptive research design	Diagnostic research design
Experimental research design	Explanatory research design
Correlational Research Design	Exploratory research design
Review [literature review/systematic]	Meta-analytic [meta-analysis]

The research designs above are not exhaustive, and there are numerous other designs which are a combination of (used as) two or more designs for the same study. Kimberlin and Winterstein (2008:2276-2284) state that each design has specific and/or appropriate places and situations where it can be used without affecting the validity of the findings negatively. The decision on what design to use was therefore critical to this study, which focused on establishing the relevance of the conflict management methods in use. To decide on the most appropriate design, an objective research design was selected to meet the critical aspects of a scientific research (DeBoer, 2000:582-601). The design needed to comply with the expectations of a scientific research undertaking. The design was structured to address the expectations of the problem statement. The ideal objective research design was expected to be neutral, reliable, valid and allowing for generalisations to be drawn. The researcher opted to use the descriptive research methodology as it met the conditions of an objective research design within the context of the study.

Descriptive research design is clarifies the situation of the phenomenon being studied, and both quantitative and qualitative research methodologies can be used. This enables the researcher to identify and/or measure the central tendency.

The disadvantages of the descriptive research design are primarily an overdependence on tools and techniques, the qualitative element of the research is

not repeatable (thus, it does not produce with the same results), and it may not always be used to prove or disprove existing hypotheses.

The advantages of descriptive research design:
- Is usable as a pre-cursor for a more elaborate quantitative research on the phenomenon being studied
- May assist in identifying variables for future measurable quantitative studies of the phenomenon
- May determine and indicate likely weaknesses and limitations of the study, thus enabling more focused studies
- Allows for generalisation of the phenomenon on the certain aspects of the study and may be of assistance in the development of theories

The researcher considered the advantages and disadvantages of descriptive research design and concluded that the research objectives could be met using this design; thus, the advantages were more that the disadvantages for the study. The research design focuses on *what* is to be done, but once that has been identified and detailed, there is a need to discuss *how* this will be done. This led the researcher to decide on *how* the different stages would be executed.

4.5.2 Research methodology

Research methodology is the use of specific techniques and tools following objective sets of procedures to identify, select, analyse and critically evaluate the overall validity and reliability of the process. There are two types of schools (thoughts), namely quantitative and qualitative research methodologies. Research methodology addresses *how the processes* from the design will be implemented. It is equally important to note that the methods used may determine the quality of the research outputs. The two methodologies may be applied independently or in conjunction with each other, which is then referred to as mixed-methods research methodology. The researcher opted for the use of mixed-methods research, which was considered because of its benefits to the proposed study.

Mixed-methods research methodology is the systematic integration of quantitative and qualitative data collection methods in the same research; this permits more synergistic utilisation of the data. In this case, the two methodologies complement each other by providing both depth and breadth in the understanding of the phenomenon (Zweni &

Zuma, 2018:15-33). This methodology originated in social science research, but it is now commonly used in health research and other forms of research on human beings.

The disadvantages of mixed-methods research:

- It complicates the evaluations even more given the extensive and meticulous planning
- Integrating the two distinct paradigms is complex and needs high levels of experience in research to blend the two
- Sequencing the qualitative and quantitative methodologies is in itself a difficult task as these may be conducted in parallel
- There is need for multidisciplinary researchers to be open to accept the practices and views coming from a different school of thought
- It requires more labour and time than what may be needed for a mono- method study

The mixed-methods research design has its disadvantages, and understandably, some researchers may opt out and decide to use either qualitative or quantitative research, not both. However, this design has benefited many research projects by providing a holistic approach.

The advantages of mixed-methods research methodology:

- It assists with understanding possible contradictions between qualitative and quantitative results
- The qualitative aspect of the research provides the researcher with findings based on the human experience
- The methodology allows for scholarly interaction on two philosophies, which encourages the forming of multi-disciplinary teams
- It has significant flexibility, as it attempts to combine extreme research paradigms and bring them together into one study
- It reflects on the natural method used by human beings to collect data and information for developing beliefs and culture

The researcher considered the merits and demerits of the two paradigms, and then deliberated on the benefits of a multi-dimensional approach. The use of mixed-methods research was considered more appropriate to the phenomenon being studied and beneficial in that it would address the researcher's expectations. The methodology

is well suited for descriptive research design with its flexibility to accommodate the use of mixed-methods research.

Table 4.2: Difference between quantitative and qualitative research (Source: Jowah, 2015:103)

Quantitative [Positivist]	Qualitative [Anti-Positivist]
1. Focuses on observable behavior	1. Focuses on laws of relationships
2. Focuses on universal relationship laws	2. Focuses on human experience
3. Focuses on causes of the phenomenon	3. Focuses on experience of the phenomenon
4. Uses the natural sciences model	4. Uses the experiential model
5. Aided by firm checks and balances	5. Does not have firm checks and balances
6. Emphasis is on measurement and analysis	6. Emphasis is on investigating processes
7. Natural sciences built structures	7. Has socially built nature of reality
8. Focus is on causal relationships and variables	8. Focuses on object relationship with researcher
9. Ideal for objective data with numbers	9. Uses subjective data from opinions
10. Uses rigidly structured methods	10. Uses flexible exploratory methods
11. Tries to understand from outside	11. Tries to be involved with subjects
12. Needs a static environment	12. Works with non-static realities
13. Uses a particularistic approach	13. Uses holistic [wide data] approach
14. Uses large samples	14. Uses small samples

As illustrated in table 4.2, there are marked differences between these methodologies, which may be used to make the correct selection. Although they differ in many aspects, they complement each other in certain types of research. The researcher opted to use both methodologies to take advantage of the positive attributes of each methodology. Creswell and Garrett (2008:321-333) posit that adopting both the qualitative and quantitative research methodology has the benefit of using the positive attributes to assist with providing a holistic approach to the research. This benefit was utilised in the study, and it is believed that the findings provide a near complete picture of what was expected from this research.

4.5.3 Sample frame

Johnston and Sabin (2010:38-48) describe a sampling frame as the material or device from which a sample is derived or extracted from the population being studied. Essentially, those in the population (individuals, institutions, households, etc.), who have the characteristics as specified in the study, in this case the sample frame for the

study, were identified as individuals who specifically work on construction projects in the Cape Metropolis. The sample frame was estimated to be 1000 people according to human resources records.

4.5.4 Target population

The population for this study was project practitioners at construction sites where the activities take place throughout the life of a project. These were identified by the researcher as people actively involved in project execution, operational staff whose functions impact directly on the execution. These staff interact daily and report to a manager or supervisor, in which case they are affected by the manager/supervisor's conflict management models or processes.

4.5.5 Sample

As stated in section 4.5.3, the sample comprised the construction project practitioners taking part in project execution on a daily basis, specifically people reporting to a senior person, as this would enable them to study or encounter the processes and methods used by their manager in the resolution of conflicts. The researcher opined that the individuals selected for the sample would be in a good position to confirm if the methods used to run the project were relevant to the traditional methods used for their circumstances in a multi-racial structure in the Cape Metropolis.

4.5.6 Sampling methods

For the research, systematic random sampling was used to select respondents at all the sites where construction was taking place. Using four (4) as a base number, every 4th person was eligible to taken part in the research. The number 4 was chosen randomly. On a few occasions, convenience sampling was used where the numbers in the units were too small to allow for systematic random sampling.

4.5.7 Sample size

Fugard and Potts (2015:669-684) suggest that the size of the sample is affected by numerous facts, including the cost, time and accessibility of the subjects for the research. The larger the sample, the more likely the margins of error will be reduced, even though $^1/_{10}$ is considered sufficient for generalisation (Schein & Ungar, 2007:235-265). The sample size was determined based on the research objective, the dependent variables being studies, the time needed to complete the research, the cost, and the

accessibility of the respondents. The researcher, using the systematic random sampling method, accessed 250 participants for the research.

4.6 Differentiating research design from research methodology

The application of research design and research methodology is based on literature that focuses on research designs, research methods, and the importance thereof. It is necessary to differentiate between research design and research methodology, even though these are used interchangeably by many researchers. Jowah (2015:77) separates them by the use of definitions: Research design is the path or map to be followed systematically in the research process, clearly stating what is to be done. The design systematically (chronologically) identifies the activities to be followed in a particular order with one step after the other, whereas research methodology speaks of the methods to be used, how the steps in this project will be executed in compliance with the requirement of the design. The research methodology is the implementation of the research design, just as a brick layer follows the architect's plan for a house and builds the house according to plan. Evidently, the two are related in that the design leads to the methodology, and both need to be congruent to the objectives and research questions. This was considered carefully during this survey. Table 4.3 below illustrates the differences between the design and the methodology.

Table 4.3: Differentiating research design from research methodology (Source: Jowah, 2014:77)

Research Design	Research Methodology
Strategic master plan	Operational or execution plan
Emphasis is on the road to be walked	Emphasis is on how the walking is done
Emphasis is on what results are expected	Emphasis is on tools/techniques for results
Guided by research problem/question	Guided by the tasks and work packages
Focuses on rationality of research	Focuses on procedures and processes
Focuses on "what should be done?"	Focuses on "how should it be done?"

The table contrasts the design and the methodology. The design is the master plan, indicating what needs to be done to reach the objectives. The methodology is the tactical plan used to operate or execute the activities on a regular day-by-day basis. The design indicates which road to walk, with the focus on reaching the expected results, whereas methodology concentrates on how the walking will be done. The

design involves the logic behind the 'doing' and methodology is interested in the procedures and processes. The research designed is guided by asking the questions. The research methodology then describes how each one of these road map milestones will be converted from a plan to a deliverable – the completed plan.

The researcher defines the research methodology as an explanation of *how* the techniques identified in the research design will be used or implemented (Johnson, Onwuegbuzie & Turner, 2007:112-133). Whatever the tasks, the methodology explains how these tasks must be executed since there are many possible methods that could be applied to implement the master plan.

Figure 4.4: The road map for this research
(Source: Adopted from Jowah, 2015:79)

Road Map of this Study	
1. What is to be researched?	2. What are the expectations?
3. What is the research question?	4. What is the target population?
5. What type of sample is needed?	6. What sampling methods will be used?
7. What will the sample size be?	8. What research method will be used?
9. What type of instrument will be used?	10. What data collection methods will be used?
11. What data analysis methods will be used?	12. What type of reporting will to be used?

4.7   Data collection instrument

A **questionnaire** is a tool constructed scientifically to collect data for an investigation by using questions to help understand a phenomenon. The questions are constructed in alignment with the problem statement and the research objectives (Diefenbach, 2009:875-894). This set of questions may have difficulties in being accepted as the most effective way to collect information, especially if the critics focus on the weaknesses of a questionnaire. The descriptive research methodology lends itself to the need for using a questionnaire as tool to collect data for this research. The researcher investigated various methods of data collection and concluded that a questionnaire is a reliable method to use. The initial choice of adopting descriptive research design informed the use of a descriptive research methodology. Therefore, it became imperative that the research instrument is relevant to both the design and methodologies to collect quantitative data (close-ended) and the qualitative (closed-ended) data simultaneously using one instrument. This helped with reducing both time

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and costs, even more so because the respondents interviewed for the quantitative data collection we the same people who provided the qualitative data. The researcher took into consideration the advantages and disadvantages of the use of questionnaires.

Disadvantages of using a questionnaire:

- The problem is explored in a limited way as the questions are constructed with the intention of delivering a specific report
- The responses are restricted to what is deemed important
- The right questions are not always asked, because an outsider (the researcher) may not have full knowledge of the research area
- The responses to the same questions may not always be as expected by the researcher
- The understanding of what is asked depends on the comprehension of the responding individual
- It may be difficult to know what information has been left out by the respondents unless further questions are asked
- Respondents may tell you what they think you want to be told, especially if they are not excited about the research
- The respondents remain anonymous and may therefore give false/incorrect unverifiable information

Advantages of using a questionnaire:

- The use of questionnaires is comparatively less expensive and more manageable by the researcher and team that other data collection methods
- Questionnaires are realistic, because the researcher may administer these directly to the respondents and clarify where necessary
- It provides quick results, especially if they are administered personally to the respondents
- Making comparisons of the different answers provided by the respondents is easy
- It is easy to clean, edit and code questionnaire data before capturing it and analysing the research findings
- The questions are standard to all the respondents, thereby making it easy to compare the responses and results

- It is easy to test the research instrument for both validity and reliability before it is administered to the respondents

The advantages and disadvantages were considered and the researcher decided on the research tool (questionnaire) as the most effective way of collecting data for this research. The strengths or merits of the questionnaire aided the researcher in his decision to use the questionnaire as tool that aligns with the descriptive research design. The research instrument was constructed in three parts, namely:

Section A – Biography: The questions in this section aided with identifying the characteristics of the respondents and their eligibility to participate in the research. There were specific expectations in terms of the characteristics of the respondents in view of the research at hand.

Section B – Likert scale: This section focused on the perceptions, beliefs, attitude and other related abstract elements of the human being. These are not quantifiable; hence, the Likert scale enabled the respondents to rank their answers on a scale of 1 to 5 to determine the extent of their feelings towards the issues under discussion. The scale was structure as follows: 1 = Strongly disagree, 2 = Disagree, 3 = Neutral/ indifferent, 4 = Agree, 5 = Strongly agree.

Section C – Open-ended section: This section comprised of open lines where the respondents could freely write their views about specific issues regarding the study. The respondents had to list as many as five (5) aspects for each request provided, and they were free to converse with the research assistants who administered the questionnaires.

4.8 Data collection method

The questionnaires were administered directly by the researcher with the help of five (5) trained interviewers. It was assumed that this method would assist with increasing the rate of return of the questionnaires, and provide answers to any questions the respondents might have. The questionnaires were then collated, edited, cleaned, coded and captured for analysis purposes.

4.9 Data analysis

An Excel spreadsheet was used for the capturing and analysis of the data because of the availability of the Excel tool to the researcher. The tool also assisted with the

construction of the histograms, tables, pie charts, and other forms of diagrammatic illustrations that were used for the research. The relationships of the variables were used to interpret the findings of the data obtained through the survey.

4.10 Ethical consideration

In addition to the university subscribing to research ethics, it has become common practice that the respondents be protected from unscrupulous and unethical research practices. The respondents were volunteers and had been told during the debriefing that they could withdraw from partaking in the research whenever they felt uncomfortable. Confidentiality was maintained and no names were allowed on the questionnaires.

CHAPTER FIVE: DATA RECORDING, ILLUSTRATIONS, ANALYSIS AND INTERPRETATION

5.1 Introduction

This chapter records the data from the research findings as per the questionnaire that was used to collect the data. The main objectives were primarily to identify generic sources of conflicts in project execution and measuring the extent to which the conflict areas in management affect the success of a project. The objectives of the study were to establish structures that can be used to model effective conflict management in construction projects in the Cape Metropolis. These emanated from universal usage, which is structured in a different cultural setting, hence the researcher wanted to establish a model ideal for a multi-cultural environment by exploring the best possible ways of dealing with conflict at the construction site through contributions from respondents.

5.2 The empirical investigation and objectives

Our study presented the increase of projects failing due to the high number of conflicts among project members. Some conflicts might be mitigated in time given the many departments involved in a project. However, the construction industry seems to be dominated by a high number of lower level education staff and a diversity of groups involved. A main reason for projects failing or conflicts arising is workers that do not understand each other's background and sensitive feelings about different views on culture background. This factor confirms the importance for management to understand the team members in order to build a winning team. By not identifying and applying the most appropriate method to solving problems, the conflict is escalated further and unsolved conflicts tend to re-appear. It is therefore essential to identify the sources of conflicts during project execution in the highly diversified construction industry in the Cape Metropolis.

5.3 Data analysis

Data analysis comprises processing the collected data, learning the instruments, editing the instruments, coding the questions by using the instruments, and capturing the data onto an Excel spreadsheet (ESS). For this study, the data were converted to illustrations in the form of pie charts, bar charts, histograms, frequency polygons,

graphs and tables to allow for easy comparison of the variables. The relationship between the variables is presented and explained in the next sections of the chapter.

5.4   The method used to report

The method used to report on the data analysis presents specific information arranged purposely for particular questions contained in the research instrument. The arrangement involves the sections, each with the relevant questions and responses, in the same order as it appears on the research instrument. The data collection instrument was designed as a three-section document:

- Section A – Biography
- Section – B Likert scale
- Section C – Open ended

Each section together with the relevant questions and responses are presented below.

5.4.1   Section A: Biography

It was expedient that the respondents have all the expected characteristics as per the sample design, and this section sought to qualify the respondents. Responses from the individuals who did not qualify as per the sample standard were excluded during the cleaning and editing of the data before it was capturing onto the Excel spreadsheet. This section therefore lists the nine (9) relevant questions one-by-one, consecutively, each with the responses from the participants.

QUESTION 1: Indicate your age range by ticking the appropriate box below

RESPONSE: The purpose of this question was to determine the age range of the respondents, although somewhat precarious, to assist with evaluating the age difference of the staff on the construction site. The age of the individual is considered critical because it also affects the maturity level of the workers and their ability to handle conflicts with understanding. Sánchez-Álvarez, Extremera and Fernández-Berrocal (2016:276-285) points to the relationship between the age of the individuals and their level of emotional intelligence. The responses are illustrated in figure 5.1 below.
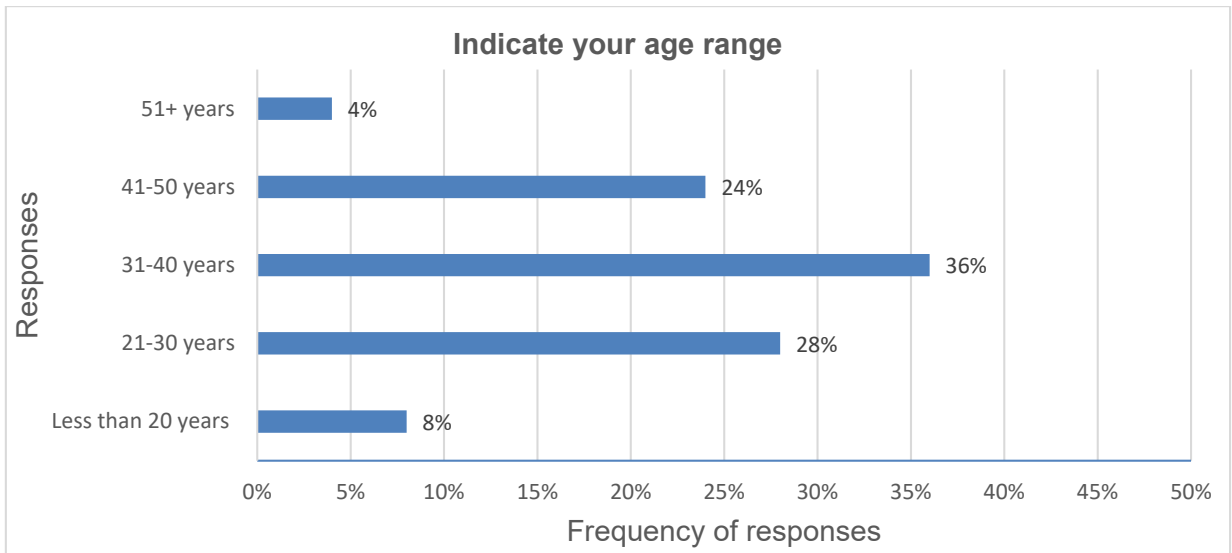
Figure 5.1: Age range of the respondents
(Source: Researcher)

From the responses illustrated in figure 5.1, it can be seen that 36% of the respondent falls within the group 31-40 years, presumably having higher levels of emotional intelligence (EQ). The next largest group is the 21-30 year range at 28%, followed by the 41-50 year age group at 24%, with those less than 20 years at 8% and the smallest group, 51+ years of age, at 4%.

QUESTION 2: In what section or department are you working?

RESPONSE: This question intended to confirm whether these respondents qualified for the research, as this would help establish the relevance of the participants and improve on the reliability of the results. The response is illustrated in figure 5.2.
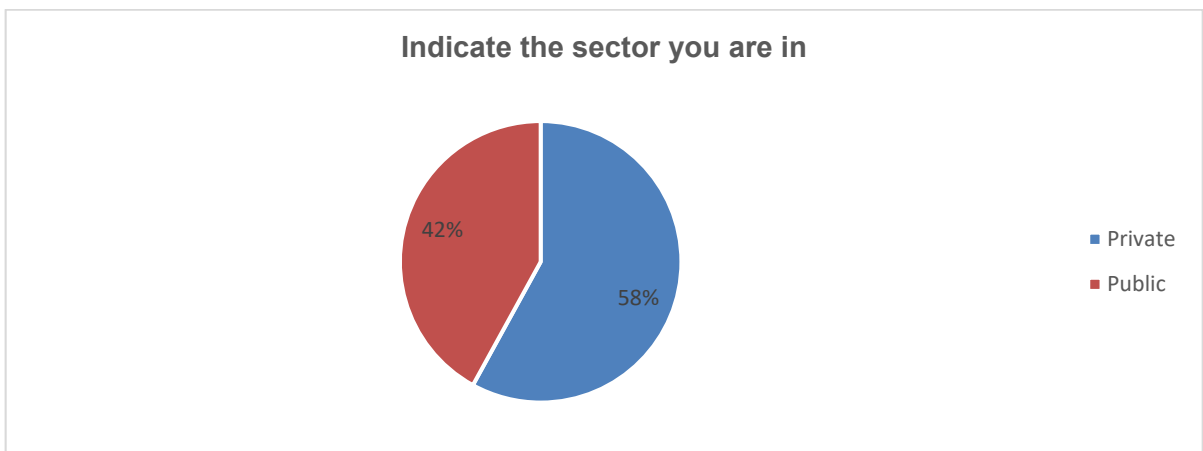
Figure 5.2: Departments represented by respondents in the survey
(Source: Researcher)

The construction industry plays a large role in both the public and private sector, and the latter has complexities of its own. Figure 5.2 shows that 42% of the respondents were from the public sector and 58% from the private sector. Due to certain tasks performed, it may seem that conflicts happen only in the private sector, but from this question, it is clear that conflicts arise in both sectors. This question focused on differentiating the involvement of respondents per sector and aligning their skills, i.e. bricklayers, carpenters, and electricians, among others, to the construction industry.

QUESTION 3: What is your position in the organisation?

RESPONSE: This question aimed to determine the level of the position of each respondent in the construction organisation and view the quality of the responses based on conflict management. The level of a respondent's position played a major role in determining where most of the conflict originates. Figure 5.3 shows the responses of the respondents.
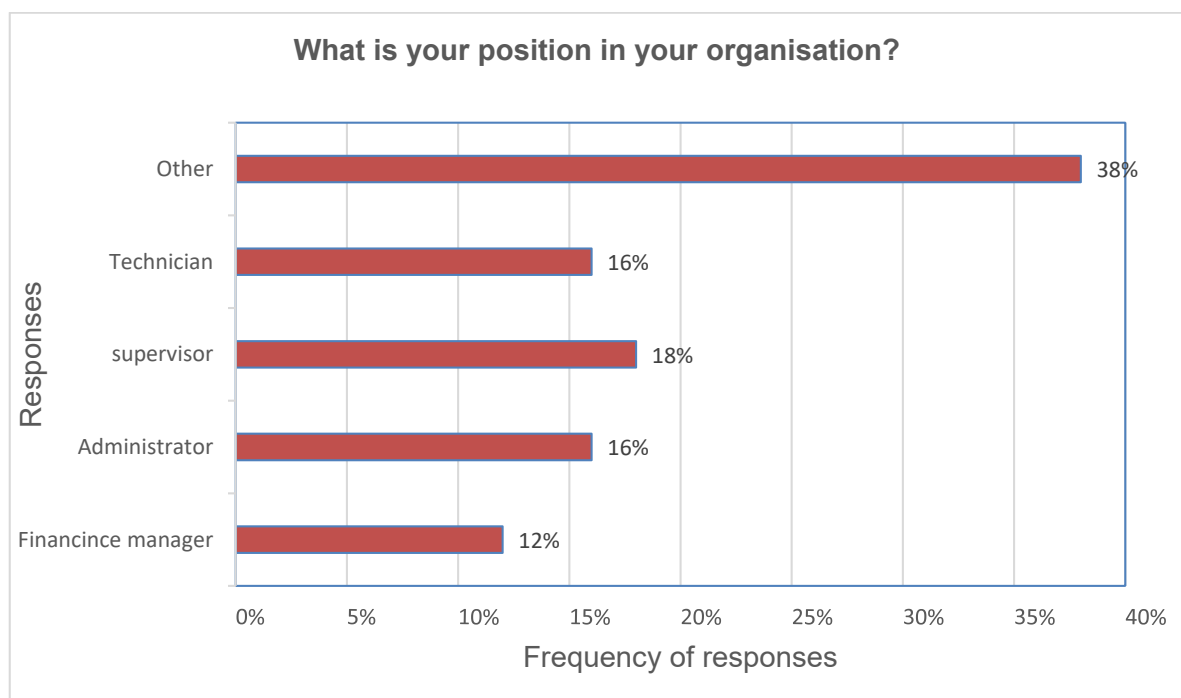
Figure 5.3: what is your position in the organisation?
(Source: Researcher)

As per the answers in figure 5.3, 38% of the respondents stated a position other than what was mentioned in the question, while 18% selected 'supervisor', 16% selected 'technician' and 'administrator' respectively, and 12% stated that they are finance managers.

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QUESTION 4: If other, please specify

RESPONSE: This question aimed to obtain information from the respondents who answered 'other' in Question 3. In the construction industry, there are many and various positions for the day-to-day activities in the company. This question was helpful and formulated to include all the positions in the construction industry.

QUESTION 5: Indicate your years of working experience

RESPONSE: This question was formulated to determine the years of working experience of the respondents. The number of years of experience is a key factor because it shows how many years the respondents faced problems in the construction industry (Niazi & Painting, 2017:510-517). An indication of many years working experience offers the assurance that conflict is handled well. In this study, the years of experience provide an indication of the frequency of conflict the respondent had to endure and how much experience he/she has in solving conflicts. This is shown in figure 5.4 below.
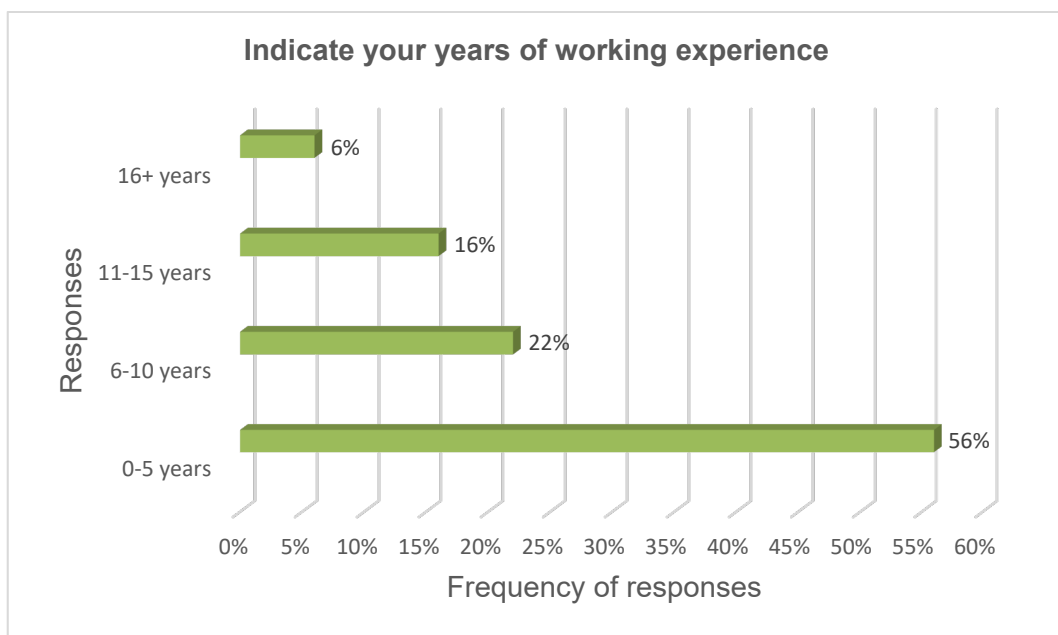
Figure 5.4: Indicate your years of working experience
(Source: Researcher)

According to the responses presented in figure 5.4, 56% of the respondents indicated that they have 0-5 years working experience in the construction industry, 22% indicated 6-10 years of experience, 16% indicated 11-15 years working experience, and 6% stated that they have 16 years or more working experience. This shows that the majority of respondents have 0-5 years of experience, which points to the possibility of

many conflicts igniting as not many respondents have long-term working experience in the construction industry.

QUESTION 6: How many people report to you?

RESPONSE: The aim of this question was to present information on how many people report to the prospective respondent. It might be only one or two people, but even the supervisor with 20 people reporting to him/her started with only a few people. People who work well by following instructions are an indication that they have taken on more responsibility in terms of handling conflict. The responses are presented in figure 5.5 below.

How many people report to you?

Response	Frequency
17+	12%
11-16	10%
6-10	24%
Under 5	54%

Frequency of responses
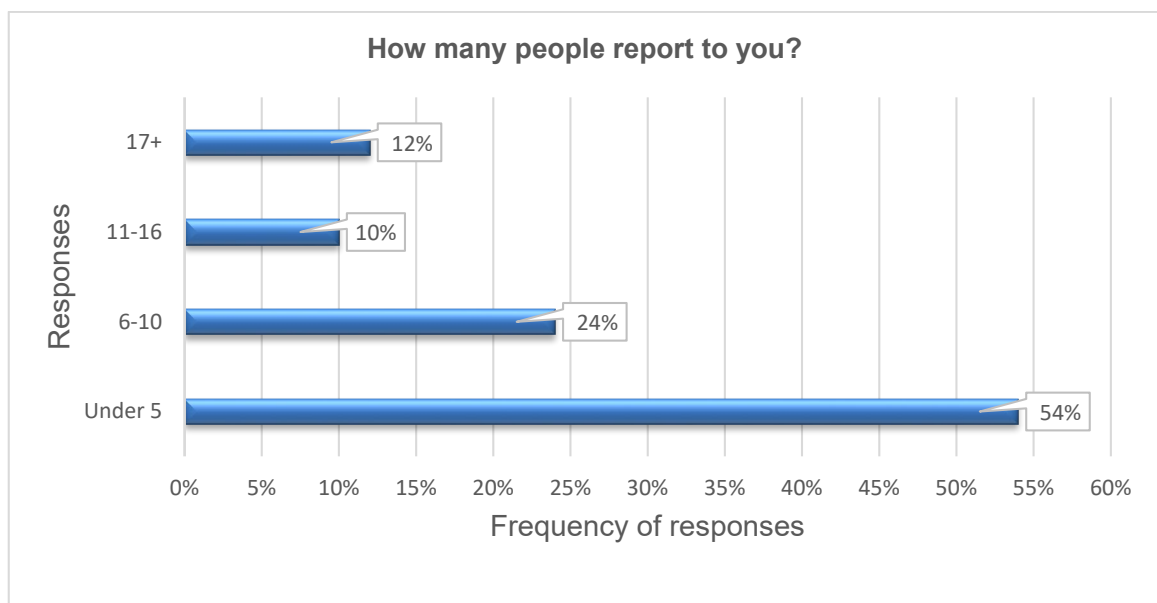
Figure 5.5: How many people report to you?
(Source: Researcher)

Figure 5.5 shows that the majority of respondents, 54%, have less than five (5) people reporting to them, 24% has 6-10 people, 10% has 11-16 people, and 12% has 17 or more people reporting to them. From this outcome, it can be seen that the number of people reporting to the respondents is limited, which makes it seemingly easier to control conflicts among workers.

QUESTION 7: What department in construction do you work in?

RESPONSE: The aim of the question was to determine the exact department each respondent worked in. Construction is divided into many components; it is therefore important to know what components the respondents resorted under (Bajjou & Chafi, 2020:2-13). This is presented in figure 5.6 below.
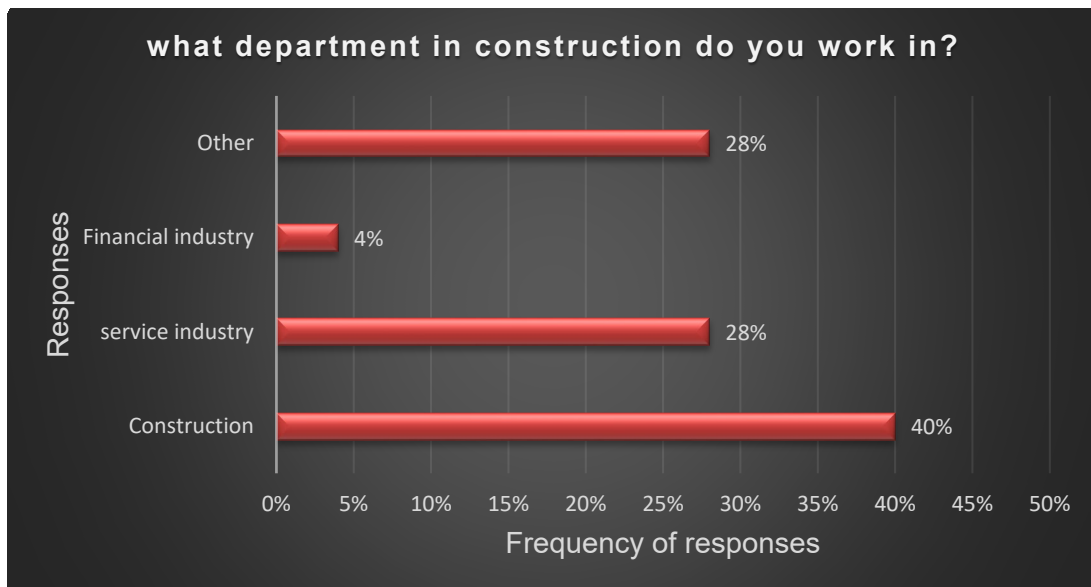
Figure 5.6: What department in construction do you work in?
(Source: Researcher)

According to figure 5.6, as expected by the study, 40% of the respondents worked in construction, 28% in the service department, 4% in the financial department, and 28% worked in other departments. As anticipated, the majority of respondents were from construction, because the focus of the study was on the construction section of the business.

QUESTION 8: If other, please specify

 RESPONSE: Construction comprises many departments or components working together to meet the expectations of customers. Departments/components not mentioned in Question 7 (i.e. those who answered 'other'), are also important as they form part of the construction industry and play a meaningful role. Construction does not merely comprise building or maintaining – many role players are involved that are not seen as construction, e.g. the banks. This question aimed to determine those other departments or components.

QUESTION 9: Other information you would want us to know

 RESPONSE: Of the 100 respondents who were asked this question, only one responded. This one respondent contributed by saying that on some construction sites they still have much racism, including no equal payment to workers. There is no formal

grading done, and this leads to conflict escalating in the industry because of changes not done in time.

5.4.2 Section B: General understanding of conflict in your organisation?

This section demonstrates and debates statements that assisted the researcher with understanding conflict in the organisation, specifically in the construction section. These statements were formulated to gain a clear view on the causes or sources of conflict in the work environment as well as conflict management strategies, general problems that escalate conflict, and management's role in conflict management.

The findings were drawn from participants' responses to the statements. This was done by the respondents ranking the statements on a scale of 1-5 as follows: Strongly disagree = 1; Disagree = 2; Neutral = 3; Agree = 4; Strongly agree = 5.

These scales were not specially formulated according to the strength of an approach or observation; it was merely constructed to assist the respondents with narrating on a statement presented.

5.4.2.1 Sources of conflict in your work environment

STATEMENT 1: It is my duty as an employee to meet the expectations of my manager

RESPONSE: To moderate the occurrence of conflict, it is important as employee to do work as per expectation of the manager, not on duress but by following the rules and regulations of the organisation. As long as the manger is not working well with their employees, it is possible that the expectation will not be met in time and in accordance with suitable outcomes. A reasonable manager is likely to have the best team following instructions and having a clear view should the conflict arise. This is shown below in figure 5.7.

According to figure 5.7, 48% and 28% of the respondents indicated that they strongly agree and agree, respectively; 16% remained neutral, while 4% of the respondents strongly disagreed and 4% disagreed. This shows that the majority of respondents were in no doubt that it is their duty to meet the expectations of the manager. As employees, they clearly understand that they need to action or execute what is required by their manager. This is a good indication that at least managers are respected by their employees in the construction industry.
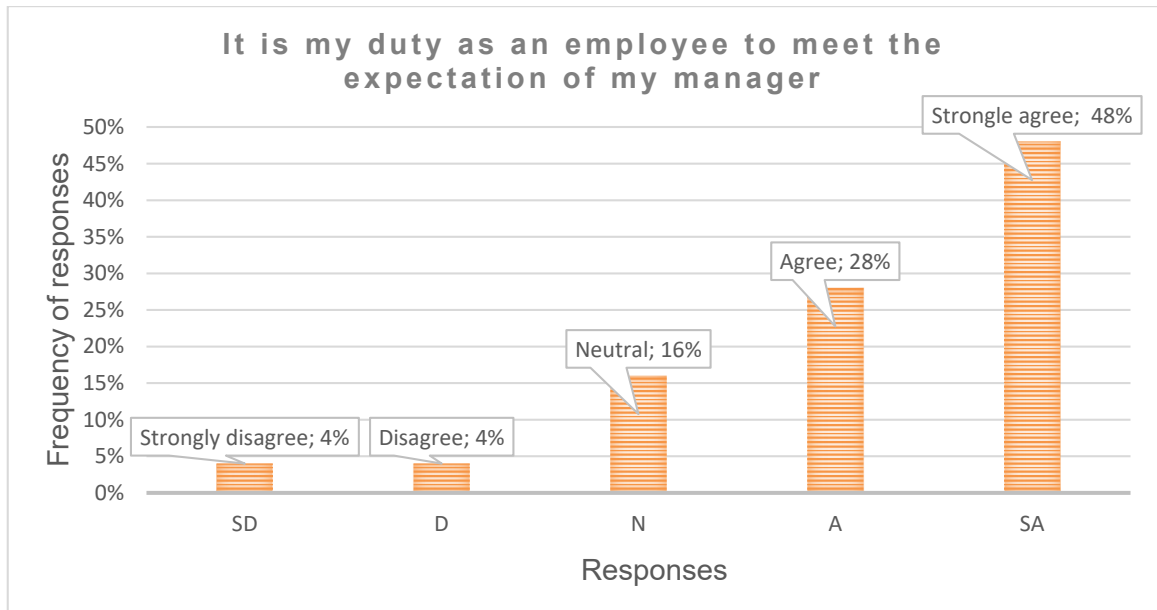
Figure 5.7: It is my duty as an employee to meet the expectation of my manager
(Source: Researcher)

STATEMENT 2: I believe withholding information on purpose causes conflict

RESPONSE: To reduce the starting of unnecessary conflict it is important not to withhold information. Some people keep back the best information deliberately to start conflict in the workplace. It is stated many times that information is the key (Horkoff et al., 2014:1015-1041), meaning workers sharing positive information among themselves in the working environment is the best possible healthy working environment. The responses are shown in figure 5.8 below.
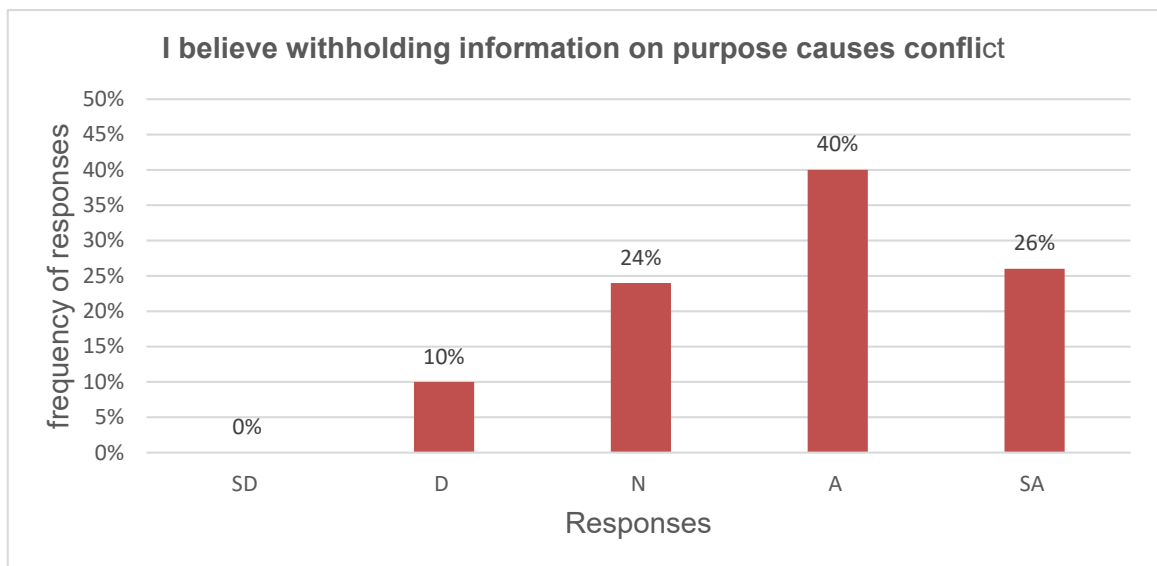
Figure 5.8: I believe withholding information on purpose causes conflict
(Source: Researcher)

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Figure 5.8 shows that 40% of the respondents agreed that holding information back on purpose causes conflict. However, it is disappointing to the researcher that 40% selected agree and only 26% selected strongly agree. Some respondents (24%) remained neutral, while 10% disagreed and no respondent indicated that they strongly disagree.

STATEMENT 3: Differences in culture cause conflict

RESPONSE: Cultural differences are believed to causes conflict in all sectors of the organisation (Mangi et al., 2012:20-30). The most important factor is to understand each other's background or culture. Because of a difference in understanding people's background, a simple joke at work on might cause major conflict and lead to huge misunderstandings. The stereotyping of certain groups about other groups causes conflict and reduces productivity in the workplace. As suggested by Joy and Kolb (2009:69-85), an effective manager learns cultural background of all his/her team members. The effectiveness of a manger leads to a healthy working environment and creates a strong working bond among the employees. The responses are presented in figure 5.9 below.
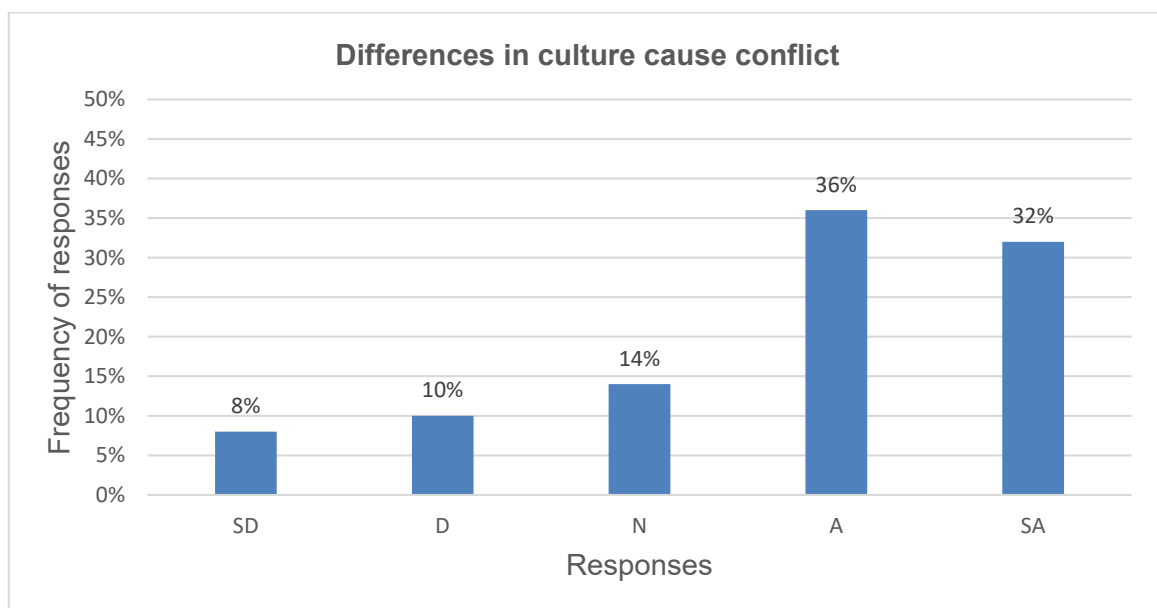
Figure 5.9: Differences in culture cause conflict
(Source: Researcher)

The illustration in figure 5.9 shows that the majority of the respondents (36%) agreed with the statement, supported by 32% of the respondents who strongly agreed, while some respondents (14%) were neutral. In total, 10% of the respondents disagreed and 8% strongly disagreed, meaning they did not support this statement. Notwithstanding,

the high percentage of respondents who were in agreement with the statement shows that many people do have a tolerance each other's cultural background at the construction site even though some jokes cause conflict.

STATEMENT 4: Ignorance and avoidance of responsibility result in conflict

RESPONSE: It is significantly advantageous to have an experienced manager who does not avoid responsibility, especially in terms of conflict management. All unattended issues are prone to lead to a team failing hugely in the workplace, as issues remain unsolved (Bae et al., 2014:217-254). If employees and employers are ignorant and avoid responsibility, there are no other people to solve these problems before they reach an uncontrollable stage. It is expected of all individuals in the organisation to take full responsibility for their action(s), no one will take responsibility for someone else's action(s). The responses are shown below in figure 5.10.
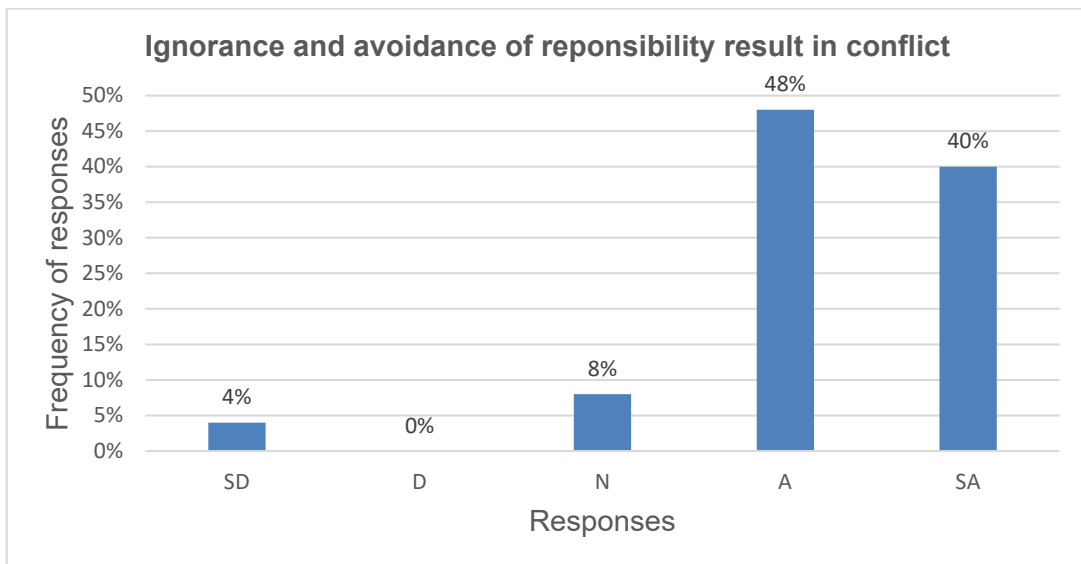
Figure 5.10: Ignorance and avoidance of responsibility result in conflict
(Source: Researcher)

With a better idea of what is expected from both employers and employees in the workplace and who is responsible for specific tasks, figure 5.10 shows that the majority (48%) agreed and 40% strongly agreed with the statement, while 8% remained neutral, 4% disagreed strongly, and 0% disagreed. It was heart-warming for the researcher to see so many respondents agreed and so few respondents disagreed with the statement that ignorance and avoidance of responsibility result in conflict.

STATEMENT 5: Failure to follow the rules and regulations of the company results in conflict

RESPONSE: Persons who fail to follow the rules and regulations of the company disrespect the mission and vision of the company, because rules and regulations are the backbone of the success of a company meeting all the expectations (Olszak & Ziemba, 2012:129-150). It is important to follow all the rules of the company, because observing all the protocols may lower the rate at which conflicts occur. Figure 5.11 is shown below.
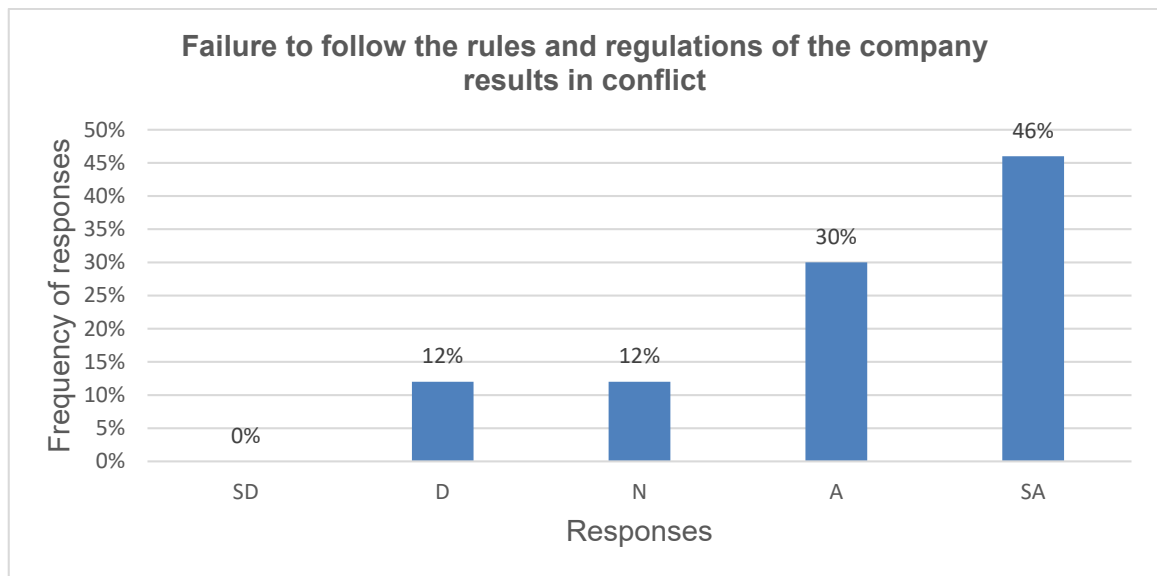
Figure 5.11: Failure to follow the rules and regulations of the company results in conflict (Source: Researcher)

According to figure 5.11, and as predicted by the researcher, the majority of the respondents (46%) strongly agreed with the statement, followed by 30% who agreed, while 12% remained neutral and 12% disagrees. No respondents strongly disagreed, which is encouraging.

5.4.2.2 Conflict management strategies

STATEMENT 6: Accommodating the opposing side is the best way of handling conflict

RESPONSE: Conflict in any sector and industry is always expected to rise. Newell et al. (2011:273-304) suggest that sometimes the strategy selected to resolve conflict is to accommodate the opposing side in order to have positive outcomes for the sake of keeping the peace and moving forward through learning from previous mistakes. Accommodating the opposing side is not always the way to go, but it helps to solve the conflict with a clear view of the reason that caused the conflict in the first place. Figure 5.12 shows the responses below.
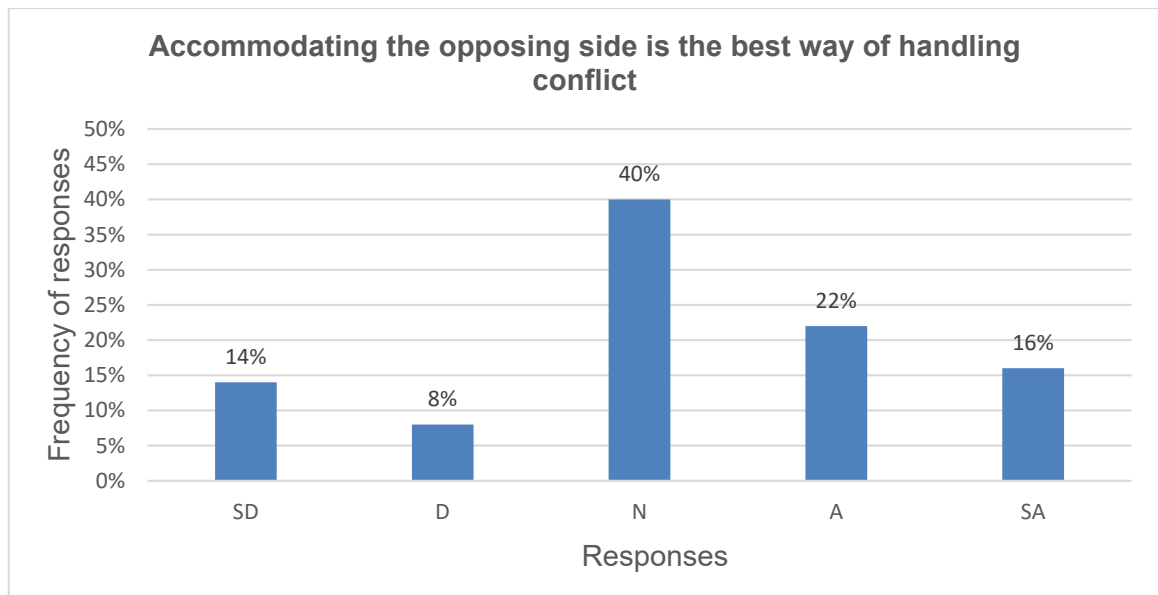
Figure 5.12: Accommodating the opposing side is the best way of handling conflict
(Source: Researcher)

Due to the sensitivity of this statement from the respondents' point of view, it was quite debated before they provided feedback. Figure 5.12 shows that the majority (40%) of the respondents opted to remain neutral. Furthermore, not all respondents were on the same page as 22% agreed and 16% strongly agreed, while 8% disagreed and 14% strongly disagreed. This shows that only a low percentage of the respondents took a different stance on this statement as was expected by the researcher. From the responses, it is clear that respondents were not keen on accommodating the opposing side when handling conflict.

STATEMENT 7: Avoiding conflict leads to project success

RESPONSE: Although it is not always easy to avoid conflict, having regular meetings reduces the chances of conflict. Holding meetings in time to avoid or deal with conflict during the early stage will prevent the conflict escalating out of control. The failure of projects is many times caused by conflicts that were not handled in time. The more management applies the best approach to conflict resolution, the more likely the project will complete on time. The responses to this statement are shown in Figure 5.13 below.

Figure 5.13: Avoiding conflict leads to project success
(Source: Researcher)

Figure 5.13 shows that avoiding conflict of being proactive indeed leads to project success. Thirty-four percent (34%) of the respondents strongly agreed and 30% agreed with the statement, while 18% remained neutral. It was necessary for the respondents to be more open with their responses, thus 10% disagreed and 8% strongly disagreed.

STATEMENT 8: Our organisation uses collaboration to deal with conflict

RESPONSE: Teamwork has proven to be an efficient and effective method to deal with conflict at the construction site, as different components are needed to run the project and reach the final stage (Serrador & Pinto, 2015:1040-1051). From management's side, collaboration is a suitable strategy towards solving conflict. Management needs to understand the perspective of all parties involved before the conflict escalates out of control. The study proves that management needs to involve all parties when solving conflict. Responses to this collaboration strategy are shown in figure 5.14 below.

Respondents remaining neutral lead the outcome of this statement with 44%, while 24% agreed, 16% strongly agreed, 10% disagreed and 6% strongly disagreed with the statement. The responses show that at the construction site visited for this study, the organisation does not fully collaborate when dealing with conflict.
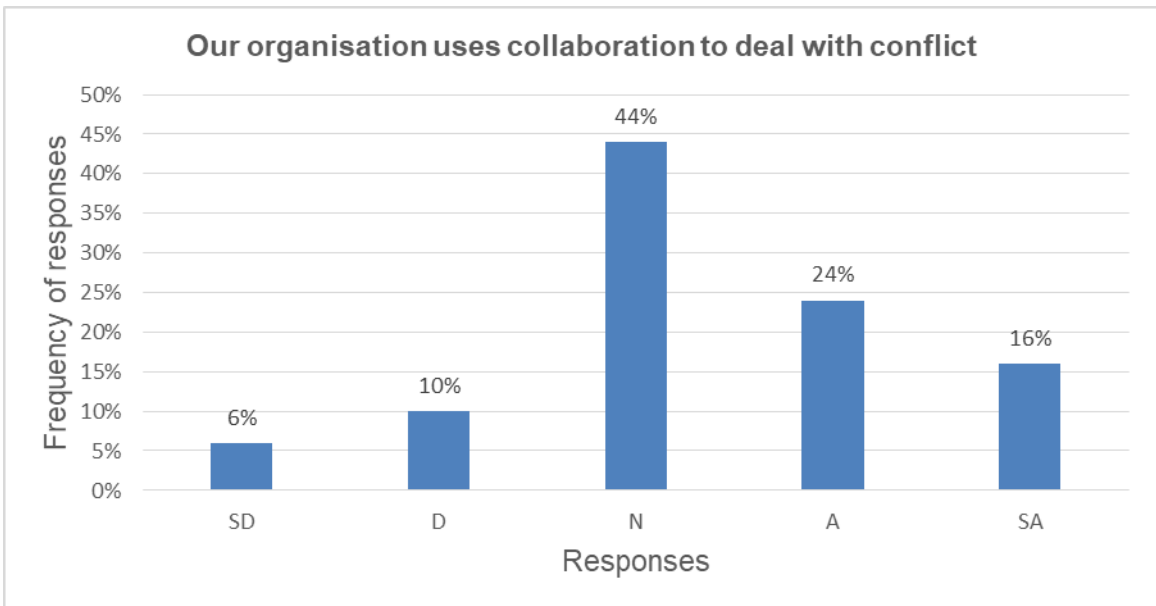
Figure 5.14: Our organisation uses collaboration to deal with conflict
(Source: Researcher)

STATEMENT 9: Compromise is the way to go when solving conflict

RESPONSE: Management need to compromise when solving conflict for the benefit of all parties involved in the conflict. Thus, all parties need to give up at least part of their demands and find agreements through communication and mutual acceptance of terms. Management has to seriously consider compromise when solving conflict, especially if they are not sure of the original source and reason for the conflict. The responses to the statement are shown in figure 5.15 below.
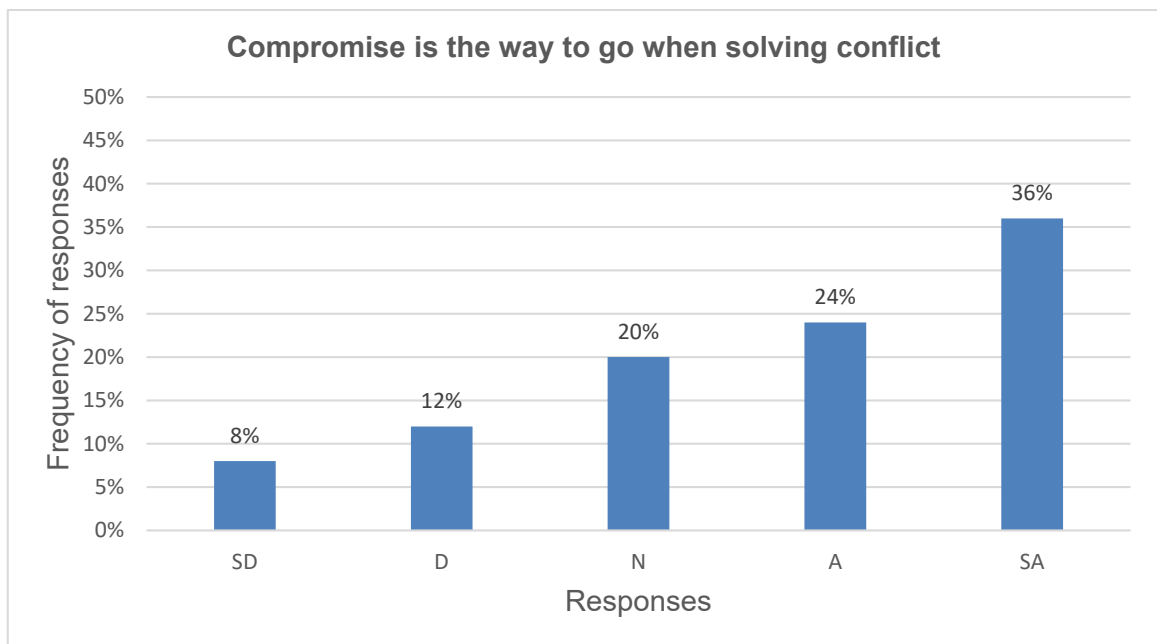
Figure 5.15: Compromise is the way to go when solving conflict
(Source: Researcher)

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As indicated in figure 5.15, 36% of the respondents strongly agreed and 24% agreed with the statement. However, 20% of the respondents remained neutral, which equals the percentage of those who jointly disagreed (12% disagreed, 8% strongly disagreed). Notwithstanding, the majority (36% + 24%) of respondents agreed that compromise is the way to go when solving conflict.

STATEMENT 10: Competition among workers is discouraged in our organisation
RESPONSE: Managers who discourage competition among workers tend to face ample conflict in construction. To produce a better working team, management has to create competition that will be fair and allow the followers to learn from this and be positive. Competition needs to encourage everyone to participate, not only certain individuals. As long as the competition is fair to all team members, a happy working environment is established to all members if the organisation. The responses to this statement are shown in figure 5.16 below.
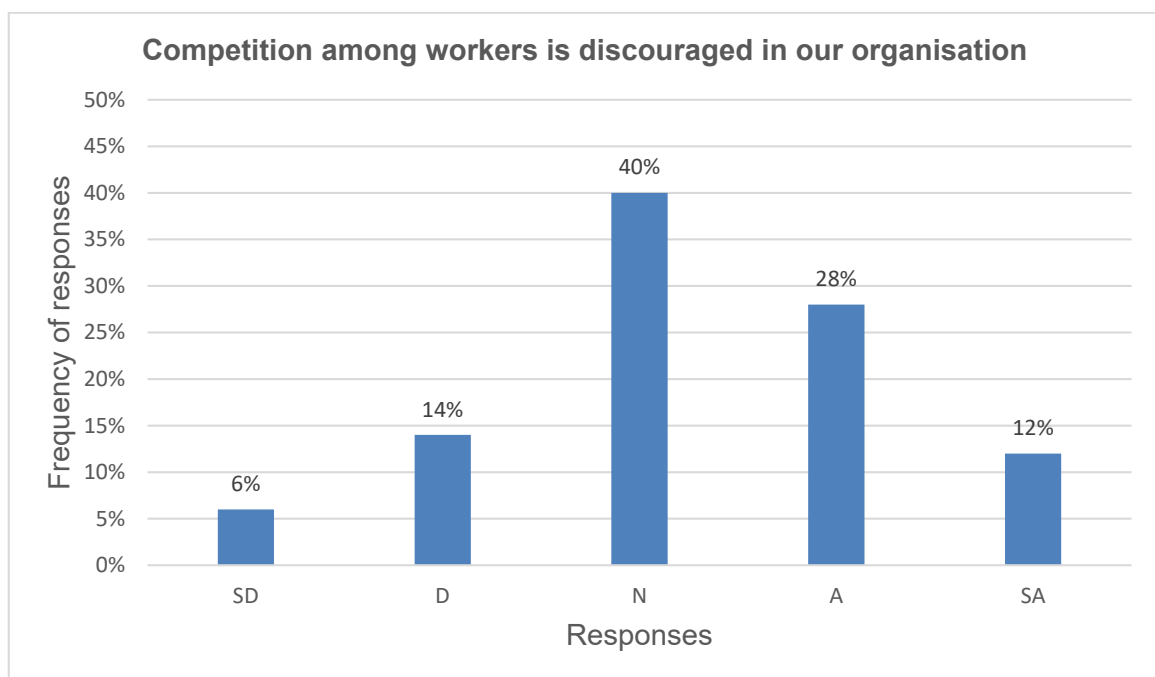
Figure 5.16: Competition among workers is discouraged in our organisation
(Source: Researcher)

It was not expected that 40% of the respondents would opt to remain neutral to this statement, as teamwork and rewards on the construction site create a productive team. To balance teamwork, the discouragement of competition is not a winning approach. Jointly, 40% of the respondents agreed and strongly agreed (28% and 12%

respectively) with the statement, while 14% disagreed and 6% strongly disagreed that competition among workers is discouraged in their organisation.

5.4.2.3   General problems that escalate conflict

STATEMENT 11: Employees use unions to shift the balance of power in their favour

RESPONSE: The function of unions is to represent the well-being of the employees, but they create confusion in some cases. The power unions have determines the outcome of negations, which explains why conflict arises when unions are present at all times. The view of respondents on employees using unions to shift the balance of power in their favour is unclear, but the study does prove that the respondents are in two minds about this, as illustrated in figure 5.17 below.
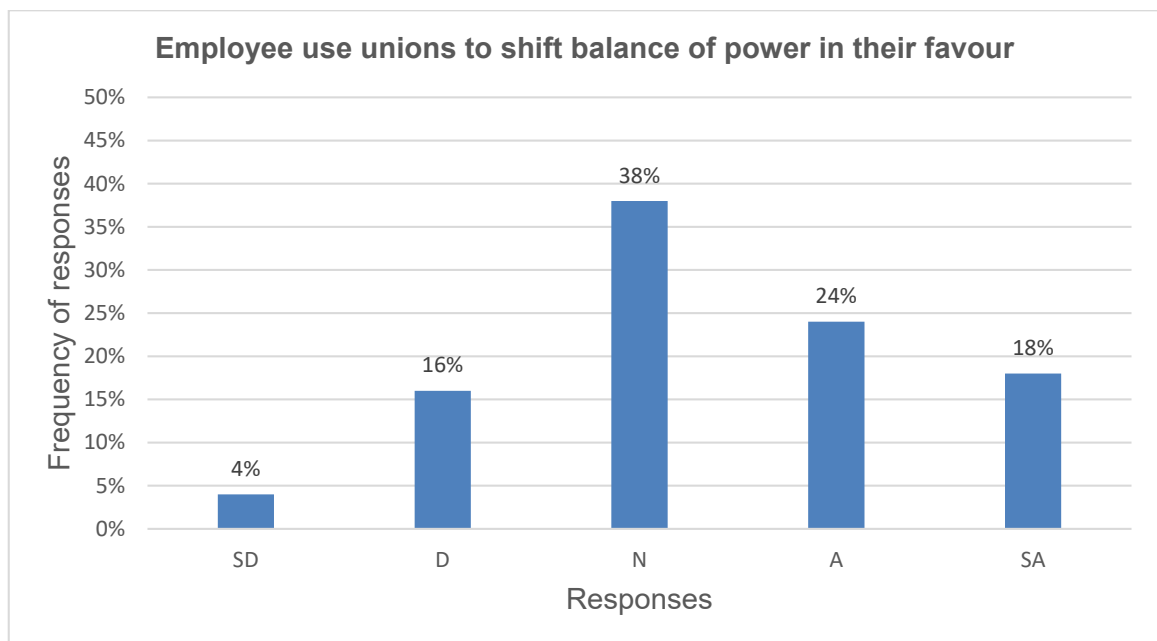
Figure 5.17: Employees use unions to shift the balance of power in their favour
(Source: Researcher)

Neutral response lead the way on general problems that escalate conflict as proven in figure 5.17, where 38% of the respondents opted to remain neural to Statement 11. This outcome points to respondents shifting the balance when solving problems. Twenty-four percent (24%) of the respondents agreed and 18% strongly agreed, thereby supporting the statement. As expected, some were not in agreement with the statement – 16% of the respondents disagreed and 4% strongly disagreed.

STATEMENT 12: Uncertainty about their roles in organisation creates confusion among staff

RESPONSE: When management is not sure about the roles in the organisation, it creates major problems for the subordinates, in this case the staff of the construction organisation. Once those in power do not provide direction to the workers, they cannot expect positive outcomes from staff in terms of achieving project objectives. This study agrees with Statement 12 – once management has a clear direction of the roles and responsibilities, the staff support their leadership to achieve positive outcomes. Figure 5.18 illustrates the respondents' perceptions to this statement.
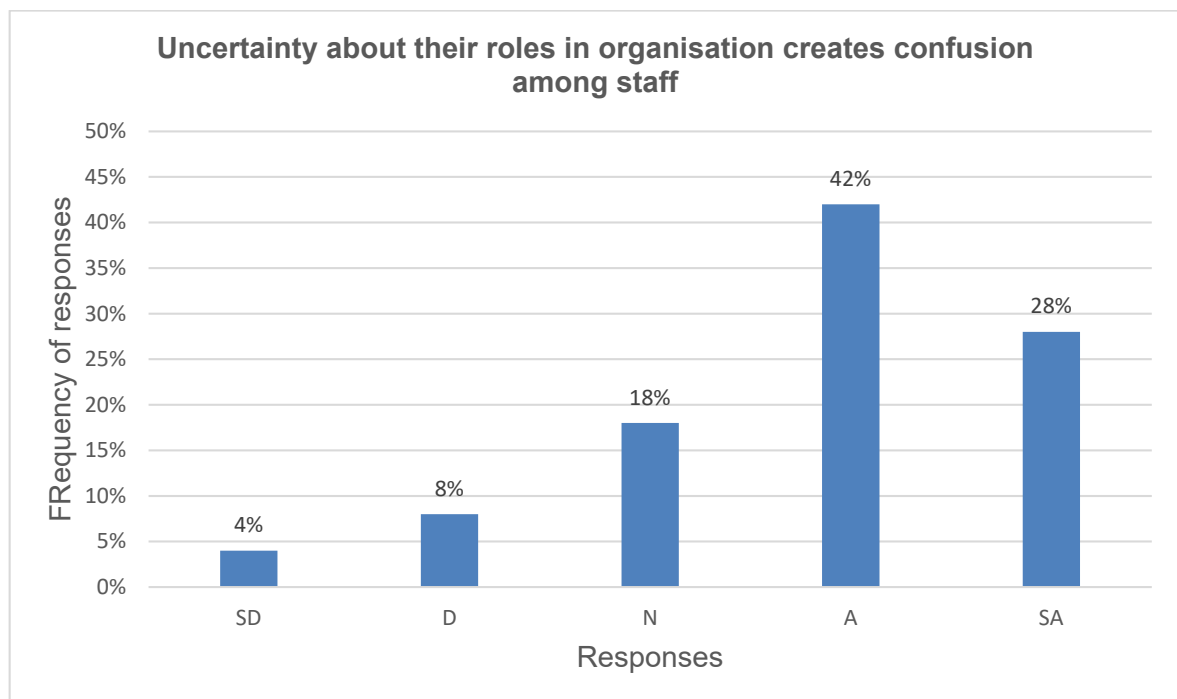
Figure 5.18: Uncertainty about their roles in organisation creates confusion among staff (Source: Researcher)

An overwhelming 70% of the respondents agreed with the statement (42% agreed, 28% strongly agreed), proving that uncertainty among workers on their roles and responsibilities in the organisation indeed creates confusion. This outcome suggests the importance of workers having clear direction on their role in the organisation. Eighteen percent (18%) of the respondents opted to remain neutral, while 12% of the respondents indicated that they do not agree with the statement (8% disagree, 4% strongly disagreed).

STATEMENT 13: Uncertainty about commitment to the organisation increases conflict

RESPONSE: Statement 13 applies to all individuals in the organisation – feeling no commitment towards the organisation create problems, which leads to the emergence of conflicts. Commitment is a primary characteristic that creates a winning team in terms of achieving the objectives and expectations of the organisation (Sanchez & Terlizzi, 2017:1608-1626). Without commitment, how could the project be successful, because this means the team is just here at workplace for the sake of being employed and not for the benefit of the company? Commitment is the ultimate key factor for reaching any goals life; without commitment, failure is expected in high numbers. The responses to this statement are shown in figure 5.19 below.
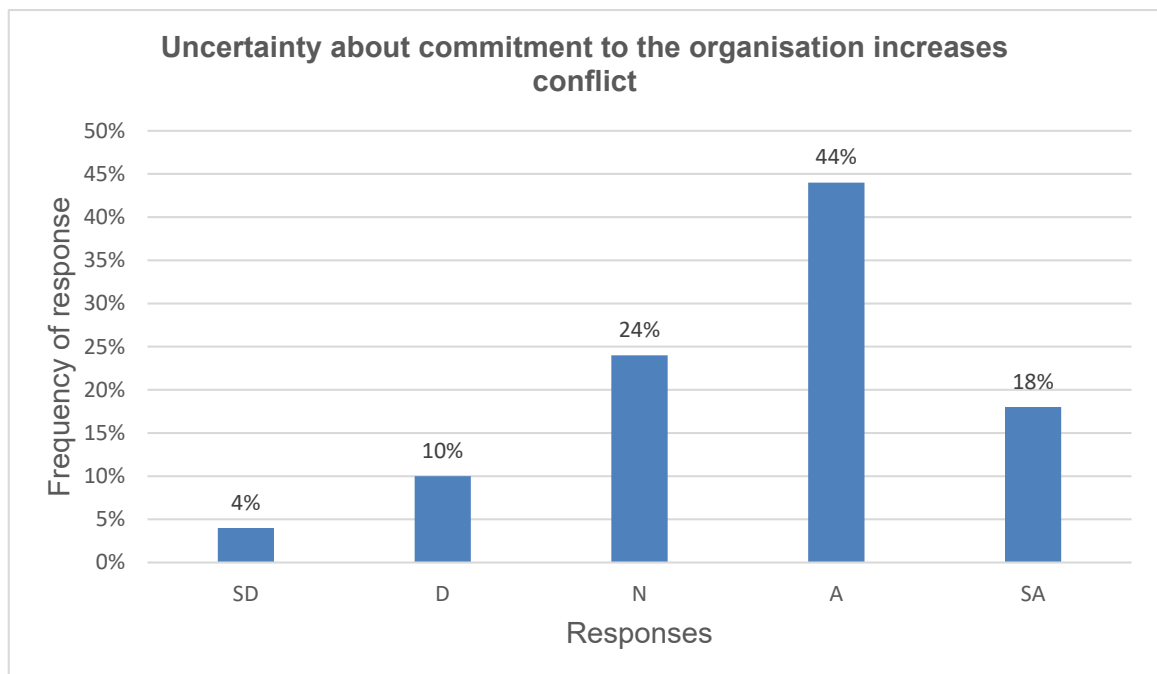
Figure 5.19: Uncertainty about commitment to the organisation increases conflict (Source: Researcher)

Figure 5.19 illustrates that 44% of the respondents agreed with the statement. Hesitation showed to exist with 24% of the respondents choosing to remain neutral, while 18% strongly agreed with the statement. There is the usual disagreement in all scenarios in life, as not all people think and interpret the same, and this creates the learning curve to scholars. Understanding this, 10% of the respondents disagreed and 4% strongly disagreed that uncertainty about commitment to the organisation increases conflict. This supports the notion that commitment is essential to successfully performing and completing a task.

STATEMENT 14: Perception about roles strongly influences the success of a project

RESPONSE: This statement aimed to determine the workers' opinion that their perception of their roles influences the success of a project and determines the outcomes of the project. Perception is another key driver for the success of a project-based environment. The respondents' attitudes and perceptions are illustrated in figure 5.20 below.
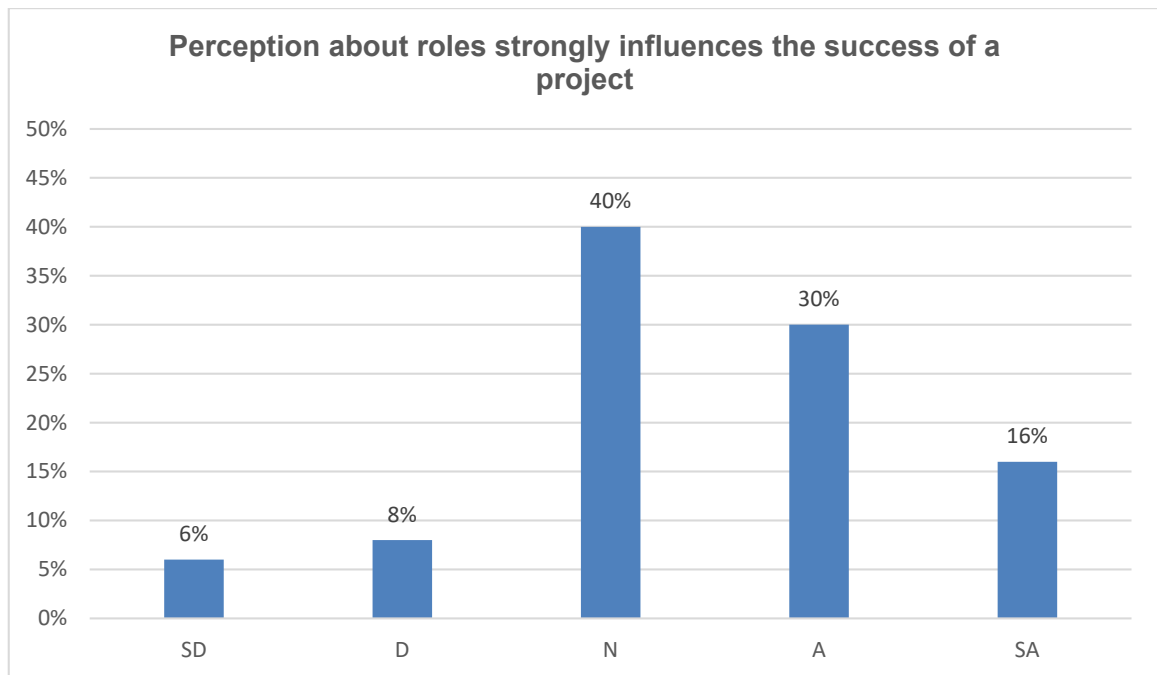
Figure 5.20: Perception about roles strongly influences the success of a project
(Source: Researcher)

Forty percent (40%) of the respondents remained neutral to this statement, while the agreed responses jointly leads with 46% (30% agreed, 16% strongly agreed), suggesting that the respondents truly supported the statement. Eight percent (8%) of the respondents disagreed and 6% strongly disagreed, which points to the minority of the respondents.

STATEMENT 15: Employees usually expect inflexible conflicts to be persistent

RESPONSE: Fixed (rigid or inflexible) conflicts that haven been solved should not be forgotten by the organisation, even though employees believe that once a problem has been solved, one does not talk about it anymore. The problem may re-appear in the future and therefore its impact needs to be considered. Responses to this statement are illustrated in figure 5.21 below.
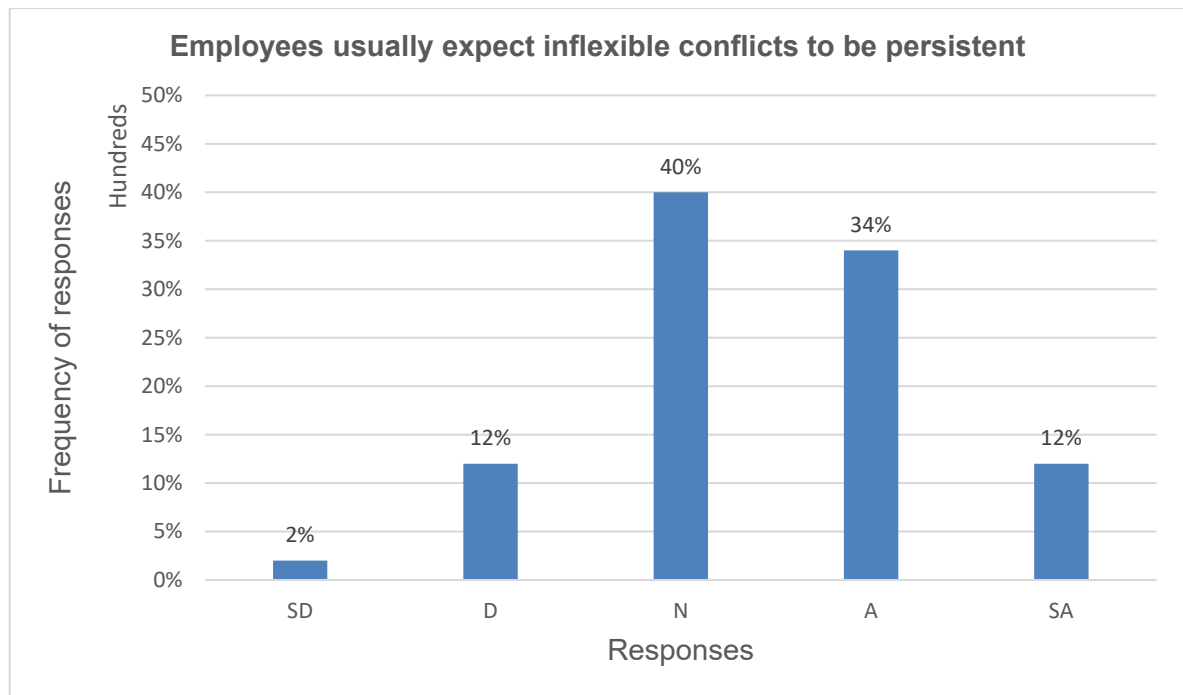
Figure 5.21: Employees usually expect inflexible conflicts to be persistent
(Source: Researcher)

Forty percent (40%) of the respondents remained neutral, 46% (34% + 12%) agreed that inflexible problems tend to persist (re-appear), and 14% (12% + 2%) felt that such conflicts do not persist.

STATEMENT 16: Loss of trust makes it difficult to restore a helpful link/ relationship

RESPONSE: The most unnoticed aspect in life that escalates conflict is loss of trust in people general. Trust is the most important aspect to move forward with other people – once the trust is broken it becomes very difficult to restore the trust. This applies equally to workplace – once a team member was involved in a conflict and people around this member know that he/she was wrong, they start distancing themselves from this person and do not ask the person anything anymore. The relationship is based on trust; once the trust is broken, conflicts start increasing. The responses to the Statement 16, *loss of trust makes it difficult to restore a helpful link/ relationship*, is depicted in figure 5.22 below.
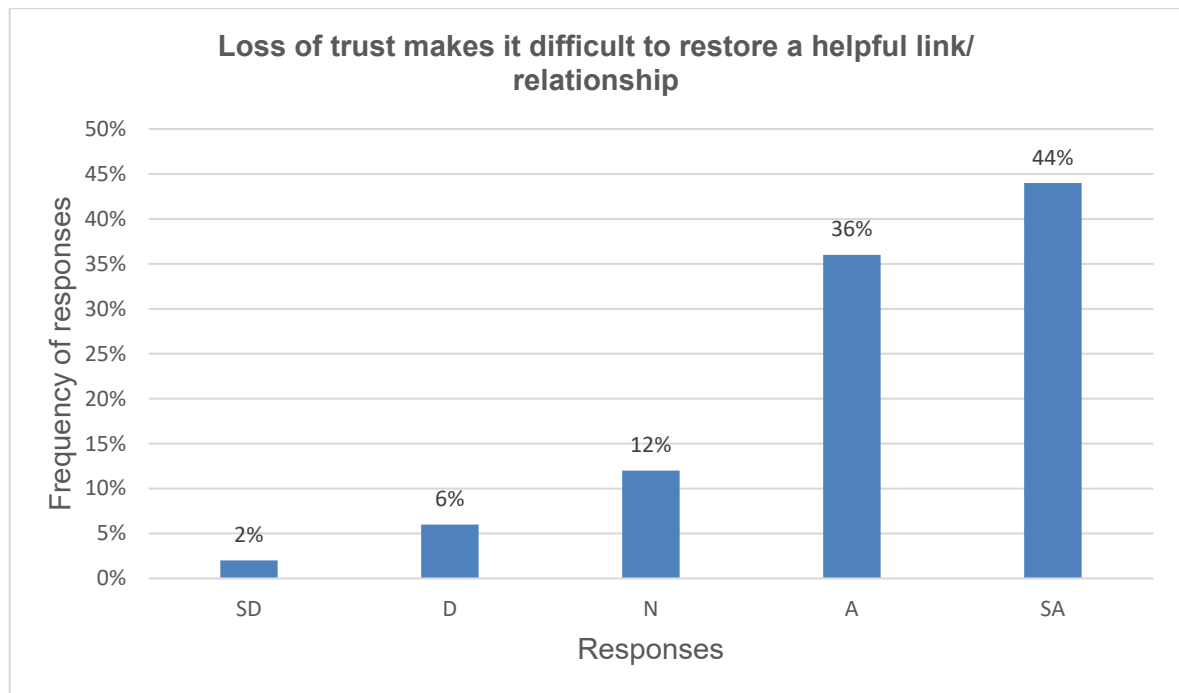
Figure 5.22: Loss of trust makes it difficult to restore a helpful link/relationship
(Source: Researcher)

The respondents were confident in their responses to this statement given their personal experience with this. The findings show that 80% were in full agreement (44% strongly agreed, 36% agreed), while only 12% remained neutral, stating that it depends on what the relationship level was in the first place. Two percent (2%) disagreed and 2% strongly disagreed. This proves the intelligence of the participants involved in this study, having a clear mind of what causes the escalation of conflict in the construction sector.

5.4.2.4   Management role in conflict resolution

STATEMENT 17: Our management tries to identify the source of the conflict

RESPONSE: Good managers use all means to identify the source of the conflict before resolving the conflict (Thakore, 2013:07-16). This motivates the involved parties to take part in discussions of the problem, thereby contributing to a well-respected management role towards the staff in the organisation. This study proves that management, as expected, is necessary to identify the source of the conflict and make the ruling towards resolving the conflict fairly. The responses of the participants are illustrated in figure 5.23 below.

95
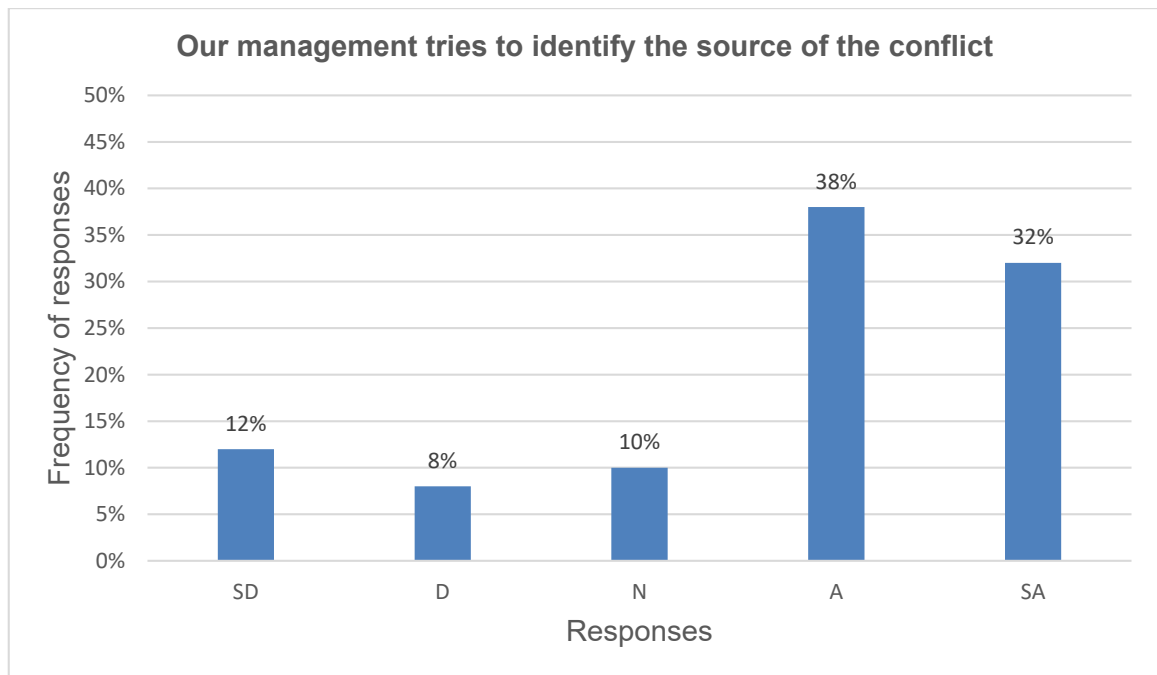
Figure 5.23: Our management tries to identify the source of the conflict
(Source: Researcher)

The majority of the respondents (70%) agreed with this statement (38% agreed, 32% strongly agree) that their management tries to identify the source of a conflict. Twelve percent (12%) strongly disagrees, 8% disagreed, and 10% remained neutral. This shows the extent of management's efforts and involvement in solving problems, leading by example to reach the objectives of the project.

STATEMENT 18: Our management looks beyond the incident to find the cause of the conflict

RESPONSE: When solving a problem, it is important as leader in any industry to look past the incident to find the cause. This develops the excellent leadership skills any manager should have. The responses to this statement are shown in figure 5.24.

As with the previous statement, the majority of responses were positive, showing that their management indeed looks beyond the incident to find the cause of the conflict. Thirty-eight percent of the respondents (38%) agreed and 22% strongly agreed. Twenty-four percent of the respondents (24%) opted to remain neutral, indicating that in their company, management does not always attempt to look beyond the conflict to find the source. Sixteen percent (16%) did not agree with the statement – 8% disagreed and 8% strongly disagreed.
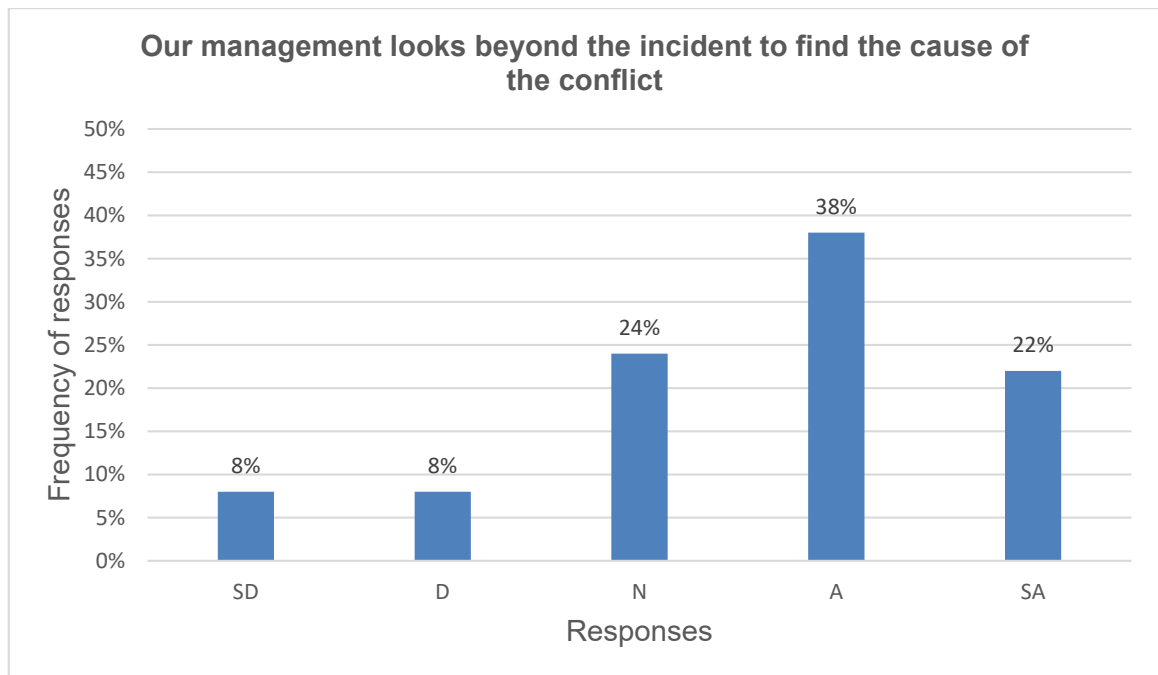
Figure 5.24: Our management looks beyond the incident to find the cause of the conflict (Source: Researcher)

STATEMENT 19: Our management obtains each party's viewpoint on the conflict

RESPONSE: Gathering all the facts from all the parties involved shows the effectiveness of management when resolving the conflict. It is important for management not to be one-sided, as this attitude will always lead to conflict for the ones who 'lose'. Supporting this response, Alizadeh, Nikoo and Rakhshandehroo (2017:1457-1472) cite that management should combine all the points from the parties involved with conflict resolution. Supplementary evidence on the outcomes of statement 19 is shown in figure 5.25.

One again, in terms of conflict resolution, respondents positively supported Statement 19 in terms of their management obtaining each party's viewpoint on the conflict. Sixty-six percent (66%) of the respondents agreed with the statement (42% agreed, 24% strongly agreed). Although the highest percentage was obtained from the 'agree' response and not from the 'strongly agree' response, it still significantly portrays management's point of view, which assisted this study to identify the best suitable model when dealing with conflict. Sixteen percent (16%) of the respondents were neutral, while 12% disagreed and 6% strongly disagreed. The latter two percentages are not significant compared to the 66% on the other side of the scale.

97
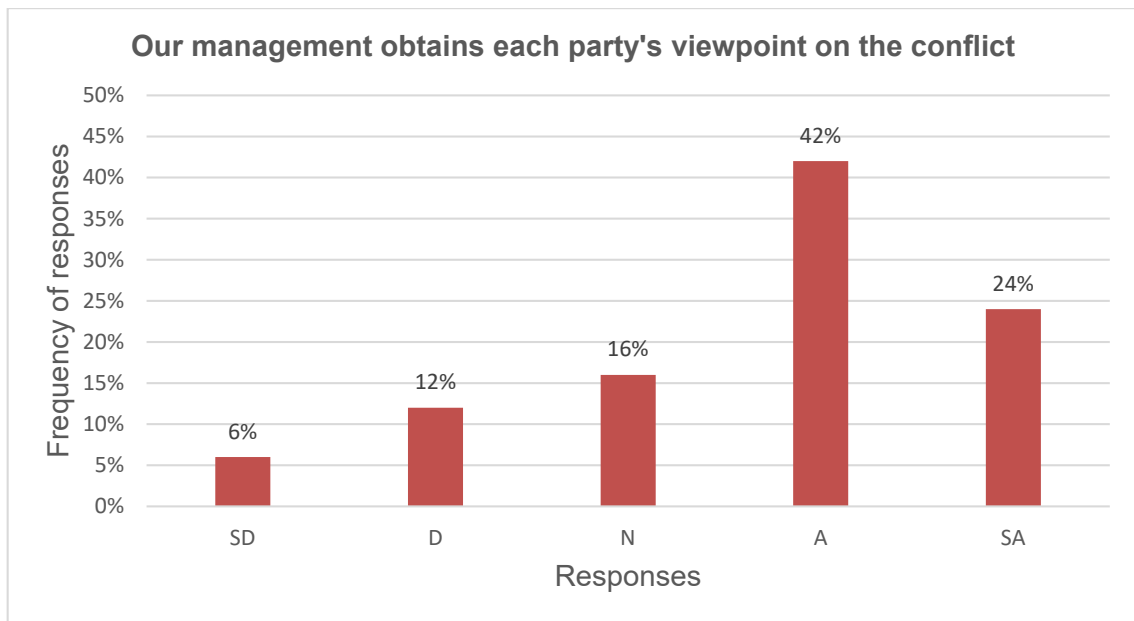
**Figure 5.25: Our management obtains each party's viewpoint on the conflict
(Source: Researcher)**

STATEMENT 20: Our management requests solutions from conflicting parties

RESPONSE: Obtaining solutions to conflicts might be biased given the intensity of the problem. Notwithstanding, management does have the ability to request solutions from all parties involved – not necessarily to use their responses, but to compare all the responses available as it is expected of management to lead by example. Figure 5.26 shows the responses to statement 20.
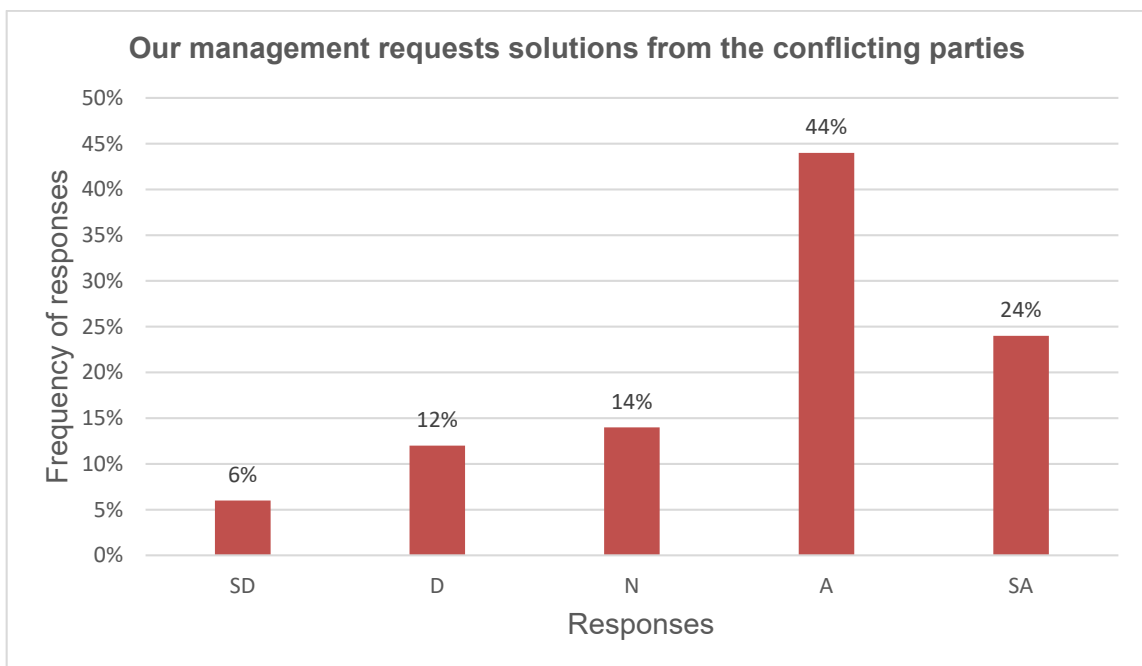
**Figure 5.26: Our management requests solutions from the conflicting parties
(Source: Researcher)**

Forty-four percent (44%) of the respondents agreed with the statement, 24% strongly agreed, and 14% opted to remain neutral because of previous experiences they encountered when conflict was resolved in the workplace. Usually, not all have the same insight, which is provided as the reason why 12% disagrees and 6% strongly disagreed with the statement.

STATEMENT 21: Our management tries to identify solutions that both disputants can support

RESPONSE: Management needs to identify a fair solution, not one that seems to be directed at the other party. Management must lead by example at all times, treating the subordinate equally without favouritism when solving problems. As expected from management, the study proves that for management to be effective with conflict resolution, they need to be more relevant and act honestly, not favouring certain individual. The responses are detailed in figure 5.27 below.
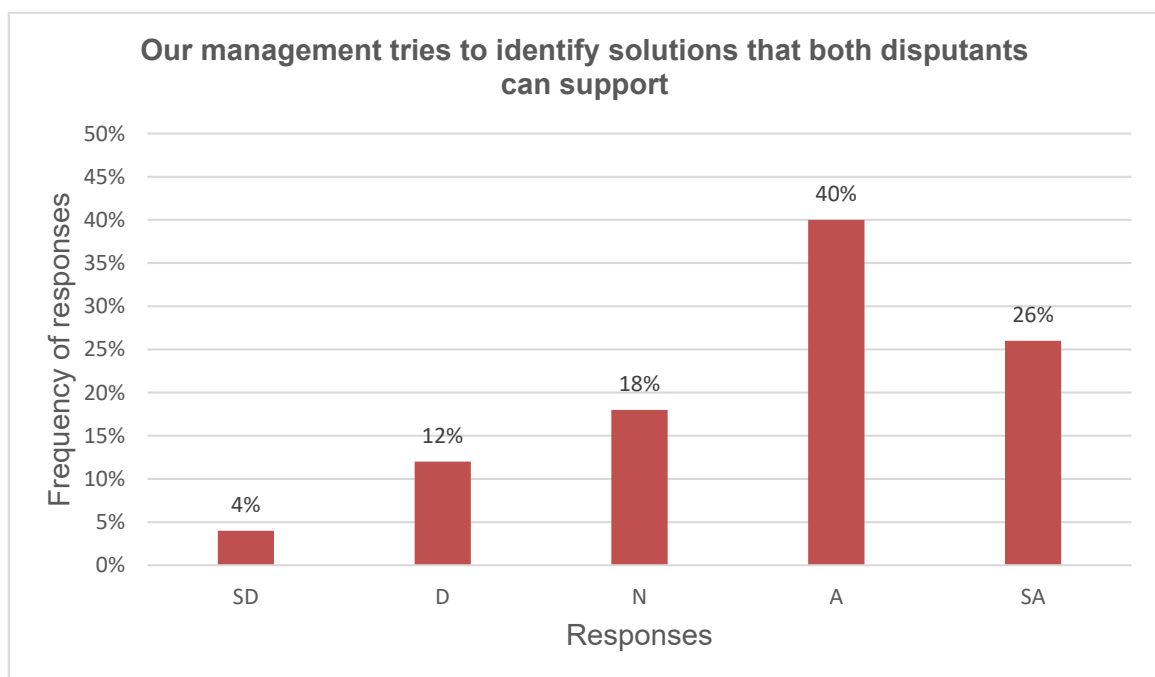
**Figure 5.27:Our management tries to identify solutions both disputants can support
(Source: Researcher)**

Sixty-six percent (66%) of the respondents supported this statement (40% agreed, 26% strongly agreed). Eighteen percent (18%) of the respondents were neutral, while 16% did not support the statement (12% disagreed, 4% strongly disagreed). However, as expected by this study, the majority agreed that their management truly makes effort to avoid being biased when solving a problem in the organisation.

STATEMENT 22: Our management resolves conflict effectively

RESPONSE: For conflict management, successful resolutions are needed from the negotiations. Thus, although management has to strive towards a positive outcome, none of the contribution parties should feel they 'won'. Management is the mainstream of the organisation and need to avoid handling conflict too carefully, as they might face difficulties controlling their subordinates in the long run. The respondents' feedback is recorded in figure 5.28 below.

Figure 5.28: Our management resolves conflict effectively
(Source: Researcher)

Thirty-four percent (34%) of the respondents were neutral, showing their lack of commitment on an effective approach when solving conflict. Nevertheless, 50% of the respondents reacted positively – 28% strongly agreed and 22% agreed that their management resolves conflict effectively. However, respondents felt that not all parties involved in the conflict were always considered for outcomes of the negotiations, stating that rules and regulations are not always formulated for the benefit of the employees, but for the benefit of the organisation. Fourteen percent (14%) disagreed and 2% strongly disagreed with the statement.

STATEMENT 23: Our management works toward agreement between parties involved in conflict

RESPONSE: An effective management has to work with all the parties involved in the conflict throughout the entire discussion or negotiation process (Wallensteen & Svensson, 2014:315-327), thus letting no party feel left out. The study is in support of

parties working together when solving conflict, from management down to all the involved teams. The responses are detailed in Figure 5.29 below.
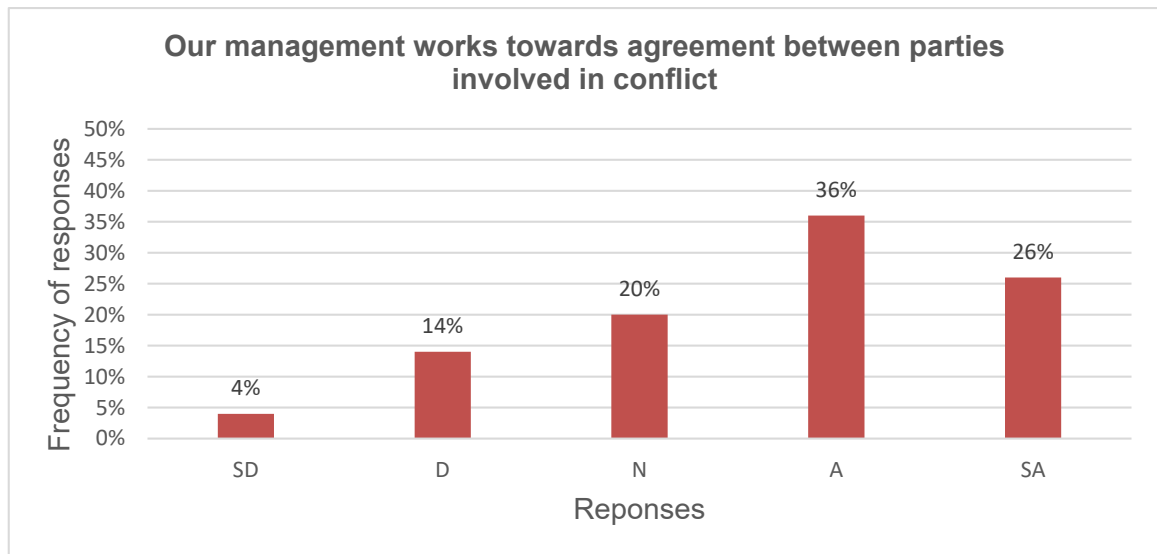
Figure 5.29: Our management works toward agreement between parties involved in conflict (Source: Researcher)

Although figure 5.29 indicates that 62% (36% agreed, 26% strongly agrees) of the respondents supported the statement, 20% were neutral, not that they were ignorant, but based on their past experiences of conflict resolution in the workplace. Eighteen percent (18%) stated otherwise – 14% disagreed and 4% strongly disagreed that their management works together on solving conflicts with their subordinates.

5.4.3 Section C: Open-ended questions

Open-ended questions for this study were formulated to assist this study with collecting further information from respondents and allowing them to respond to answers with their own knowledge and understanding without any limitations. The aim was for respondents to provide their opinions, concerns and positive points for the benefit of working in an environment free from conflict escalation, as well as offering their thoughts and best views on modelling effective conflict management specifically in construction projects in the Cape Metropolis. Their input were collected and grouped accordingly to the sub-sections below. Some responses were excluded because of their irrelevance to and some were used for the positivity of information needed.

5.4.3.1 State conflict management mistakes you have noticed at your workplace

Management's mandate is to ensure that every individual in the workplace perform their tasks according to the rules and regulations of the organisation. This is done in accordance with the vision and mission to meet the objectives of any current and future projects, as conflicts are always expected. This question was directly aimed towards conflict management mistakes noticed by respondents in the workplace. Most of the focused mistakes happen daily in the operation of the business. The effect of these mistakes is not always noticeable, and management sometimes makes these mistakes unintentional. Of the 100 respondents, 40% proposed a reward system to be used by management, which is not always accommodating to everyone. Favouritism plays a major role in conflict and is serious taken for granted by management. Race is the biggest concern, as 90% of the respondents complain about colour issues in the workplace, which contributes significantly in starting conflicts in the organisation. Bullying is a further main cause, and the biggest mistake is taken this for granted. One of the respondents pointed out the lack of appreciation in the organisation. Dating by management creates conflict in the workplace because this leads to favouritism.

5.4.3.2 State what you think is the best way to resolve conflicts at the workplace

Respondents indicated that each employee should to be treated with fairness regardless of culture or traditions, and that management should listen to both parties and solve the conflict accordingly. Management has to work together in the industry so that conflicts can be resolved fairly. Listen skills are a key factor towards solving the problem and the understanding the cause of the conflict.

5.4.3.3 What other information do you want to share on the resolution of conflicts in the workplace?

This question was focused on obtaining further relevant information from respondents in terms of their views. Respondents were welcomed to present their own proposed contribution to conflict resolution in the workplace. Some respondents refrained from answering this question, arguing that nothing will be done with their recommendations, as they attempted many times to raise concerns, but nothing has been done to meet their demand. According to the analysis, only 8% of the respondents replied to this question, with surprisingly similar responses, albeit not word-for-word. They responded

that every company should form an employment equity plan within the industry so that conflict in the workplace can be resolved. To perform well in the workplace, it is important for employees to always report problems to seniors during the early stage of the issue rather than waiting until the problem escalates out of control.

5.4.4 What is your gender?

RESPONSE: This question aimed to determine the gender of respondents without hurting any feelings or undermining any gender perspectives. As the construction is male dominated, it is significant to notice the number of females participating in this industry nowadays. The responses are indicated in figure 5.30.
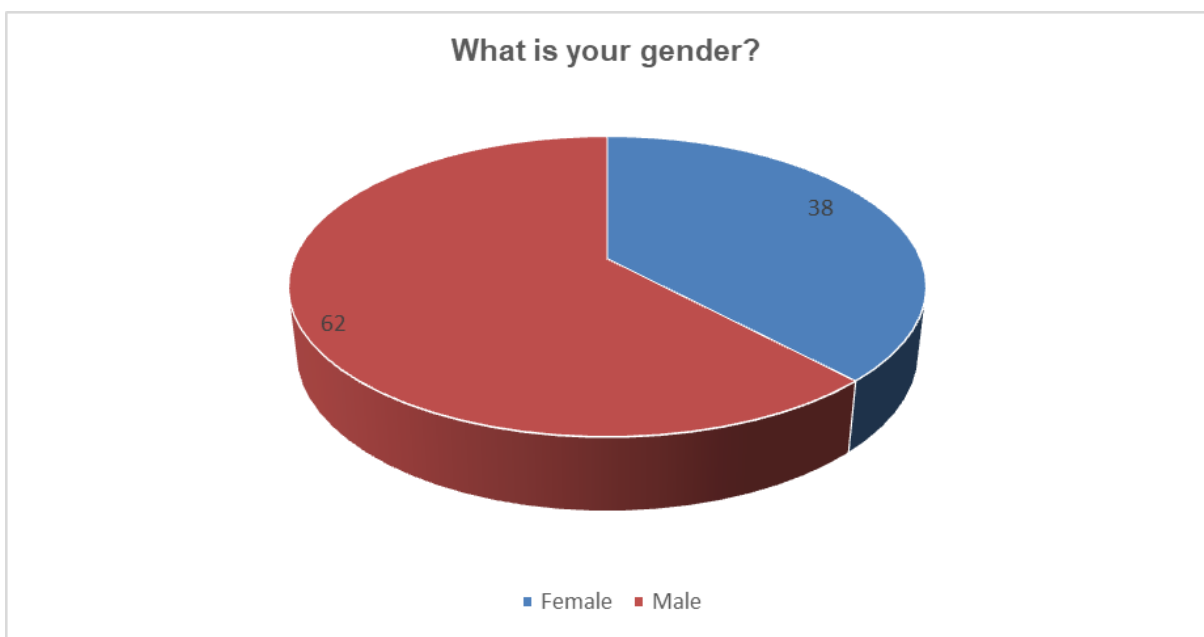
Figure 5.30: What is your gender?
(Source: Researcher)

The relatively large number of women was not expected by this study due to many of studies showing only a small number of women involved in construction in the Western Cape. Figure 5.30 showed a promising result in terms of women in construction, although the percentage is still less than 50%, which is what is needed maintain gender fairness in working place. The figure shows that 62% of the respondents were male and 38% were female. This concludes that females are entering the construction industry slowly but surely.

5.5 Summary

As suggested in prior chapters, conflict in the construction industry causes the failure of projects, which create a negative impression on those involved in the running of the projects. Sometimes individuals use their personal agenda to sabotage others. This creates a major problem to all involved in the project throughout the project stages. The complicity of incidents tends to cause conflict down to the lower levels in at the construction site. The employers and employees need to develop a working bond that will positively solve problems, not based on bias and favouritism towards certain individuals. Bias and favouritism cause employees to suffer the consequences during the running of the project. The rules and regulations of the organisation need to be kept at all times for management to be effective.

The findings are somewhat disturbing for statements where respondents opted to remain neutral on matters that exist in workplace. These respondents chose neutrality because of the failure of management to handle conflict well, which points directly to a lack of management skills for some managers at the construction site who are not willing to learn from previous experience and move forward with the best positive outcomes. The neutral responses do not mean the respondents were uncertain or lacked understanding of the statements; rather, it confirms the sensitivity of previous experiences and the failure of management to resolve these conflicts well. Although conflict can be reduced, it needs a team effort. The best possible proactive approach to face and resolve conflict is team effort, especially when the background of people us involved, as cultural backgrounds seem to be a major cause of conflict escalation at the construction site. The involvement of women in construction, as indicated in this study, is a good improvement towards gender fairness.

CHAPTER SIX: SUMMARY OF RESEACH FINDINGS AND CONCLUSION

6.1   Introduction

The main drive for conducting this research was to model conflict resolution styles that are ideal for risk control in construction project execution in the Cape Metropolis. Conflict in any project in construction is a major cause of project failure. The purpose was to assess the contribution factor of all stakeholders involved in the implementation of the project in the construction industry. Due to existing of types of conflict in the project, this study intended to find a resolution able to deliver an improved and expectant result of the project objectives. This chapter focuses on presenting the summary of previous chapters' objectives. In support of this, the findings derived in Chapter Five are discussed in alignment with the survey that was administered to the respondents. This includes the recommendation and conclusion of the study based on the researcher's consideration and clarification of the data collection.

6.2   Summary of chapters objectives

Chapter One presented the purpose, objectives and significance of the study. The literature review in Chapter One assisted with the identification of the research gap. Subsequently, a problem statement was formulated, followed by establishing the research objectives, research questions, research methodology and ethical considerations. The formulation of the research questions was designed to align with the nature of the selected industry and the survey questionnaire. The sample frame was identified and discussed in detail together with the background of the respondents, the sample size and the methods selected for sampling, as well as the data collection and data analysis.

In Chapter Two, different types of conflicts were discussed, including sources of conflicts specific to construction projects, because the study focused on construction in the Cape Metropolis in the Western Cape. Furthermore, the different levels of conflict in construction-based projects and the impact it has on the success of projects were explored. This was done by understanding the role of the stakeholders in the risk management programme to pre-empt stakeholder conflict. Modelling a conflict resolution needs a suitable leadership style, as was also discussed in this chapter.

Chapter Three differs from Chapter Two in terms of presenting the models of conflict rather than the types of conflict, as well as the five conflict management styles.

Chapter Four presented the research methodology implemented in this study. The methods used in the research design as well as the theoretical characteristics of research methodology, the research strategy, target population, sampling methods, sample size, methods of data collection, and ethical considerations were also discussed.

Chapter Five focused on the feedback of the respondents who took part in the survey. The responses were explained in the form of graphs and analysed through interpretation, all in alignment with the research question and objectives.

6.3   Conclusion

6.3.1   General understanding of conflict in your organisation

6.3.1.1 Sources of conflict in your work environment

STATEMENT 1: It is my duty as an employee to meet the expectations of my manager

The question establishes if the sources of conflict are derived from whether an employee meets the obligations given by a manager. As shown in figure 5.7, 76% of the employees agreed that is indeed the duty of an employee to meet the expectations of the manager. It shows that the objectives of this study are met because the high agreement percentage indicates that employees clearly understand following orders and adhering to managers' requests. This reduces the risk of continuous conflict within the workplace. It is recommended from the conclusion above that the perfect employee should meet the manager's expectations. This creates a positive working environment and all tasks should be realistic and achievable.

STATEMENT 2: I believe withholding information on purpose causes conflict

The findings were not quite as expected because only 66% of the respondents agreed with the statement. It is highly recommended to share information within the workplace to improve the expected goals of the project and reduce the chances of conflict engagement in the workplace.

STATEMENT 3: Differences in culture cause conflict

In total, 68% of the respondents were in agreement with this question, concluding that the differences in culture cause conflict in the workplace. It is recommended that management should create a working environment where the cultural background of each employee is understood and respected by all stakeholders involved. It is not suited to work in an environment where values are taken for granted because one's culture.

STATEMENT 4: Ignorance and avoiding responsibility result in conflict

As shown in figure 5.10, a resounding 88% of the respondents agreed that ignorance and avoidance of responsibility result in conflict. These findings are a strong indication that evading responsibilities are not acceptable in the working environment. It is recommended that project teams should learn to accept the responsibility and the consequences of their actions. This creates individual inspiration and increases the level of trust.

STATEMENT 5: Failure to follow the rules and regulations of the company results in conflict

Although 76% of the respondents agreed with the statement, it was surprising to find that some respondents disagreed or felt neutral about this statement. It is always expected from employees to follow the rules and regulations of the company from their first day of work. It is always expected from employees to follow the rules and regulations of the company from their first day of work. It is a standard operating procedure to inform all new employees and remind current ones, of the company rules and regulations. It is recommended that all project team members work "according to the book", as this creates a working place with a clear expectation to meet the goals and objectives of the project.

6.3.2 Conflict management strategies

STATEMENT 6: Accommodating the opposing side is the best way of handling conflict

Although 40% of the respondents were neutral, it was highly expected because of different approaches used by management when solving conflict. However, 38% agreed with statement 6. It is recommended that the mandates of management be aligned with the leadership skill of allowing everyone to engage in the conflict resolution, especially the parties involved. To further this recommendation, it is

important to accommodate the opposing party in the negotiating process. Employees with a clear understanding of aspects of conflict will be good followers of an effective management.

STATEMENT 7: Avoiding conflict leads to project success

Sixty-four per cent (64%) of the respondents agree that avoiding conflict leads to project success. It does not necessarily mean conflict might not exist; rather, employees should try to reduce the chances of facing conflicts. It is recommended that being proactive in conflict situations could significantly reduce the chances of conflicts flaring up. It can be concluded that a pre-emptive approach applied in time may avoid conflict, and that management will be able to assign tasks with the cooperation of subordinates.

STATEMENT 8: Our organisation uses collaboration to deal with conflict

Not to be confused with statement 6, the result for this statement is significant because 44% of the respondents were neutral, as per figure 5.14. A low 30% of the respondents agreed with statement 8, thereby proving that management acts at a slow pace when using teamwork for solving conflict. It is not a 'good' management strategy to omit or resist cooperation when solving problems. It is therefore recommended that management improve its leadership style when applying the conflict resolution strategy to be more empowering to the subordinates. Management should assess the need for team building and a conflict free zone working environment.

STATEMENT 9: Compromising is the way to go when solving conflict

This statement denotes meeting everyone halfway when solving conflict. Sixty percent (60%) of the respondents found it necessary for management to apply this statement, which means they agreed with this statement. It is therefore concluded that management should be effective enough to compromise when dealing with the parties involved in the conflict. It is recommended that management should have a good understanding of what comprises an effective management strategy while keeping subordinates' opinions in mind along with their own thoughts on whether the organisation meets the objectives.

STATEMENT 10: Competition among workers is discouraged in our organisation

This statement intended to determine the ability of management to recognise and appreciate the contribution of each employee in the organisation, and to motivate them.

Unexpectedly, during this period at Western construction sites, 40% of the respondents were neutral and 40% agreed to the statement. Not allowing workers to strive for the best outcome of the organisation and the lack of appreciation towards employees is considered negative. It is recommended that management should work closely with their employees to motivate and inspire them, and to apply a useful approach towards allowing healthy competition among workers for the benefit of the organisation.

6.3.3 General problems that escalate conflict

STATEMENT 11: Employees use unions to shift the balance of power in their favour

This statement was directed to everyone in the organisation. Respondents on a management level seem to blame the unions much more than their subordinates in the study. The respondents were reluctant about the specifics when presented with this statement. Figure 5.17 supports their hesitancy to replying to this question, as 38% of the respondents were neutral and avoided the statement Forty-two percent (42%) of the respondents supported the statement that employees use unions to shift the balance of power in their favour. However, respondents showed hesitation regarding specifics. and avoided the opportunity to be heard. It is recommended that employees do not hide behind unions when trying to be heard; rather, they should utilise the proper channels set out as per organisational rules and regulations. Matters should be studied before deciding on an appropriate suitable management style suitable to support the unions without many arguments engagements.

STATEMENT 12: Uncertainty about their roles in the organisation creates confusion among the staff

In total, 70% of the respondents agreed that uncertainty about management roles and responsibilities in the organisation creates confusion among staff. It is much needed that management becomes more involved and with a clear understanding of his/her role as leader in the organisation. It is recommended that management should strive to be the 'face' or ambassador of the organisation with the right intention towards subordinates. It is further recommended that roles are assigned openly and transparently, and that everyone should know who is responsible for what tasks, which created a sense of security among subordinates. Respondents require management to have a clear understanding of their roles.

STATEMENT 13: Uncertainty about commitment to the organisation increases conflict

A confident 62% of the respondents agreed with statement 13 that uncertainty about commitment to the organisation increases conflict. Commitment motivates all people in the organisation. The findings are a clear indication that motivation is the result of having certainty about what one wants, and this creates an understanding of the expectations and objectives. To conclude, being uncertainty about the destination (goals) may develop doubt, which affects achieving these goals. This creates conflict among those in the workplace and does not improve overall performance.

STATEMENT 14: Perception about roles strongly influences the success of a project

A surprising 46% of the respondents agreed with the statement, as in-depth insight into the roles in the organisation is key to the success of the project. However, 40% of the respondents were neutral, showing the imbalance in the understanding the roles by those involved. This study recommends educating employees on the importance of the roles and responsibilities in construction as this contributes positively to a project's success. Training will reduce conflict in future. In conclusion, all project work is done specifically in alignment with three primary constraints, namely time, scope and cost. Adhering to these confinements will ensure efficient project planning.

STATEMENT 15: Employees usually expect inflexible conflicts to be persistent

Forty-six percent (46%) of the respondents accept that employees usually expect inflexible conflicts to be persistent. By doing so, the study confirms that this increases general problems continuously, because they are not taken seriously. It can therefore be concluded that employees need to understand that taking small problems lightly in construction causes conflict. The leaders should be able to solve all arising matters efficiently, albeit small. It is further recommended that management should resort to powers that are more relevant and legitimate to the cause.

STATEMENT 16: Loss of trust makes it difficult to return to the helpful connection or relationship

A decisive 80% of the respondents agreed with statement 16 that the loss of trust makes it difficult to restore the helpful connection or relationship. The findings clearly indicate the need to keep trust as the foundation at all times. It creates an environment where it is easy to work and get along well with others. Trust should always be

respected. Subordinates require a trusting working relationship with their leadership, otherwise the leadership will not be perceived as effective. It is supported that through trust alone, projects can run smoothly for all parties involved. To further this recommendation, whatever inspires the employees will help them increase their overall performance.

6.3.4 Management's role in conflict resolution

STATEMENT 17: Our management tries to identify the source of the conflict

A decisive 70% of the respondents agreed to management's role in conflict resolution when trying to identify the source of the conflict. The findings indicate that management indeed has to make the necessary effort to identify the source of conflict. It is recommended that management should lead by example and create a winning team by solving all problems effectively and without choosing sides, with the clear intention of creating a happy working environment. Other than that, it may be compulsory for mangers to have certain required skills to deal with people by empowering them to choose the right direction. Without proper guidance, experienced and knowledgeable people in general do not perform tasks perfectly nor do they familiar themselves with their endorsements.

STATEMENT 18: Our management looks beyond the incident to find the cause of the conflict

In total, 60% of the respondents have accepted that their management looks beyond the incident to find the solution. This shows the effectiveness of management, the understanding of their roles in the organisation, and their involvement in everything around them in general in the construction industry. Although 24% of the respondents were uncertain about this statement, which points to incompetencies of management, at least the percentage is not exceedingly high. This study recommends that management have a clear understanding of a case making a decision. To further this recommendation, project leadership should try to adopt impression management skills and be visible to let the employees know who is responsible for certain tasks in the company.

STATEMENT 19: Our management obtains each party's viewpoint on the conflict

A solid 66% of the respondents agreed that their management obtains each party's viewpoint on the conflict. It is accepted by this study that some managers have different

inputs on solving problems, but the winning point is to organise all the facts before reaching the verdict. To conclude, management should not work alone to solve problems; it is recommended that management assess the capabilities of their subordinates' involvement in the incident and determine how the background of each individual creates confusion in the matter.

STATEMENT 20: Our management requests solutions from the conflicting parties

Sixty-six percent (66%) of the respondents agreed with statement 20. This proves the effectiveness of management when solving problems in construction even though the culture diversity makes it difficult for all individuals to be understood. The researcher hereby concludes that a creative leadership produces a winning result in whatever tasks are done. Subordinates need their contribution to be valued despite their colour or background. It is recommended that management should devote more time to understand their subordinates. Projects need to be done calmly to make the stakeholders happy and meet their expectations. Yes, problems will be present; thus, management should have a clear method of interacting with those problems. This has been proved by the number of responses received from the respondents for this statement.

STATEMENT 21: Our management tries to identify solutions that both disputants can support

Sixty-six percent (66%) of the respondents agreed that management tries to identify solutions that both disputants can support. The role of management is determined by the effort they put in to solve problems in the various industries that required wisdom to be successful. Although the decision might not be favourable to all parties, the respondents supported statement 21. Only 18% of the respondents chose to be neutral, which shows the extent to which management will go to solve conflict and reach a conclusion. It is recommended that management should have what it takes to solve the problems through good governance in this diverse industry, and not being the cause of the problem, for the benefit of the company. This study further recommends that the leaders be well informed of the problems and allow positive contributions as the main primary source of the reasons being addressed.

STATEMENT 22: Our management resolves conflict effectively

The respondents alluded to the sensitivity of this statement based on their experience. Fifty per-cent (50%) of the respondents stated that conflict is not handled well by the people in charge. With 34% of the respondents choosing to remain neutral, a gap was identified in terms of creating leadership that will resolve conflicts effectively, as this is needed to have a productive team that accomplishes all tasks as per scope. To conclude, management has the mandate to be effective in all their tasks and activities; however, this study shows that leaders fail to solve problems. It is recommended that management should be effective in order to create the best team that will produce the best results throughout. Furthermore, management should find the balance needed to get along with their followers; this includes even the simplest effort to achieve teamwork. Management should find the balance required to complete any work in time, putting the right amount of time into efforts to solve problems that will delay success.

STATEMENT 23: Our management works toward agreement between parties involved in conflict

The agreement of 62% of the respondents with statement 23 shows the positive input of management on solving conflict by investing time in dealing with problems in the construction sector. Management should rigorously find the balance needed for both parties involved in the conflict to work together to find a solution acceptable to everyone, and which is realistic in terms of the rules and regulations of the organisation. Management should be required to possess people skills that will be of benefit to the company with the help of all individuals involved. Furthermore, management is the backbone of the organisation with the mandate to instil the perspective of projects running and completing successfully. This perceptive goes hand in glove with conflicts that may arise in the workplace, and with the positive manner in which managers face such problems. It is important to solve conflicts in time and align them with the organisation's visions and objectives, although some individuals deem this unnecessary.

6.4 Implications for further research

Although respondents chose to remain neutral for some of the statements, it did not have a significant impact on the study's outcomes, but is does open up opportunities for further exploration to researchers. In particular, the conflict management strategy on solving conflict was found to be the area that most needs further research to find relevant techniques on solving conflicts.

In some areas, respondents disagreed to statements because they experienced situations in the workplace that were not dealt with properly. This too points to the need to explore, in-depth, the reasons why the construction industry leads by project managers who do not work well with their subordinates. For the open question regarding the colour of skin, almost all respondents indicated racism in construction still the major issue. This asks for much needed effort to have more research done on all of these areas.

6.5   Limitations of the research

The aim of this study was to identify generic sources of conflicts in project execution and to determine how to solve these conflicts at the construction site. The way tasks are handled is not always the same across the diverse construction industry. This study was restricted to a selected organisation in the Cape Metropolis and the outcomes may not be a true reflection of the entire country, but it does reveal important conflict areas that may arise during the five stages of a project's life cycle.

6.6   Recommendations

Project managers have to find a balanced way of working with their team members, which includes the strategy they use when solving conflict. Whenever there are people involved, a proper way of team building is always necessary. People do not have to be born with required skills, but the need to attend courses to learn the skills applicable to the workplace. Conflict cannot be avoided, but a proactive approach should be used when it occurs. Team members should be developed through honest and equal treatment, as this is what creates a winning team in the construction environment. Although this study found that competition is not an approved activity in the workplace, for the sake of worker productivity, in a sense it is needed. It is recommend that although competition creates conflict among team members and leaders it can be a winning approach if the way it is applied is tested and fair to all. If any employee is performing well, recognition should be given to him/her. One must guard against favouritism in the workplace, as favours are always present.

Management should create a balanced strategy, that meets the objectives of the organisation, that is as efficient as possible, and that results in all parties involved to become more effective. Sometimes, limited resources causes delays in the success of the project and drains the spirit of the team members, but if management is effective

with formulating policies in future, this can enhance the working conditions and increase the sharing of low resources, thereby limiting the escalation of conflict.

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QUESTIONNAIRE

THE FIVE CONFLICT MANAGEMENT STYLES AND HOW THEY RELATE TO THE SUCCESS OF A PROJECT.

Dear Respondent; This is an academic exercise, we want to measure the extent to which the conflict areas in management affect project success. This is a voluntary exercise, you are guaranteed confidentiality, no information will be given to anyone, you are free to withdraw from the survey if you are not comfortable. Please don't put your name or anything to identify you or your organisation. **THANK YOU.**

SECTION A. BIOGRAPHY
Please cross the applicable boxes

1. Indicate your age range in the boxes below by ticking the appropriate box below.

Less than 20 years	21-30 years	31-40 years	41-50 years	51+ years

2. Below indicates the sector you are in please.

Private	Public

3. What is your position in the organisation?

Finance manager	Administrator	Supervisor	Technician	Other

4. If other, please specify…………………………………………………………...............

5. Indicate your years of working experience.

0-5 years	6-10 years	11-15 years	16+ years

6. How many people report to you?

Under 5	6-10	11-16	17+

7. What department in construction do you work in?

Construction	Service industry	Financial industry	Other

8. If other, please specify……………………………………………………………..…

9. Other information you would want us to know

...…………………………………………………………………………………………
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SECTION B

Using the Likert scale below, please rank your answers by crossing the appropriate / most relevant number / box. 1= strongly disagree, 2= disagree, 3= neutral, 4= agree and 5= strongly agree.

	GENERAL UNDERSTANDING OF CONFLICT IN YOUR ORGANISATION?	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	SOURCES OF CONFLICT IN YOUR WORK ENVIRONMENT	1	2	3	4	5
1	It is my duty as an employee to meet the expectations of my manager.	1	2	3	4	5
2	I believe withholding information on purpose causes conflict.	1	2	3	4	5
3	Differences in culture results cause conflict.	1	2	3	4	5
4	Ignorance and avoiding responsibility results in conflict.	1	2	3	4	5
5	Failure to follow the rules and regulations of the company results in conflict.	1	2	3	4	5
	CONFLICT MANAGEMENT STRATEGIES	0	0	0	0	0
6	Accommodating the opposing side is the best way of handling conflict.	1	2	3	4	5
7	Avoiding conflict leads to project success.	1	2	3	4	5
8	Our organisation uses collaboration to deal with conflict.	1	2	3	4	5
9	Compromising is the way to go when solving conflict.	1	2	3	4	5
10	Competition amongst workers is discouraged in our organisation.	1	2	3	4	5
	GENERAL PROBLEMS THAT RISES CONFLICT ESCALATION	0	0	0	0	0
11	Employees use unions to shift the balance of power in their favor.	1	2	3	4	5
12	Uncertainty about their roles in organisation creates confusion within staff.	1	2	3	4	5
13	Uncertainty about commitment to the organisation increase conflict.	1	2	3	4	5
14	Perception about roles strongly influence success of project.	1	2	3	4	5
15	Employees usually expect inflexible conflicts to be persistent.	1	2	3	4	5
16	Loss of trust makes it difficult to return to the helpful link/relationship.	1	2	3	4	5
	MANAGEMENT ROLE IN COFLICT RESOLUTION	0	0	0	0	0
17	Our management tries to Identify the source of the conflict.	1	2	3	4	5
18	Our management looks beyond the incident to find the cause of the conflict.	1	2	3	4	5
19	Our management gets each party's viewpoint on the conflict.	1	2	3	4	5
20	Our management requests solutions from the conflicting parties.	1	2	3	4	5

	GENERAL UNDERSTANDING OF CONFLICT IN YOUR ORGANISATION?	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
21	Our management tries to identify solutions both involved parties can support.	1	2	3	4	5
22	Our management resolves conflict effectively.	1	2	3	4	5
23	Our management works toward agreement between parties involved in conflict.	1	2	3	4	5

SECTION C

1. **State conflict management mistakes you have noticed at your workplace [4 items]**

- ……………………………………………………………………………………………
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2. **State what you think is the best way to resolve conflicts at the workplace**

- ……………………………………………………………………………………………
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3. **What other information do you want to share on the resolution of conflicts in the workplace**

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…

What is your gender?

Male	Female

THANK YOU FOR YOUR PARTICIPATION.

APPENDIX B: CONSENT RESEARCH

29th October 2020

Reg: 2010/170081/23
35 Fortuna roads Sanddrift
Milnerton, Cape Town 7441
South Africa
Tel: 27215551948
Cell: 27727370728

TO WHOM IT MAY CONCERN

This is to certify that **Lucky Siyabonga Zitulele** student number **204170877** has been granted permission to carry out research for his **Masters of Technology: Business Administration in Project Management** on condition that no private and confidential information is requested.

He will be allowed to conduct in-depth interviews of an generic nature to gather data on the at OTBC , by using various methods including but not limited to a detailed questionnaire.

Yours sincerely

IR Mihindou

Managing Director
Head of Project

"Your project our services"

APPENDIX C: PLAGIARISM REPORT

MODELLING CONFLICT RESOLUTION STYLES IDEAL FOR RISK CONTROL IN CONSTRUCTION PROJECT EXECUTION IN THE CAPE METROPOLIS

by Lucky Zitulele

MODELLING CONFLICT RESOLUTION STYLES IDEAL FOR RISK CONTROL IN CONSTRUCTION PROJECT EXECUTION IN THE CAPE METROPOLIS

ORIGINALITY REPORT

7%	7%	1%	4%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

APPENDIX D: ETHICS CERTIFICATE

Cape Peninsula
University of Technology

P.O. Box 1906 • Bellville 7535 South Africa •Tel: +27 21 4603291 • Email: fbmsethics@cput.ac.za
Symphony Road Bellville 7535

Office of the Chairperson Research Ethics Committee	FACULTY: BUSINESS AND MANAGEMENT SCIENCES

The Faculty's Research Ethics Committee (FREC) on **20 October 2020**, ethics **Approval** was granted to **Lucky Siyabonga Zitulele (204170877)** for a research activity **M Tech Business Administration in Project Management** at Cape Peninsula University of Technology.

Title of dissertation/thesis/project:	**Modelling conflict resolution styles ideal for risk control in construction project execution in the Cape Metropolis** Lead Supervisor (s): Dr L E Jowah

Comments:

Decision: APPROVED

	30 November 2020
Signed: Chairperson: Research Ethics Committee	**Date**

Clearance Certificate No | 2020FOBREC834

APPENDIX E: PROOFREADING AND TECHNICAL EDITING CERTIFICATE

21 June 2021

LUCKY SIYABONGA ZITULELE
Faculty of Informatics and Design (FID)
Cape Peninsula University of Technology
Cape Town

RE: CERTIFICATE - TECHNICAL EDITING AND PROOFREADING OF DOCTORAL THESIS

I, the undersigned, herewith certify that the technical editing and proofreading of the Doctoral thesis of Lucky Siyabonga Zitulele, *"MODELLING CONFLICT RESOLUTION STYLES IDEAL FOR RISK CONTROL IN CONSTRUCTION PROJECT EXECUTION IN THE CAPE METROPOLIS"*, has been conducted and concluded.

The finalised thesis was submitted to Mr Zitulele on 21 June 2021.

Sincerely

Professor Annelie Jordaan
DTech: Information Technology
Ph: 065 990 3713

Member: SATI 1003347

South African Translators' Institute (SATI)